TO READERS AND CORRESPONDENTS.

The Pathology and Treatment of Strictures of the Urethra, both in the Male and Female. Being the Treatise for which the Jacksonian Prize for the year 1852 was awarded by the College of Surgeons of England. By Henry Thompson, F.R.C.S., &c. London: Churchill, 1854. 8vo, pp. 324. (From the Publisher.)

A Review of this work will appear in a subsequent number.

Epilepsy and other Affections of the Nervous System which are marked by, Tremor, Convulsions, or Spasms, their Pathology and Treatment. By Charles Bland Radcliffe, M.D., Licentiate of the Royal College of Physicians, etc., etc., London: Churchill, 1854. 8vo, pp. 114. (From the Author.)


It affords us much pleasure to announce to our readers the reception of another number of this great and truly valuable work. We regret, however, to learn that the distinguished author has suffered from illness "brought on by exposure to cold and fatigue, in attending to urgent calls from out of town,"—which is the excuse for the delay of this number. In the passage through the press of a work of such magnitude and importance as this, it is not surprising that there should be an occasional delay, and in such an event subscribers must not allow feelings of distrust to arise. We learn from an advertisement in this number, that the manuscript of the 2d volume is in a more complete state, and that its passage through the press will proceed more rapidly.

Comparative Anatomy. By C. Th. von Siebold and P. Stannius. Translated from the German, and edited, with Notes and Additions recording the Recent Progress of the Science, by Waldo J. Burnett, M.D. Volume I. Boston: Gould & Lincoln, 1854, 8vo, pp. 470. (From the Publishers.)

The Science and Art of Surgery, being a Treatise on Surgical Injuries, Diseases and Operations. By John Enchsen, Professor of Surgery in University College, London, etc., etc. Edited by John H. Brinton, M.D. Illustrated by three hundred and eleven engravings on wood. Philadelphia: Blauchard & Lea, 1854. 8vo, pp. 908. (From the Publishers.)

Women: her Diseases and Remedies. A Series of Letters to his Class. By Charles D. Meigs, M.D., Professor of Midwifery and the Diseases of Women and Children, in the Jefferson Medical College at Philadelphia, etc., etc. Third edition, revised and enlarged. Philadelphia: Blanchard & Lea, 1854. 8vo, pp. 672. (From the Publishers.)

An Examination of the Practice of Bloodletting in Mental Disorders. By Pliny Earle, M.D., author of "A Visit to Thirteen Asylums for the Insane, in Europe," etc., etc. New York: S. S. & W. Wood, 1854. 8vo, pp. 126. (From the Publishers.)

This is an exceedingly interesting monograph—like every practical production from its accomplished author, it deserves to be read by all who are brought in contact with the unfortunate subjects of insanity. We shall notice this work more fully in a future number.
To Readers and Correspondents.

Clinical Lectures on Pulmonary Consumption. By Theophiles Thompson, M.D., F.R.S., Physician to the Hospital for Consumption and Diseases of the Chest, etc., etc. Philadelphia: Lindsay & Blakiston, 1854, 8vo, pp. 258. (From the Publishers.)

Essay on the Mechanism and Management of Parturition, in the Shoulder Presentation. By Wm. M. Boling, M.D., of Montgomery, Alabama. Charleston, 1854. Pamphlet, pp. 91. (From the Author.)

This is a very elaborate and, in many respects, complete essay on one of the most important deviations from the normal presentation in parturition. The author enters at great length into the various questions involved in this complication, exhibiting a commendable familiarity with the literature of his subject, as also a personal knowledge of its practical difficulties.

On the Subject of Priority in the Medication of the Larynx and Trachea. By Horace Green, M.D. New York: 1854. Pamphlet, pp. 17. (From the Author.)

In this publication the author reviews the history of topical applications to the larynx, particularly with reference to his own practice.

Clinical Report on Dysentery, based on an Analysis of forty-nine Cases, with remarks on the Causation, Pathology, and Management of the Disease. By Austin Flint, M.D. Buffalo, 1853.

Clinical Report on Chronic Pleurisy, based on an Analysis of forty-seven Cases. By Austin Flint, M.D., Buffalo, 1853.

These reports originally appeared in our Western cotemporary, the Buffalo Medical Journal. They contain the results of a careful analysis of a sufficient number of cases to confirm many points in the pathology and therapeutics of these grave diseases, which are important to the practitioner. They are fair examples of the method of studying diseases according to the numerical system—a method for which the Author has a decided penchant. Like every contribution to medical science from Prof. Flint, they are of permanent value to the physician both for study and reference.


The design of this paper is to examine the commonly received opinions in regard to the Physiology of Fatal Circulation, in the light of the present state of physiological science. It is an able and candid production.

Remarks on Croup and its Treatment. By Horace Green, M.D. New York, 1854. Pamphlet, pp. 21. (From the Author.)

This pamphlet illustrates the treatment of Croup, by the topical application of nitrate of silver to the larynx: a method of treatment which the author has advocated several years.


Catalogue and Circular of the Albany Medical College, Spring Term, 1854.

The Transactions of the Iowa State Medical and Chirurgical Society, Third and Fourth Sessions, held at Fairfield, May, 1852, and Davenport, June, 1853. Burlington, 1854.

Transactions of the Medical Association of the State of Alabama, at its Seventh Annual Session, begun and held in the city of Montgomery, January 16th and 12th, 1853. With Constitution, Code of Medical Ethics, and List of Members. Mobile: 1854. 8vo, pp. 190. (From the Society.)


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ART. I.—Review of the Climate and Diseases of Certain Portions of the State of California. By F. W. Hatch, M.D., Sacramento City, California.

The climate of a particular region of country, depending, as it does, upon conditions varying with its equatorial relations,—its soil, elevation, cultivation,—its proximity to the Ocean,—the prevailing currents of wind, and the many phenomena and modifications which arise from these conditions, presents a field for study so vast, as scarcely to admit a just and intelligent investigation within the limits of a short essay, without more enlarged and extensive means for examination than those we have been enabled to obtain.

The difficulties attending such an investigation, growing out of the intrinsic nature of the subject, are here, in California, greatly increased by extraneous circumstances peculiar to the State. But a short time since emerged from a condition of semi-barbarism, and attracting to its shores a large influx of population, eager in the pursuit of wealth, and with no abiding interest in the country, no attachment beyond the realization of their golden dreams, it has, until
recently, presented a meagre field for the cultivation of science, or for intellectual improvement. The passion for gold—the thirst for riches—absorbed every other emotion of the soul, and in the hot and entrancing pursuit, the opportunities which might have been possessed by the earlier settlers for recording facts relating to the climate of the State, during a succession of years, were, for the most part, if not entirely, neglected.

The want of the instruments necessary for scientific investigations, and the expense attending their procurement in this State, has, also, greatly retarded the acquisition of correct information, and prevented the prosecution of those meteorological observations so essential to the proper understanding of the subject under consideration. With these difficulties in our way, we shall not attempt a consideration of all the phenomena which modify the character of the climate of California, and which involve an intimate study of its physical condition and peculiarities, but content ourselves with a brief review of some of its more prominent features, considered in a medical point of view;—its influence in the production of disease and as a beneficial agent,—its pathologic and therapeutic tendency. Even with this limited view of the subject, there is scarcely a region in the world presenting so great a variety in its climatic features, where extremes are so marked, where the physical constitution of the country is so diversified within an equal area, as in California.

Bounded on the West by the Pacific Ocean, and extending from the 42d parallel of latitude on the north, its northern limit, to the 32d on the south, its southern boundary, and stretching east to the summit of the Sierra Nevada, in the 120th meridian, east longitude, it presents a diversity of geographical arrangement, of temperature, and of the various other elements which mark the peculiarities of different climates, but seldom observed within the same parallels of latitude and longitude.

It is a fact, frequently noticed, that countries on the
Pacific side of the great chain of mountains which divide the eastern from the western section of North America, vary remarkably in temperature from regions on the Atlantic side, similarly located, in respect of latitude and elevation; the former presenting a temperature and atmospheric dryness, strongly contrasted with localities under the same conditions in the latter. This fact is amply exemplified by the difference observed between the winters in this country, and those in the same latitudes east of the Rocky Mountains. Regions of country, in a latitude which, on the Atlantic, exhibit, during the winter months, frequent snow storms, and a thermometrical descent to several degrees below zero, are in the other division noted for the mildness and equability of their winter season; snow is seldom seen, the ground rarely frozen, and vegetation, though checked for a time, is speedily renewed under the quickening influence of the periodical rains and warm sun which succeeds them. Compare, for example, the climate of St. Louis, of Washington, or even of Charlottesville, Va., with that of Sacramento, in this State. Though the difference in latitude is, in either, less than half a degree, yet how great is the difference observable in the extremes of temperature! Less in the case of Charlottesville than in either of the others, yet, even there, the extreme of winter is in wide contrast with Sacramento; and it is not very uncommon for considerable snow to fall. Even as late as the second of March, we have seen the ground completely covered with a snowy mantle.

In forming an estimate of the climate of California, however, the geographical arrangement of the country, and the winds prevailing in different localities, must be particularly noticed. Embracing within its limits the latitudes of Savannah and Boston as its northern and southern extremes, it presents a variety of climatic phases but little corresponding with its equatorial relations, or with the latitudes it comprises.

These opposite characteristics are often most obvious in localities situated within a comparatively short distance of
each other, and depend upon their different elevation, or their respective exposure to the winds from the ocean. At San Francisco, for example, in latitude 37° 47' 35".6, the climate differs widely from that of localities only a few miles in the interior. In the former, during the summer season, the high winds which rush down the bay from the ocean, loaded with oceanic vapor, create so great a degree of chillness as to render the warmest clothing necessary for comfort. The peculiar position of the city is such, indeed, as to give to this locality a climate whose features are, in some respects, remarkably different from any other portion of the State. Situated on a bay which extends north and south a distance of more than seventy miles, it is secluded from the ocean by a mountain barrier, except at the break or gap in which the city itself is built. Through this gap the bay communicates with the ocean by a strait, a distance of some four or five miles, allowing a free and uninterrupted current for the winds which pour in from that quarter during the greater portion of the year. These winds, rushing down the bay, loaded with vapor, create a degree of chillness in the atmosphere, during the summer months, more especially, in wide contrast with that which prevails in localities sheltered from the ocean, and the strong west and north-west winds which proceed from it. Indeed, it has been remarked that the vicinity of the Golden Gate is colder during the summer months than any point on the Pacific south of Columbia river.

A series of papers published in a weekly journal in San Francisco, by Doct. H. Gibbons, of that city, furnishes minute and interesting statistical information of the climate of the place and its immediate vicinity. Of these we shall freely make use, as affording, at a glance, a summary of great value in studying the peculiar features the locality presents. They refer to the winds, the barometrical phenomena, and the temperature, and, from the well known ability of their author, and the accuracy and care with which his investigations have been pursued, are more reliable than any others
we possess. The observations upon which they are based were taken at sunrise, at noon, and at 11 P.M., and embrace a period of fourteen months, viz., from Dec. 1850, to Jan. 1852, inclusive.

The barometrical phenomena, being devoid of any striking peculiarities or deviations, we shall omit. The range of this instrument is but slight, and not calculated to shed much light upon the present subject.

The mean temperature for this period we condense into the following Table. The thermometer was Fahrenheit's:

<table>
<thead>
<tr>
<th>Month</th>
<th>Yearly</th>
<th>Sunrise</th>
<th>Noon</th>
<th>11 P.M.</th>
<th>Month.</th>
<th>Yearly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1850</td>
<td>1851</td>
<td>43°29</td>
<td>54°13</td>
<td>45°39</td>
<td>48°71</td>
<td>56°66</td>
</tr>
<tr>
<td>Jan. 1851</td>
<td>1852</td>
<td>41°68</td>
<td>56°94</td>
<td>44°90</td>
<td>49°31</td>
<td>54°20</td>
</tr>
<tr>
<td>Feb. 1851</td>
<td>1852</td>
<td>41°97</td>
<td>60°03</td>
<td>43°64</td>
<td>51°00</td>
<td>55°45</td>
</tr>
<tr>
<td>Mar. 1851</td>
<td>1852</td>
<td>44°00</td>
<td>63°68</td>
<td>44°84</td>
<td>53°84</td>
<td>51°90</td>
</tr>
<tr>
<td>April 1851</td>
<td>1852</td>
<td>48°20</td>
<td>67°27</td>
<td>49°80</td>
<td>57°73</td>
<td>51°32</td>
</tr>
<tr>
<td>May 1851</td>
<td>1852</td>
<td>49°58</td>
<td>64°32</td>
<td>50°42</td>
<td>55°95</td>
<td>56°55</td>
</tr>
<tr>
<td>June 1851</td>
<td>1852</td>
<td>50°90</td>
<td>66°73</td>
<td>51°80</td>
<td>58°81</td>
<td>55°26</td>
</tr>
<tr>
<td>July 1851</td>
<td>1852</td>
<td>51°50</td>
<td>64°32</td>
<td>52°10</td>
<td>57°91</td>
<td>50°28</td>
</tr>
</tbody>
</table>

In an examination of the above table, one of the most striking features of the climate will be observed in its equability. The highest monthly temperature for 1851 is shown to be 62°21 (August), the lowest, 49°31 (January), being a difference of only 12°90. The warmest day in the year 1851 was April 28th, the thermometer reaching 84°; on the 19th of October, it reached 83°; on the 18th of August, 82°. The mercury rose to 80° on only nine days in the year, of which six were in October. The lowest temperature of the year was 30°, the highest 84°, the range being 54°. On only twenty-five mornings did the thermometer sink as low as 40°. The warmest month in the year was August, then October, then September; and it will be observed by the table that between the first two of these the difference
Hatch on the Climate and

was less than one degree, while between August, the warmest, and September, the coldest of the three, it is but little more than half a degree. At sunrise at San Francisco, in 1851, the mercury stood at 53° on forty-five mornings, at noon it was 64° during forty-two days. There were one hundred and sixty-one mornings with a temperature varying from 50° to 54°.

The above facts show the great equability of the temperature at San Francisco, and, based as they are upon the observation of one so reliable as Dr. G., form a valuable record for reference. In scarcely any region in the Atlantic States is so great a uniformity observable, so slight a variation between the extremes of heat and cold. Yet are the diurnal depressions of temperature in the afternoon sometimes considerable. In the summer months the early morning is ushered in calm and generally clear, with a bright warm sun. From twelve to one o’clock the winds from the ocean come rushing down the bay, and, bringing with them thick clouds of oceanic vapor, quickly depress the thermometer and completely change the character of the atmosphere. At these times the mercury will suddenly fall from 60° to 65° down to 50°, where it usually remains all night. On the cessation of the winds, in or about October, the weather is again delightfully equable and fine; vegetation springs up under the refreshing influence of the rains which soon succeed, and the hills, throwing off the dry and yellow mantle which a burning sun imposed, smiling in verdure, once more resume the fresh green livery of beauty and loveliness. With remarkable equability of temperature, the weather continues until April, when again the ocean winds renew their sway, and the air is chilled by the vapors which accompany them.

Neither the limits nor the intent of this paper will admit a minute record of the daily or even monthly course of the winds at this point. A few observations will suffice to show their general habitues, and illustrate what has been already intimated as to their prevalence at certain seasons.

It may be proper to observe that the direction of the coast
is N.W. and S.E. nearly, and that, in consequence, winds from the N.W. to S. come from the ocean, those in the opposite direction being land breezes. The observations before us indicate the prevalence of ocean winds for more than three-fourths of the year, a regular increase being observed from January to September. During the interval between these extremes, it would appear that the land winds prevailed only twenty-five and two-thirds days, while the number of days for those from the ocean was one hundred and eighty-six and one-third. During the remainder of the year the predominance of the land winds was only during forty-six days to one hundred and seven from the ocean. The former are generally warm and dry, while the latter, which are usually from the west, are always cool, and loaded with vapors from the ocean. It should be observed that the winds seldom rise before noon, or continue after sunset.

In respect of rain, there cannot be that difference observable between the locality of San Francisco and places in the interior that is noticed in the temperature and the winds, though there the rainy season ordinarily sets in a little earlier and continues later in the year. In the valley of the Sacramento, for example, it would be an unusual occurrence for the rainy season to commence before November, or to continue longer than the month of April, while at San Francisco and on the coast it is not uncommon for them to embrace a larger period of the year. Occasional variations are observed in this respect even in Sacramento. Thus, the 20th of May, 1853, closed the rainy season of that year, while as early as the 15th September, 1853, a slight rain betokened the approaching rule of the storm-king. They are usually accompanied by a wind from a south-easterly direction, and their abatement may at any time be predicted when the current sets in steadily from a northerly or north-westerly point. There exists a very erroneous impression of the character and continuance of the rains of California, especially as to the amount of rain which annually falls. There is indeed no exact uniformity in the annual quantity of rain in this coun-
try, yet we believe the number of inches of rain which fall annually in this climate is vastly less than in most, if not all, the States east of the Rocky Mountains. At San Francisco, during the year from April 1st, 1851, to the same date in 1852, there fell 19.84 inches. Admitting this to be a fair average, it exhibits a very great contrast with the amount observed in regions of country on the Atlantic. At Cambridge, Mass., in 1852, the amount of rain was 40.507 inches; at Savannah, Ga., 42.201 inches.

The duration of the rains here is also very variable, as well as their severity in a given period. They seldom last longer in the valley of the Sacramento than forty-eight or sixty hours, often not more than twelve, or even less than this, and exhibit during their continuance a very great irregularity, sometimes coming down in spasmodic showers, now pouring as if the flood-gates of the clouds were opened, and then dispersing, for a time, before the beams of the sun, which break through their misty canopy. A frequent and irregular recurrence of such a series usually makes up the sum of a rainy day or period, after which there is an interval, varying from two or three days to a fortnight, of fine, clear, and delightful weather. Indeed, during the interval thus established between the rainy periods of the season, we have our finest weather. The air is clear and bracing; fresh and invigorating breezes infuse health and elasticity into the frame, and a warm sun, acting upon the moist rich earth, starts into life the dormant energies of the vegetable kingdom.

We have digressed thus far for the purpose of showing some of the peculiar features which characterize the climate of the locality of San Francisco. The observations noted embrace most of the points of interest involved in its history, and it will be seen hereafter in what important particulars the climate differs from some other portions of the State. The influence of the different seasons upon the health of that city, as exhibited in an abstract of the annual mortality, will form a subject for future consideration.

It may not be uninteresting to notice a few of the leading
geographical peculiarities of the country out of San Francisco. They may be sketched in few words, and will serve to explain the great differences existing in the climate of different localities, and prove of interest in their bearing upon the diseases which prevail.

Passing over the strip of country near the ocean, which is diversified by rolling hills intersected by rich valleys and plains, a beautiful region of country, unexcelled in fertility, the first range of mountains is the coast range, running at a varying distance from the Pacific, of from thirty to forty miles, and parallel with it. Its elevation is exceedingly variable, rising in the towering peak of Mt. Diablo to a height of more than 3,000 feet above the ocean level. The whole range is but a continuation of the central chain of Lower California, and is finally merged in the Klamet range of Oregon. At its base lie the rich and fertile valleys of the San Joaquin and Sacramento. These valleys, extending east to the foot hills of the Sierra Nevada, constitute one of the finest portions of the State. Stretching from the south in a north-westery direction for a distance of three or four hundred miles, and watered by the San Joaquin and Sacramento rivers, they are unsurpassed in fertility of soil, in the exuberance of their vegetation, and in their adaptation to the successful pursuit of agriculture, by any portion of the world. Nowhere are the labors of the husbandman more amply repaid, nowhere are to be found the elements for the cultivation of a greater variety of productions, than those furnished by the deep alluvium which covers their surface, and the genial atmosphere which surrounds them. Yet beneath these very elements of prosperity may be sought the source of the principal maladies which exist in this region. Starting into activity under the burning rays of the sun, and wafted alike by the winds which come up from the ocean, and the breezes which flow from the Sierra Nevada, a noxious miasm is exhaled from the decayed and decaying vegetation, which constitutes a fruitful cause of disease among those most exposed to its influence.

The surface of the country in the immediate vicinity of the
two principal rivers flowing through these valleys is generally low, and, for miles in extent, in many parts of their course, covered by marshes, or luláres, in which grows in great exuberance a species of bulrush, or lule, as it is called, Scirpus lacustris. The severe and long-continued rains which fall during the winter season, and the melting snow which pours down from the mountains early in the spring, cause a general overflow of the banks of the rivers, frequently submerging the country for great distances. To the exhalations which arise from the intense action of the sun, during the dry season which so soon succeeds the rains of winter, upon the large deposits of water and upon the vegetable matter spread over and beneath them, may, we believe, be attributed most of the diseases met with in the summer and fall months.

East of these valleys, and at a distance varying from fifty to eighty miles, lie the foot hills of the Sierra Nevada, which raise their huge sides and snow-capped summits along the Eastern boundary of the State. The transition is extreme. In the plains, whose luxuriant fields are spread out at their base, a verdure almost perpetual reigns, and the smiling earth rejoices in the rich and exuberant harvest, or the brilliant display of wild-flowers which lavishly decorate her beneficent bosom. Here the severity of winter is never known; the frosts, which in equal latitudes on the Atlantic side cast gloominess and a blight upon the face of nature, are here but seldom seen, and the autumn and spring glide gradually and imperceptibly, without striking deviation, one into the other. While aloft, on the broad summit of the mountains, in the same latitude, but elevated thousands of feet above, lie unmeasured depths of snow, from year to year accumulating, glittering beneath the bright rays of a summer’s sun, in striking contrast with the vegetation which flourishes below. Standing in the centre of the valley of the Sacramento, at midsummer, with the thermometer at 100° in the shade, the eye of the beholder is surprised by the bright columns of snow which sparkle in the distance, high
above him, far off on the lofty ridges of the Sierra, or, nearer still, on the highest peaks of the foot hills which fringe their western sides,—the region of eternal frost,—the resting-place of perpetual snow. Between these hills themselves, and the valleys which separate their rolling heights, the extremes of climate are equally striking; there is the same thermometrical difference during the summer months. The heat of the sun, which pours down, unobstructed, upon the deep valleys, is often intense. A sultry atmosphere prevails, the temperature during the morning hours is oppressive, and the miners in the gulches are mostly unable or unwilling to pursue their labors during the heat of the day.

From this rapid and imperfect sketch, some idea may be gained of the general topography of the country,—its geographical features, and the variations existing between different portions in respect of temperature and elevation. The data upon which to base a history of the climate of different portions of the State, and its relation to disease, are extremely defective. Statistical facts are wanting, or incomplete, and necessity compels us, in many instances, to rely upon the general facts which come to us in an authentic form, and upon personal observation. Out of San Francisco, the most interesting portion of the State, which can form the subject of an investigation of this nature, is the valley of the Sacramento. Whether considered in the view of its population, its position, its agricultural and commercial importance, or the attractive features with which the prodigal hand of nature has enriched it, no other portion of the State is so well entitled to careful consideration. If to these we add the character of its diseases, we may find, in examining some of their more prominent causes, and their mortality, a large and interesting field for contemplation.

A general description of the location of this valley has been already given, particularly of that portion in the immediate vicinity of the Sacramento river. But it would be erroneous to suppose that the whole of the valley is ever subject to overflow, or in any way affected by the annual
rise of water in the river. In by far the greatest portion, the land is high, and at all seasons dry. Beyond a mile or two of the river, there is a large extent of country whose broad plains are unaffected by the rains of winter, and where no marshes or standing bodies of water are to be seen. The principal low grounds are on or near the banks of the Sacramento, and in the broad luáres, which extend, in some places, for several miles in extent, and whose waters are emptied into the river. During the summer season, they are most of them dry and passable, but, filled by the rains of winter, and the overflowing of the swollen rivers, they are for the greater part of the year covered with water. Thus supplied from the rivers, they become the receptacle of large deposits of vegetable matter, which, swept down the current, lodge among the rushes, and, on the subsidence of the waters, form, together with the decayed products of their own soil, an abundant source of miasmatic exhalation. Along the immediate vicinity of these sources of malaria, its effects are distinctly seen in the diseases which prevail,—the intermittents and remittents, and their sequels, which affect those residing within the sphere of its influence. This influence appears, in most instances, to be strictly local, or to extend, at least, but little beyond its original seat. The healthful atmosphere which prevails beyond, and in the higher portions of the valley, is fully attested by the almost entire immunity of the inhabitants from disease of any kind. Indeed, there is no part of California more salubrious than many portions of this valley. Nowhere is the annual mortality, in proportion to the inhabitants, less; nowhere is there a purer, more invigorating, health-giving atmosphere. This fact may be fully shown by statistical records of mortality, and is apparent in the unmistakable evidences exhibited by the population.

Surprise has often been expressed by residents of this valley, and especially by those in the immediate neighborhood of the river, at the apparently slight increase of disease which sometimes succeeds its overflow, after a rainy season
of unusual severity. So true is this, that it constitutes one of the most striking features of the climate, and has frequently been the occasion of a doubt, or even of absolute denial of the influence of the floods on the health of the country, or of the presence of malaria in the emanations which arise from them. It is indeed difficult to account for the remarkable exemption occasionally observed under circumstances which, by all the processes of reasoning commonly adopted in prognosticating the chances of disease, would seem to indicate, with the unerring certainty of cause and effect, its alarming increase. What influence the prevailing winds, or the early subsidence of the inundations, and the consequent drying of the soil before the sun of summer has attained its greatest intensity, may have upon the solution of this question, is yet the subject of a theoretical opinion merely, and, perhaps, not perfectly substantiated by the limited array of facts which can at present be made available in its discussion. In the lower situations bordering upon the river, the manifestations of malaria are abundant. Yet, in Sacramento, in the winter of '51 and '52, and again in '52 and '53, although a portion of the city was, until late in the season, covered with water, there was no such alarming augmentation of those peculiar diseases usually supposed to be of malarious origin as was universally predicted. In any other country in the world, situated in a temperate latitude, subject to the like apparent causes of disease, the population would have been inundated and overwhelmed by the severity and universality of the pestilential influences.

We do not consider; at this time, or in this connection, the cholera, which made its appearance in this city in the summer of '52. Its dependence upon marsh miasm is rendered more than improbable by the recorded history of the disease, and its progress under all circumstances of climate, locality, and season, as well as under all recognized atmospherical conditions. That this want of connection between the inundations to which this city has occasionally been subjected, and the subsequent presence of cholera, is frequently lost
sight of, is clear, and will satisfactorily account for the erroneous impressions entertained by many unacquainted with the medical history of the valley, as to the healthiness of the climate. In the fall of 1850, the cholera raged here with fourfold the violence of that in '52, and yet it was preceded, not only by no flood, but by a winter of unusual dryness.

Yet, to certain portions of the valley, subject to overflow, and in which there is a large extent of low and wet ground during a greater portion of the year, these remarks do not apply. In these, the continued presence of water in the marshes during the summer, and the generation in them of malarious miasm, are intimately associated, and the results are too plainly evinced in the frequent occurrence of the more active forms of periodical disease during the autumnal months. Following the course of the river towards the N.W., for nearly one hundred miles, we find at Colusi, for example, a marked difference in this respect from what is observed at Sacramento, which may be considered, practically, to occupy a central position between the former place, and the affluence of the river into Suisun bay. Situated in a rich alluvial district, in the immediate neighborhood of extensive marshes, which are covered for a long period of the year with water, the recurrence of each autumnal season is marked by the almost universal prevalence of periodical diseases and their congeners. Intermittents and remittents often assume their most malignant forms, and their remote effects are seen in the organic congestions, the visceral enlargements, and the dropsical effusions which ensue. The winds which prevail during the summer, as we are informed, are usually from the N.W., warm and dry; its remoteness from the bay excludes it from the cooling influence of the southerly winds, which, at Sacramento, are so grateful during the evening; the days are extremely hot, and though the mercury falls towards evening, the difference observed between the temperature during the day and night, so refreshing nearer the ocean, is much less prominent.

There is no portion of this valley, studied with reference
to the diseases annually prevailing, of greater interest than Sacramento. In population the second city in the State, located in one of the richest valleys, the business mart of the vast extent of country in the interior, and the central rendezvous for the influx of immigration which annually pours in from the plains, or is brought to our shores by the ocean steamers, it is invested with an importance which is exceeded by no other city or region in California. In a medical point of view this interest is maintained by its local features and the diseases which prevail.

The general characters of the locality of the city have been already referred to in the preceding pages. Its situation is on the eastern side of the Sacramento river, whose banks for miles north and south (or rather N.W. and S.E.) of the city are low, and subject to occasional inundation from the rivers and the melting snow from the mountains. The water, thus spread over the adjoining country and in the luâres, remains upon the surface for some time after the subsidence of the river itself, and the surrounding lands being lower than the river banks, its dissipation is left to the gradual processes of evaporation and interstitial exudation. Such is the character of the land immediately south and north of the city. On the east it is generally higher, and extends in wide plains, with varying elevation, interspersed with occasional meadow lands, to the foot hills on its further boundary. The elevation of the city above the sea is, according to an observation which has been shown us, about twenty feet, its latitude 38° 34' 40'', its longitude 121° 45' 11''. The permanent population of the city is from ten to twelve thousand.

The climate of Sacramento, in many respects, excels that of any other portion of California. Exempt from the extremes of heat and cold which are observed in other portions of the State, the seasons here are remarkable for their equability and uniformity, gliding gradually one into the other, without abruptness, and without those sudden changes often so marked in the Atlantic portion of America. Compared with
each other, the temperature of different years is remarkably uniform. Contrasting the seasons themselves in any one year, the greatest thermometrical deviation will be observed during the summer months, between the periods of sunrise and noon, and between noon and a late hour of the night. Indeed, one of the most striking features of our summer climate is seen in the descent of the mercury a few hours after sunset. In the latter part of the afternoon, or towards evening, a brisk southerly breeze usually sets in from the ocean, rapidly replacing the atmosphere which an almost vertical sun has rarefied during the day. Even at a time when the temperature of mid-day is indicated by from 95° to 100° Fah., the evening sets in delightfully cool and pleasant; the heat which the earth has absorbed is rapidly radiated into space; the mercury falls to about 60° or 65°, and the heated frame, languishing under the intensity of the sun, is cooled and invigorated by the genial current, which, "like a breathing from another world," brings joy on its wings. These winds, or rather breezes, present a strong contrast with the cold, chilling blasts which visit San Francisco at this season, at or near mid-day, and which, being attended by heavy mists from the ocean, occasion a change in the atmosphere by no means agreeable. Here they seldom rise high, and though accompanied with a marked alteration in the atmospheric heat, the change is not abrupt, nor more than sufficient to impart timely vigor to the energies of a population relaxed by the exalted temperature of the preceding day. Sufficient has already been said of the general character of the annual rains, to convey some idea of their leading features. In their prominent characteristics, they do not differ from the account given of them as pertaining to the vicinity of San Francisco.

In this valley they usually commence a little later in the year, say the last of October or first of November, and continue with irregular periods of duration and intermission until April. Sometimes there are occasional showers in October, and not unfrequently they begin upon the receding days
of April. Their approach is always preceded for some time by an increased hygrometric condition of the atmosphere, with southerly winds; and on each recurrence during the season, these winds, though not unerring prognostics, become their most reliable and undeviating heralds.

In the interval between the rains, the weather is cool and pleasant, a fresh northerly wind from the "snowy mountains" diffuses health and an invigorating influence among the inhabitants, and a warm and grateful sun awakes from their slumbers the torpid germs of the vegetable world. In February, the wild oats have covered the fields with a rich mantle of green, and the violet mingleth its odors with the balmy breath of March. Close upon the termination of the rainy season the summer begins. The sun at mid-day rapidly attains an almost tropical intensity. The north wind, which before was cool and refreshing, comes to us warm and sultry, while the south wind of evening, "like a gentle friend," renews his welcome visitations.

Materials are not at hand for the construction of statistical tables, showing the changes in respect of temperature during any very considerable period. This is the more to be regretted, as we conceive they would fully establish the positions assumed in the preceding pages. I have, however, been kindly furnished by my partner, Dr. J. F. Morse, with a statistical record for a portion of the year 1852, which suffices to show the thermometrical range and the course of the winds during the period they embrace, and which may be considered a fair criterion by which to construct an estimate for a series of years. The only noticeable difference is in the greater prevalence of southerly winds during the whole day than has at other times been observed.

The following are the Tables alluded to; the first relates to the thermometrical changes, and the last to the course, &c., of winds.
Tables showing the thermometrical range and direction of the winds from July 18th to Oct. 30th, inclusive.

<table>
<thead>
<tr>
<th>July</th>
<th>Max.</th>
<th>Min.</th>
<th>Range</th>
<th>August</th>
<th>Max.</th>
<th>Min.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunrise</td>
<td>80</td>
<td>68</td>
<td>12</td>
<td>Sunrise</td>
<td>72</td>
<td>66</td>
<td>7</td>
</tr>
<tr>
<td>3 P.M.</td>
<td>92</td>
<td>79</td>
<td>13</td>
<td>3 P.M.</td>
<td>91</td>
<td>70</td>
<td>21</td>
</tr>
<tr>
<td>Sunset</td>
<td>88</td>
<td>74</td>
<td>14</td>
<td>Sunset</td>
<td>87</td>
<td>70</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sunrise</td>
<td>78</td>
<td>60</td>
<td>18</td>
<td>Sunrise</td>
<td>67</td>
<td>56</td>
<td>11</td>
</tr>
<tr>
<td>3 P.M.</td>
<td>96</td>
<td>67</td>
<td>29</td>
<td>3 P.M.</td>
<td>79</td>
<td>64</td>
<td>15</td>
</tr>
<tr>
<td>Sunset</td>
<td>92</td>
<td>70</td>
<td>22</td>
<td>Sunset</td>
<td>76</td>
<td>61</td>
<td>15</td>
</tr>
</tbody>
</table>

It is to be regretted that the indications of the thermometer were not given at a later hour in the evening than sunset, inasmuch as the change in temperature is much greater after that hour than between that and 3 P.M. As far as our own observations extend, the height of the mercury is remarkably near the same standard at sunrise, and 10 or 11 o'clock, P.M.

According to these tables, we find the hottest day in the four months, at 3 P.M., was Sept. 11th—96°; next, Sept. 10th and July 24th—92°. The hottest day at sunset was Sept. 11th—92°; next, July 23d and 29th—88°. The coolest day at 3 P.M. was Oct. 14th—79°. The highest monthly range between sunrise and sunset was 10°, in August; the lowest 2° in July. The greatest range during the four months was in Sept.—29°. The mean range for the whole period was 16° 16'.

On the subject of the winds, the observations furnished by Doct. M. substantiate the general remarks above expressed. From these we have arranged a general statement as follows, viz.:

**JULY.**

Sunrise—Wind S.S.E., E.S.E., or S.W., every day but one.

3 P.M. " S., or S.E., " " " five.

Sunset—" S., E.S.E. or S.W., every day in the month.

**AUGUST.**

Sunrise—Wind S., E.S.E. or S.W., every day except four.

3 P.M. " S., S.S.E., E.S.E., S.E., or S.W., " five.

Sunset—" from some southerly point every day.
September.

Sunrise—Wind S., S.E., or S.W., every day except nine.

3 P.M. " " " " " " " thirteen.
Sunset " " " " " " " five.

October.

Sunrise—Wind S., S.S.E., or S.W., every day except nine.

3 P.M. " " " S.S.W. or S.W. " " eight.
Sunset— " " " S.E., " " " " " "

During July, August, and October, the wind was northerly on no day during the evening, and in September only one evening. When not southerly it was from the west. It will be observed how uniform the southerly winds prevailed during the evening, and an explanation will be afforded thereby, of the delightfully cool and refreshing atmosphere of that period of the day. As before mentioned, the prevalence of southerly winds during other portions of the day was greater than is usual. In the succeeding summer, the northerly winds were more predominant during the day.

The influence of these winds upon the health of the city we do not regard as a matter requiring a lengthy discussion. At most, it would appear, from all the evidence before us, to be slight. The occasionally injurious effects of the great deviation of temperature noticed between day and night, the checking of the perspiration which ensues, and the consequences resulting from it, have been previously alluded to. Beyond this, their agency in disease is not remarkable.

With these somewhat cursory observations, we shall briefly allude to a few of the diseases most frequently met with on the Sacramento river, and it will readily be understood that, of these, intermittent and remittent fevers constitute a large proportion. Of the two varieties, intermittents largely predominate. In addition, many cases are reported as typhoid fever, some of which are the true petechial typhoid, and others only, such as, originally of a different type, have assumed that form in their progress towards their termination. It will also be seen, that there is no class of diseases more prevalent than those whose seat is in the mu-
mucous membranes, particularly that of the large intestines. Of all the maladies which the physician is called upon to treat, there are none more common than those whose primary seat is found in some portion of the intestinal mucous membrane, nor is there any complication of other affections more frequent, and towards which his watchful attention is more earnestly directed. Indeed, few persons come to California, and more especially to the valleys and to the neighborhood of the rivers, without being more or less affected, during their early residence, with diarrhea. In this city, it is frequently attributed to the use of the river water, by those unaccustomed to it; and though this may possibly be one of its occasional causes, yet it should, with stricter propriety, be ascribed to the universal pre-disposition conferred by the climate to disorder,—to irritation,—hyperemia of the lining membrane of the intestinal canal and its follicles. The prevalence of these affections in warm countries, induced by the action of the hot sun on the dermoid tissue, has been long noticed, and this cause, with the chilliness of the nights, and perhaps, also, an atmosphere vitiated by malarious emanations, probably furnishes a sufficient explanation. In its associations, it frequently attends the commencement of fever, especially of the ordinary intermittents of the autumnal months, of dysentery, and every stage of remittents. As a primary disease, its character, in the great majority of cases, is mild and tractable.

It is not our intention to enter into a minute account of this or the other diseases commonly met with. A very few words will be devoted to the subject.

According to our own experience, the accession of this complaint is usually attended with more or less derangement of the biliary secretion, the discharges being sometimes highly charged with bile, or, much more frequently, during the latter part of the season, entirely devoid of this principle. They are commonly frequent, thin, and serous, sometimes mucous, and, in the vast majority of cases, unattended with tormina or pain. The tongue is seldom loaded, usually clean, and more or less red. It the latter part of the season,
and in cases of severity, it is often pale and oedematous, or dry and discolored, accompanied with a marked torpidity of the cutaneous secreting vessels, a languid circulation, and the general evidences of extreme debility. The treatment is, of course, modified by the peculiar characters presented, and the stage of the disorder, but consists mainly in the administration of alteratives, opiates, and tonics, combined, if needed, by the more active astringents. A combination of blue mass, morphia, and quinia, will, frequently accomplish all the purposes in view. While, in many cases, occurring in debilitated habits, the addition of piperine to the first two of these has seemed to be attended with beneficial effects. The chronic stages of the disease are often extremely obstinate and difficult to relieve. For this condition, a host of expedients may be tried, comprised mostly under the indications already mentioned: a change of air—a temporary removal to the mountains in the interior, or to a marine atmosphere, will here often effect more lasting relief than all the appliances of the materia medica.

The type of the fevers most commonly met with is intermittent, of every variety of feature, but neither these, nor the remittents, present any peculiar characteristics which require special attention in this place. The general principles of their treatment are common to this and other countries, except, indeed, in so far as depends upon the prevailing element of irritation of the intestinal mucous membrane. Attention should constantly be directed to this important feature, and due respect paid to its earliest manifestations. Their frequent complication with cerebral symptoms is promptly and effectively relieved by the timely use of cupping. In our own experience, the long-continued use of mercurials is seldom needed, and ptyalism never. A few initiatory doses as an alterative, or purgative, will fulfil all the indications to which they are applicable, and the subsequent issue of the case may, in most instances, be left to the administration of diaphoretics, quinia, and, if required, to stimulants. Many modifications of this practice will, in dif-
different cases, be required, which the judgment of the physician, at the moment, can alone determine.

In concluding this portion of the subject, we will simply add, that the prevalence of diarrhoea and dysentery, in this climate, seems to strengthen the opinion entertained by many, of the connection of these diseases with malarious vitiation of the atmosphere, and tends to confirm the remark of Doct. Forry, that, “compared with the ratios of intermitting and remitting fever, the laws developed in both exhibit a striking analogy.” The augmentation of both with the increasing temperature of the season is very evident. Besides these, rheumatic affections are frequently met with, as well also as ophthalmiae, of different characters, but very often, according to our own observation, associated with a rheumatic taint, and implicating the iris in the progress of the inflammation. Of minor affections, there are none more common than the various diseases of the skin,—impetiginous and lichenous,—also, urticaria; erysipelas, too, has been of frequent occurrence in this country, sometimes, in certain localities, assuming an epidemic form. Its progress is rapid, and it has, at times, been marked by great severity. In the State Marine Hospital at San Francisco, 21 cases were reported for the year ending Dec. 31, ’53; and in the Stockton Hospital, for the year ending Dec. 31, ’52, 10 cases. In this year, it is stated to have prevailed throughout the southern mining counties, with “great virulence and alarming fatality.”

For the purpose of more clearly setting forth the relation of the climate to disease, and of facilitating a proper understanding of the subject, we have prepared a series of Tables, an examination of which will not be without interest. It is here proper to state, that the facilities in our possession for the accurate investigation of this important subject, are extremely defective. The information we have been enabled to obtain, has been through the kindness of Mr. Yeomans, the undertaker in this city. Having held this position for a series of years, and being necessarily engaged in the burial of all persons dying within the city, a record of whom he
has constantly kept, whether from the public hospitals or from private circles; the information, thus far, is probably correct. But in the absence of any law requiring the certificate of a physician stating the cause of death, he must necessarily incur the hazard of an occasional error. Under these circumstances, much credit is due to Mr. Yeomans for the unrewarded care bestowed in ascertaining the true causes of death, and the general apparent accuracy with which his registry has been kept. When the probable cause could not satisfactorily be arrived at, he has classed them under the head of "unknown." With this explanation, we believe the statistical collections we have made, will, with one exception hereafter to be mentioned, present a near approximation to the truth. The same explanatory statement will equally apply to the records obtained at San Francisco.

The first of these Tables embraces a full record of the interments in Sacramento for the years 1851, '52 and '53.

**Table of Mortality during three Years.**

<table>
<thead>
<tr>
<th>Disease of the Heart</th>
<th>1851</th>
<th>1852</th>
<th>1853</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bouten,</td>
<td>84</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td>Abdominal Abscess,</td>
<td>59</td>
<td>140</td>
<td>63</td>
</tr>
<tr>
<td>Ulceration of Bowels,</td>
<td>19</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Jaundice,</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Croup,</td>
<td>7</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Dentition,</td>
<td>6</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>Cystitis,</td>
<td>5</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Cancer of Oris,</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Parturition,</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Convulsions,</td>
<td>2</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Accidents,</td>
<td>2</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Poisoned,</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Unknown,</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Disease of Kidneys,</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ruboela,</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Paralysis,</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hip-Joint Disease,</td>
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<td>1</td>
</tr>
<tr>
<td>White Swelling,</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cholera Morbus,</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Polio,</td>
<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>Disease of the Heart</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cholera,</td>
<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>Burned,</td>
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<td>1</td>
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</tr>
<tr>
<td>Suicide,</td>
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<table>
<thead>
<tr>
<th>Disease of California</th>
<th>1851</th>
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<th>1853</th>
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</thead>
<tbody>
<tr>
<td>Diarrhoea,</td>
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<td>31</td>
<td>16</td>
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<td>Dysentery,</td>
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<td>140</td>
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</tr>
<tr>
<td>Fevers,</td>
<td>19</td>
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</tr>
<tr>
<td>Phthisis,</td>
<td>15</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Erysipelas,</td>
<td>13</td>
<td>13</td>
<td>9</td>
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<tr>
<td>Pneumonia,</td>
<td>6</td>
<td>19</td>
<td>16</td>
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<tr>
<td>Mania a Potu,</td>
<td>5</td>
<td>27</td>
<td>12</td>
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<tr>
<td>Infl. and Con. of Brain,</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Hydrothorax,</td>
<td>2</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Disease of the Heart,</td>
<td>1</td>
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<tr>
<td>Bronchitis,</td>
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<tr>
<td>Pthyalism,</td>
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<tr>
<td>Worms,</td>
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<tr>
<td>Disease of Kidneys,</td>
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<tr>
<td>Billos Colic,</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>Rheumatism,</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Liver Complaint,</td>
<td>1</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Intem. and Exposure,</td>
<td>1</td>
<td>15</td>
<td>8</td>
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<tr>
<td>Gastritis,</td>
<td>1</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Debility,</td>
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<tr>
<td>Tonsillitis,</td>
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<tr>
<td>Scorbatus,</td>
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<tr>
<td>Spinal Disease,</td>
<td>1</td>
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<tr>
<td>Pertussis,</td>
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<tr>
<td>Influenza,</td>
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<td>1</td>
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<tr>
<td>Pleuritis,</td>
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The whole mortality, as shown by the above, was 1,251. Of these, however, a considerable number cannot be ascribed to the influence of any local causes, and of such, there will be observed the large proportion of 125 arising from intemperance and exposure, murder, executions, and sundry accidents. Besides these quite a large number were of diseases of a purely accidental character, or such as depended upon organic alterations begun in other climates. It is to be remembered that Sacramento is the general rendezvous for the tide of immigration which pours in from the Atlantic States. Whether from the plains or from the ocean steamers, the great mass of adventurers to the land of golden promise repair to this city, bringing with them the seeds of diseases acquired on their route hither, or implanted before leaving home. Destitute, in many instances, of the means necessary for subsistence merely, and unprovided for the emergency of sickness, too many, alas! are thrown upon the cold charity of strangers, and with blasted hopes and an untimely death, help to swell up the lists of mortality.

The estimate here made includes, also, the deaths occurring in the State Hospital, which, during '51 and '52, was located in this city, and thus embraces a large aggregate of cases not properly belonging to the city, and who had contracted their diseases in other portions of the State. The total mortality at this institution, as taken from the books of the undertaker, was two hundred and one, and in 1853, from January to June 30th, when the Hospital closed, it was thirty-nine.
During '53, there died also at the County Hospital, from June 30th to September 1st, five persons; making forty-four to be deducted from the proper city mortality during eight months, and a total aggregate of two hundred and forty-five from the whole mortality of the city from January '52 to September 1st, 1853.

With these considerations kept in view, an examination of this Table furnishes the most convincing evidence of the general salubrity of the climate of Sacramento. When we consider the character of the population, the disregard of all sanitary requisitions among a large class of the community, the dissipation, the apparent contempt for the restraints which a due regard to health imposes, and more than all, the flood of immigration annually centering here, and the wretched condition to which so many of them are reduced, the wonder is, that the annual mortality is not vastly greater than that shown by the record.

The statement of the ages of the deceased during 1852 and '53, is worthy of notice. The large number, between twenty and forty years of age, sufficiently shows the general character of our population, and admits the influence of the youthful vigor and energy which distinguish it.

In comparison with other diseases not strictly ascribable to the climate, the proportion of deaths from disease of the brain is large. Under the heads of inflammation and congestion of this organ and apoplexy, we find that fifty-four are referable to cerebral affections. A ready explanation is offered in the moral causes which are so prevalent in this country. Among these, disappointed hopes, blighted expectations, and pride smarting under the contemplation of golden dreams unrealized, or fortunes acquired, but suddenly vanishing in the vortex of speculation or of gaming, are in ever active operation, powerfully predisposing and exciting both of functional and organic derangements of the brain.

An analysis of the Table would afford an interesting opportunity for a comparison of the record of deaths in this city, with those of other cities on the Atlantic side of North
Hatch on the Climate and America. The whole mortality from acute diseases of the chest and respiratory organs, for example, including pneumonia, pleuritis, bronchitis, influenza, and croup, is only twenty-seven. On the other hand, under the head of consumption and diseased lungs, which are supposed to refer to the same disease, we find the comparatively large number of ninety-six.

The relation of the climate of this valley to phthisis is a question, upon the discussion of which we have neither space to enter, nor the materials at hand upon which satisfactorily to construct an argument. The country has but so recently been occupied by its present population, and this is so fluctuating, that statistical records upon this subject are entirely wanting. Certain it is, however, that few of the cases of consumptive disease, hitherto met with in the valley, have originated here. In most, if not all the instances, the disease has been implanted before reaching the country, and the most that can be said, is that it has not been benefited by the change. Our own opinion is that the climate is not a favorable one for the residence of those in whom the manifestations of the disease have appeared. The prevailing constitution of the atmosphere is malarious, and the debilitating influence of this poison upon the vigor of those exposed to its operation, and upon their power of resisting the inroads of this disease, has been simply tested by the experience of the best observers. Moreover, the sudden atmospheric change which occurs in the evening, and the bronchial irritation which is liable to ensue upon the too speedy checking of the cutaneous secretions are not to be lost sight of in this connection.

In the succeeding Table is a statement showing the monthly mortality from all diseases during '52 and '53:
It will be seen that in both the years referred to, the mortality was greatest in the last half of the year, viz., from July to December inclusive. In 1853, the excess of the last half over the first was only 85:12, nearly; while in '52 it was equal to three times the whole number of deaths in the same period. This discrepancy in the monthly mortality in the two years is more apparent than real, if we take into account only those diseases which can justly be attributed to the permanent influence of the climate. If from the deaths in the latter half of 1852, we deduct those from cholera and cholera morbus, which were probably the same disease, and none of which are stated to have occurred in '53, and which cannot properly be considered to belong to the ordinary agency of the climate, and at the same time make a proper allowance for the large increase of diarrhoea in that year, which was to be ascribed to the prevailing choleraic influence, the proportion of deaths is but little greater in one year than in the other, only 34. If in addition, we take into account the large increase of deaths classed as "unknown" in that year, the persons, so classified, having been many of them found dead, picked up in the sheds and bushes on the outskirts of the city, and some of whom we have reason to know died of cholera, and also the small, though still frightful, list of those who fell victims to the relentless fire which swept over our city in
November, and classed in the Table as "burned," the uniformity in the mortality of the two years is remarkable.

In computing the pro-rata mortality of the city, a very large allowance is to be made for the floating population constantly present within its precincts. This cannot be less than 3,000 or 4,000, and, if considered in the calculation, must considerably reduce the estimate. It is a fact, universally admitted, we believe, that the actual population of this city,—permanent and transient—has not varied to any very considerable extent, for the last three years. The permanent inhabitants are, probably, more numerous now than at any previous time, but the difference is fully equalized by the greater floating population in '51 and '52. Admitting then the whole population to have been 13,000, the mortality in 1851 was one in 47.87, nearly; in 1852, including cholera and its associates, one in 20.46; in 1853, one in 33.61.

But from this estimate, the mortality from cholera should, according to the view above expressed, be deducted, in judging of the mortality from diseases connected with the climate in its permanent influence, which will reduce the ratio to a nearer equality for the three years.

The third Table which we have prepared, is intended to show the mortality in two years, from the two principal diseases of this locality, viz., fevers and affections of the bowels. The last half of the year is selected, as at that period, these complaints are ordinarily more prevalent than at any other, and the year 1852 is purposely omitted, in consequence of the acknowledged incorrectness of the report, as will be explained. It is thus shown, that the greatest difference was in 1851, while in 1853 it amounted to two only.

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<th>1851</th>
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<th>1853</th>
<th>1851</th>
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<th>1853</th>
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</thead>
<tbody>
<tr>
<td>July,</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>November,</td>
<td>1</td>
</tr>
<tr>
<td>August</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>December,</td>
<td>11</td>
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<tr>
<td>September,</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>Total in 6 m's,</td>
<td>36</td>
</tr>
<tr>
<td>October,</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>3</td>
<td></td>
<td>37</td>
</tr>
</tbody>
</table>

With reference to the reported cases of fever in 1852, a word is necessary in explanation. The number reported was
so large, as with the general information we possessed, could scarcely be credited. With the hope of obtaining a solution of the question, we made particular inquiries of Mr. Yeomans, and learned from him, what was before suspected, that a good many of the cases of cholera were in the early period of its prevalence, reported to him, by the attending physicians, as congestive fever. This was done partly with the view of quelling the excited state of the public mind on the subject of cholera, and partly under the theoretical persuasion of the identity of the two diseases. Still, with this admission, the real number of deaths by fever, in that year, exceeded those of either of the other years with which they are associated in the first of the tables.

The small excess of fevers over the diseases with which they have just been contrasted, will appear remarkable when it is considered that there was an extensive inundation in the spring of '53, and the fact goes far to confirm the impression of the slight influence exerted by the floods upon the health of the city.

Upon this subject we shall not, at present, attempt an explanation, awaiting the further collection of statistical facts and the developments of the future. However it may be viewed, the facts which have been presented, and which, we believe, are mainly authentic, demonstrate, in the clearest possible manner, the almost unequalled salubrity of our climate. A careful examination of all the statistical records,—regard being had to the modifying circumstances we have mentioned,—the accidental deaths, and those in no way connected with the locality,—fully and unequivocally establish the proposition of the healthful influence of the climatic elements which prevail.

The cases set down as fever it would be interesting to classify according to their type, as well as their comparative prevalence in particular months; but the record is here greatly defective, rendering it impossible to do more than arrive at an approximation to the truth. Intermittents and remittents are those most commonly met with, of which the greatest mortality in '53, was in September, 7 cases; next October,
6 cases. Of typhoid fever, there are reported four cases in October, the same number in December, two in September, and one in August.

The same remark is applicable to any attempt accurately to classify, according to their monthly mortality, the two diseases, diarrhoea and dysentery. From a careful examination of the reported cases, according to the record of the undertaker, we find that the greatest monthly mortality from dysentery in 1853, was four, in September; while the highest report of diarrhoea in that year was twelve, in December; next January, eleven cases; and the lowest was in June, when there was but one death reported from this disease. The prevalence of cholera in ’52 of course caused a very large increase in the mortality of diarrhoea over the other, yet experience positively indicates the preponderance of the former at all times.

The whole mortality in the city during the present year, 1854, from Jan. to March 30th, has been seventy-three. Of these there occurred in Jan. thirty-eight; Feb. seventeen; March (29 days), twenty-one. Eight cases were of fever; six of diarrhoea and dysentery; three of disease of the brain; twenty-one of diseases of the lungs—not clearly specified; three of variola; two of dropsy; six of enteritis; and the remainder of various accidental causes.

The following table is intended to exhibit the mortality of this city as compared with San Francisco, during the last year, 1853.

<table>
<thead>
<tr>
<th>Sacramento</th>
<th>1853</th>
<th>San Francisco</th>
<th>Sacramento</th>
<th>1853</th>
<th>San Francisco</th>
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</thead>
<tbody>
<tr>
<td>January</td>
<td>43</td>
<td>133</td>
<td>January</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>February</td>
<td>29</td>
<td>130</td>
<td>February</td>
<td>28</td>
<td>135</td>
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<tr>
<td>March</td>
<td>21</td>
<td>93</td>
<td>March</td>
<td>37</td>
<td>105</td>
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<tr>
<td>April</td>
<td>28</td>
<td>84</td>
<td>April</td>
<td>32</td>
<td>129</td>
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<tr>
<td>May</td>
<td>20</td>
<td>99</td>
<td>May</td>
<td>41</td>
<td>100</td>
</tr>
<tr>
<td>June</td>
<td>18</td>
<td>120</td>
<td>June</td>
<td>Total</td>
<td>333</td>
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<tr>
<td>July</td>
<td>15</td>
<td>115</td>
<td>July</td>
<td></td>
<td>1343</td>
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[July,
The whole mortality of San Francisco, during three and a half years, was as follows:

From July, 1850 to July, '51, 1,475
" " '51 " '52, 1,005
" " '53 " '53, 1,575
" " '53 January, '54 (6 months) 620

Total mortality in 3½ years 4,675

In judging of the salubrity of this city, however, a large deduction from the above must be made for those who have gone there with the germs of disease already implanted in the system. Many from neighboring counties, or even from the mines, are annually carried there for the purpose of securing the benefits of hospital treatment and care. Large numbers of immigrants to the country by way of the ocean, also arrive, suffering under maladies contracted on the Isthmus or on shipboard, and, dying in the city, add to the sum of the mortality. If we make due allowance for these, and for those who meet death by accident, and consider the difference in population, which is probably three times larger than that of Sacramento, the contrast in mortality is slighter than would at first appear. Still, making every admission for these modifying circumstances, the comparison seems to show a large percentage in favor of the healthfulness of Sacramento. This latter, as already remarked, is the general resort for the great mass of adventurers coming to California. By whatever route they may have travelled, a very large majority first seek this city as a convenient locality for the perfection of their future plans, and for a mature survey of the prospects before them. This qualifying element in estimating the salubrity of the climate, as well as the remarks relative to hospital patients, applies, therefore, with equal force, to the latter, and reduces the actual climatic diseases much below the amount stated in the records we have consulted.

We derive the following information from the report of the Trustees of the State Marine Hospital to the Legislature.

The whole number of patients admitted in 1852 was
2,283; of these, 1,898 were received on account of the city of San Francisco, and 51 were "pay patients"; these should also be considered as properly citizens. Of the whole number, there died 368; and of these, 296 belonged to the two latter classes of patients. Of the diseases, 52 were of continued, 41 of typhoid, 19 of remittent fever, 45 of cholera, 3 of cholera morbus, 42 of diarrhoea, 34 of dysentery, 10 of phthisis, 11 of pneumonia, 7 of pleuritis; being 264, or nearly 5-8 of the whole. The remainder are classed under the head of "wounds" and sundry occasional diseases.

The comparative monthly mortality of the two cities presents a striking contrast. July, which, in 1853, appears to have been the healthiest month in the year in Sacramento, and which shows a mortality of only 15, exhibits in San Francisco an aggregate of 115 deaths, or nearly eight times as many; June, 6-66 as many; May, five times, and so on; while the fall and winter months, which are the most unhealthy in Sacramento, compare favorably with the same period in San Francisco, after making all proper allowances for the difference in population. The mean monthly mortality for Sacramento is 27-75, and 111-92 in San Francisco.

The limits of this paper preclude the possibility of entering into the diseases and climate of any very extensive portion of the State. Yet we cannot omit to add a few observations concerning the locality of Stockton. This, which is one of the principal cities in the State, is situated in the valley of the San Joaquin, on a slough connecting with the San Joaquin river. As before observed, this valley may be considered, practically, as one with the Sacramento. Their general geographical features are similar, the bale lands are abundant, and the existing causes of disease are not unlike. The climate is mild and equable, and during the summer season, from its more secluded position, the atmospheric heat is somewhat greater. According to the report of the physician to the State Hospital located there, the variations of the thermometer are slight. It is stated that the coldest morn-
ing in the year (1853) was December 31st, thermometer 28°; the coldest noon, Dec. 26th, thermometer 43°; the coldest night, Dec. 25th, thermometer 34°; the warmest morning was June 16th, thermometer 83°; the warmest noon, June 16, thermometer 100°; the warmest evening, June 15, thermometer 83°. The prevailing winds during the dry season are N.W.; during the rainy season, southerly.

The whole number admitted into the Hospital from Aug. 7th, 1851, to July 1, 1853, was 1,870, of whom only 87 are stated to have died. Of the whole number admitted, 515 were sick of fever, viz.: intermittent, 284; remittent, 90; continued, 15; congestive, 6; typhoid, 80; Panama, 40;—of whom 20 died. One hundred and forty-nine were cases of dysentery and diarrhoea, in the proportion of 86 of the former to 63 of the latter. Of diseases of the chest, there were 10 of bronchitis; 40 of pneumonia; 10 of pleuritis; 1 of gangrene of lungs; 5 of asthma; 11 of phthisis; 7 of influenza. Rheumatism of various kinds numbered 52 cases; ophthalmia, 20; hepatitis, 16; cholera and cholera morbus, 49; skin, diseases of, 40; venereal affections, 172; the remainder comprising a few cases of various incidental affections. It is remarked that there are no cases which the physician is called upon to treat, as unpleasant and unmanageable as the chronic diarrhoeas and dysenteries which present themselves. The resemblance of disease in the two valleys is so striking, that it is unnecessary to repeat what has been before said when considering the valley of the Sacramento.

It would be interesting to subject to analysis the report of the physician to the Insane Asylum at Stockton, and examine the details of a malady whose inroads in this State have been fearfully, frightfully manifested,—whose march during the last four years has been, not “aequo pede,” but in a quadruplicate ratio. What a field for serious contemplation is here opened! What a commentary it suggests upon the moral influences which affect the population! How violent the passions, wrestling with disappointment and de-
spair! How terrible the struggle which destroys the balance and desolates the integrity of mind!

The whole number of patients admitted from May 14, 1852, to Dec. 31, 1853, was 284. In no State in the Union are the incentives to this disease more prevalent; nowhere are its exciting causes more actively displayed. The thirst for wealth,—the strife for power,—the intricacies and perplexities of speculation,—the wounds, the secret struggles of pride,—the capriciousness of fortune,—the constant excitement, the feverish tension of the intellect they occasion, and, last of all, and with the crumbling overthrow of all, the agonies of despair,—these are but the outlines of that picture in whose finely-wrought lineaments are to be traced the potent causes of insanity existing in this State. But we cannot pursue this subject in its interesting details. It is one which in itself embraces a wider compass than our limits allow.

We have thus hastily, and with the feeble aids in our possession, imperfectly sketched some of the more striking features of the climate of a portion of California,—a limited portion indeed, yet one in which, by its geographical position, its commercial and agricultural importance, and as the locality of its largest cities, there seemed to centre the greatest interest. It is a source of sincere regret that the statistical information could not have been more extensive, and embrace a wider range of topics, as well as of territory, and especially that the means of obtaining such information should in any respect be involved in doubt. In their collection, we have endeavored to separate the uncertain from the true, and wherever the circumstances were such as to involve a want of precision, we have sufficiently expressed it. In the main, we believe they will be found to convey a pretty correct estimate of the actual sanitary condition of those portions of the State they are intended to embrace. A consideration of the climate of other parts of the country, and especially of the mining regions, and the diseases which prevail, may form the subject of future contemplation.
The medical constitution of the climate of California is yet in its forming state. With the progress of cultivation, of civilization, and the changes in the social condition, new elements and combinations of elements will arise to modify the character of the diseases, to bring about the development of new creations, and the manifestation of those consequences which even now, perhaps, are silently germinating under elemental influences whose agency is not yet recognized. The actual pathologic or therapeutic influences of the climate, it is difficult to determine in a state of society so constantly changing; where exposure to its influence is so seldom permanent, or where, as yet at least, it has been of so short duration. Time and the revolutions which keep pace with it, a more settled state of society, the results of observations extended through a long series of years, and having reference to the permanent population, will alone determine a subject of so much interest.

Sacramento, April 1st, 1854.

Art II.—A Case of Amputation at the Shoulder-Joint. By John Cochran, M.D., One of the Surgeons to Brooklyn City Hospital.

At three, A.M., November 12th, 1853, I was called to see Mr. Charles Phillips, a young gentleman of South Brooklyn, who had reached home an hour previously, seriously wounded by the accidental discharge of a gun. I found him lying on a lounge, exhausted, and almost bloodless. The following is the history of the accident, as given me:

He had been out in Pennsylvania, deer-shooting, in company with some friends. At three, P.M., of the 11th, while resting from fatigue on a log, with the gun across his breast, the dog interfered with the trigger, which caused the discharge of the piece, the contents of which passed through the left arm, close to the shoulder. Binding the arm to the body with some tape, he travelled two miles on foot, five in a country wagon without springs, over a rough road, and thence
one hundred and forty-five miles by railway to the terminus at Jersey City; from there, by carriage, to his residence in South Brooklyn; making in all a distance of about one hundred and fifty-five miles, the wound all this time being undressed, and oozing constantly.

Cutting open the sleeve of the coat and shirt, the wound was exposed. On the inner side of the arm, at the insertion of the pectoralis major muscle, there was a wound of the size of a dollar. On the outer side, opposite to the first, there was a long, ragged slit, extending from within two inches of the acromion to the juncture of the middle with the lower third of the arm.

The os brachii was shattered into fragments from its surgical neck to the middle of the bone, leaving a spicula of bone attached to the head. The external wound of the soft parts was owing to a considerable portion of bone being carried longitudinally through with the shot. The axillary artery was dissected out, and visible for two inches of its course, but untouched; the parts adjoining were considerably discolored and burnt with the powder.

Having carefully examined the condition of the parts, I communicated to him at once the necessity for the speedy removal of the arm at the shoulder-joint. Without a moment's hesitation, he assented by directing me to proceed. I explained to him that, in his present state of exhaustion, a little rest would be necessary before subjecting him to another and greater shock. Filling up the wounds with sponges, and applying a roller, moderately tight, from the fingers to the shoulder, and giving, at the same time, directions for the free use of broth and brandy, with perfect quietness, I took my leave, to return by daylight.

At nine o'clock, A.M., in consultation with my friends, Drs. Hunt and Ayres, it was decided to remove the arm at the shoulder-joint, although at first it was supposed we might possibly succeed in saving the head of the bone, with a view to the gentleman's appearance. But, on close inspection, the soft parts immediately around the capsular ligament were
found to be ragged and burnt. This rendered any such attempt worse than useless, as we must necessarily incur the risk of extensive suppuration and a second operation.

The patient was placed upon the table, and the chloroform administered. The operation was begun with an ordinary scalpel, by carrying an incision from the posterior border of the acromion directly downwards to the upper angle of the external wound, thence across the front of the arm to the internal wound, dissecting up the parts in front of the joint. (In this way a small portion of flap was obtained.) The long head of the biceps and capsular ligament were next divided, and the head of the bone raised from the glenoid cavity. Liston's knife was then carried under the disarticulated bone; and by a single traction downwards, a long flap was made from the comparatively sound tissues behind.

There was no compression resorted to in the dissection in front of the joint; but it was necessary to stop and secure the acromial artery, which bled very freely for a moment. In making the posterior flap, Dr. Ayres followed the knife so closely with his hand, securing the artery and compressing the veins, that scarcely a tablespoon of blood was lost. Besides the axillary, some nine or ten small vessels required the ligature. Between the twelfth and fifteenth days, all the ligatures came away, with the exception of that upon the main vessel, which parted on the twenty-second day after the operation. In five weeks the cure was complete, without the occurrence of any unfavorable symptoms. His general health at the present is as good as at any previous period of his life.

Brooklyn, February 16th, 1854.


Owing to the oppressive and long-continued hot weather of the past summer, an unusually large number of cases were admitted to the New-York Hospital of what is
called coup de soleil, or, as now regarded by the profession, extreme prostration produced by exposure to excessive heats, combined, perhaps, with the effect of receiving large draughts of cold water into the system, when overheated.

So prevalent, indeed, was this disease, that at one time it was regarded almost as an epidemic, not only in this, but in neighboring cities. Several cases occurred in the country, where, heretofore, it has seldom appeared. It will be recollected that a large per cent. of the cases were fatal. The report of the City Inspector of this city alone shows 260 deaths from coup de soleil, without including many cases designated as "congestion of the brain" and the "effects of cold water."

It is now only five or six years since the nature of this disease was pointed out, and yet the profession, generally, have but vague and indefinite ideas respecting it, and it is a matter of surprise that medical literature is so deficient on this subject. A few short monographs, and a few reported cures, are all that can be found in regard to it. Cases are not so infrequent, nor is this affection so devoid of interest, as this silence would seem to indicate.

I have no new theories to propose, or any new light to throw upon the pathology or the treatment of this disease; the object of this paper is simply to call the attention of the profession to this subject, more especially as the season is now approaching in which we may reasonably expect a return of this "calamity."

The term coup de soleil as applied to this disease, is a misnomer. It is a popular rather than a professional appellation. All our authors agree that "cerebral apoplexy" is occasionally produced by exposure to the direct rays of the sun. This I regard as true coup de soleil. The subject now under consideration is an entirely distinct affection. It is now almost universally admitted to be mere nervous exhaustion produced by protracted and violent exercise in an over-heated atmosphere.

Of the large number of cases observed by me, none were
strictly apoplectic, and no lesions were noticed in those which proved fatal, sufficient to account for death. Those two opposite conditions—the "cerebral congestion" and "nervous debility"—require opposite modes of treatment, and should be carefully distinguished from each other.

The subjects of this affection are usually laborers who have been exposed several hours during the day to the direct rays of the sun, the thermometer being over 90°. A great majority of the following cases were foreigners, many of whom had but recently arrived in this country, and who, after the deprivations of a long passage, were ill-adapted to endure great fatigue in so high an elevation of temperature.

The same condition may result after exposure to artificial as well as solar heat. Eleven patients were attacked one morning in the laundry of one of our principal hotels; several were brought to us from a sugar refinery, where, after working several hours in a close and over-heated apartment, they fell down suddenly in a state of insensibility; and we had an opportunity of comparing their symptoms and lesions with those who became exhausted after laboring in the sun, but were unable to satisfy ourselves of any distinction.

Whatever tends to enfeeble the vital powers must be regarded as the predisposing cause. This may result from muscular debility or preëxisting disease. Heat acts as the exciting cause. One patient had suffered for several weeks from an obstinate diarrhoea. He had eaten nothing on the morning of the attack, and, after imprudently walking only a short distance in the sun, fell down insensible. Another patient was suffering at the time of the attack, as we afterwards learned, from the usual malaise of fever, and after convalescing from this disease, passed through the ordinary attack of petechial typhus. Still another was in a cachectic condition from the influence of malaria. He was also picked up in the street, and brought to hospital in an insensible condition. These cases were not included in our Report, though they were evidently suffering from this disease at the time of their admission to the hospital.
An attempt has been made to distinguish those cases which are the result of exhaustion merely, and those who have been suddenly seized after drinking large draughts of cold water when over-heated either from exposure to the sun or by violent exercise. If such a distinction exists, by far the greater number of cases which fell under my observation would be included in the latter class, though only in a single instance were we able to trace any immediate connection. A seaman had been employed, during the day, in the rigging of a vessel, exposed to the direct rays of the sun. At 3 p. m., he complained of a severe pain in the head and a "sense of sinking within him." After drinking very freely from a bucket of hydrant-water, he plunged his head into it, and immediately fell down insensible. Most of the patients had been drinking water freely during the day,—some moderately,—while others had scrupulously avoided it. But a large majority of them were attacked immediately after dinner, when probably large draughts of water were employed.

For this reason I am inclined to believe that the effect of the cold water in these cases is merely to hasten the development of the disease, and that a majority of the cases reported as deaths from "drinking cold water," are really occasioned by "solar exhaustion." Nearly all the patients were exhausted by severe labor, and at their dinner they were in just the condition to suffer from the shock of receiving a large quantity of water suddenly into the system.

Deaths from the effects of cold water are not so frequently met with as is generally supposed. Dr. Dickson, of Charleston, S. C., says: "I have never seen a death from drinking cold water, nor have I been able to obtain any authentic account of such an event having occurred since I have been engaged in the practice of medicine in this city. Yet here, if anywhere, such accidents should occur. Immense quantities of ice and iced fluids are daily consumed here by persons subjected to the several conditions which are regarded as calculated to favor the morbid influence of the agent in the highest degree. The cases described by Rush I believe
to have been generally cases of insolation, and that, being sensible of rapidly approaching disease, and at the same time feeling an internal heat, the patients were just procuring relief when overtaken by sudden death." Such, undoubtedly, was the case of the sailor above referred to.

The disease is usually stated to be confined to patients of irregular habits; but only a small proportion—at least less than one-half of the following cases—could be regarded as intemperate, and many of these had restricted themselves during the day to a single glass of ale or brandy.

The premonitory symptoms are usually slight, and of short duration. A laborer may, perhaps, have been employed until a late hour the previous night, and the next morning complains of a slight headache and a general feeling of languor. He takes his breakfast with less relish than usual, but resumes his ordinary duties. But, in the great majority of cases, even these slight symptoms are wanting. They are suddenly seized, while in the performance of their labors, with pain in the head, and a sense of fulness and oppression in the epigastrium, occasionally nausea and vomiting, general feeling of weakness, especially of the lower extremities, vertigo, dimness of vision, and insensitivity. Surrounding objects appear of uniform color. In a great majority of cases, this was, so far as could be ascertained, blue or purple. In one instance, everything appeared red; in another, green; and in another, white. One stated that objects retained their natural color, but expressed them as being very beautiful, while to another everything appeared greatly magnified.

This may be regarded as the first stage of the disease. It is usually of short duration. In the milder forms of the disease, the stupor is only momentary. The patient is at first, perhaps, aroused with difficulty, but he gradually regains his consciousness. If, however, the attack is severe, the patient shortly passes into a state of coma. The skin is hot and pungent to the touch, and by actual experiment, according to the observations of Dr. Dowler, the temperature is elevated to 112° Fahr. The pupils are dilated and insensible
to light; the breathing hurried and labored; the pulse is
sometimes slow and full—sometimes frequent and feeble,
though the action of the heart may continue inordinately
strong up to the last moment of life.

In the third stage, the symptoms are those of collapse.
The pulse becomes more frequent and feeble; the respiration,
which at first was hurried and labored, now becomes ster-
torous, and accompanied with sighing and moaning; the
skin cool, or the surface of the body may retain its natural
temperature, though the head may be hot; the sphincters
become relaxed; extremities cold; the countenance swollen
and livid; the pupils may be dilated, but are often firmly
contracted; tracheal râles appear; either the patient is quiet,
as if completely paralyzed, or else convulsions, often violent
in character, supervene, and he dies suddenly, or he may re-
main in this condition for several hours.

The first stage corresponds very nearly to that condition
described by Southern writers as "solar exhaustion." Dr.
Dowler makes a distinction between this "solar exhaustion"
(the coup de soleil of northern latitudes) and what he
calls "solar asphyxia." The former he regards as "a mere
fainting, in which the face is pale, skin cool, or not above
the natural standard, while, in the latter, the skin is burning
hot, face flushed, and the mind and body are utterly insensi-
tble to impressions." It runs its course rapidly, and often
proves fatal in 30 minutes. Dr. Cartwright says, the cases
of "asphyxia are often incurable from falling into an incura-
ble state before medical aid can be obtained"! while those
of exhaustion simply, if properly treated, will yield as readily
as a case of common intermittent, and almost as fatal as
"solar asphyxia" if improperly treated.

The second and third stages, described in the progress of
the disease, are so intimately connected that it may seem an
unnecessary division; but it is more convenient to regard
them separately. They differ usually in the mode of attack,
and for this reason some have regarded them as a distinct
condition. The stage of collapse is most frequently noticed
in those who are seized late in the afternoon, "without the signs of apoplexy," after exposure to the heat and fatigue of the day. But the same condition may occur in those who have been seized suddenly "with the signs of apoplexy," and yet pathologically there may be no difference.

Of 60 cases which came under my observation during the past year, 44 were insensible at the time of admission, and 16 were either stupid or sensible. The pupils were dilated in 30, contracted in 19, and natural in 11. The temperature of the body was hot in 34, warm or natural in 14, and cool in 12; while that of the head was elevated in 31, warm in 11, and cool in 18.

The respiration was hurried in 44; the pulse was uniformly accelerated, varying from 100 to 160, and even more per minute. Convulsions were present in 24, delirium was noticed in only a few. 52 of the patients were males. The average duration of the fatal cases was about 4 hours.

The time of the attack in 3 cases was between 8 and 11 A.M. " " " " "40 " " " 11 A.M. and 4 P.M. " " " " "17 " " " 4 and 9 P.M.

Convalescence is usually speedy, after the severity of the disease has passed, and reaction is fully established, varying from a few minutes to five or six hours; the patient sinks into a deep slumber, and awakes somewhat exhausted, and the cerebral functions disturbed; but this soon disappears. Two patients only complained of severe pain in the head, and at intervals exhibited great forgetfulness for nearly a week; and one was occasionally delirious.

A case was reported to me in which delirium supervened, resembling that of delirium tremens. I can conceive that such a condition may exist, but this patient was intemperate, and had been drinking to excess previous to the attack.

Dr. Pepper reports 20 cases, 10 of which died, and 3 resulted in insanity. This termination was not noticed in over 100 cases received at the New-York Hospital. In the reports of lunatic asylums, however, few cases of insanity are
Swift on Exhaustion from Heat.

referred to an attack of *coup de soleil*. One patient was delirious, and with the greatest difficulty restrained.

The statistical reports are too inaccurate to furnish any satisfactory data for the mortality of this disease, as no attempt has been made in the reports to distinguish it from "cerebral apoplexy"; but this latter class is, I believe, less frequently met with than was formerly supposed; and that their number will somewhat diminish as the facilities for *post-mortem* examination are furnished, and that by far the greater number of cases included under the head of *coup de soleil* are nothing more than "nervous prostration." About one-half of the cases are usually fatal. The mortality of the past year will, however, be above this estimate.

The total number of cases admitted to this Hospital since 1845, is 150, of which 78 died. The mortality of the cases admitted in 1853 is 33 in 67.

The mortality of hospital practice must be greater than that in private, as very many were admitted in a moribund condition, and died before any treatment could be adopted, while others were rendered hopeless by being brought a long distance, several hours after the attack.

The prognosis will depend on the stage of the disease. In the first stage, the prognosis is usually favorable; much, however, will depend upon the treatment adopted. The symptoms indicating collapse are always unfavorable.

In 33 fatal cases, the pupils were contracted in 20, moderately dilated in 7, and markedly so in 6; while, in the successful ones, the pupils were dilated in 19, and nearly natural in 15. No case recovered in which the pupils were contracted. Mere stertorous breathing is not necessarily fatal; but after the respiration becomes *sighing* and *moaning*, the prognosis is very unfavorable; only two patients recovered after this character of the breathing was present.

To these two symptoms—the condition of the pupil and the character of the respiration—I attach much value; and if other observations shall confirm this, they will furnish the most reliable basis for prognosis.
The respiration was sighing or moaning in 31 of the 33 fatal cases; convulsions were noticed in 24. This is a grave symptom, but 6 recovered after they were present. The pulse alone is no safe criterion of the actual condition of the patient, for it may continue of fair strength throughout the whole course of the disease, with no perceptible alteration either in force or frequency, though the patient may be under the free use of stimulants. This will frequently surprise those who are unaccustomed to observe it.

A fatal relapse occurred in one instance. This patient was attacked suddenly while at his work, and lost all consciousness. As soon as he had sufficiently recovered, he walked a long distance to the Hospital, exposed to the direct influence of the sun. This exertion, combined with his previous prostrated condition, probably induced another attack. He again partially convalesced, but immediately sank into a comatose condition, from which he did not rally.

The pathology of this disease is uncertain. We have as yet failed to discover any satisfactory lesion to account for the phenomena noticed before death. It is now, however, generally admitted to be merely "exhaustion" produced by fatigue—either in the sun, or, less frequently, in a close and over-heated apartment.

The post-mortem appearances, though of a negative character, are precisely opposite those found in "congestion" of the brain or apoplexy produced by insolation—in other words, coup de soleil. And it is of great importance that this relation should be correctly understood, for they obviously require an opposite course of treatment. Unfortunately these two conditions are too indiscriminately called coup de soleil. Our nomenclature, in this respect, is imperfect, and calculated to mislead those who are unaccustomed to observe it. But we must not infer, simply because a disease has been erroneously called coup de soleil, that we have apoplexy to contend with. "It is debility we have to meet, and not repletion." Depletion, which is essential in the one, is almost necessarily fatal in the other.
In some cases we have apoplectic symptoms with those which properly belong to the opposite condition. And we may perhaps be puzzled to know to which class they belong. But even in these cases, we rarely find any lesion. Sometimes there will be found a moderate congestion of the brain, but no more so than we often find in cases where we suspect no lesion of that organ.

The following case may perhaps be interesting, as illustrating this:

An unknown woman was picked up in the street in a state of exhaustion, and brought to the Hospital at 8 p.m., Aug. 14th. Nothing could be learned of her previous history. She was completely insensible, pulse frequent (120) and feeble; respiration hurried and labored; skin burning hot; temperature of head elevated; pupils contracted and insensible. The prognosis was unfavorable. Our ordinary treatment was adopted. Sinapisms were applied to the calves of the legs and abdomen, ice to the head. Stimulating enema of spts. tereb., brandy, and tr. capsici were administered moderately. Frictions with mustard were also ordered. Four hours after her admission, her condition became decidedly worse. The slight convulsive movements of the body, which were noticed at the time of her admission, were more marked and violent, and it was only with the greatest difficulty that she could be confined to the bed. The breathing was exceedingly labored, and accompanied with sighing and moaning—pupils dilated; the pulse very frequent, and scarcely perceptible at the wrist; the countenance swollen and livid; extremities cold; the stomach refused to retain the stimulants. The bronchial tubes became clogged with an increase secretion of muocus; and deglutition was very difficult. The slightest attempt to swallow threatened almost immediate asphyxia. She was ordered injections of brandy and carb. ammonia.

On the following morning reaction, was fully established. The pulse 130, but fair strength. The head and surface of the body hot; eyes suffused, red and injected, fixed and
motionless; pupils contracted to a point and inactive; face flushed; countenance swollen and turgid; respiration deep and stertorous; and the patient was completely comatosed. The quantity of stimulants was diminished, and an aloetic enema repeated; ice reapplied to the head, and sinapisms to extremities.

The physician in attendance now regarded these symptoms sufficiently indicative of cerebral congestion to warrant deple-
tion. Ordered a moderate abstraction of blood from the temples by cupping, and the treatment adopted during his absence to be continued. She died 21 hours after admission.

Autopsy 18 hours after death. No marked congestion of the brain or lungs was observed. The heart was flaccid and filled with fluid blood. The liver was much congested—other organs healthy.

This case was, doubtless, one of "nervous exhaustion"—a condition so often mistaken for, and associated with, "cere-
bral apoplexy," and it was the only one in which reaction ran sufficiently high to indicate depletion. But even in this the post-mortem disappointed us. I have only seen a few, a very few cases, of insolation verified by a post-mortem exami-
nation,—certainly not one during the past year, although examinations were made in all the cases in which we sus-
pected any cerebral lesion.

The diagnosis of those cases, which simulate apoplexy is often difficult. The remarks of Dr. Condie, though inappli-
cable to the case just given, may perhaps be generally useful. He says: "In those cases requiring depletion, the head partic-
ularly, and often the entire surface of the body, is hot. The eyes injected; pupils contracted; pulse small, quick, and cored. Tongue red and dry. Patients are delirious, restless, and in a constant state of agitation; and if not speedily relieved by prompt and active treatment, coma ensues, and the patient dies as in acute meningitis."

The true pathology of this disease, like those cases of death produced by lightning, will probably never be cor-
rectly explained, unless, perhaps, the microscope may aid in
removing the veil of mystery which surrounds it. But it must be remarked *en passant*, that there are many points of resemblance in the appearance of those who have died from the effects of heat, and the cases reported of death from lightning.

Does the heat produce death by destroying the "vital principle," as Hunter supposed was the effect of lightning? Does it produce some chemical change in the blood itself, so that it can no longer subserve the purposes of innervation? or does it produce its effect primarily upon the nervous system? This is the most plausible theory. The vital powers, already enfeebled by fatigue and the heat of the atmosphere, are unduly stimulated. The natural balance of the circulation is destroyed, and the heart contracts with a "morbid activity." The lungs are engorged with blood, and the heart labors to overcome the increased obstacle, until at length it is exhausted by this "morbid activity," and passive congestion takes place in the capillaries throughout the body.

The pathology of this disease is too obscure and uncertain, and observation too limited, to arrive at any satisfactory conclusions in regard to the treatment. It is at best empirical. We regard the disease as one of debility, and we partially treat it as such.

The great practical point to be regarded in the treatment is, that this affection is entirely distinct from *coup de soleil*, as generally understood by the term. It is a disease of "debility," and not one of "repletion." Depletion is generally contra-indicated, and stimulants are usually required.

In cases of *Insolation*, the lance is often employed. But these are very rare. During the summer of 1818, there were 13 cases admitted into the Hospital. These were largely bled; 60 ounces were taken from the arm by repeated bleedings; and in one case as many as 80 ounces. And the "recovery in this one was much more marked and speedy." Three of these died, and the post-mortem appearances were precisely those of "cerebral congestion." But in cases of exhaustion, I have never seen a patient recover after he had been bled.
This practice is now nearly abandoned. Formerly, nearly every case treated before admission to the Hospital had been bled. But not a single patient had been bled of those admitted during the past summer. They do not bear well even the local abstraction of blood by cupping.

The plan of treatment usually adopted is to place the patient in a hot bath, rendered stimulating perhaps by mustard or capsicum—or counter-irritation to the whole body by means of mustard; a stimulating enema of tr.-aloes c., or, what is preferable, spts. terebinth; ice to the head when the temperature is elevated; brandy and tr. capsici, or even carb. ammonia if required.

The indiscriminate use of cold affusions is productive of harm. Injurious and often fatal effects result from them. It is a popular and erroneous idea that a patient, as soon as he is attacked, should be completely deluged with cold water. To employ it in every case would be as absurd as in cases of collapse from any cause.

Another important consideration in the treatment of the earlier stages is rest. In crowded cities, to which this disease is mostly confined, this caution is too much disregarded. As soon as a patient is attacked, he should be placed in a horizontal position, in as cool a place as possible, and perfect rest required. Nothing can be more serious for a patient in this condition, to be carried, as is too often the case, upon an ordinary cart for a long distance, or allowed to remain exposed to the influence of the sun.

The length of this paper will prevent any detailed account of the cases themselves. They were admitted during the attendance of Drs. Joseph M. Smith and H. D. Bulkley, and the treatment adopted during their absence was approved of by them. In conclusion, I desire to express my special acknowledgments to my senior assistant, Dr. John B. Chapin, for his valuable assistance, not only on this, but other occasions.

*New York Hospital, March 15th, 1854.*
Art. IV.—On the Use of Hydrochlorate of Ammonia in Coup de Soleil. By J. R. Leaming, M.D., Physician to the Northern Dispensary, N. Y.

Case 1.—I was called in the afternoon of June 16th, 1852, to see a man at the Knickerbocker stables, on Eighth avenue, overpowered by heat. He was insensible, breathing somewhat sterterous, pulse slow and weak. Having used muriate of ammonia in the comatose condition of typhus fever with apparent benefit, and believing the nervous prostration in this case to be very similar, I prescribed it in about 8 grain doses in solution, every half hour. He was removed to his home and mustard applied to the epigastrium. With some difficulty he was made to swallow the medicine, but in about 15 minutes after the first dose the stertor ceased. In an hour he was sleeping quietly, and when disturbed, answered questions incoherently. In about three hours, he could sit up in bed and converse, but complained of great lassitude and fullness about the head. The next day he was able to walk out.

Case 2.—I was called in the afternoon of June 22d, 1853, to see a blacksmith who had been sent to his home in 28th street, overpowered by heat. I found him entirely unconscious, without any action of the voluntary muscles, deep stertor, pulse slow and full.

I gave him the ammonia and applied mustard. I left him, but returned in an hour and a half, and was surprised to find the patient sitting up, able to converse. He complained of general lassitude and a dull pain in the head. The next day he was walking about.

Case 3.—I was called in the evening of June 28th, 1853, to see a bricklayer, who had fallen insensible a moment after returning home from his work in the evening. I found him without stertor, but breathing slow and heavily, pulse slow and weak, entirely unconscious. I gave him the ammonia and applied mustard, then sent a messenger for Dr. Tucker, his family physician. In about an hour the Dr. called on me, and requested me to see the patient with him. We found him able to converse, complaining of debility and pain in
the head. The medicine was continued, and the patient walked out the next day.

Dr. T. assures me that he has since used the muriate of ammonia, in similar cases, with gratifying success.

Case 4.—August 12, 1853, I was called in the afternoon to see a man, in 26th street, suffering from sun-stroke. Mustard had been well applied before I arrived. He was entirely unconscious, labored breathing, pulse weak and frequent. I gave him the ammonia, and when I returned, in about an hour, he was sitting up.

My notes of these cases are very meagre, but the impression left on my mind at the time, and by other cases of which I have no notes, is, that the ammonia produced speedy and satisfactory relief. If the pathological condition of sun-stroke be excessive nervous exhaustion, as I believe it is, diffusible stimulants are indicated, and I think the muriate of ammonia is the best. The patient should not be bled, ice should not be applied and continued to the head. The face and temples may be sprinkled, or sponged with cold water. Mustard should be thoroughly applied, the extremities kept warm, and muriate of ammonia dissolved in cinnamon water, given at short intervals till consciousness is restored, and afterwards at longer intervals, till the sensation of pain and fullness in the head has disappeared.

Art. V.—A Review of Epidemic Small-pox as it has prevailed in New York City at different periods during the last fifty years. (Read before the Society of Statistical Medicine, New York.) By J. Lewis Smith, M.D, Physician to the North Western Dispensary, New York.

In May, 1801, Dr. Jenner, whose wonderful discovery of the prophylactic power of cow-pox was at the time riveting the attention and gaining the favor of the whole medical world, wrote thus in reference to vaccination: “It is now too manifest to admit of controversy, that the annihilation of small-pox—the most dreadful scourge of the human race—will be
the final result of this practice." More than half a century has passed since this pleasing prediction was uttered, and are we yet nearer its fulfilment? The bills of mortality of this city show, instead of a diminution, a gradual increase of small-pox; yet all our physicians are advocates and practitioners of vaccination, and the poor may receive this blessing gratuitously by application at the dispensaries.

This increase of the variolous disease, so contrary to the reasonable expectations of the friends of vaccination, and especially the fact, that we are now witnessing the decline of the most fearful small-pox epidemic which has yet visited our Island, have induced me to prepare this paper. I trust I shall not encroach on the ground already occupied by Dr. Hutchinson, in his interesting and practical communication to the May number of this Journal.

Prior to the present century, small-pox seems to have held an unimportant place among the diseases of New York. It caused, however, an adjournment of the Legislature in 1730, then in session here (Webster's Hist. of Epidemics), and no doubt it visited the city, in a sporadic form, almost annually, prior to the period of the registration of deaths. Bills of mortality were first prepared and published in 1805, and our remarks must therefore be based on data furnished since then.

In the decade, commencing with the year 1805, there were in this city 413 deaths from small-pox, or 1.9 per hundred deaths from all causes. In the following decade, from 1815 to 1824 inclusive, the number was 718, or 2.2 per hundred; in the following ten years, closing with the year 1834, they numbered 1103 or 1.9 per hundred; in the next period, from 1825 to 1844 inclusive, 1606 or 2.2 per hundred, and in the following nine years, ending with 1853, 3280 or 2.5 per hundred. From this we see that the per centage of small-pox deaths, instead of diminishing, increases, and that the ratio of increase has been uniform during the last three decennial periods. The second decade shows a large proportion of small-pox deaths, in consequence of its embracing the year
1824, when a very severe epidemic of this disease prevailed. This increase in the fatality of variola is the more note-worthy, because in every European city, so far as we have statistics, there is a gradual diminution of variolous deaths. In London, Edinburgh, Cork, Limerick, Paris, Berlin, and Copenhagen, statistics show a gradual but decided abatement in the fatality of this disease. Whether in the other American cities, as well as in New York, this epidemic is increasing, or, as in the transatlantic cities, is subsiding, is an interesting point, but one which I have not sufficiently examined.

Except in the years 1819, '20, '21 and '22, when there was a long immunity from variola, at least of a fatal nature, the records of every year since 1805 show more or fewer deaths from this disease, and every month since 1847 has had at least ten. Nosologists regard it a law of epidemic diseases, that they prove most fatal after periods of comparative immunity from them. Our statistics show this to have been true of small-pox. Thus in 1811 there were 117 deaths succeeding 4 in 1810, and the years 1813 and '14, '19 to '23, '29, '33, '39, '44 and '47, all showing comparatively few interments from small-pox, were immediately followed by years of unusual mortality from this cause.

During the first quarter of the present century, yellow fever occurred at times epidemically in this city, and since its last visitation, about the year 1823, small-pox, scarlatina, and measles have augmented in frequency and severity. Prof. J. M. Smith, of this city, in an able and highly interesting report, made to the American Med. Association in 1848, in alluding to this fact, ventures the opinion that these diseases require, for their development, different climatic or atmospheric conditions from yellow fever, and that as long as the former are of frequent occurrence we need not fear the visitation of the latter.

It is a matter of some importance to determine the correctness of this view; for, if true, there is less need of imposing quarantine restrictions on vessels coming from ports where yellow fever prevails. Much light might be thrown
on this point by examining the statistics of mortality in southern cities. Are these cities, which are yearly scourged by epidemics of the fever, lightly or severely visited by the three eruptive diseases? From the statistics which I have seen, I am inclined to think that these diseases, though by no means of rare occurrence, prevail less south than north, and that they prevail principally in the months when the fever is absent. Dr. Gregory remarks (Lect. on the Erump. Fever.) "It is seldom that two diseases are epidemic at the same time in the same district." This is no doubt true of certain of the epidemic diseases, but small-pox, scarlatina, and measles are an exception. The Inspectors' reports show not only that the annual mortality of all three has gradually increased, and in about the same ratio, but also that two, or indeed all of them, may occur as epidemics during the same month. This comports with the fact, now clearly established, that any two of these may co-exist in the same individual. These diseases, too, have much the same history, commencing as far back as they can be traced with certainty. We find them co-existing in Arabia at the rise of Mahometanism, and thence they have spread, for the most part, pari passu, wherever conquest and commerce have carried them. May not their close affinity, as thus evinced in the history of their occurrence, yet throw light on their nature and causes? and is there not plausibility in the conjecture, that each, as it prevents its own recurrence, may serve to mitigate subsequent attacks of the others; and that cow-pox, though it may not prevent, yet, as is thought by some, may render measles and scarlet-fever milder, producing, in a less degree, the same prophylactic effect as in case of small-pox?

Many of the Inspectors' reports present, in a tabular form, the monthly deaths from variola; and, with a view to determine the influence of the weather on the prevalence of this disease, I have added the deaths from 1816 to 1853 inclusive, being obliged to omit only eight years in this period. The result is as follows: January, 661 deaths; February, 531; March, 559; April, 309; May, 449; June, 380; July, 288; August, 243;
September, 194; October, 269; November, 370; December, 521; Spring, 1217; Summer, 911; Autumn, 833; Winter, 1713. From this we see that the mortality has been greatest in the winter, and successively less in the remaining seasons; the deaths in the autumnal months being not one half those in the winter. The question may here arise whether the known prevalence of intermittent and remittent fevers in the autumn may not have something to do with the diminished mortality from small-pox, a question which, like that in reference to yellow fever, can only be settled by a large number of statistics.

At different times and in different places, the variolous epidemics have observed no uniformity of occurrence as respects the seasons. Thus, Dr. John Cross published, in 1820, an account of the very fatal epidemic which occurred the year before in Norwich (Eng.), causing 530 deaths, of which 382 took place in the summer, and only 4 in the winter months. In Sydenham’s time, according to his own statement, mild variolous epidemics began about the vernal equinox, when of an extended and dangerous kind in January. “These observations,” says Dr. Gregory, “are not confirmed by modern statistics.” (Erup. Fev. page 85.) The last epidemic which the metropolis (London) experienced began in November, 1837, reached its acme in June, 1838, being a period of eight months; then slowly declined, and ceased entirely in January, 1839. The epidemic of 1796 followed a course very similar in all respects. The Inspectors’ reports show that we have had occasional mild epidemics of small-pox in the summer, but that those attended with much fatality have commenced uniformly late in the fall, or at the beginning of winter.

In order to determine more certainly if atmospheric conditions or variations, such as we can measure by our instruments, influence the occurrence of small-pox, I have examined carefully the meteorological tables contained in the Inspectors’ reports since 1845. As the disease occurs in all climates and seasons, its essential atmospheric condition, if it
have any, is probably of too subtile a nature to be detected by any means which we at present possess. Yet if small-pox be independent of those climatic conditions of which we are cognizant, such as temperature, density, and humidity, it is interesting to know the fact. The following Table gives the average for each month of the temperature and density of the atmosphere, the direction of the winds, and the amount of rain and snow, from 1848 to 1852, inclusive, the year '49 excepted; also the average monthly mortality from small-pox:

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<td>Average amount of rain and melted snow.</td>
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<td>Average days of wind towards equator.</td>
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<td>Average days of wind from equator.</td>
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<td>Average deaths from small-pox</td>
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Slight as appears the connection between this disease and the state of the atmosphere, there may yet be discovered a close connection between them. Mr. Blodget, of the Smithsonian Institute, in an able article, entitled "The Climatic Conditions of the Summer of 1853," published in the *New York Journal of Medicine* for November last, in speaking of
the high temperature of the summer months, says: "It is more remarkable that some incipient epidemic was not started in full vigor, to rage after the principal inducing cause had passed away." True enough, the miasmatic diseases prevailed in the autumn to an extent almost unprecedented on this Island; and when they had subsided, small-pox followed with a mortality greater than at any previous period.

In the London Med. and Phys. Journal for Feb. 1809, Dr. Thomas Christie, Med. Sup. General in the island of Ceylon, writes: "Previous to the introduction of cow-pox (in Ceylon) in 1802, small-pox scarcely ever failed to visit us, at Colombo, during the prevalence of the south-west monsoon." It seems probable that long-continued winds from the same direction may so change the condition of the atmosphere as to introduce a new class of diseases, and this is probably the reason, why at times, and in certain places, small-pox has seemed dependent on the state of the winds. That variolous epidemics are not due to any intrinsic change in the nature of the disease; but rather to changes in the constitution of the atmosphere or of persons, is evident from the fact of an unusual susceptibility to kine-pox, when small-pox is epidemic, on the part of those who have once been vaccinated. During the past spring and winter, I have re-vaccinated quite a large number, and have found but few unsusceptible to a second course of the disease; and other physicians have remarked the same; a fact, by the way, which goes to prove the essential identity, or at least close relationship, of vaccinia and variola, contrary to the opinion of Dr. Gregory.

The annual reports for the years 1824, '30, '34, '39, '41, '42, and '44 give the total mortality, as well as the mortality from small-pox of the colored people. I find that, in these years, 19.6 per cent. of those who died of small-pox were colored, while only 7.8 per cent. of the total mortality was in this class. This corresponds with the received opinion that variola is most fatal among the blacks.

During the six years from 1848 to '53 inclusive, 165 deaths
from varioloid were reported, or 6.2 per cent. of the deaths from small-pox. I am certain, however, that many cases reported as varioloid were really cases of unmodified small-pox. Having of late studied closely the appearances of the vaccine vesicle, I am convinced that many vaccinations which pass as genuine, and leave cicatrices, are spurious and not to be relied on, and that death from variola after true vaccination is much more rare than the bills of mortality would lead us to think. There can be no doubt, too, that some physicians call cases, which they know to be unmodified small-pox, varioloid, and if death result, the misnomer of course enters the certificate.

During the years included between 1842 and 1852, with the exception of '43 and '45, the proportion of male to female deaths from small-pox is given, viz., as 1.3 to 1; from all diseases, as 1.4 to 1. The number of males in the city is considerably less than that of females, and this strange disproportion in the deaths of the sexes has not yet been satisfactorily explained. I have examined the registers of the Northern and North-western Dispensaries, to see if there were a similar disproportion as regards the sex in cases which recover, and I find that, of 464 variolous patients, presenting the disease in all grades of severity, 240 were males and 224 females.

From measles, the deaths, from 1842 to 1852, inclusive, were males to females as 1.35 to 1; from scarlatina as 1 to 1.03. Of the three eruptive epidemic diseases, then measles and small-pox have been more fatal among males; while from scarlet fever, there has been a slight excess of mortality, but perhaps no more than proportionate to the whole number of cases occurring in the two sexes.

I have collected from the registers of the Northern and North-western Dispensaries, statistics of the ages of 549 variolous cases (variola and varioloid). Of these, 93, or 17 per cent., were one year old or under; 163, or 30 per cent., from one year to five; 126, or 23 per cent., from five to ten years; 104, or 19 per cent., from ten to twenty; 54, or 10
per cent., from twenty to forty; 7, or 1.3 per cent., from forty to sixty; and 2, or 0.6, over sixty. Forty-seven per hundred, then, or nearly half of these patients, were five years old or under. This shows the importance of an early vaccination of children.

According to Dr. Hutchison, 64 per cent. of the small-pox deaths, during the past five years, have been under the age of five. So far, then, as the statistics allow us to generalize, it appears also that the proportionate mortality is greater under the age of five than subsequently.

The question may properly be asked, among what class of our population small-pox is most prevalent. May it not be confined chiefly to foreigners, especially the Irish, who have within a few years settled in the city in such vast numbers. The Irish, more than any other class, as is well known, are disfigured by the variolous eruption, and in Ireland the proportion of deaths from small-pox is greater than in any other civilized country. In Dublin, for the ten years ending with 1851, the small-pox deaths were 2.5 per hundred deaths; in Cork 3.9; Limerick 4.1; and in the whole of Ireland during the ten years ending with 1841, 4.9 per hundred. In order to determine more certainly how far the prevalence of this disease in our city is due to the Irish element, I have learned the nativity of 599 variolous patients, treated in the Northern and North-western Dispensaries since 1848. Of these, 331 were born in the United States, 229 in Ireland, and the remainder, 39, principally in England and Germany.

Many, and probably most, of those registered Americans, were of Irish extraction, children of parents who have within a few years emigrated to this country. If we reject from the whole number those under the age of ten years, we shall find that the Irish greatly preponderate in the remainder. Thus, of 163 cases, occurring after the age of ten, I find that 54 were American and 109 Irish. From this it appears that, if it were not for the Irish population, New York would suffer much less from small-pox, probably no more in proportion than other northern cities; and we have a satisfactory explaina-
tion of the fact, that, though vaccination is more and more practised here, the proportion of deaths from small-pox increases. The bills of mortality, instead of proving the inefficiency of vaccination, as might appear at first, really afford a strong argument in its favor; for the Irish, more than any other class, neglect vaccination. Their ignorance in reference to this subject is truly astonishing; many appear never to have heard of it till advised by some friend to have it performed, and others have the most absurd and vague ideas of its nature. The large class of unprotected children furnish foci for the spread of small-pox on almost every street, and were it not for the efficiency of the great Jennerian discovery, we can see no reason why there should not be a proportionate mortality among the American population.

Our sole reliance being on vaccination, the question arises, in what manner it can be made the most available. When the Irish have once arrived and diffused themselves among our population, it is almost impossible to effect a general vaccination among them, and the surest way to accomplish this end would seem to be in making it the duty of the physicians on board the emigrant ships to vaccinate all emigrants not already protected. Once learning the simplicity and importance of vaccination, these people would probably be more anxious to have it performed on their children, born subsequently to their arrival, and by this means not only this but other cities, and the country towns, where the Irish locate, would be much less liable to be visited by epidemics of small-pox.

Art. VI.—On the Topical Application of the Nitrate of Silver to the Larynx and Trachea in Croup. By Edwin N. Chapman, M.D., Brooklyn, N. Y.

In the March number of this Journal for the present year, I reported five cases of croup, treated in the last and fatal stage by the topical application of a solution of lunar caustic to the larynx and trachea. Since that paper was published,
five other cases illustrating the same treatment have been
presented to my notice, the particulars of which are as fol-
low:

Case 1.—March 18th, 1854, I was called to Mr. H.'s
child, Atlantic street, 10 months of age, ill with the croup
for 48 hours; previously to my attendance, the patient had
been vomited repeatedly with ipecac. and Cox's hive syrup,
without producing any salutary effect on the course of the
disease, or mitigation of the laryngo-tracheal, symptoms,
which were gradually, but certainly assuming a more fixed
and grave significance; these were, whistling respiration,
labored inspiration, hoarseness, almost amounting to a sup-
pression of the voice, cough stridulous and dry, excessive
thirst, full and bounding pulse. The chest failed to betray
any evidences of disease, either as tested by auscultation or
percussion.

Before resorting to the nitrate of silver, I wished to give
the established treatment a fair and faithful trial, having full
confidence in the caustic, as long as the disease was limited
to the tracheal and laryngeal mucous membrane. It matters
little whether that disease consists of mucous or sub-mucous
inflammation, or pseudo-membranous or diphtheritic exuda-
tion; over one and all the nitrate of silver possesses a power
almost magical.

I directed one leech to the top of the sternum, the bleeding
from which was to be promoted by warm fomentations for
two hours or more, unless faintness supervened. After the
leeching had produced its full effects, a warm bath for half an
hour, and whilst the child is in the bath, one-half teaspoonful
doses of the following mixture to be given every ten minutes
till free emesis occurred: R.—Tart. antimonii, gr. ij, syrup
ipecac. ½i.

4 p. m. A free and copious flow of blood had followed
from the leech, so much so as to make the child pallid and
languid; free and powerful emesis from the emetic, attended
with the prostrating effects of the antimonial was produced,
but without causing the least apparent effect on the laryngeal
inflammation. No mucus was discoverable in the matters vomited. Ordered for the night 15 drops of the above mixture, or sufficient to nauseate every hour.

March 19th. No marked change in the condition of my patient. Continue mixture and apply a blister, 4×4 inches, to the top of the sternum. In the evening an emetic of ipecac.

March 20th. No alteration for the better; an entire absence of secretion, at least of mucus. No evidences that the chest is implicated in the disease. Continue treatment.

8 o'clock, p.m. More alarming and aggravated symptoms begin to manifest themselves; constant labored inspiration, with exacerbations, threatening suffocation; purple, suffused countenance, torpor and lethargy. The medication has failed to check in the least the course of the disease, which has, notwithstanding, slowly but surely advanced to serious, if not permanent obstruction in the windpipe.

I now applied in Arg. nit. 5ss, add Aq. dist. 3i misce—to the larynx and trachea, introducing the swab at least three inches below the rima glottidis.

March 21st. During the night there was no marked amelioration of symptoms. Applied caustic as before, which resulted in free vomiting of a substance very tenacious and adhesive, albuminous in appearance, and not at all resembling the proper mucous secretion. Reapplied the caustic in the evening with a like result.

March 22d. Improved; reapplied caustic; mucous secretion begins to take the place of the albuminous, though it is still glary and lymph-like. Prescribed an expectorant of senega and squills.

March 30th. Discharged—cured.

Case 2.—May 5th, 1854. Child of Mr. S., Amity st., 15 months of age, suffering from an attack of the croup for six days. For the last two days it had been under the careful and judicious treatment of Dr. Drake, who had employed all the usual means of combating the disease, viz., antimony in divided doses, mercurials, warm baths, cathartics, &c., but
all without avail. An antimonial emetic failed to operate, though continued until three grains had been given.

The patient presented the following symptoms: laborious inspiration, with a permanent constriction of the calibre of the larynx, and attended with a dry whistling sound, as though the mucous membrane was devoid of moisture; no violent exacerbations; voice muffled and nearly suppressed; cough dry, ringing, and sonorous; pulse full and strong; skin disposed to perspiration; chest not implicated.

As Dr. Drake had tried the approved means of treatment assiduously without producing any beneficial effect, we resolved to resort to the caustic without further delay. It was employed in the same manner and of the same strength as in the last case. Emesis occurred with the discharge of a substance gelatinous and albuminous in appearance, mixed with shreds which had the semblance of false membrane in the formative stage. Ordered B Hydrarg. sub mur. gr. iss., cretae ppt. gr. viij. m. Ft. chart No. viij. S., One every third hour, also one-sixteenth of a grain of antimony every second hour, for the purpose of producing a nauseating effect.

May 6th. Laryngeal symptoms slightly improved; reapplied caustic with an effect similar to the day previous; directed a cathartic and omitted the mercurial; ordered B Syr. senegae. 5ij; ipecac, 5i, given to produce vomiting at first, afterwards in 5ss. doses every hour. May 7th, improved; continue treatment. May 9th, cured.

Case 3.—April 26th, 1854. Mr. McL.’s child, Columbia st., 16 months of age, had suffered with croupal symptoms, of a mild but insidious character, for the last seven days, which, from the onset, were gradually assuming a more dangerous character. At S, A.M. there were the following symptoms: difficult and labored inspiration; croupal cough; profuse perspiration; loss of voice nearly complete, respiration of natural frequency, and attended with noisy rhonchi throughout both lungs; percussion clear. Directed two leeches to the throat, to be followed, after they had bled freely, by an antimonial emetic.
4 P.M. The emetic operated freely, with a copious discharge of mucus, but without any mitigation in the symptoms. Applied the caustic, the same as in the other cases, and directed a blister $4 \times 4$ inches to the chest. Directed also an expectorant, composed of squills, senega, and carb. ammonia, with a nutritious diet.

The child died on the following day at 12 o'clock, m., with symptoms of the same character as those of the previous day, but more profound and aggravated. Inspiration was not only difficult, but short and rapid. The catarrhal inflammation seemed to affect the entire mucous membrane of the respiratory apparatus.

Case 4.—March 27th, 1854. A child of Mr. G., Wolcott street, 20 months of age, laboring under an attack of croup for five days, had been treated by domestic prescriptions until the day previous, when Dr. Brooks, a well-known practitioner of this city was called to attend it. About the same time, Dr. Harris, of Williamsburgh, saw the case. They employed the usual means for combating the disease, but without producing any change in the unfavorable features of the case. In the evening, an attempt was made to introduce caustic into the wind-pipe. On the morning of the fifth day, the caustic was applied a second time.

At 4 p.m., when I first saw the patient, it presented symptoms almost identical with the last case. There was a catarrhal condition, sub-inflammation of larynx, trachea, and bronchial tubes, which had attempted resolution by a profuse secretion of mucus. The child was in a half somnolent, torpid condition, aroused with considerable difficulty, and breathing not only as if there were great constriction about the larynx, but much more rapidly than natural. The tracheitic symptoms, though the mucous secretion was very free, were of the most grave and serious character. Moist rhonchi were heard all over the chest; percussion clear.

We applied caustic, as in the preceding cases, directed an expectorant of senega, squills, and carb. ammonia, and a blister $4 \times 4$ inches to the chest.
March 28th. The child died at 9 o’clock A. M., of extensive inflammation of the bronchial mucous membrane.

Case 5.—March, 1854, Master W., from Massachusetts, a lad 10 years of age; consulted me on account of an affection of the larynx and trachea of 18 months’ duration, attended with a croupy cough, hoarseness constant; subject to exacerbations from changes of the atmosphere; tenderness in the crico-thyroid space. I applied caustic on eight different occasions, with an interval of from four to six days. His symptoms constantly improved, and, May 1st, he was discharged cured.

Remarks.—Setting aside spasmodic croup, arising from causes sympathetic, all cases assuming a fatal character naturally divide themselves into three classes: the membranous, catarrhal, and diphtheritic. The last differs from the first, in frequently commencing by an exudation in the mouth or face, which, by continuity of tissue, extends into the respiratory tubes. In none of the ten cases reported by me was this diphtheritic exudation perceptible, though my attention was most particularly directed to discover it if present. All were either of membranous or catarrhal character; two of them had perfectly organized false membrane and recovered; of four cases which, from the want of secretion till the caustic was used, and the appearance of the matters subsequently vomited, were judged to be of the membranous variety in the initiatory stage, three recovered and one died. Of the two catarrhal cases, which were nearly moribund at the time caustic was resorted to, both died. One chronic case, from congestion of the mucous membrane of the larynx, was cured. One case, probably membranous, which recovered from the croup, died two weeks afterwards from marasmus.

Of these ten cases (including those previously reported), seven recovered from the disease, and three died.

The duration of the disease before the caustic was resorted to was respectively 72, 60, 36, 48, and 60 hours, and 4½, 6, 7, 5 days, and 18 months. Faithful and thorough medication

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was employed in all excepting one, before resorting to the caustic, yet without avail. Not one of the nine acute cases, in my estimation, could, in the desperate strait to which they were reduced, have recovered by any other known method of procedure, excepting from the doubtful and unsatisfactory operation of tracheotomy, which, in hands the most skilful and experienced, yields results far from being favorable to its repetition. We can readily imagine a case in which suffocation might be imminent, from an obstruction localized in the larynx and upper portion of the trachea, where tracheotomy holds out a solitary and perhaps the only hope for the patient. We have no time to wait for the remedial powers of caustic, which, from its very nature, requires an appreciable interval—very likely five or six hours—before its peculiar powers are displayed in subduing the inflammation or disorganizing the pseudo-membrane that may have been secreted. Unless greatly deceived, even such a case would not require the operation, were the caustic thoroughly and efficiently employed at an earlier date, whilst the obstruction is not too serious, and the powers of life are still strong. We sadly need some remedy, more general and universal in its applicability than tracheotomy, to which we may appeal with confidence, in all cases hastening on to a fatal issue, after active and efficient medication has been resorted to, without producing a favorable crisis.

Such a remedy I confidently trust we shall find in the nitrate of silver, when its powers have been more generally tested, and its application to the seat of the disease becomes familiarized by frequent and careful practice. I do not despair of seeing it used with as great an assurance of success as in those other kindred inflammations of the fauces, of whatever nature or kind, in which we cauterize so confidently and with such beneficial effects. Even in diphtheritic pharyngitis, between which and the false membrane of tracheitis there is such a close resemblance, we confidently appeal to this remedy, almost certain that the inflammation will subside, and the exudation be detached in shreds and
disorganized portions, before the almost magical power of
this potent article. Its efficacy, when thus applied, can be
observed by the eye.

I trust that it will be found that the mucous membrane of
the larynx and trachea of a similar organization will be
equally as amenable to the treatment by cauteration, as a
like disease in the pharynx, whether that disease consists of
inflammation, or has resulted, in addition, in a lymphatic ex-
udation of pseudo-membrane. Analogy bears me out in
asserting, what my experience demonstrates to my own satis-
faction, at least, that similar tissues, affected with similar dis-
ases, require for their cure the same remedial agent, unless
there are other good reasons why its powers would be less
ef ficacious in the given case.

J U N E 1 S T, 1854.

A R T. VII.—A Case in which a Cystoid Tumor of the Ovary was
Successfully Punctured through the Vagina. By J. M E N N I N-
GER, M.D., of New-York.

Among the many diseases to which the ovarics are subject, the degene-
trations and tumors, especially the so-called hydrops ovarii, are
deserving of our special attention. We purpose to speak of the treat-
ment of the latter form of disease by paracentesis, performed through
the vaginal wall, in connection with a case in which this operation was
recently successfully practised.

Carus distinguishes three different species of ovarian dropsy, viz.: 1.
Hydrops ovarii sacculus, or the collection of water or fluid between
the serous and fibrous membranes of the ovary ; 2. Hydrops hydat-
idosus, or, transformation of the ovary into a membranous sac, contain-
ing real hydatids. 3. Hydrops cysticus, or cellulosus (cystic sarcoma
of Abernethy; emphysema cellulosum, or cystose tumor of Mason Good),
in which the contents of the tumor are seldom serous, but thick, sa-
guinolent, purulent like chocolate, ichorous, glutinous, and of different
colors. The case which follows is classified under the third form of
degeneration.

Paget, one of the most recent and able writers on pathology,
(Lectures on Surgical Pathology.) arranges cysts under the titles of
"simple" or "barren," and "compound" or "proliferous" cysts.
He enumerates the different orders of the former and latter, and brings the above case under the compound or proliferous cysts; but especially of it he says: "these compound eystoid growths may appear equally compound, though they are only simple eysts clustered or grouped together."

Case.—Mrs. Reyher, 29 years of age, midwife, emigrated from Germany to this country fifteen months since, and has since resided in this city. She is of medium size, well-formed, and, with the exception of her present difficulty, enjoys good health. She was never previously affected with any serious illness; first menstruated in her fifteenth year, and continued to do so regularly until her marriage in her twentieth year; soon after which, she became pregnant, and was delivered of a healthy female child. She did not again conceive, although still living with the same husband. Her menstruation, which reappeared ten months after delivery, was regular until fifteen months before the date of the operation, with the exception of five months, two years since, during which period she suffered a chlorosis, caused by a cold, and depression of spirits on account of the sickness of her husband, who had emigrated before her to America.

On the 25th of November, 1853, the patient was forced to take to her bed on account of pains in her abdomen, especially above the pubes, which she had experienced, but in a less degree, during the previous week. These pains were aggravated by motion, and still more in the effort to evacuate the bladder and the bowels. On the morning of the 26th, I saw her for the first time. In addition to the above-mentioned symptoms, she now complained particularly of frequent vomiting, from which she had suffered during the previous night, and which had greatly increased the pain in the abdomen. The tongue was thickly coated, appetite gone, and the pulse accelerated. Ordered an effervescing draught of carbonate of potash and citric acid, which relieved the vomiting and pain until evening, when both returned, with little less severity than the night before. Upon examining the abdomen, I discovered, on pressing deeply just above the pubes on the left side, a small, resistant tumor, which was painful, but not as in peritonitis, and not markedly more so than the remaining portion of the abdomen. The patient thought herself pregnant, because the menses had not appeared in about eight weeks; but that circumstance did not appear to account for all the symptoms present. The diagnosis remained uncertain. I ordered emollient cataplasms, which gave temporary relief during the night, but on the following morning I found her condition as unfavorable as before. I gave calomel, twelve grains, divided
into eight doses, and followed it with an emulsion of castor oil and manna; this produced a free evacuation of the bowels, and, in consequence, a slight relief of pain. Externally, unguent hydrarg. cinerum, with iodine, was applied. These remedies, however, gave only temporary relief.

On the 29th of November, the catamenia again appeared, just two months after her last menstruation. The vomiting and pain ceased, the tumor seemed to enlarge, and was now just above the symphysis. In the afternoon, with pains like those of labor, a membranous mass was discharged, which had the appearance of a miscarriage, in the second month of pregnancy. On the following day, the former pains returned; the bleeding ceased; the pulse was ninety, and small; the patient was weak, and had not been able to obtain sleep for five days.

A more careful examination became necessary, and I now for the first time made a careful exploration of the contents of the pelvis *per vaginam.* I found that the tumor on the median line above the pubes was the same which I had felt three days before more deeply on the left side; that it extended to the left side; or rather, that the tumor, situated deeply on the left side, extended, by enlargement, to the middle and right side. It also rose upward, above the symphysis, three fingers in breadth. The tumor was felt protruding into the vagina, from the left side, crowding the uterus slightly downwards, and to the right side. The diagnosis was a tumor of the ovary, the nature of which remained to be determined, although its hardness, and equal elasticity, its rapid growth, and also the evidences gained from palpitation and percussion, seemed to indicate fluid contents. After the employment of various external and internal remedies, I found that the best means of relieving the symptoms, were the administration of aperients (manna and Seidlitz powders), and the application of cataplasm of flax-seed and chamomile flowers.

After some weeks, the pain occasioned by the evacuation of the bowels and bladder ceased, and the patient felt well while lying in bed. When out of bed, and making exertion, the pain returned, and she would be compelled to lie down. The appetite had gradually improved, but still she was emaciated. In the mean time, I constantly observed that the tumor was enlarging, and that it could be felt more easily in the vagina, with the index finger, than formerly, pressing the womb still more strongly downward, and to the right side, so that the whole now lay entirely to the right of the median line. The tumor extended upward to the umbilicus, and upon the right side nearly to the crest of the ilium; it was symmetrical in its extent and elasticity,
and but one cyst could be distinguished. Still, there was an indistinct feeling on the right side, above the pubes, as if there were two tumors; one lying above the other, the edge of the lower one being perceptible below the edge of the other. Fluctuation could be distinctly perceived through the vagina, but not at all through the abdominal parietes; it was most distinct when the finger, introduced into the vagina, was pressed against the tumor, and percussion was made externally by another. This was the condition of the patient, and the tumor, in December. On the 25th, the menses appeared exactly at the regular period, and on their cessation she thought herself better, and began to walk about; she attended several cases of midwifery, as midwife, during the last days of December, but it aggravated her symptoms so much as to compel her to take to bed again. I had already spoken to her of the probable necessity of an operation, and described to her the method I proposed to pursue,—an operation which had recently proved successful in the practice of my friend Dr. Shnetter, of this city. On the 7th of January, Dr. Shnetter saw the patient, and confirmed the diagnosis, and agreed to the plan of operation. The patient was now failing rapidly; she had hectic perspirations, and the weight of the tumor was a great burden. She herself estimated the circumference of the abdomen, at the lower part, equal to the seventh month of pregnancy; but the tumor did not rise above the navel, and the abdomen was broader and less round and high than is usual in the sixth or seventh month of pregnancy. The patient now grew impatient of delay in the performance of the operation.

The operation which I designed to perform was with slight modification the one proposed by Kiwich in 1846, and which he several times practised, viz., puncture of the cyst through the vagina, enlargement of the wound, the insertion of a tube, and the injection of warm water to wash out the matter until the entire destruction of the cyst by suppuration took place.

The operation was set down for January 11th; at this time Drs. Boldeman and Stephen Smith were present, and examined the case. Chloroform was administered, but the patient was so restless, and took the anaesthetic so badly, that it was deemed advisable to defer the operation to a subsequent day. On the 13th of January, with the assistance of Dr. Boldeman, I proceeded to operate.

Operation.—The patient was placed across the bed, the hips being brought near its edge, her feet resting on chairs, and chloroform administered. I then introduced a curved trocar and canula into the vagina, and, conducted by the index finger of the left hand to the most
prominent point in the tumor, I plunged them into the cyst. The trocar was now removed, and a gush of fluid followed; the canula was retained; through the latter I then introduced a bistoury, curved upon the side, with a button, as described by Recamier, and, withdrawing the canula sufficiently to allow the cutting edge to incise the wound, I proceeded to enlarge the opening, managing the instrument with the right hand, and guiding its blade with the left index finger. The walls of the cyst were very thick, and were cut with difficulty. Removing now the bistoury, I again pushed forward the canula into the wound, and through it passed a sound which served as a guide to the introduction of a tube into the cyst after the removal of the canula. This tube was a piece of an elastic stomach-tube, about ten inches long and more than one-third of an inch thick, and was retained in the wound to afford an exit to the contents of the cyst. The operation was completed in about twenty minutes. The fluid discharged measured nearly two quarts, and had the consistency of thick pus, and was of a chocolate color. On examining it under the microscope, it was found to consist principally of shrivelled blood-corpuscles, pus globules, and a few epithelial scales.

Upon recovering from the state of anesthesia, the patient felt well, lighter and easier than before, and complained only of a slight soreness at the point were the puncture had been made. There was no reaction following the operation on this or any subsequent day; she took half of a Seidlitz powder daily, as before the operation, until her convalescence. On the following day, the amount of fluid which had escaped from the tube and vagina since the operation was six or eight ounces; the secretion was purulent, and the tumor was still found to extend midway between the pubes and navel. On the second day, I found my patient in good condition, had slept well, but the matter discharged was more ichorous, and had a penetrating odor. Injections of warm chamomile tea through the tube produced a better secretion, and the bad odor of the discharge disappeared. On the third day, I changed the tube, and, in the absence of a larger one, made use of a large catheter, through which the purulent matter did not find so ready an escape. The patient continued to do well until the sixth day, when she began for the first time to complain of not feeling well, and there

* . . . . Si je ne trouverais pas l'ouverture du kyste suffisante j'examine-rais s'il ne serait pas facile de l'agrandir avec un bistouri boutonné, courbe sur le plat, conduit par la canule de trois-quarts, etc.—Revue Médicale Française et Étrangère, Janvier, 1839.
was evidently some febrile excitement. On the 7th day, her condition was much more unfavorable; the pulse 125, small; great prostration; tendency to faintness, and slight delirium during the night. Conjecturing that these symptoms were due to a retention of the purulent discharge from the cyst, I immediately withdrew the catheter, which gave exit to a large quantity of matter. A larger tube was now inserted and injections more frequently made. Her condition improved, and on the following day she complained only of weakness. I ordered decoct. of cinchona and sulphuric acid, with liquor anodyne, from which the patient derived very marked benefit; in two or three days after, she expressed herself as feeling quite well.

The discharge up to the present time averaged one or two ounces in the twenty-four hours; during the last night, however, it amounted to nearly a quart from a sudden eruption.

On the night of the 22d of January, the tube slipped from the wound unknown to the patient, who slept soundly. So much time had now elapsed, that I failed in my efforts to reintroduce the tube. The finger and tube could be readily passed through the wound in the vagina, but a careful and prolonged search for the opening in the cyst proved unavailing, as the two wounds now did not correspond. I ordered large injections to be made into the vagina, at the same time that a napkin applied to the vulva prevented its escape. By this means I had the satisfaction of seeing pus escape freely with the injection, the latter having evidently penetrated to the cavity of the cyst. On the following day, I endeavored again to introduce the tube, but without success; this attempt was repeated two or three times after, but, as the purulent discharge became free, I desisted, satisfying myself simply that the opening into the vagina was patulous. On the 12th day of the operation, and the third after the escape of the tube from the cyst, nearly two quarts of purulent fluid was discharged with a sudden gush. The quality of this matter differed from that which escaped during the operation only in being of a more purulent character. The quantity of matter discharged now diminished to one or two ounces in the day, and the improvement in the health of the patient was proof that there was now no retention of pus.

I cannot explain these two large and sudden discharges of purulent fluid, the one on the night of the 20th, and the other on the 25th, more plausibly than by supposing that each was the result of the rupture of an adjacent cyst into this one, which communicated externally, the walls of which had become thinned by ulceration. The local changes, which, on examination, were found to have taken place, confirm
this opinion. The uterus immediately regained its normal position in the median line,—the tumor was diminished to the size of a hen's egg, and the discharge from the vagina became much less. The strength of the patient increased in a degree proportionate to the diminution of the discharge. About the 6th of February, the patient was able to be out of bed during most of the day, and the discharge had from this date to the 23d reached its minimum. On this day the menses made their appearance, after which every appearance of the former discharge disappeared, nor could a careful digital examination detect any remains of disease. The patient's appearance improved, and, although she had not recovered her former strength, she returned to her daily duties.

Up to the present time, June 3d, the patient has continued well, with the exception that in March and May she was taken ill with slight fever, gastric symptoms, pain in the pæcoeordia and above the right hip, and enlargement of the liver. The first attack confined her to bed three days; the last, but one. The liver remained enlarged and hard for several days each time. Exposure to cold and mental excitement seemed to be the cause of these attacks. I examined her a few days since, and could discover no trace of her former difficulty.

The puncture of cystoid tumors of the ovary, through the vagina, has been rarely practised, except when, by their protrusion into the vaginal cavity, they have obstructed the progress of labor. The first operation of this latter kind related in English medical literature, was performed by Dr. Ford, the patient surviving the operation six months (Denman.) In the Medico Chirurg. Trans., vol. 7, Mr. Park details the histories of several cases in which ovarian tumors complicated labor; and in three, he resorted to puncture of the cyst, through the vagina; all recovered. Subsequently, Dr. Merriman reported, in the same work,* similar cases.

But the operation of puncture through the vagina, for the purpose of effecting a radical cure of these growths, independently of their connection with parturition, though attended with a fair average of success, has met with little favor, and is not even mentioned in most surgical treatises.

The first operator was Callisen, who punctured the vagina, both for the relief of ascites and a variety of encysted dropsy, as appears from the following passage in his work: † Sic quoque cautam punctionem

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* Medico-Chirurgical Transactions, vol. x., p. 50.
† Systema Chirurgiae hodiernae, t. II., p. 59.
Menninger on Tapping Ovarian Cysts. [July,

per tumorem eminentem, et fluctuantem in vagina uteri cum successu instituit. It seems, however, to have been discussed still earlier; for, on the occasion of Marcen, a surgeon of Turin, communicating an operation of this kind to the Acad. of Surg., Paris, in 1788, M. Allan reminded this body that he had presented a memoir in 1767, wherein he recommended puncturing ovarian cysts through the vagina, in preference to any other part.* The operation has, during the last twenty years, been more frequently performed than previously, and with a degree of success which at least entitles it to serious consideration. Kiwisch states,† that he has operated several times successfully by this method, and remarks that others have also practised it. In a memoir by M. Tavignot, entitled De l'Hydropsie enkystée de l'Ovarie, et du Traitement qui lui est applicable,‡ four cases are related. In one, the cyst was punctured to facilitate parturition, and the patient recovered. The second was undertaken, but unsuccessfully to effect a radical cure. The other two were operated upon by Récamier and Michon, and both proved fatal. One had an attack of peritonitis and pneumonia; in the other, upon attempting a re-puncture, the instrument entered the peritoneal cavity. In an elaborate monograph, entitled Des Tumeurs fluctuantes du petit Bassin, et de leur Ouverture pratiquée par le vagin,§ by Hyppolite Bourdon; several successful cases are recorded, and the operation is strongly advocated. In Great Britain the operation is rarely mentioned, although English surgeons early recognized the necessity of puncturing ovarian cysts when they obstructed labor. An operation for the cure of ovarian dropsy is related in the Archives Générale, as having been performed in the Middlesex Hospital, London. Mr. Ogden reported a case in the Lond. Med. Gaz., May, 1840, p. 348, in which he punctured an ovarian tumor, through the vagina, which, by its pressure, caused complete retention of urine. Before resorting to this operation, however, he punctured the bladder above the pubes. The discharge from the ovarian tumor continued several days and, when it ceased, no re-accumulation of fluid followed, the cure remaining complete. The operation was recently performed in this city by Dr. Shnetter, and was com-

† Klinische Vorträge über specielle Pathologie und Therapie der Krankheiten des weiblicher Geschlechtes. II Abtheilung, Prag. 1749.
‡ L’Expérience, No. 160, 1840.
§ Revue Médicale, Sept., 1841.
pletely successful. It is published in the Prag. Vierteljarschrift, 1854, and is, so far as we are aware, the first of the kind in this country.

In regard to the propriety of the operation, Tavignot very justly remarks that nature has indicated the proper method of curing these cysts by the frequency with which they have ruptured into the vagina, and completely recovered; and, adding to this the projection of the tumor into the vagina, and its distinct fluctuation, he traces readily the origin of the operation. He bases the propriety of the operation upon the following considerations: 1. The cyst is punctured at its most depending portion, and the escape of the fluid is thereby favored. 2. An ordinary sound being retained in the wound, gives exit to the fluid as fast as it collects, and allows the walls of the cyst to collapse. 3. It favors the formation of a fistula at a point most favorable to effect a cure.

The success of the operation itself depends, in a great measure, upon the freedom of the discharge, as is illustrated in the above case and others to which we have referred. When the matter was allowed to collect, by the escape of the tube from the opening, symptoms of irritative fever set in, and, unless relieved by the free discharge following the injection, the case would undoubtedly have had a less fortunate termination. On this account it is very important that the opening be freely made, and the tube introduced, of a capacity sufficient to allow of the free escape of the contents of the cyst. Another point of special interest in managing the case, is to be careful to maintain the tube constantly in the wound, except to exchange it; for, if allowed to escape, it has, in several instances, involved the necessity of repeating the operation. This seems to be due to the change in position, which the cyst may undergo, and thus prevent the correspondence of the two wounds.

Appended, is a table of all the cases of this operation, with which we have met in our reading, with the results in each case. We have not included cases where the operation has been performed to facilitate labor, and which have, in many instances, been followed by complete recovery. The whole number is ten, of which six were cured, three died, and one had a return of the disease. Of the three fatal cases, in one, peritonitis was set up from a puncture of the peritoneum in attempting to repeat the operation, after failing to find the former opening in the cyst. In this case also the cyst was found to have undergone a partial seirrrlus degeneration. In the second, the vagina was opened from above, and the patient died from a complication of dis-
cases, though, for a time she progressed favorably. Of the third fatal case, we have no note of the cause of death; she survived the operation about a month.

Table of Ten Cases in which Ovarian Cysts were punctured through the Vagina to effect a Radical Cure.

<table>
<thead>
<tr>
<th>No.</th>
<th>Age</th>
<th>Operation</th>
<th>Result</th>
<th>Remarks</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Simple incision</td>
<td>Died on 30th day.</td>
<td></td>
<td>M. Dubois, Revue Médicale, 1838.</td>
</tr>
<tr>
<td>3</td>
<td>26</td>
<td>Passed a long curved trocar into abdominal wall and downward through the cyst into the vagina</td>
<td>Died on 20th day.</td>
<td>Peritonitis and lung complication</td>
<td>M. Récamier, Revue Médicale, Jan. 1830.</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Punctured with a pharyngotome</td>
<td>Cured.</td>
<td>Cure complete on the 39th day.</td>
<td>M. Récamier, Revue Médicale, 1840.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Puncture with trocar</td>
<td>Return of disease.</td>
<td>Canula was not retained in the wound after puncture.</td>
<td>M. Nonat, L'Experience, 1840.</td>
</tr>
<tr>
<td>6</td>
<td>35</td>
<td>Puncture with trocar</td>
<td>Death in 6 hours after second operation.</td>
<td>In attempting a second operation the trocar entered the peritoneum.</td>
<td>M. Tavignot, L'Experience, 1840.</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>Cured.</td>
<td>Discharge continued 64 days.</td>
<td>Mr. Arnott, Archives Générales, vol. 56, p. 487.</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Puncture with large incision</td>
<td>Cured.</td>
<td>Operation performed in New York.</td>
<td>Dr. Shnetter, Prag Vierteljahrschrift, 1854.</td>
</tr>
<tr>
<td>10</td>
<td>29</td>
<td>Puncture with large incision and introduction of large tube</td>
<td>Cured.</td>
<td></td>
<td>Dr. Menninger, N. Y. Jour. of Medicine, vol. xiii. (N. S.), p. 75.</td>
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Cancer of the Breast.—Appearances of Retrogression of Cancer. By T. M. Markoe, M.D., one of the Surgeons to the New York Hospital.

Dr. Markoe exhibited specimens taken from a woman who had been under his care some two years, and gave the following history of her case:—She died at the age of 51. In one of her breasts there appeared, some years ago, a slight discolored spot, which soon assumed the form of a tumor, and at length grew to occupy the whole centre and substance of the breast. Soon after the tumor had progressed thus far in the first breast, a similar tumor made its appearance in the other breast, and progressed in the same insidious manner, without inflammation or redness, and, at first, without much pain. As the breasts grew to a considerable size, they became hard, and she suffered a great deal of pain. This period lasted about four years, during which the progress was very slow and gradual. About this time she came to this country from England. For a year or more after her arrival, no apparent change took place, except that both breasts had become nearly of a size; they were as large as the two fists, hard, and insensible. She made use of some quack remedies, which had the effect, after a year or two, of reducing the volume of the breasts; they also became less painful, and the skin was shrivelled and horny, so that the nipple began to look like a warty excrecence. There seemed to be a flat indurated substance under the nipple, with hard lines passing from it. At this period she came under his care, not on account of her breasts, for she supposed they were in a fair way of being cured; but for some vague affection in the hypochondriac and epigastric regions. Upon investigating these symptoms, he was led to suspect a transfer of the disease of the breast to some of the internal organs. Flatulence was a symptom throughout the progress of the disease. After a time, the abdomen became somewhat distended with fluid, which increased until the case became a fair one of abdominal dropsy. He put her upon a mild mercurial course, which unexpectedly produced severe ptyalism. For a time after this, she was so much more comfortable that he ceased to attend her. Finally, she again sent for him, and he found that the dropsy had reached a point which threatened suffocation. He proposed tapping, but she refused until suffocation became imminent, when she yielded, and he drew off twenty-one quarts. Symp-
toms threatening peritonitis supervened, but soon subsided, and she rapidly recovered. The tapping was repeated at intervals of five to seven weeks while she lived; the quantity of fluid removed increasing at each repetition of the operation, from 21 quarts at the first, to 35 quarts at the eighth. After each tapping, she would get up and resume her business, and continue thus until the distension of the abdomen became so great as to compel her to seek relief in the operation. Previously to the last operation, she was attacked with vomiting, or rather rejection of her food. She died exhausted by the long continuance of the disease, the rejection of food, and excessive pain.

On post-mortem examination, three or four quarts of clear, transparent serum were found in the abdomen. The viscera presented a beautiful appearance; the intestines stood out in relief, as if injected with plaster; the surface was studded with tuberculous-looking masses, closely packed together, varying in size from a pin’s head to a pea; and scattered here and there were little transparent vesicles, containing fluid. Around these little masses there was a peculiar vascularity, and the whole surface of the small intestines were more or less agglutinated by old false membrane. The principal scat of this deposit was in the small intestines, but the spleen was covered entirely with something of the same nature. A portion of the liver was attached to the ascending colon; the parietal peritoneum, though not injected in the same way, presented the same tubercular appearance. He supposed he had found, in the evidences of chronic inflammation, the cause of the dropsy; but further examination revealed the portal vein compressed by the deposit of new matter in that portion of the mesentery which enclosed it, this deposit extending along the vein to the liver. The vein itself was healthy. This condition of the vein was probably the principal cause of the dropsical symptoms.

At the lower part of the abdomen, he found a condition of things which he had not before seen. The whole of the intestines appeared as if their cavity was injected; they could be felt, through the abdominal wall, after each tapping, like coils of rope. The explanation of it was here seen; the coats of the intestines were infiltrated with this matter, so that they were thickened and swelled out like a solid cord. It was not easy to recognize a canal in the upper part of the rectum, but the lower portion was more natural. The same deposit covered the uterus and ovaries; a fallopian tube had been caught in one of the serous cysts upon the ovary, and was stretched out as a broad band over it. The new deposit, whatever it was, seemed to be confined to the peritoneum and portal vein.
The breast was in the same condition as when she first came under observation, two years before.

On section, the knife passed through a dense yellowish white substance, having the appearance of partially dried fibrous tissue, and spread out in a layer of about one-third of an inch thick under the nipple, to which the nipple was attached. No trace of the normal structure of the gland was apparent. The shoulders and back were covered with tubercles under the skin; the muscle and bone seemed to be perfectly healthy.

The most important feature in this case was the fact of an apparent absorption or retrogression of a cancerous tumor. The history of the breasts would establish pretty clearly that it was a case of cancer; and if we could determine that the abdominal deposit was cancerous, it seemed to be a pretty clear case of partial disappearance and atrophy of a cancerous tumor, with reproduction in another part. One symptom which seemed to him as most certainly indicating the character of the disease, was the hard tubercles all over the shoulders and back, which by their prominence made the surface irregular. He was not, however, fully satisfied of the cancerous nature of the deposit, but its general appearance led him strongly to suspect it. The only other deposit would be tubercular, but in this case there would have been false membrane effused, which did not exist in any considerable degree. Every part was examined except the brain; in one part of the lungs there was a very little of this tuberculous-looking matter. As this was a point of much importance, he had made a careful examination. The heart presented one very small tubercle, as large as half a pea, just above the place where the coronary artery curves around the base of the auricle. He could not ascertained that there was any hereditary predisposition.

Prof. Clark said that he had seen one case of cancerous matter deposited upon the peritoneum. In that instance it was a small, white, shining, irregular deposit on the surface of the peritoneum, covering the whole of it. There was scarcely the space of a line in width that had not some of that matter upon it; he had now forgotten whether it was primary or secondary, but he believed it was the latter. The tuberculous deposits are almost always connected with a considerable amount of fibrinous effusion, which produces agglutination of the intestines, and, unless seen very early, they will be found so connected. At a very early period they appear transparent, deposited rather under than on the membrane. But there is still another deposit, rarely met with, which might give some explanation. It is that which occurs
from inflammatory action, and is caused by the fibrinous matter which, from the friction of the intestines, collects into little nodules, exactly as we see nodules in the spleen. It is possible that this is a case of that rare form of slowly organizing matter. The little tubercles situated under the skin, when not cysts, from which they are easily distinguished, are, in ninety-nine cases out of a hundred, of a cancerous character.

The specimens were then referred to Dr. Clark for examination, and a report at a subsequent meeting.

Heart-Clots. By John Cochran, M.D., Surgeon to the Brooklyn City Hospital.

Dr. Cochran presented specimens removed from a man 32 years of age. This person had been ill more than four years. When he first came under observation, his extremities were oedematous, and the abdomen filled with water. On making a physical examination of the chest, he found the ordinary symptoms of considerable hypertrophy of the heart, complicated, as he thought, with valvular disease on the left side. The urine had a high specific gravity, and threw down a copious deposit of albuminous matter when subjected to the proper tests. The patient gradually grew worse, and at length died. On examining his heart after death, it was found enlarged, but no disease of the aortic valves existed; a polypus six inches long was found extending up the aorta, which he supposed might have produced death. One of the kidneys was healthy; the other presented but little normal structure.

Prof. Clark said that, in regard to the occurrence of these polypoid clots, which have been supposed to exist previous to death, and to have been the cause of the fatal termination of any particular disease, ever since the publication of Dr. Meigs' papers upon the Heart, &c., his attention had been directed to the subject, and he did not remember to have seen, in a single instance, any satisfactory evidence that coagulation of the blood had taken place before death. Such a thing does happen, but it must be of rare occurrence. Dr. Cheeseman had a specimen that was unequivocal; it is now in the museum of the New-York Hospital. The clot formed a sort of rounded ball, which acted like the ball-valve in a syringe, and finally obstructed the circulation completely. He had seen one or two other instances; in one the clot became attached to the pecten muscles of the heart previously to death, as was proved by the fact that the inner portion of it had softened, while the exterior remained firm. He thought it impossible that this
change should have occurred after death. In all cases where the evidence had been entirely satisfactory, the coagulum has had a whitish appearance. This case appeared to him like those he had been accustomed to consider mere coagulation of the blood at the heart. The firmness of the clot did not exceed what might be found in any coagulated blood, and it is very common to find the coagulum bound down, and embracing the pecten muscles so as to be firmly attached.

Condition of Muscular Fibres in a Ruptured Heart. By Prof. Clark.

Prof. Clark read a report on the condition of the muscular fibres in a ruptured heart, presented at a previous meeting for Dr. Uhl. The heart at the time of the examination had been removed from the body twelve days; a part of that time it had been kept in diluted alcohol, and for about six days it had been macerating in cold running water. The fibres that had been exposed to the action of water directly, had nearly all lost their striated appearance, and had become markedly granular. But when a new section was made, and the fibres examined from it, they showed the transverse marking very distinctly, and many of the longitudinal striations. They appeared perfectly normal. This was true of both the right and left side, and as demonstrable even in the immediate neighborhood of the rupture as in any other part. There was, besides, nothing of the pale or yellowish color which so often accompanies the granular degeneration of muscular fibre; on the contrary, the tissue had the deep brown healthy color, except where it had been changed by the direct action of the water. It was worthy of notice, however, that on the right side were to be seen numerous adipose cells, grouped irregularly, separating the muscular fibres, but causing no change in their structure. This fact has been often noticed in hearts that are undergoing the adipose degeneration. In this instance the adipose matter was not found among the fibres of the left side, and on that side there was no noticeable encroachment of the adipose upon the muscular tissue. At a later period he examined this same structure, and it seemed that the change in the muscular fibre had advanced considerably, for then the specimen had been lying in the water two weeks more, and there was apparently more degeneration than could be at first seen. He was inclined to the opinion that considerable of this change was owing to maceration in water. March 9th, 1853.

Prof. Clark reported upon the specimens presented to the Society at the last meeting by Dr. Markoe. He thought the white deposit upon the peritoneum of the intestines, and other abdominal organs, was of a cancerous nature, and if it was cancerous, the structure was such as to place the specimen upon the very border, when cancer becomes blended with, or runs into fibrous deposit. First, the structure was mainly fibrous, the fibres being of the fine, silky variety. The fibres at points separated, leaving meshes which were filled with cells; in some of these meshes there was but one cell, in others there were several. They varied in size from $\frac{1}{100}$ to $\frac{9}{100}$ of an inch. Over these fibres there was a moderate amount of fatty matter. A few mother cells, that is, cells of more than the usual size, and containing other cells, were floating free in the fluid. Second, the structure was made up of cells of about the size of blood-corpuscles, some of them granular in whole or in part. A number of the cells had one diameter about the same as those last described, and the other diameter from one-half to twice the length of the first. There were also oval cells with clear nuclei. Some of each of these two kinds of cells were found to be elongated into fibres, at one or both extremities. Third, in addition to these, were cells of a much larger size, and most of them granular, or nucleated, their diameter being three times the size of the round ones just referred to. Fourth, there were a few caudate cells. All these cells were found to contain fat. This was the appearance of all the small tumors upon the peritoneal surface. On examining the breast, no satisfactory evidence was found, that the degeneration was of a cancerous nature. There was some of the white fibrous and yellow elastic tissue, and round fibres in considerable abundance, that did not exist in the peritoneal specimen; and also several cells were observed, having a diameter of nearly $\frac{1}{8}$ of an inch, some of them appearing as if about to decay, while others had a recent fresh look. Nothing farther was found, with reference to the thick deposits between the peritoneal and mucous surfaces of some parts of the intestine. On submitting the mucous membrane and muscle to microscopical examination, more than the usual quantity of fibrous tissue was found in the rectum, while there was scarcely any remains of the proper muscular structure. In some other portions of the intestines, there was muscular tissue in abundance. The absence of muscular structure in the rectum, was apparently dependent, first upon the increase of fibrous tissue, and second, upon an almost countless number of small cysts; these cysts varied in appearance in different portions of the intestines. In the rectum, they were mostly rounded,
and so placed with reference to the fibres, that the latter separated and surrounded them, and, uniting again, continued on their course. Sometimes three of these cells were lying in apposition, and at other times they were isolated. The cells were all filled with extremely minute granules of very uniform size. There was evidently some change in the muscular structure, because it could not be seen, owing to its being covered with a granular matter of a kind different from that in the cells. In the small intestines, they were almost all elongated, and much smaller in size than those found in the rectum. It seems quite probable, that the serous cysts, which were of a size appreciable to the eye, were the same with the microscopic cysts lying immediately under the peritoneal covering, and extending to the mucous membrane, but greatly developed. He concluded, that, if the deposit upon the peritoneum was cancer, and he thought it must be, then the history of the tumors in the breast would compel us to suppose that they also were cancerous. The examination, however, did not show them to be cancerous, and as they had remained in a shrunken condition for two years, and as no vestige remained that could be considered normal structure, we must infer that there had been a retrograde movement of a malignant disease. The fact that there was no breast structure remaining had an important bearing upon the question of the nature of the disease.

Tumor of the Uterus. By Prof. Clark.

Prof. Clark then exhibited a uterus having a tumor as large as an orange on the posterior surface, of the nature of which he was not certain; he thought it was fibrous. It was fairly within the walls of the uterus, and had the appearance of a cancerous tumor, and when under the microscope it looked very much like cancer, yet he thought it not usual for a cancerous tumor to grow as this one did. At first view it might seem to be fatty, but this was not the case; it had a decidedly fibrous structure, but he doubted if it possessed sufficient elements of cancerous disease. The examination under the microscope did not satisfy him that the tumor could be referred exclusively to either form. It had the feeling of contained fluid, and he expected a fluid to escape when it was laid open. The patient had repeated uterine hemorrhages, but the hemorrhage did not come from the tumor; the inner portion of the uterine wall was reflected upon the tumor in such a manner that the latter had no connection with the internal cavity. The fact is worthy of notice, that, though the uterus was the seat of repeated hemorrhage, and had been for six weeks, yet the appearance of the uterine membrane did not account for the discharge of blood from it.
Prof. Gilman believed, that when tumors like this occupy the uterine wall, and are so near the uterine surface that they project into the cavity of the peritoneum, and are fibrous in their character, they very rarely cause uterine hemorrhage, but when they project into the uterine cavity, even when they are covered with uterine tissue, and much more when not so covered, they are very certain to produce hemorrhage. They are then called polypi of the uterus. The difference in respect to the tendency to bleed seems to depend entirely upon their location; if they are near the mucous membrane, hemorrhage takes place. He had never seen any explanation of this fact that was satisfactory to him, and he was himself unable to offer any explanation. He had seen these fibrous tumors in every stage of development, from their being imbedded in the uterine wall and projecting only one-third of their bulk, and progressively as they projected more and more into the uterine cavity. He had seen them when hemorrhage had been so great as to endanger life, and in one instance to prove fatal. In examining these tumors with the speculum, he had found them paler than the uterine tissue, and he supposed the hemorrhage proceeded from the lining membrane of the uterus, and not from the tumor.

Prof. Clark remarked, that in this case there was no particular point indicated as the seat of the hemorrhage. The relation existing between polypos and fibrous tumors, to which Dr. Gilman had referred, was, in his opinion, simply this: that they were both composed of the same tissues, but in different proportions. The statement, that the hemorrhage produced by fibrous tumors depends upon its projection into the cavity of the uterus, was not strictly applicable to this case, as almost the entire uterine wall lay upon the anterior surface of the tumor. The common form of uterine polypus is more vascular, and frequently not only contains vessels, but sinuses filled with blood.

Prof. Gilman thought the truly pediculated polypi were not a particle more vascular, and had no more sinuses in them than those covered by the peritoneum, and projecting into the abdomen. March 23d, 1853.

Cancer of the Stomach.—Dr. Uhl presented a specimen of cancer of the stomach which occurred in a German, 68 years of age. He was taken a few days before death with slight diarrhoea; on the third day he went to the privy, where he was soon after found in a fainting condition; he continued in this state several hours, and died. On post-mortem examination, two tuberculous cavities were found in the lung, of about the size of a hen's egg. On opening the stomach, this cancer presented itself, extending from one extremity of the organ to the
other, but not involving either orifice. The most singular feature in
the case was, that the patient had never exhibited any symptoms of
cancer whatever; he had only complained of a bad cough, and had
emaciated; no cause of the diarrhoea was ascertained, nor had he ever
suffered from it before.

Prof. Clark said it struck him as a curious fact with regard to this
specimen, that the mucous membrane seemed to be entire over the dis-
ease, the cancerous element being at a little depth below the surface.
On the larger protuberances, the epithelium was greatly hypertrophied.
The want of symptoms might perhaps be owing to the fact that the
cancer was confined to the smaller curvature, and another circumstance
which would tend to explain it, was the condition of the pyloric orifice,
which was entirely free. Although the disease extended one-half of an
inch below it, there was no perceptible constriction of the opening.

Compound Benign Tumors. By Prof. Van Buren.

Prof. Van Buren presented two specimens of a similar nature,
though taken from different individuals. They were benign
tumors, but did not belong to any species generally recognized
under this class. They had a compound character, the main
constituent of the tumors being fat, and the intervening tissue
being a material which has generally passed for bone. The first was
laid before the Society some time ago by Dr. Finnell, having been re-
moved from a man who died suddenly. It presented a colorless prom-
ience, and on being laid open was found to consist almost entirely of
fat; but in the centre was a bone-like mass, constituting about one-fourth
part of the entire bulk of the tumor. This mass he had carefully ex-
amined, microscopically and otherwise. The other tumor was very
much larger, a cast of which was exhibited at the last meeting, by Dr.
Lattimore. It was situated over the nates, and was attached simply
by the integuments. On laying the tumor open, it was found to pre-
sent a very unusual appearance; the larger proportion was fat, and in-
tersecting it were streaks of white, hard, fibrous tissue, and in this
tissue were masses of irregularly-shaped knobs or bodies which would
pass for bone. The whole character of the tumor was marked by the
presence of this bone-like material; it became necessary to saw it in
laying it open. These tumors presented a great similarity in their
composition; in the smaller there was but one mass of bone, and this
occupied the centre. To the naked eye it had the appearance of bone,
but on close examination it was found to contain phosphate of lime, and
on submitting it to the microscope it presented no evidences what-
ever of bone structure. It appeared to be an amorphous mass of
bone salts, without any definite structural arrangement, the phos-
phate and carbonate of lime being in a state of aggregation or pre-
ception. The bone-like matter of the larger tumor was of a
precisely similar character; and in neither was there the slightest
evidence of organization. The most interesting constituent of
these tumors was this bone-like material, from the fact that
when these concretions have been met with hitherto, they have
generally been described as masses of bone, and considered to be ossi-
ification of the tissues. This view Dr. Van Buren believed to be en-
tirely incorrect, inasmuch as they are not masses which have undergone
ossification, but are merely aggregations of the salts of which bone is
partly composed in its normal condition. They are similar to the
lamellæ sometimes found beneath the serous coat of arteries. He re-
collected having found a mass in the substance of a liver which had
the same external appearance as the mass in the smaller tumor. He
presumed this had the same character as the degeneration which false
membrane undergoes, forming bone-like plates on their surfaces, as is
sometimes seen about the arachnoid and pleura. He had occasion
once to operate upon a man with double hydrocele, in whom one
tunica vaginalis had undergone almost entire ossification. It was ne-
escary to extirpate this, and he found there was a material in it
resembling bone in every respect, and also a material resembling car-
tilage, but he did not then know whether this condition was owing to
ossification or to some simple concretion of bony constituents. The
term calcification has been very appropriately applied to these hard,
bone-like formations, so frequently met with.

Prof. Clark remarked, that the occurrence of fatty matter and fibrous
structure in the same tumor was of common occurrence, and it has
been supposed that cancerous and fatty tumors were combined; but he
had no recollection of any tumors of the fatty kind containing elements
of bony structure, and he thought that Dr. Van Buren had stated cor-
rectly the character of the pseudo-osseous structure. He had himself
made exhibitions of similar materials, from other parts of the body, to
the Society: for instance, the dura mater, from which a large tumor
was taken, projecting into the brain, and at the time it was stated that
it did not contain osseous structure. This fact, he believed, was
generally recognized. Dr. Walsh named this condition calcification,
in distinction from true bone structure. The latter, Dr. C. believed,
seldom or never occurred, except in the uterus, and occasionally in the
scrotum. All the other deposits resembling bone have received the
name of calcification. April 1st, 1853.
PART SECOND.

CRITICAL ANALYSIS.

Art. IX.—The Dublin School on the Heart: A Retrospective Review of its Principal Contributions on this Subject for the last Thirty Years.


And the following from the Dublin Quarterly Journal of Medical Science:


4. Diseases of the Brain dependent on the Heart. By Dr. Law. 1840.


(7.) Clinical Lectures, &c. By R. J. Graves, M.D. Phil. 2d Edit.


If we range through the galleries of Rome, Florence, Paris, or Dresden, we find that from certain marked similarities in grouping, coloring, or shading, artists of different nations or cities are classified in what are termed Schools. The genius of a nation or a university
may in like manner be read in the portraits of disease. The records of medicine plainly show French taste and enthusiasm, German patience and erudition, and Anglo-Saxon common sense and utility.

Though we mean to be strictly just, yet, speaking of hearts and the pleasant Irish capital, we ought perhaps, in candor, to put the reader on his guard by saying, that we have a little amiable weakness in that direction, and cannot discuss the subject without a slight movement of our own palpitating organ. We rejoice, after years of waiting, to pay a friendly debt. In praising our Dublin friends where it is so justly due, we know we but echo the feelings of hundreds of our medical countrymen, who have enjoyed their contributions or generous hospitalities. Nowhere are Americans so rapturously received even by the very beggars. These patriotic times may not be the best to discharge a debt of gratitude by talking of nationalities; but we belong as physicians to the universal brotherhood of letters, that recognize equally the intelligent and worthy of every land. Besides, we are not discussing the good or evil qualities of Ireland, or its resident or emigrant poor, any more than Donnybrook Fair or St. Kevin's goose. We are simply describing the choice spirits of a naturally select class—the medical writers of the capital.

Many circumstances have latterly combined to elevate the Medical School of Dublin. Something may be due to natural emulation with Edinburgh and London. It is a quiet, beautiful city, with little of the fever of trade. Like Heidelberg, Oxford, or New-Haven, it is specially fitted for study. When the Irish capital lost her parliament, Trinity College remained, like an only child, her darling pride. If her absentee aristocracy forgot their country, she valued more the only nobility we republicans recognize—that of intellect. The heads of the learned professions became the magnates of Dublin society. Her physicians have long been perfect gentlemen. They have risen above the weakness of clap-trap. They have worked like men, and taken no little airs to attract attention.

We once knew a droll backwoods clergyman of the Dean Swift order, who reproved Sabbath-breaking in the sugar season, by closing a sermon on the virtues of the prophet Daniel with the astounding exclamation, "Daniel never boiled sugar on Sunday!" Our praise has a similar double meaning. While momentarily on the stool of censorship, we venture in kindness, a gentle reproof of our worthy combative friends, who either too sensitively claim, or who morbidly grudge, the honors of medical discovery. So we commend the men of Dublin. They have had no speculum, heart, or throat quarrels—no great battles be-
tween progressives and conservatives. They have easily and justly
decided all questions of ownership in professional thunder. They
have needed no such storms and earthquakes to display the shining
ore, but have regularly digged for their treasures. In fact, they form
in practice that precursor of the millennium, a medical peace society.

They generously quote one another, and we fancy, in this respect, are
more liberally eclectic than our English cousins, in giving credit to
their French, German, and American neighbors. They are safely and
yet earnestly progressive. We like their unpretending, straightforward
style. They have a refreshing way, too, of dealing bountifully with
facts, and then, in a sort of Hippocratic fashion, summing up with a
few aphorisms in the shape of modest inferences.

Lastly, the highest praise we can give this, or any other school, is,
that it is eminently practical. To cure the patient is more glorious
than to spin the most ingenious theory, or make the most beautiful
dissection of his diseased body. Etiology, diagnosis, pathology,
everything, are with them still auxiliary to treatment. They are
not ashamed of details in therapeutics or niceties in diet,—remind-
ing us of the coveted epitutics of one of their noblest, the lamented
Graves: "He fed fevers."

We may criticize any individual faults in the future. But to the
proofs: two regular treatises on diseases of the heart have just ap-
ppeared from the Dublin press, by Drs. Stokes and Bellingham, and we
deem this a fitting occasion to review these, and to preface them by a
few kindred monographs from the same school, as an introduction.

As a matter of convenience, we have commenced with the earliest,
giving the date of each in order, and reserving the larger portion of
our space for the later publications of Drs. Bellingham and Stokes.
Minor papers from the authors quoted, and several others, have been
omitted for want of room.

Dr. Adams on Diseases of the Heart. 1827.—This is a capital
production of 100 pages, containing a series of well-described cases of
pericarditis, hypertrophy, fatty softening and valvular diseases, with
their autopsies, and many ingenious and philosophical observations on
the mechanism and pathology of cardiac disease. Dr. Adams’ paper,
it will be seen, was written four years previous to the publication of
the first edition of Dr. Hope’s work, and many new views, generally
attributed to Dr. Hope and later observers, in justice belong to Dr.
Adams. His countrymen constantly refer to him with much defer-
ence. Dr. Corrigan’s first paper will be noticed with the last.

Mr. Mayne on Pericarditis. 1835.—Mr. Mayne’s monograph is
an instructive record of six cases of pericarditis read before a medical society, and reference to five others which were omitted for want of time. They were interspersed with a series of judicious reflections. Out of these eleven cases, epigastric tenderness occurred in ten, generally to the left side, and was the most distressing symptom in five instances. Dyspnoea existed in ten, and in one only was very distressing. In ten cases, too, the pulse was rapid in all periods of the disease, rarely below 120, in two it was intermittent, and in all the instances that reached the third stage, it was weak, small, feeble, irregular, and intermittent. His paper appeared soon after Dr. Stokes' upon the friction sounds in pericarditis, and confirmed his views.

**Prof. Smith on Free Oil in the Blood.** 1836.—The contributions of Prof. Smith in this paper are devoted to "the more remarkable lesions of the heart and great vessels."

The most curious result of these investigations was the discovery in two cases of death from fatty heart, of free oil in the blood. The first was that of a lady aged 90, who died suddenly, as was supposed, of debility and old age. On examination, the pericardium was found distended with blood from a small lacerated opening in the anterior part of the left ventricle. The head was loaded with fat; the muscular substance soft, easily broken with the finger, pale yellowish in color, and greasing the scalpel; upon the surface of the blood escaping floated numerous globules of oil. The division of the vena cava gave exit to nearly a tablespoonful of a clear, perfectly transparent, limpid oil, followed by the blood of the vein. Nearly an ounce might have been collected all together. The second case was that of a poor woman aged 70, admitted into Richmond Hospital, who died half an hour after, apparently from exposure and exhaustion. Similar appearances of fatty heart were found, only there was no rupture. "The surface of the blood was thickly covered with globules of limpid oil."

**Dr. Law on the Connection of Cardiac Disease with Softening of the Brain.** 1840.—Of Dr. Law's contributions we can notice only this, showing the effect of cardiac disease in producing cerebral softening, with, apparently, apoplectic symptoms. The previous researches of Legallois, Richerand, Brichteteau, Lallemand, and Rostan are gracefully noticed. The observations of Dr. Law are founded upon four cases of disease of both aortic and mitral valves, causing, in every instance, obstruction, in which, on the post-mortem, softening of the brain was discovered.

A fifth case of paralysis and idiocy, and other signs of cerebral
disease, in connection with a valvular murmur, with violent cardiac impulse, was partly cured by an accidental burn.

Dr. Law considers that such brains become anaemic from the obstruction of the cardiac disease to the flow of blood, and that, from its consequent impoverished state, softening occurs in the brain, just as mortification occurs from obstructed circulation elsewhere. The treatment pursued was the exhibition of stimulants, such as camphor mixture, Hoffman’s anodyne, carbonate of ammonia, and tonics consisting mainly of iron and nux vomica, aided at times by very moderate derivation of a few leeches and small blisters to the neck.

**Dr. Hudson on the Cardiac Indications for Opium in Fever.** 1841.—The contribution of Dr. H. is founded upon the careful analysis of twelve cases of typhus in the epidemic of 1840, in which a series of cautious investigations led him to the conclusion, that precisely the same rule for the exhibition of opiates was necessary in fever, which Dr. Stokes had previously laid down for the use of wine; and that feeble or absent impulse, and first sound of the heart, equally demanded opium and wine; while with strong impulse and full sounds of the heart, both were alike injurious, aggravating the cerebral symptoms.

The post-mortem examinations confirmed these views with regard to softening, as, wherever it occurred, these remedies were well borne.

With softening of the heart, too, there was, in the brain, venous congestion; while, with the opposite state, it was arterial. These facts, he thinks, explain the benefits of opposite modes of treatment in delirium tremens.

**Dr. Corrigan on Inadequacy of the Aortic Valve.** 1832.—*On Functional Cardiac Derangements.* 1841.—Dr. Corrigan has long ranked in the first class, in his own country and elsewhere, as an original and laborious observer in cardiac disease. We might have added to our list, at the head of this article, a most ingenious, though less practical paper “on the mechanism of the Bruit de Soufflet,” published in 1836. But we shall hardly have room to do even passing justice to the two we have selected.

The paper on aortic patency, being one of the earliest special contributions on the subject, was much prized. He divided these aortic valvular imperfections into the following classes:—1. The valves “absorbed in patches,” and presenting “holes,” through which the blood leaked. 2. Ruptured valves, “flapping back into the ventricle,” and allowing the blood to rush back. 3. Valves “curled” or con-
trated, so that they cannot spread out and fit. 4. Valves separated from each other by dilatation of the orifice itself, so that they are "unable to meet."

We have long been convinced that, except in vigorous plethoric cases of that rare form of disease, pure hypertrophy, without valvular complication—the bleeding and cupping plan (coup sur coup) of Bouillaud,* Hope, and others, with much valvular difficulty, was commonly injurious, and that these cases were generally over-treated.

Dr. Corrigan very judiciously remarks:

In these instances, hypertrophy is recognized as a provision of nature to make the power of the heart equal to the obstacle it has to overcome. The consequence of the neglect of this principle has been that, too often, in the treatment of a valvular alteration of the heart, there has been a constant struggle between nature and medicine. Nature has been making the organ equal to its task, while medicine has been directed to counteract nature's efforts, by weakening the organ to render it totally incapable of its task. The repeated bleedings and starvings, and the enforcement of the debilitating measures, are totally unsuited to the disease we are considering.

He specially condemns, in aortic valvular disease, with hypertrophy, the use of digitalis.

The paper by Dr Corrigan, on "Functional Derangements of the Heart," eleven years later, is equally judicious. Not having then seen Dr. C's. article, in a paper on this subject recently read before the Society of Statistical Medicine, and published in this Journal, we took occasion to dwell upon two or three points, under the impression that they were new. We are happy now, in justice, to acknowledge that we had been partially anticipated by this distinguished observer. The chief topics of his paper may be enumerated in his own words, as "functional derangement of the heart in growing persons"; those "dependent on gastric irritability"; "nervous palpitation, indicating permanent patency of the aorta"; "self-audible bruit"; and "epileptic palpitation." On the last topic, his observations, we believe, are quite original, and treat of some of those mild forms of epilepsy, attended with what the French term the petit mal, in which the palpitation and irritability of the heart are very troublesome.

It is well known that, among the large consumers of tobacco, the hysterical, bloodless females, and growing or dyspeptic males of our cities, a large proportion of cases of suspected heart-disease are simply functional.

* Maladies du Cœur.
Dr. Corrigan, in his practical discrimination, has laid down several principles in their diagnosis, which have since been amplified by Canstatt* and Hughes.

**Dr. Grave's Clinical Lectures. Paper on Certain Affections of the Heart.**—We have not space to notice the paper on the "Influence of Position on the Pulse," and other contributions from this able and lamented teacher. We are also, accidentally, "just too late" to find in the city a copy of the second edition of his Clinical Lectures, which, we see by the many references of his surviving friends, contains much new matter on heart-disease.

In the first edition, which we have in hand, Dr. G. was one of the first to draw attention to a curious temporary enlargement of the thyroid gland, occurring, commonly, in nervous females, in connection with severe palpitation of the heart, commonly functional, and continuing many months. Dr. G. hints that the *globus hystericus* may depend on this. Sometimes it was accompanied by protrusion and staring of the eyeball. Dr. Stokes quotes his friend Dr. Graves on this subject, and adds in his new work, several illustrative cases. The thyroid enlargement, protrusion of the eyeball, and heart symptoms, generally spontaneously stopped after a year or more.

The paper to which we have above alluded is a capital piece of medical reasoning, based upon the record of six cases of cardiac disease, three of which were rheumatic pericarditis.

In the first of these latter, in addition to the usual signs of cardiac inflammation, there were at first two murmurs at the base and along the aorta; a *sawing, friction sound*, and, secondly, a musical murmur like that from rubbing glass with the moistened finger. On the second day, both merged into a "leather creak." On post-mortem, the valves were healthy, but the pericardium was adherent at the apex, and the rest of the surface was coated with lymph. We had, recently, a similar case of a grating sound at the middle, and a musical sound at the apex, in a rheumatic patient under our care in the New-York Dispensary, which, however, were permanent for weeks.

Dr. G. remarks that, "in some cases of pericarditis, the heart's action becomes increased in strength for many hours before any sign of pericarditis can be detected."

In the fifth case, there was a loud, systolic bellows-murmur, simulating exactly that of aortic obstruction, in which it was found, after death, that the valves were perfectly healthy, and that the murmur

* Hondbuch der Medicinischen Klinik.
depended on some dilatation and calcareous roughening of the ascending aorta.

The sixth case was interesting from an extraordinary vibratory thrill all over the chest, with a loud bellows-murmur, in a nervous little girl convalescent, which gradually subsided, without leaving any traces of organic disease.

**Dr. O'Ferrall on Mitral Disease.** 1843.—This interesting paper is based upon four anomalous fatal cases of valvular disease, located in the mitral alone complicated with hypertrophy and followed by dropsy, in three of which the usual sawing murmurs of mitral regurgitation, heard previously at the apex, permanently ceased some time before death. In two of the cases, on post-mortem examination, there was adherent pericardium. In all there was some thickening about the mitral orifice, and the mystery of the temporary cessation of the valvular murmurs was explained by the shortening of one of the lamina of the mitral, having produced, so to speak, a refitting of the valve during the progress of the disease. After a few clear, practical reflections, he sums up with the following conclusions:

1st. That regurgitant disease of the mitral valve is attended by persistent murmur with the first sound.

2d. That the subsequent disappearance of this murmur does not lessen the value of the sign, nor contradict the diagnosis at the time it was made.

3d. That the order of phenomena here described, in combination with the general symptoms of the disease, constitutes a rational evidence of the supervision of contraction of the opening to a degree proportioned to the previous shortening of the valve.

4th. That uncomplicated obstruction of the aperture is not necessarily attended with a murmur.

5th. That the general symptoms of disease of the mitral valve are not to be distinguished from those of softening, merely by the presence of murmur, as has been asserted by authors.

6th. That the diagnosis can be made only by the observation that a well-marked systolic murmur had previously existed in combination with the general symptoms of the disease.

**Dr. Leared on the First Sound.** 1852.—Being simply ingeniously theoretical, Dr. L.'s paper requires, in this practical summary, but brief notice. It will probably, however, attract considerable attention in future discussions of the causes of the sounds of the heart.

In repeating the experiments of Williams, Hope and others, he became dissatisfied with their views of the causes of the first sound. By means of a hydraulic apparatus of India rubber, fitted with valves, and worked under water, he found that, by bringing a jet of water in mo-
tion against water at rest in the tube, he could produce a good imitation of a bellows-murmur; and if he used a more viscid fluid, like the blood consisting of molasses and water or gum-water, he could imitate the first sound of the heart. Hence, he inferred the latter to be caused to a great extent, by the shock of the column of blood in motion lifting the columns at rest in the aorta and pulmonary artery.

Dr. McDowell on Dilatation. 1852.—This instructive, well-written paper is based upon the careful relation of nine selected cases of heart-disease, mainly with excessive dilatation, and, in several instances, unaccompanied by valvular lesions. After many practical reflections upon the individual cases, he arrives at the following general conclusions:

1. Excessive dilatation is a direct and efficient cause of obstruction of the circulation.

2. It contrasts in this respect with hypertrophy, the benefits of which latter condition in valvular disease are often subsequently counteracted by progressive dilatation.

3. Dilatation may exist independently of diseased valves, and may produce general symptoms of obstructive valvular disease, or, when accompanied by softening, it may develop signs which specially indicate mitral contraction.

4. Dilatation may recur as a complication of all forms of valvular disease, modifying their signs, and producing an identity in the final symptoms of dissimilar diseases.

5. Hence, in valvular diseases, not essentially obstructive, when dilatation is superadded, the signs of obstruction become developed. The occurrence of pulmonary apoplexy and other phenomena of an obstructed circulation in aortic patency may thus in general be explained.

6. Atheromatous disease of the aorta causes obstruction from loss of elasticity of the vessels. Enlargement of the part may be thus induced, which, as dilatation becomes established, proves fatal, though the valves of the heart are free from disease.

Dr. Bellingham's Treatise. 1853.—The work of Dr. B. is founded on the lectures delivered in St. Vincent's Hospital, and partially published some time since in the Dublin Medical Press and the London Medical Gazette. It is planned to consist of two parts:—First, a careful description of the anatomy, measurement, motion, and sounds of a healthy heart, followed by an account of the physical, general, and secondary or remote signs of cardiac disease. Only the first half, a neat octavo volume of 250 pages before us has yet appeared. The second volume is yet to be published. This last, we are promised, will be devoted to the individual diseases of the heart, which are arranged according as their seat is the investing membrane, the lining mem-
brane, or the muscular tissue of the heart, followed by a description of functional or inorganic affections of the heart." As the work is yet incomplete, and the portion naturally the most interesting and practical is yet to appear, a very extended or elaborate review at present would perhaps hardly be just. Yet a few samples, some slight foreshadowings of what our readers may expect, may be welcome.

A very learned and extended description is given of the anatomy of the heart; better fitted, some will say, for a cyclopedia than a practical manual.

He gives the following judicious directions as to the mode of opening the heart:

The most simple and convenient method appears to me to be, to commence the incision in the pulmonary artery, carrying it through this vessel into the right ventricle, cutting between the sigmoid valves and continuing it to the apex, keeping close to the septum. A transverse incision, meeting the other about its centre, may then be made in the walls of the right ventricle. The aorta being next separated from the pulmonary artery, a similar incision is to be made through it into the left ventricle and continued to its apex, keeping close to the septum. This incision can then be continued on through the apex upon the posterior surface of the heart. To display the interior of the right auricle, a crucial incision may be made upon its anterior aspect, while the left auricle may be opened upon its posterior aspect, between the orifices of the opposite pulmonary veins.

The above differs but slightly, if memory serves us, from the process of the very dextrous assistants of Rokitansky.

With regard to the size and weight of the heart, he agrees with Bizot and Clendining, that the heart is naturally a trifle larger in the male than the female, averaging at middle age about 8½ ounces in the male; that in health it gradually increases in the male for life, and in females till 50 years, till at the maximum it may gain an ounce or two with age.

Our author has come out with a new theory to account for the sounds of the heart, in place of the more usual explanation given by Hope, Williams, Watson, and others. They believe, as we know, that the first sound, commencing with stretching of the auriculo-ventricular valves, is formed mainly by the rumbling of muscular contraction, aided sometimes by the tilting against the ribs, and that the short second sound is formed by the blood recoiling upon the semilunar valves. From the anologous sounds produced by an aneurismal sac without any valves, and from valvular murmurs being an exaggeration of the natural sounds by friction, Dr. Bellingham endeavors to prove that both sounds of the heart are produced by the friction of columns of blood.
The blood, compressed by the powerful muscular walls of the heart, during the systole and first sound, through narrow oriﬁces, produces greater friction, and therefore more sound, which, he argues, must be “likewise more prolonged, because sound must be developed during the entire period that the blood is passing from the ventricle into the large arteries.” He thinks that the blood falls from the auricles to the ventricles without propulsion, but in a full and rapid stream, and “with sufﬁcient force” to generate the second sound.

The most interesting and practical portions of the volume are those describing the various signs of cardiac disease. We are glad to see a revival of attention to rational symptoms, believing that the recent great emphasis placed on the physical signs has led to some neglect of the former. The chapters on “palpitation,” “the varieties presented by the pulse,” “the countenance in heart disease,” “congestion of the lungs, liver, and brain” and “cardiac dropsy,” are excellent. The work is evidently the fruit of much research, and is especially rich in its abundant references to the literature of the subject.

Dr. Stokes’ Treatise. 1854.—The work of Dr. Stokes is, we believe, the most voluminous ever published on the subject, being a large octavo of nearly seven hundred pages, very neatly printed. And we perceive that the Philadelphia publishers have reproduced a perfect fac simile of the Dublin edition, at a reduced price. As this great work is the latest, and, in some respects, the best treatise on this subject we now possess, we shall devote to it our remaining space.

In his preface Dr. S. frankly declares that, “omitting much that is new and interesting, his chief aim is to be practical; to dwell upon the refinements of pathology and diagnosis only, so far as they may be useful in every-day practice”; that, without being warped by any favorite theory, he simply seeks to record the results of clinical observations “for more than a quarter of a century,” and the consequent “state of his own mind”; the conclusions which he thinks may be safely arrived at, and the doubts and difﬁculties he has been unable to solve or remove. The ﬁrst hundred pages are devoted almost entirely to pericarditis. He divides it into 3 varieties as follows:

<table>
<thead>
<tr>
<th>First Form.</th>
<th>Second Form.</th>
<th>Third Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence of pain or local suffering frequent. No sign of muscular excitement, nor any special character of pulse. No increase of dulness over the heart.</td>
<td>The local and general symptoms more decided than of ten very trifling. Irregular action of the heart and pulse of ten more manifest in the advanced periods. Remarkable increase of dulness over the heart.</td>
<td>Local distress often extreme even at the outset. Tumultuous action of the heart. Irregularity of pulse. Dyspnoea. Orthopnoea. Edematous swellings. Syncope, death.</td>
</tr>
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N. S.—VOL. XIII., NO. 1. 8
It is curious how much the heart may be compressed without ceasing to act. A friend of the reviewer, a highly intelligent Spanish physician, mentioned recently the case of a man with extensive effusion, under his care in the hospital at Caracas, in whom life was feebly sustained some time, by a heart, which, after death, was found flattened like the hand.

Dr. S. quotes a case of his own, in which pericarditis attacked a heart displaced and compressed by pleuritic effusion, "without any injury or disturbance of the action of the organ," and another from Dr. Adams, "of long-continued pressure of the heart, so great as to fold up part of one ventricle, in which the heart endured this effect for a considerable time."

It is well known that Dr. Hope made somewhat of a bug-bear of adherent pericardium as inevitably causing hypertrophy. On this point Dr. S. remarks: "Without denying that a general adhesion may induce hypertrophy and dilatation, experience leads me to doubt that such an effect necessarily or even commonly follows the condition indicated. I have often found the heart in a perfectly natural condition, with the exception of an obliterated pericardium. It was neither hypertrophied nor atrophied." He cites a case of his own, of death from hepatic disease, in which the pericardium had been perfectly adherent from inflammation seven years previous, without any consequent change or disturbance. He further expresses his conviction that it is only where valvular disease accompanies or succeeds pericarditis, that enlargement necessarily follows; and refers to the statement of his friend, Prof. Smith, that he had indeed found atrophy of the heart, often attended with fatty degeneration or ossification, to be nearly as frequent a consequence of adherent pericardium as hypertrophy.

It will be remembered that, although M. Collin, as early as 1824, in a passing reference, stated that the "new leather sound," heard in two or three cases, would "perhaps prove a constant symptom of pericarditis," yet the honor of discovering the other "attrition-murmurs," and first clearly unraveling the whole subject, is now generally conceded, even by his competitors, to be due to Dr. Stokes, in his paper on this subject in the Dublin Journal, in 1833. Watson, Latham, and Bouillaud who shortly after unconsciously followed in the same track, in fact, simply confirmed his views by their valuable contributions.

With such high claims as a discoverer in the diagnosis of heart-disease, we are not surprised to find a great deal of interesting matter on this topic in his final elaborate work.

He enumerates, under different heads, as signs of pericarditis: 1.
Sense of friction on touching with the hand; 2. Friction-sounds or attrition-murmurs; 3. Extended dulness over the heart from effusion; 4. Friction-signs attended with or preceded by valvular murmurs; 5. Signs of eccentric pressure analogous to those of empyema; 6. Signs of excitement of the heart; 7. Signs of weakness or paralysis of the heart. These, he asserts, are varied by the state and extent of effused lymph; the existence of fluid; state of organization; obliteration of cavity; repetition of inflammation; air in the pericardium; distension of the stomach; complication with pleurisy; the force and volume of the heart; and, lastly, combination with valvular disease.

Speaking of the modifications of friction-sounds, he remarks:—

With the exception of the leather-reak sound of Collin, and some of the loudest rasping sounds, the friction phenomena are in general singularly localized, and are not heard beyond the actual region of the heart. In many instances, we find that, on removing the stethoscope but a single inch from the spot where the sound is loud, it totally ceases, though we still hear the ordinary sounds of cardiac pulsation.

As might be expected, we find the most intense friction-sounds under two conditions: one, a great degree of induration of lymph; and the other, a dry state of surface.

In other cases, however, the sounds, though distinct, do not convey the idea of so unequal and resisting a surface, but resemble the rubbing together of two sheets of paper or parchment. In such cases the lymph will probably be found of soft consistence. And there is a third class of cases in which the friction-sounds are sometimes so soft, equable, and gentle, as to render it necessary that the patient should hold his breath for a few seconds, in order that we may fully observe them. Two circumstances having the effect of modifying these sounds must be here mentioned: one is the employment of antiphlogistic means, and the other is the trial of pressure over the heart. Nothing, indeed, can be more remarkable than the rapidity with which these signs are altered by the application of leeches over the heart, followed by a blister or a poultice. They change within a few hours even from the lowest rasp with distinct vibration to the hand, into a soft murmur, while the tactile signs disappear.

If, while the stethoscope is applied, we make downward pressure with the ear-piece, we shall often find a notable increase in the loudness and distinctness of the friction-sounds.

The work is full of such close, nice, practical observations; we have room but for here and there a brief sample.

A case is given and two others quoted from Drs. Graves and McDowell, of that rare and interesting phenomenon, *air in the pericardium* in connection with inflammation, and attended with a tympanitic sound of the cracked pot over the heart, large, loud, crepitating, and gurgling, mixed with attrition-sounds.
The influence of flatulent distension of the stomach in giving a metallic character to the sounds of pericarditis, as well as those of pneumonia, pleuritis, and bronchitis, is also noticed. He thinks Drs. Watson and Hope have overrated the frequency of valvular murmurs in pericarditis.

As a brief illustration of our author’s clear, practical summing-up at the end of each important chapter, we copy the following on the connection of rheumatism with pericarditis:

1. That, though the combination of pericarditis with acute articular rheumatism is common, yet that disease of the heart is more closely related to rheumatic fever than to inflammation of the joints.

2. That the liability to pericarditis is in direct proportion to the violence and duration of the fever.

3. That in apyrexial cases of acute arthritis, the liability to cardiac inflammation is but slight.

4. That pericarditis may be developed at any period of the disease, and even precede arthritis.

5. That every variety and degree of pericarditis may occur in acute rheumatism, from the simple, dry, latent pericarditis, to the worst forms, combined with inflammation of the endocardium and muscular structure."

These statements very closely corroborate the views of Dr. Latham.

While giving a complete summary like the above, we think it a material omission not to state that cardiac inflammation from rheumatism is vastly more frequent in subjects under thirty than in middle or advanced age.

Our author’s views of the treatment are admirable. He discredits indiscriminate general bleeding, especially when a weak pulse or pulse forbid, and quotes Dr. Wood, of Philadelphia, in support of caution. He generally prefers relays of leeches over the heart, with intermediate warm poultices, aided by the prompt administration of calomel in from ten to twenty grain doses at long intervals, as recommended by Dr. Graves.

In the second stage he blisters freely. Digitalis he thinks useless in the early inflammatory stage; beneficial, sometimes, in the subsequent irritative period; and dangerous by encouraging syncope when the heart begins to fail in force. In the latter stage, with feeble pulse, faint or absent first sound, pallor, and oedema, he strongly advises wine and other stimulants, and thinks patients are often lost for want of them.

On the subject of endocarditis, he is comparatively brief. Pure, uncomplicated endocarditis he thinks exceedingly rare, and differs from Dr. Hope in the opinion that pericarditis without endocarditis is much the most common of the two.
Dr. Stokes places the combination and isolation of pericarditis and endocarditis, respectively, in the following order of frequency, commencing with the most numerous:—1. Pericarditis with endocarditis. 2. Pericarditis alone. 3. Endocarditis alone.

The following statistics of Dr. Latham, from Bartholomew’s Hospital, give quite a different result from this:

In 90 cases of cardiac inflammation from rheumatism, there were of endocarditis alone, 63; pericarditis alone, 7; endocarditis and pericarditis combined, 11; doubtful, 9.*

After the late startling assertions and statistics of Dr. Taylor in favor of the view that cardiac inflammation was about as frequently connected with Bright’s disease as rheumatism, we could have wished for something decisive from such high authority as Dr. Stokes. Only in the relation of two or three cases is albuminuria, without comment, casually mentioned as a symptom. But if there are a few points thus excluded, there are perfect mines of information on others.

On the subject of myocarditis he generally confirms the views of Hasse. Valvular lesions are in the main ably treated. The clear, terse definitions remind us of the style of Skoda, although, in many points, he disagrees with the Vienna professor. He doubts the truth of some of Skoda’s nice distinctions in the diagnosis, and especially his statement that, in mitral obstruction, the second sound is accented over the pulmonic valves. The very rare affections of the valves of the right side of the heart naturally receive but brief notice; as Dr. S. justly observes, “in practical medicine we may confine ourselves to the diseases of the mitral and aortic valves.” We cannot, however, much as we revere Dr. Stokes, in the honest love of medical truth, quite assent to the proposition, that it is unimportant to distinguish between the latter, and that “the number of cases in which it is desirable to determine the exact seat and nature of the affection is comparatively small.”

According to the recent statistics of M. Forget, of Strasbourg, in round numbers, in about one-third of the cases both valves are affected, and the remaining two-thirds are nearly equally divided between the mitral and aortic valves, singly. If there is any difference in the prognosis or treatment from the large number involved, it is decidedly important to distinguish aortic from mitral affections.

Dr. Walshe arranges them in the following order, commencing with the most dangerous: “Mitrall regurgitation and constriction, aortic regurgitation, and, last and least serious of all, aortic constriction.”†

* Lectures.  † Practical Treatise.
The experience of the reviewer confirms this last statement. We had occasion to discuss the comparative prognosis a few weeks since, in a paper read before the Society of Statistical Medicine, in which we reported four cases of aortic disease with hypertrophy, in which the average duration had been some ten years. Usually, mitral disease is much more troublesome and extensive in its complications, involving the lungs, liver, and stomach, and often terminating speedily in dropsy; while purely aortic difficulties may remain stationary, occasionally for years,—may gradually wear the patient out, or complicate only the brain. The treatment is also different. Of course, such rules are liable to numerous exceptions.

Dr. S. has paid a high compliment to the great German authority in these matters, by translating and embodying an extract of some fourteen pages from the Abhandlung der Perkussion und Auskultation of Skoda.

Under the head of dilatation, he has given us a very interesting account of the case of his friend, the late Mr. Colles. During the last six years of the life of this eminent surgeon, he was subject, at intervals, to gouty attacks, accompanied with bronchitis, transient dyspnoea, palpitation, and other cardiac symptoms, finally giving rise to sudden enlargement of the liver with temporary suppression of urine, which were repeatedly relieved by mild mercurials, followed by diuretics and rest. During the worst of these paroxysms, "the impulse was feeble, irregular, and rapid, and the organ seemed to impinge over a large surface. So irregular and rapid was the action of the heart, that analysis of the sounds was a matter of great difficulty, the first occasionally resembling the second sound, and vice versa. There was no valvular murmur, nor any unusual thrill in the arteries." After some months of tolerable health, the liver was observed to be "permanently enlarged, forming a smooth flat tumor." This tumefaction rapidly increased with each paroxysm. No relief was ever obtained until, by mercury and diuretics, a free action of the kidneys was established. On a post-mortem examination at the generous request of Mr. Colles himself, the heart was found much larger than natural, in a state of "great passive dilatation," the orifices "natural," and the muscular substance loaded with fat, "pale, soft, greasy, and easily ruptured"; "globules of oil floated upon the surface of the blood." The liver "not much enlarged," presented a dull mahogany color, a tumid, swollen aspect, and a rough granular surface. Except the globules of oil floating on the blood after incision, the kidneys were apparently healthy.
Eight other cases of "fatty heart" are minutely recorded. The average age was 61. Of the eight cases, three had the characteristic slow pulse, and three the pseudo-apoplexy; two had rupture, and two free oil in their blood. In the treatment of these cases of weak "fatty heart," he advises the giving up of all luxurious habits; moderate, persevering gymnastic or pedestrian exercise; cold, shower-bath, with frictions; for diet, to eat temperately of lean flesh, avoiding fluids, except water; the use of wine or brandy at meals, and the free resort to these stimulants in attacks of fainting and pseudo-apoplexy.

The description of the more active and pure hypertrophy of the heart not connected with great weakness and dilatation, is rather meagre. In regard to the treatment of hypertrophy, there are some very judicious observations. With Dr. Latham, he discourages Hope's plan of repeated bleeding from the arm for fear of anemia; cupping he thinks often objectionable, from the excitement of the operation; but prefers, when necessary, applying small numbers of leeches over the heart, from time to time, stating that, when not pushed too far, they sometimes effect great improvement. He speaks doubtfully of setons and issues, as also of the endemic use of digitalis, as recommended by Bouillaud, but commends the cautious use of small blisters, and anodyne applications, and the internal exhibition of digitalis or hydrocyanic acid.

One of the most interesting chapters in the book is that devoted to the condition of the heart in typhus fever, comprising nearly a hundred pages. On this subject, it will be remembered, Dr. Stokes was the pioneer many years since. In the present volume, he has minutely recorded no less than thirty-one illustrative cases.

They exhibited in many instances the peculiar sign, first pointed out by Dr. Stokes, as indicating softening of the heart, and the special need of wine and active stimulants in typhus; the loss of impulse, even when the patient was turned on the left side, and the partial or total suppression of the first sound of the heart. Of these 31 cases, the impulse was feeble or absent in 14; the first sound of the heart obliterated in 5; and feeble in 14 instances.

Out of these 31 cases, 11 died; and in 9 of those fatal, on post-mortem, there was found softening of the muscular substance of the heart, usually most decided in the left ventricle, and sometimes confined to that locality.

Dr. Stokes also discovered a group of cases of typhus, mild in char-

* Maladies du Cœur.
acter, with little or no petechial eruption specially liable to relapse; with no evidences of softening, and little or no necessity for wine; in which a soft systolic bellows-murmur, like that in chlorosis, or a prolongation of the first sound, was distinctly heard. Of the above 31 cases, 7 were of this mild "relapsing fever," with the first sound changed to a bellows-murmur, or lengthened.

In some of the above cases, the heart was over-excited, and had increased impulse, and perhaps, at the same time, a weak pulse. These cases all seemed either injured, or not benefited, by wine. They were generally fatal, and exhibited no appearances of softening.

It is only in the third class, or where the impulse and first sound of the heart are feeble, or obliterated, that he so strongly recommends wine and corresponding stimulants. He thinks improvement of these signs after the exhibition of wine, in these grave cases, of much value, as indicating a favorable prognosis.

An interesting chapter is given on displacement of the heart. Among the varieties enumerated, are those from pleuritic effusion, penumothorax, emphysema, cancerous tumor, aneurism, diaphragmatic hernia, tubercular disease, and atrophy of the lung.

As a frequent cause of that rare occurrence, rupture of the walls of the heart, he naturally mentions the fatty softening sometimes found in the cachectic or aged. Rarely, as we know, it has occurred from violence and other causes.

Several cases of rupture of the valves and chordæ tendinae, are also given. He thinks that angina pectoris is generally connected with organic disease of the heart or arteries; that there is commonly "some form of weakened heart," and that, therefore, stimulants are always indicated.

On the subject of functional derangement of the heart, there are many valuable practical observations. But we have already much exceeded our proposed limit, and must close by simply giving his classification. He separately treats of "Increased action in young and growing persons;" "palpitation from derangement of the stomach;" from "hysteria;" from "gout and rheumatism;" and cardiac suffering from the abuse of "tea," and "tobacco." We close Dr. Stokes' volume with the conviction that it is the best of his many learned and practical contributions to medical science, and worthy of his previous high fame; and that, while it does not profess to be a compendious or complete text-book for beginners, it must long remain one of the most valuable works of reference on the subject, in any language.

In conclusion, we may mention, that want of space has prevented us
from noticing the contributions of Townsend, Ledwich, Todd, Lees, Houston, McDonell, and others, or the valuable records of the Dublin Pathological Society, illustrative of this important subject.

We fear, indeed, we may have already wearied our readers with this sudden fancy for medical mosaic. If the setting has been unskilful, we have the consolation of believing that the stones are all precious gems.

J. W. C.

BIBLIOGRAPHICAL NOTICES.


This is a third and revised edition of Dr. Meigs' Letters on the Diseases of Women. As the merits of this work are very well known in this country, it is necessary for us merely to call attention to the issue of a new edition.


The work of Mr. Erichsen belongs to a class of surgical publications which have become quite popular latterly, and which are at once very readable and instructive. We refer to the system of publishing the lectures which the author may have delivered upon a special subject. To this class belong the recent works of B. Cooper, Skey, Perrie, &c., &c. We have in this volume the lectures which Mr. Erichsen has been accustomed to repeat to the students of University College, London, and we regard it as the best and most complete of all similar works. Every subject is carefully and accurately investigated—first, in regard to the science, and then the art of surgery. No surgical treatise is, therefore, better adapted than this to give satisfaction to the general practitioner. It is very fully illustrated.


It gives us great pleasure to call the attention of that class of our
readers who devote time to the study of comparative anatomy to this work of Siebold, now reproduced in plain and unexceptionable Eng-
lish by Dr. Burnett. It is a work of great labor, and has been justly
esteemed one of the most complete treatises of its kind in any language.
The Editor thus notices its distinctive features: "In the text will be
found a lucid yet succinct exposition of the anatomical structure of
organs, arranged, as far as practicable, under distinct types. The
details on which this typical summary is based, are comprised in notes
which are as remarkable for their erudition as for their copiousness:
indeed, the utmost care has been taken in the literature of the various
subjects treated, and the student will here find the most reliable, and,
at the same time, the fullest reference to the bibliography of nearly
every subject in Comparative Anatomy." The work thus furnishes a
complete dictionary of the science, and is invaluable either for careful
study or as a book of reference. The additions of Dr. Burnett to the
notes and bibliography are extensive and valuable. The mechanical
execution of the work is in the best style of the art, and reflects credit-
tably upon the publishers.

Art. XIV.—Clinical Lectures on Pulmonary Consumption. By
Théophile Thomas, M.D., F.R.S., Physician to the Hospital
for Consumption and Diseases of the Chest, London, &c. Phila-
delphia: Lindsay & Blakiston, 1854. pp. 258.

This is a neat edition of the lectures, thirteen in number, which the
author delivered at the Brompton Hospital for Consumption, in 1851,
and which were published in the Lancet for that year. They attracted
considerable attention at the time, from the author's investigation of
the red streak upon the gums in phthisis. As physician to a large
hospital, devoted especially to this single disease, the author has had
the most ample opportunities to study Consumption in all its phases,
and he seems to have improved his advantages diligently. The work
is not a complete treatise on phthisis, but, maintaining the form of lec-
tures, each subject is treated in the discursive but attractive style of
clinical teaching, with an ample and appropriate introduction of
cases. We shall recur to it again.

Art. XV.—Handbook of Chemistry, Theoretical, Practical, and
Technical. By F. A. Abel, Professor of Chemistry at the Royal
Military Academy, Woolwich, and C. L. Bloxam, formerly first
Assistant to the Royal College of Chemistry. With a Preface by
Dr. Hofmann; and numerous illustrations on wood. Philadelphia:
Blanchard & Lea, 1854. 8vo., pp. 681.

We find this volume, after a careful examination, admirably calculated
to smooth the path of the student in every department of chemical
analysis. It gives a concise account of general chemistry, as far as it
is involved in the operations of the laboratory; as well. also, qualita-
tive and quantitative analysis. It goes forth under the sanction of
Prof. Hofmann, and we feel certain will prove a useful guide to the
student of chemistry.
PART THIRD.

FOREIGN MEDICAL RETROSPECT.

PRACTICAL MEDICINE.

A Review of Reports on Epidemic Cholera, drawn up at the desire of the Cholera Committee of the Royal College of Physicians. By Wm. Baly, M.D., and Wm. W. Gull, M.D., 8vo. London. The Report of the Royal College of Physicians has long been anxiously expected by the profession and by the public; and, although it has at last appeared, and although its preparation does infinite credit to the distinguished authors whose names appear upon the title-page, we predict that it will disappoint the expectations of the reader who seeks in it for a solution of his doubts, and a clear indication for his practice. Its style is analytical, and it carefully collects the information derived from various sources, testing the value of theoretical views by appeal to established facts; and when conclusions are drawn at all, they are fairly warranted by the arguments which precede them. So voluminous are the materials of which the authors have made use, and so numerous are the facts and arguments which they have condensed into the present volume, that we feel considerable difficulty in presenting a tolerable analysis of the book in our pages; and, in order to be within limits, our remarks must be, necessarily, discursive.

It must, however, have struck every one who has studied the works written on cholera, or has witnessed the actual progress of the disease, that certain questions stood prominently forward for discussion by the members of the profession, and that the answers to such questions involved points of immense importance, not only to individuals but to whole nations, and to the world itself. For this fearful pestilence has spared neither sex, nor age, nor calling; it has swept off both high and low; the expanse of the ocean has not limited its progress, nor have adverse winds repelled its march or diminished its virulence; and some of the coldest as well as the hottest regions of the globe have suffered alike from its visitation. It is, therefore, of immeasurable interest to the statesman, the philosopher, and the philanthropist, as well as to the practitioner of medicine, to trace, if possible, the hidden springs of so much misery to the human race; to discover the latent poison, and to counteract its influence; or, when it has burst forth in the community, to check its ravages and prevent its propagation.
The questions, then, which require solution, are: the cause of cholera, and the mode of its diffusion; the morbid anatomy and pathology of the disease; and, lastly, its treatment.

In the Report now before us, the two first questions are discussed by Dr. Baly, the three latter by Dr. Gull. In addition to the letter-press, there are numerous laboriously-executed maps, showing the progress of the disease, and its relative mortality at different places and different times; and also copious tables, drawn up as the results of the answers obtained by the Cholera Committee to the circular letters addressed to the profession in the year 1849.

In Dr. Baly's contribution to the volume, on the Cause of Cholera and its Mode of Diffusion, he considers first the different theories which have been advanced upon the subject, and then, before treating them in detail, he advances a great variety of facts and arguments to prove the general characters presented by the cholera epidemic.

The first of these characters is, the unequal and very partial distribution of the epidemic, which presents a remarkable contrast to epidemic influenza, which has, at one time, involved the whole of Great Britain and all Europe, while cholera fallen severely on comparatively few localities. This latter fact is proved from the statistics of Mr. Farr, who shows that four-fifths of the deaths from cholera in England and Wales during the year 1849 occurred in 134 registration districts, the total number of districts being 623, while there were 85 districts in which no death was caused by cholera.

The second character of a cholera epidemic is, that the localities especially, and most severely, visited by it, have certain features by which they are distinguished from those other places which entirely escape, or suffer only in a slight degree. This feature of the disease is, perhaps, better known and more generally admitted than any other; and abundant experience has shown that low-lying districts, in the vicinity of rivers or of the sea, and which are uncleans and ill-ventilated, are far more liable to the attacks of the disease, than those places in which the circumstances are reversed. But even to this generally-received law there were several exceptions: for, in the epidemic of 1849, "three sea-ports, Lynn, Deal, and Scarborough, almost entirely escaped, and many large inland towns, certainly crowded, and in a more or less defective sanitary condition, had very few deaths." Again, we are told that Reading, where only seventeen deaths from cholera occurred out of a population of about 20,000, is described as "built upon a bog, surrounded by water-meadows, with the Thames on one side, a canal on the other; the atmosphere remarkably humid," and as "by no means in a sanitary condition as to drainage and the like." Stafford, where there were only three deaths from cholera, is said by a local physician to be "very low"; "to have numerous stagnant drains in its immediate neighborhood"; "the river impounded by hills so as to be above the level of the surrounding lands"; "floods frequent and long-continued"; and that "the most favorable conditions for the attack of cholera exist within the town, there being no sewers, much filth on the surface, slaughter-houses, pig-sties, etc."
Reading and Stafford, however, are only exceptions to a general rule; and not only is it found that low-lying and humid districts are more exposed to the disease than lofty and dry situations, but that, even in the same town and the same street, the visit is modified by the elevation of the soil and other local peculiarities. It is found that in London an inverse relation subsists between the elevation of the soil and the mortality from cholera, is proved by Mr. Farr's statistics; and a table is given in Dr. Baly's Report, showing the relative mortality, in 1849, in 10,000 inhabitants in different districts of the metropolis, lying at different elevations above high-water mark. Thus it is found that in Rotherhithe, where the soil is on a level with the high-water mark, the deaths were 205 in 10,000; while in Hanover-Square, where the soil is forty-nine feet above high-water mark, the deaths were only eight in the same number.

The third character of a cholera epidemic is its long duration in a country, or even in a town of large size, a feature in which it again differs from influenza, the duration of which is very short, not exceeding a few weeks in a town, and two or three months in a whole country. Now, as the duration of the epidemic has been found to be uninfluenced by varying states of the atmosphere, it cannot be proved that the winds have brought the disease or that these agents have carried it away, but it seems to linger among the inhabitants of towns and cities by some inherent power of reproduction. Dr. Baly therefore proposes that the explanation of the long continuance of the disease in the localities which it visits, is to be found in the theory of "its dependence on a morbific matter, transportable within limits from place to place by the atmosphere, and capable of increase under favorable conditions in the places to which it is conveyed. For there is no difficulty in supposing that such a matter might attach itself to the surface of bodies within these places, so as to remain fixed there and even to increase, as long as the favoring conditions continued, quite independently of subsequent changes in the direction of the wind, or, in other words, of subsequent movements and changes of the great mass of the atmosphere."

The fourth character of cholera is that the intensity of an epidemic of the disease varies during its continuance in a country or a large city; so that it has periods of little and of great activity, and usually well-marked periods of increase, acme, and decrease. It is generally found that cholera appears in summer, and attains it greatest intensity in the summer or autumn; but this is by no means universally the case, nor does it appear the severity of the disease is at all in proportion to the elevation of the temperature at any given period; for even when the disease has raged during the summer, its greatest intensity is by no means contemporaneous with the greatest heat. In the fatal year 1849, for instance, the greatest heat was in the month of July, but the disease reached its greatest intensity in the month of September, when the temperature was considerably lower. These facts are well shown in a diagram in the body of the work, in which the exact temperature of each day is shown, as well as the relative amount of cholera prevailing at the same time; but the general rule is not invali-
dated, that the disease is usually more destructive in the hotter than in the colder months; and it would farther appear that great stillness of the air promotes the spread of the disease, while strong currents have an opposite effect.

A fifth character of the disease is, that after a certain time it altogether disappears; a fact which is well known to all who have studied its phenomena, but one for which it is difficult to afford any satisfactory explanation.

The sixth character of the disease which Dr. Baly investigates, is the manner of its dissemination as regards time; that is to say, the degree in which its appearance, its period of greatest intensity, and its cessation were severally simultaneous in different places. After a careful examination of the statistics bearing upon these points, the results are found to be that, in 1849, different towns began to be affected in succession, and not simultaneously; and that the towns first affected were generally those which lay on the sea or on rivers, and in which the population was dense and poor, and the habitations crowded, ill-built and ill-ventilated. The facts have shown that the epidemic of 1848-49 was very widely spread over this country within three months after its first appearance, at the end of September, that the increase of the epidemic at the beginning of the summer of 1849 took place in different counties in June, July, and August, and its ultimate cessation in September, October, or November; and that although the sanitary circumstances already adduced were found to influence the persistence of the disease in most cases, yet in numerous exceptional instances, the times of the commencement and of the cessation of the epidemic were not accounted for by site, population, or sanitary conditions. We regret that our space will not permit us to follow Dr. Baly through the voluminous details on which he has founded his opinions, or to record the conflicting and apparently contradictory facts, which, as reporter to the Cholera Committee, he has been called upon to examine, and, if possible, to reconcile with one another.

On the important question of the contagious or non-contagious nature of cholera, the evidence, as is well known, is hitherto unsatisfactory; but it would appear, on the whole, that the weight of proof leans to the side of the non-contagionists. "Amongst the eighty-four communications" says Dr. Baly, "relative to this topic, there are thirty-two in which the writers either distinctly maintain that the disease is not contagious or infectious, or evidently lean to the adoption of that view, and seven in which the contagious or infectious nature of the disease is asserted in an unqualified manner." Dr. Baly, however, analyses the evidence on both sides with great impartiality, but finally arrives at the conclusion that the contagious nature of cholera is not yet proved. It certainly does not appear that the nurses of the sick, or those who have buried the patients, or the medical men who have made post-mortem examinations, have suffered in proportion to the danger which they must have incurred; nor is it proved by facts that the persons who have washed the bedding and foul linen of cholera patients have caught the disease, at any rate, in great numbers. In some hospitals, however, as in St. Thomas's and in King's College,
the disease appears to have been communicated to the attendants by the patients; in the former hospital, there were one hundred and forty-seven cholera patients, and three nurses were attacked; in the latter, there were one hundred and twenty-three patients suffering from cholera, and two nurses died of the disease. Admitting, however, that contagion may be proved to a limited extent, "human intercourse" says Dr. Baly, "is certainly only one cause of the propagation of the disease. The general features of the epidemic of 1849, and special facts, also, have afforded satisfactory evidence that some other agent is engaged in its diffusion." Dr. Baly then proceeds to examine and to criticise the opinions of those who have proposed other theories for the propagation of the disease, and he considers first, the question whether the cholera poison is carried by the wind, or whether, as Dr. Snow supposes, it is transmitted from one human being to another by the drinking water. Both of these views are argued at great length, but are finally set aside as unsatisfactory. Dr. Baly considers that the influence of atmospheric currents is chiefly exerted in spreading the disease through the different parts of towns and over limited tracts of country, but that the agency of winds does not sufficiently account for the passage of cholera across the seas. He thinks, indeed, that, unless in very rare instances, the poison is not carried long distances by the winds without the loss of its morbid properties.

All the causes, therefore, assigned for the propagation of cholera are insufficient, when taken singly, to account for the results which are most probably to be explained by a modification and combination of some of the theories hitherto proposed; and as the disease is undoubtedly encouraged by damp and foul air, crowded and ill-ventilated dwellings, and habits of intemperance and personal uncleanness, Dr. Baly concludes his Report by some remarks upon Sanitary and Preventive Measures; but although this part of the work is quite unobjectionable, and embodies some very wholesome instructions, the length of our previous notices and extracts prevents us from doing more than giving them a passing allusion.

A copious Appendix is added to Dr. Baly's Report, giving a vast amount of information, upon many practical details, of the last great cholera visitation. In those places which were severely attacked, as well as in those where the mortality was small, the names of the locality and of the reporter are given, together with the number of deaths, the character of the site and its sanitary condition; in another table, the state of the wind and the mortality from cholera are compared, from observations made in Paris from the 19th of March to the 30th of September, 1849; in another are shown the monthly mortality from cholera, and the average temperature in the corresponding months in several epidemics in several cities and towns; another shows the distribution of cholera and diarrhoea over the Devonshire and Cornwall "Cholera field"; another, its distribution over the infected districts of Worcestershire, Staffordshire, and Shropshire; and another gives abstracts of communications received by the Cholera Committee relative to the sanitary condition and general characters of the localities in which the disease first appeared. In these tables the quantity of details
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is enormous, the labor involved in their compilation and arrangement is inestimable, and the whole forms an enduring monument to Dr. Baly's patience and industry.

In Dr. Gull's Report upon the Morbid Anatomy, Pathology, and Treatment of Cholera, the reporter commenced by stating, in his address to the President of the College of Physicians, that he does not intend to write an essay upon the disease; that the section on Treatment contains little that is positive, and that, as the report was undertaken after the disease had begun to decline, there was no opportunity for original inquiry.

Among the first subjects noticed is the fact of the rise of temperature which has been observed after death in cholera; a circumstance which attracted attention during the epidemic of 1832-33, but which was not supported by accurate thermometrical details. In the cases now recorded, it is proved that the temperature really rose after death; in one case, the temperature in the axilla, ten minutes before death, was 103.1°; five minutes after death it was 104°; in another case, twenty-five minutes after death, the temperature of the uncovered abdomen was 99°, forty-five minutes after death it was 90°, and fifty minutes after death it was 91°.

Another point adverted to is, the existence of muscular contractions after death, which often occur to a great extent and last for a long period.

In the cases of those who died during collapse, the stomach was found pale, and contained fluid of various colors and character; the coats of the small intestines were thickened and pulpy from oedema of the mucous membrane and submucous tissue; the villi were swollen and prominent from oedema; the patches of Peyer were often thickened and prominent from infiltration of serous fluid; the large intestine was more rarely affected with hyperaemia and ecchymosis than the small intestine; the liver was generally diminished in bulk, and its tissue flaccid; the gall-bladder was often distended with dark bile; the kidneys were usually congested; the female generative organs were likewise often congested.

When death occurred during reaction, the mucous membrane of the stomach and small intestines presented few alterations of importance; but the kidneys were frequently enlarged, the structure coarse, and presenting traces of congestion. The morbid appearances are then described in a systematic manner, and the analysis occupies forty-nine pages, detailing, in a series of cases, the sex and age of each patient, the duration of severe symptoms, and the lesions exhibited respectively in the stomach, the small intestines, the large intestines, the solitary and the aggregate intestinal glands, the mesenteric glands, the spleen, the liver, the gall-bladder, the peritoneum, the kidneys and urinary passages, the female sexual organs, the heart, the lungs, the membranes, substances and ventricles of the brain. This part of the Report is a most laborious but useful compilation, and affords an excellent view of the morbid appearances in cholera.

Although certain symptoms have been described by authors as the prodromata of the disease, Dr. Gull thinks that little dependence is
to be placed upon them. Those which have been chiefly enumerated are vertigo, headache, giddiness, general malaise, muscular fatigue, faintings, cramps, nausea, etc.; but Dr. Gull remarks that many of them arise from mental emotion, and others are not so much premonitory of an attack as the first symptoms of its onset.

With regard to the existence of premonitory diarrhoea, the information conveyed to the reporters is unsatisfactory, one set of answers asserting the frequency of this symptom, and another set denying its uniform or general occurrence.

In answer to the question whether the premonitory diarrhoea was characteristic of the severer disease, Dr. Gull observes, that "the diarrhoea premonitory of the severer symptoms of cholera was often feeculent and bilious, and presented no characteristics whereby it could be certainly distinguished from other forms. There were, however, occasionally some subordinate points of slight diagnostic value. The evacuations were generally more profuse and liquid than usual, but otherwise of a natural appearance, often unaccompanied by pain, and passed without effort, the painlessness and passiveness giving a false security to the patient. It was not until the nervous system began to be depressed, and the feeculent character of the stools was lessened or lost, and they became alkaline, watery, and floeculent, that they were distinctive. On this point, the experience of the profession appears to be uniform, and hence we may draw the following important conclusion:—that during the prevalence of the epidemic, every case of diarrhoea, arising without obvious cause, may be regarded as a probable result of the specific poison."

When the patient has passed through the stage of collapse in cholera, he has other dangers to encounter; and when the system is much exhausted by the violence of the disease, the reaction is often imperfect, and the recovery doubtful. The hot stage of cholera—the consecutive fever, as it is popularly called—has its peculiar sources of danger. Important pathological conditions are presented by the kidneys. "Not only are these organs, in the first stage, occasionally subject to the cholera-process, but, from the complexity of their circulation, the state of the blood, and the depressed nervous power of the ganglionic system, they slowly recover their function, and, from the persistent congestion, the secreting structures undergo changes similar to those found in acute albuminuria from other causes." The urinary secretion was either entirely suppressed or very scanty, of low specific gravity, and contained albumen. It appears, however, that the lesions of the kidneys in cholera did not lead to permanent changes of structure, and that if the patients recovered, the urine soon ceased to exhibit traces of albumen. We learn, also, from statistics, that the greatest mortality was during the stage of collapse or imperfect reaction, and that not more than one-tenth of the cases perished in the consecutive fever.

Dr. Gull does not attach much importance to the so-called choleranexanthem, which is not of frequent occurrence; and, when it happens, he regards it as being of subordinate pathological interest, and as closely allied to urticaria febrilis and erythema papulatum.

Although it is generally believed that the weak and diseased mem-
bers of the community are peculiarly liable to the attacks of the epidemic, such does not appear to be exactly the case, for chronic lesions were rarely found in the bodies of those who died of cholera. In eighty-nine cases of cholera examined by Dr. W. T. Gairdner, the liver presented evidences of chronic diseases but once, the kidneys only in four cases, and the intestines were uniformly free. Of the physicians’ patients in five London hospitals, from June 1st to November 1st, 1849, 934 were in St. Bartholomew’s, and none were attacked with cholera; 998 in St. Thomas’s, and six were attacked; 913 in Guy’s, of whom three were attacked; and 640 in St. George’s, of whom only one was attacked.

Upon the influence of habits and occupations as predisposing to cholera, the Report gives some interesting details. The most fertile cause which invites the disease is intemperance; and, in the communications forwarded to the College, it is clearly shown how great an effect this vice has in disseminating, and, perhaps, in generating, the cholera poison; not only does it appear that habitual intoxication renders up its votaries as the victims to the pestilence, but even the depression resulting from occasional excess had apparently a marked predisposing influence.

As to the liability of certain professions and occupations to the attacks of the disease, the results of Dr. Guy are quoted, and, from his investigations, it appears that “cholera was least fatal to persons occupied in the learned professions, not excepting general practitioners in medicine. It was in an equally low ratio to undertakers. Footmen and other men-servants appear to have been highly favored, probably from the part of the town in which they are principally employed, and the great care they take of themselves, being, perhaps, less exposed to fatigue, either bodily or mentally, than any other class: hence we are not surprised that, whilst among physicians, surgeons, and general practitioners of medicine, the mortality was 1 to 265, amongst footmen and other men-servants it was but 1 to 1572. Amongst tradesmen there are too many discrepancies to admit of any general deductions. Amongst common laborers the mortality was high, especially to ballast-heavers, coal-ports, and seavengers.”

It is found from statistics that the Jews enjoyed a remarkable immunity from the disease—a circumstance which seems to be due to their attention to hygienic rules. “Their houses are cleansed annually, and are not overcrowded. They are, as a class, sober, and in their diet scrupulous. There is no extreme destitution among them, the wealthy classes relieving those in distress. Their Sabbath is rigidly observed as a day of rest.”

On the all-important subject of the Treatment of Cholera, Dr. Gull’s remarks are copious, but the results are unsatisfactory. Among the principal medicines employed was calomel; but Dr. Gull states that it is administered only on empirical grounds, and that there appears to be no argument in favor of its exhibition, either from analogy or from pathology. The absence of bile from the evacuations is merely a subordinate result. Dr. Gull thinks that the beneficial results of the calomel treatment have been overrated by its advocates. This is decidedly our own opinion.
The treatment by calomel, opium, and stimulants, has been termed the "rational" method. The calomel was given to restore the functions of the liver; the opium, to allay irritation and arrest the discharges; and the stimuli, to counteract the depression of the nervous system: but experience did not confirm this theory, and the results were unfavorable. Great expectations were excited by the discovery of chloroform, but its specific efficacy in cholera has not been proved. It sometimes allayed the vomitings and cramps, but did not arrest the progress of the malady.

Quinine, strychnia, arsenic, sesquichloride of iron, nitrate of silver, nitrous acid, chlorine, sulphur, sulphuric acid, have all been tried; and some of them, when used upon rational principles, are most valuable in the treatment of cholera.

The application of heat by means of the hot bath, the vapor bath, and the hot-air bath, appears to be of little value in collapse. Cold affusion has produced results not more satisfactory than those from the hot bath. The "wet sheet," in the milder cases, favored reaction, but, when the disease was severe, it was useless or injurious. "In none of the cases, which were many," says Dr. Gull, "in which we saw it tried, did it produce any good effect."

In a few cases, oxygen was inhaled in the stage of collapse, with asphyxia; and, at the same time, galvanism was employed to stimulate respiration, but no permanently favorable effect was produced by these means in the majority of cases.

The injection of saline matter into the veins was practised in 1832-33, without good results; and the repetition of the experiment in the last epidemic was not more satisfactory. Nevertheless, Dr. Gull considers that this plan deserves a further trial, taking such additional precautions as previous failure has suggested, and as the present state of physiological science may indicate. Dr. Gull gives the following observations on this subject:—"An accurate determination of the amount (of fluid) to be employed at one injection is difficult. This must be arrived at by a consideration of the previous history of the case, and by the effects produced. In general, too, great anxiety has been manifested to witness immediate and striking results; and some have probably fallen victims to a large amount of fluid suddenly thrown into an enfeebled circulatory system, whereby the lungs and brain have become seriously embarrassed. In an adult, probably not more than from forty to sixty ounces should be injected without intermission. The operation may be repeated after a longer or shorter interval, according to the necessities of the case; and this is, for the most part, to be preferred to throwing in double the quantity at once. Cases have terminated successfully where such an amount of injection has been repeated five or six times. Our physiological knowledge of the constitution of the blood shows the importance of the saline fluid being slowly mixed with it, otherwise a serious injury may be inflicted upon its organic constitution. From the data afforded by successful cases, we may conclude that about two to three ounces per minute may be set down as the mean rate."—Assoc. Med. Jour.
On a peculiar epidemic Fever, with Scarlet Eruption. By Edward Goodeve, M.D. (India Annals of Medical Science.)—A peculiar fever with scarlet eruption prevailed in Calcutta and other parts of Bengal in 1824, and was described by Twining, Mouat, and others. In 1847, a similar fever was seen, and was recorded by Dr. H. Goodeve. The fever now described by Dr. E. Goodeve appeared to be of a similar kind. The symptoms set in suddenly with shivering, and fever, which was generally paroxysmal; each paroxysm lasted from two to fourteen hours, being followed by a remission of variable duration. A bright scarlet eruption rapidly followed the initiatory symptoms, being in six cases visible within twenty-four hours, and in two cases appearing in the first febrile paroxysm. It was first seen on the upper part of the neck, the face up to the scalp, and the upper part of the thorax; it then extended to, but was always fainter in, the upper extremities; it seldom extended to the abdomen or the lower extremities. In color, this eruption varied from bright red to a faint rose hue. It was occasionally slightly papular, and was obliterated on pressure. Its duration varied from forty-eight hours to six days; it was seldom followed by desquamation. The mucous membrane of the mouth and throat, and in some cases of the nose, was involved; there was redness, follicular enlargement, swelling of the tonsils, and sometimes, but rarely, ulceration. There was, occasionally, catarrh and congestion of the bronchial mucous membrane; sometimes there was catarrh of the alimentary mucous membrane; the urine was albuminous in one case.

This fever differed from those previously recorded, in two important particulars: first, in the decided implication of the mucous membrane of the mouth and throat; and secondly, in the almost entire absence of articulor symptoms, which, in former epidemics, have been so marked as to lead Dr. Copland to describe this disease in his Dictionary under the term, "Scarlatina rheumatica." Only in one of the twenty-eight cases did these joint symptoms occur.

With respect to the identity of this disease with the European scarlatina, Dr. Goodeve hesitates to draw a conclusion, although he recapitulates the striking symptoms, and observes that they are the same as those which go to make up scarlatina.

The mortality was not great; only one case in twenty-eight was fatal. The treatment was simple.—**Med. Chir. Rev.**

Six Analyses of the Blood in Typhus Fever. By MM. Guenaud de Mussy and Rodier. (Beaquerel and Rodier's Path. Chem.)—In 1847 M. Henri Guenaud de Mussy and M. Rodier were commissioned by the French Government to enter upon an investigation of the typhus fever, which at this time was committing great ravages in Ireland. The former took charge of the pathological department, the latter was occupied with an analysis of the blood. A complete work on this disease was to have been published, but circumstances have decided otherwise, and it is probable that this work will never see the light; one of us, however, has preserved the analysis of the blood of six patients affected with typhus fever, which we believe we ought to publish here in the hope that they may be of some use in the history of this disease.
Analysis of 1000 grammes of Blood.

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<tr>
<td>Density of the blood,</td>
<td>1055-5</td>
<td>1047-0</td>
<td>1059-9</td>
<td>1042-1</td>
<td>1051-2</td>
<td>1041-2</td>
</tr>
<tr>
<td>Globules,</td>
<td>146-5</td>
<td>113-5</td>
<td>131-3</td>
<td>97-2</td>
<td>126-8</td>
<td>95-6</td>
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<tr>
<td>Solid parts of the serum</td>
<td>75-4</td>
<td>71-1</td>
<td>60-1</td>
<td>72-0</td>
<td>70-0</td>
<td>71-7</td>
</tr>
<tr>
<td>Fibrine,</td>
<td>2-3</td>
<td>1-2</td>
<td>2-8</td>
<td>3-9</td>
<td>2-5</td>
<td>2-1</td>
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<tr>
<td>Water,</td>
<td>755-8</td>
<td>814-2</td>
<td>799-0</td>
<td>826-9</td>
<td>800-7</td>
<td>830-6</td>
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Analysis of 1000 grammes of Serum.

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<tr>
<td>Density of the serum,</td>
<td>1022-1</td>
<td>1021-1</td>
<td>1017-5</td>
<td>1020-0</td>
<td>1024-1</td>
<td>1820-0</td>
</tr>
<tr>
<td>Solid parts,</td>
<td>91-8</td>
<td>80-8</td>
<td>69-8</td>
<td>80-0</td>
<td>82-6</td>
<td>79-2</td>
</tr>
<tr>
<td>Water,</td>
<td>908-2</td>
<td>919-2</td>
<td>930-2</td>
<td>920-0</td>
<td>917-4</td>
<td>920-8</td>
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It should be observed that these analyses were made previous to the period when the application of the polariscope to the study of albumen would have permitted a more exact appreciation of this latter element.

The following conclusions may be drawn from these grave cases:—

The density of the blood is, in general, diminished in a sensible degree.

The globules in normal proportion in two of the men have been considerably below the average in two others; they have exhibited corresponding diminutions in one of the women.

These facts being observed, we should examine into these deficiencies in the anterior state, the nature of the food, and particularly the anemic condition which preexisted, the above modification of the globules not being altogether due to the disease itself.

The fibrine was found either in normal proportions or occupying limits inferior to the physiological state or in diminished quantity; this tendency to diminution, therefore, is a fact worthy of notice.

The density of the serum is, in general, remarkably diminished; this diminution is, probably, the effect of the diet and the disease combined; it is, however, much more considerable in one case than in the others.—Med. Chir. Rev.

On Hydrophobia as it occurred in France in 1852. By M. Aubroise Tardieu. In the year 1850, the minister of agriculture and commerce, on the recommendation of the committee of public health, sent a circular to every prefect in France, requesting him to give information regarding any cases of hydrophobia which might occur in his department. A number of reports were in consequence sent in, but as these were in some respects incomplete, a fresh circular was issued, detailing more particularly the manner in which the cases should be recorded. From the information so obtained, M. Tardieu drew up a report re-
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Regarding the cases which occurred in the years 1850-51, as well as in 1852. As the report for the year 1852 is much more complete than the others, we subjoin an abstract of it.

1. The number of cases of hydrophobia which occurred in France during the year 1852 was 48. These were observed in 14 departments: the department in which the greatest number occurred was that of the Hautes Alpes (in the southeast of France, latitude between 44° and 45°); while the department of Lozère (also in the south, and having the same latitude as the other) came next.

2. With regard to the sex; 36 of the 48 cases were males, 12 females; the proportion in the two preceding years was almost the same.

3. The following table exhibits the ages of the subjects affected with hydrophobia:

<table>
<thead>
<tr>
<th>Below 5 years, in 1852</th>
<th>3 in two former years</th>
<th>4 = 7</th>
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<tr>
<td>From 5 to 15</td>
<td>&quot; 10 &quot; &quot; &quot;</td>
<td>14 = 30</td>
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<tr>
<td>&quot; 15 to 20</td>
<td>&quot; 4 &quot; &quot; &quot;</td>
<td>11 = 15</td>
</tr>
<tr>
<td>&quot; 20 to 30</td>
<td>&quot; 3 &quot; &quot; &quot;</td>
<td>9 = 12</td>
</tr>
<tr>
<td>&quot; 30 to 60</td>
<td>&quot; 17 &quot; &quot; &quot;</td>
<td>37 = 54</td>
</tr>
<tr>
<td>&quot; 60 to 70</td>
<td>&quot; 1 &quot; &quot; &quot;</td>
<td>7 = 8</td>
</tr>
<tr>
<td>Above 70</td>
<td>&quot; 0 &quot; &quot; &quot;</td>
<td>6 = 6</td>
</tr>
<tr>
<td>Not mentioned</td>
<td>&quot; 4 &quot; &quot; &quot;</td>
<td>0 = 4</td>
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| —                      | —                      |
|——                     |——                     |
| 48                     | 88 = 136               |

This table shows the incorrectness of the opinion which ascribes the disease to the effects of terror, for it shows that 7 children under five years of age have been attacked.

4. All the cases which occurred in 1852 originated in the bites of dogs, except one, where the bite of a cat was the cause of the disease.

5. The situation of the wounds inflicted by the rabid animals was as follows in 48 cases:—On the face, 13 times; on the upper extremities, 15; on the lower extremities, 12; not mentioned, 8. In two of the cases the disease was communicated by pet dogs which were accustomed to lick their masters' faces, and where excoriated lips were the seat of the inoculation.

6. In 40 out of the 48 cases the date of the inoculation has been observed. It occurred in March, April, and May in 10 cases; in June, July, and August, 16; in September, October, and November, 4; in December, January, and February, 10.

7. It seems a considerable number of individuals who are bitten by rabid animals escape the disease. During 1852 some observations were made on this point, and it appeared that out of 44 persons bitten about the same time 23 only were attacked.

8. The period of inoculation of the disease was exactly noted in 20 cases. It was as follows:—Less than a month in 8 cases: from 1 to 3 months 10; from 3 to 6 months 1; 11 months, 1.

9. The duration of the disease in 20 cases was 2 days in 6 cases; 3 days in 8; 4 days in 5; 6 days in 1.

10. The termination of confirmed cases of hydrophobia was constantly fatal. Of the 48 cases, it appears that only 27 came under this category; in the others the effect was merely local. In 12 of these
27 cases no precaution was taken, in 4 no mention is made of this circumstance. In 8 of the remaining 11 cases cauterization was resorted to immediately, in 3 at a late period. Of the 21 individuals who escaped (see §7) cauterization was energetically performed in 12 cases; the details of the other 9 have been omitted.

11. As to the mode of cauterization employed, the actual cautery was used in all cases but 5, and these were treated by protonitrate of mercury, nitric acid, ammonia or butter of antimony. In Germany it has been proposed to excise the bitten parts and then to wash the wounds with a solution of caustic potash.—*Annales d'Hygiène.*

**On the Influence of Belladonna in Counteracting the Poisonous Effects of Opium.** By Thomas Anderson, M. D.—Dr. Graves had first suggested that, in continued fever, with protracted pupils and coma, if an agent, administered internally, would occasion dilatation of the pupils, it might also relieve the other symptoms of cerebral derangement. Dr Anderson, acting on this theory, administered large doses of belladonna in two cases of poisoning by opium, which he related as follows:—

"A patient of whom I had charge, and laboring under delirium tremens, having received an overdose of a solution of the muriate of morphia, became comatose. He had taken, in thirty-six hours, two ounces of the solution of the muriate of morphia, and it had been continued by the attendant after sleep was procured. When I saw him he was in profound coma, his breathing was stertorous, amounting to no more than four or five per minute, and his pupils were contracted to mere points. His pulse was excessively weak, and rather slow; it was quite impossible to rouse him. I ordered him, immediately, the following mixture:—Tincture of belladonna, six drachms, in five and a half ounces of water, of which an ounce was to be given every half hour. Three ounces of the mixture were administered with great caution, after which his pupils began to dilate. The six drachms of the tincture of belladonna were taken, and in four and a half hours after the first dose of it was given, the patient was in the following condition:—The coma was entirely gone, respirations were between twenty-two and twenty-five per minute, the pupils were much dilated, the pulse had risen to nearly one hundred and twenty in the minute, and was also increased in strength. His countenance, also, from being cold and pallid, had become much flushed, and the whole body was much warmer. He replied, readily and coherently, to all my questions. He continued to improve for three days after, when, rising suddenly to stool, he fainted, and before the assistance of the nurse could be procured, he was dead.

A fortnight afterwards, a woman about 50, took, at four P.M., two drachms of laudanum, and, at half past five P.M., three drachms more. She was brought to the infirmary at eight P.M. After making vain attempts to rouse her from the coma, by walking her about, &c., the stomach-pump was used at a quarter past eight P.M. By this means her stomach was thoroughly evacuited, but no trace of opium was detected by smell or sight. It had, probably, been all
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absorbed. A current of electricity was then applied to her hands for nearly ten minutes, but without rousing her. I saw her at a quarter to nine P.M., for the first time, and on being told that she had been poisoned by laudanum, I determined to try the effects of belladonna.

At that time her pupils were contracted to mere points, her respiration was stertorous, ten per minute, the pulse was feeble, and the extremities rather cold. Between nine and half-past nine, I gave her one ounce of tincture of belladonna in three ounces of water, which was all swallowed, but with difficulty. In the course of the next half hour, two drachms more were administered. At eleven P.M., the first alteration on the size of the pupil was observed; the respirations had also then increased to twelve or thirteen in the minute, and the pulse was much stronger. The symptoms continued to improve till two A.M., when all indications of opium poisoning had disappeared. The woman was then sitting up in bed talking to the nurses, with pupils dilated to a little more than their natural size, and still slightly sensible to light. The extremities were quite warm, the pulse about 100, and of good strength.

She gave me a coherent account of her motives for taking the poison, of the amount of money she had spent in purchasing the laudanum, and the names of the druggists where it had been procured. She also replied sensibly to questions about her family, and the ages and occupations of her children. She continued awake till nearly four A.M., after which she slept till nine A.M. In the morning I found her pretty well, her pupils being no more dilated than they were four hours after the first administration of the belladonna. She complained, however, of nausea, but unaccompanied with vomiting. This symptom, along with the dilated pupils, had entirely disappeared in the course of two days. She was kept in the hospital, under observation, for ten days after the accident, at the end of which time she was dismissed, perfectly well. The tincture of belladonna, used in both these cases, was of the strength of four ounces of the leaves to two pints of rectified spirit, and prepared by percolation. Half a drachm is considered a full dose. I have seen dilatation of the pupil produced by a drachm given at once.

The committee on Dr. Anderson's communication reported that they had designed to test Dr. Anderson's views by experiments on animals, but had found, on inquiry, that the animals commonly used for experiments were almost entirely insusceptible of the poisonous action of opium or belladonna. Where the effects were so different from those observed in man, it is obviously impossible to pursue the investigation which they had intended; the committee, therefore, while recognizing that Dr. Anderson's views require more extended observations in order to confirm them, deemed them worthy of the attentive consideration of the Society.—Edin. Monthly Journal.

On the Employment of Chloroform in restlessness, following Hemorrhage. By T. E. Beatty, M.D.—I am not aware that the powerful agent, for which we are indebted to Dr. Simpson, has been used by any one in cases of uterine hemorrhage; and from the imper-
feet knowledge hitherto attained of the truly wonderful properties of this medicine, it is not surprising that its application to such cases should have been looked upon as inadmissible by even its most warm supporters. In the case I am about to relate, I was, I may say, compelled to resort to chloroform for assistance, and I am happy to say I did not call in vain. The success was so striking, the result so gratifying, that I did not hesitate to employ it in another and similar case, which occurred since I commenced to put these observations together for publication.

February 14, 1853. I was brought five miles from Dublin to attend a lady who had been under my care in three former confinements while she resided in the city. On my arrival I found the head just passing through the vulva, the labor having been short and easy. The child was soon expelled, and before the placenta came away a very profuse hemorrhage took place. A drachm of ergot of rye was now administered, pressure, &c., of course, was attended to, and the placenta, being found in the vagina, was removed. The hemorrhage continued with great rapidity, notwithstanding very good contraction of the uterus. Vinegar and water, freely applied, seemed unavailing. The ground was covered with snow at the time. I ordered a bucketful to be brought up to the room, and making up balls I passed them into the vagina, and heaped the hips and abdomen with the snow. By these means the hemorrhage was at last arrested, but the patient, a very small, slender woman, was reduced to a very low ebb indeed. The pulse was nearly imperceptible, the breathing distressed and gasping, and the formidable complaint of noises in the ears was urgently made. Fifty drops of laudanum in brandy were given, and in a quarter of an hour, the symptoms growing worse, seventy drops more and large quantities of the brandy were taken. Great exhaustion, great nervous excitement, great desire for sleep, harassed the patient. Repose was indispensable to her safety; opium did not procure it; time was of consequence. It occurred to me that if I could tranquillize the nervous system for even a short time, the opium she had taken would come into play and continue the narcotic influence so essential to her life. I fortunately had my chloroform with me, and as she lay tossing from side to side, and calling for air, I applied the chloroform to her nose. She soon became more calm, by degrees the jaetitation ceased; she assumed a more composed attitude; and, to my great delight, sleep, quiet and natural, soon came over her. Hot jars were placed to her legs and feet, and finding the sleep so natural, I held the instrument with the chloroform at a distance from her mouth, so as to keep up the action in a faint degree. It was most interesting, and, as may be well imagined, very exciting, to watch the state of the pulse during this time. I was too far off to get any assistance. I had tried an experiment with a powerful agent, but my firm belief was that the new medicine would save her life. With the finger on the pulse while she slept, I waited for the returning wave, sometimes imagining the impulse was greater, again finding it feeble as before. But it did increase in strength, and before she had slept half an hour there was a manifest improvement in the beat. The feet were kept warm, and the
sleep was kept up for two hours, at the end of which time she awoke most miraculously refreshed. In fact, I never saw any patient so thoroughly recovered at the end of twenty-four hours as this lady was at the end of two. She rapidly returned to perfect health.

Encouraged by the marked benefit derived from the administration of chloroform in this hitherto forbidden kind of case, I was led to employ it under similar circumstances on the 8th of the present month, (March). A lady was delivered of her third child after a natural, easy labor, and as soon as the placenta came away, a great rush of hemorrhage followed, which continued with great violence for an hour. Ergot and the usual means succeeded in arresting the flow of blood, but she was left in a very exhausted condition. Absence of pulse, prostration, sighing, jactitation, &c., were prominent. Laudanum in doses of fifty drops, repeated in ten minutes, and brandy freely given, failed to procure rest. Indeed, the opium seemed rather to prevent sleep. I now placed a piece of sponge in the bottom of a conical shaped wine-glass, and having moistened it with chloroform, I held the glass over the mouth and nose of the patient. The medicine did not fail to produce its usual soothing effect. Soon the nervous excitement passed away, by degrees the eyelids closed, and healthy natural sleep was induced. This was maintained for two hours, during which the warmth of the body returned, the pulse returned at wrist, and slowly regained strength, and at the end of the time, when she awoke, she said she felt perfectly well and happy. She described the first effects of the chloroform as being most delightful. The peace of mind and soothing of the whole nervous system produced by it, she declared resembled a foretaste of heaven.

Conclusions respecting Injections of Iodine in Ovarian Dropsy.

By Professor Simpson.—Within the last year, Dr. Simpson has, subsequently to tapping, injected into dropsical ovarian cysts the tincture of iodine in seven or eight cases. For this purpose he has employed the common tincture of iodine of the Edinburgh Pharmacopœia, undiluted. He has usually thrown into the cysts two or three ounces of the tincture. In some cases he has allowed a portion of the injected fluid to escape; in others, has retained the whole of it in the sac of the cyst that was tapped. From these cases he drew the following conclusions:—

1. In none of the cases of ovarian dropsy, treated with iodine injections after tapping, has he yet seen any considerable amount of local pain follow the injection, with one exception; in most instances no pain at all is felt; and in none has constitutional irritation or fever ensued. In the one exceptional case considerable local irritation followed; and the pulse rose to 110; but the same phenomena occurred in the same patient after previous tappings without iodine being used.

2. While the practice seems thus so far perfectly safe in itself, it has by no means proved always as successful, as in hydrocele, in preventing a reaccumulation of the dropsical fluid; for in several instances the effusion into the sac seems to have gone on as rapidly as after a simple tapping without iodine injection.
3. But, in two or three of the cases, the iodine injection appears to have quite arrested, for the time being, the progress of the disease, and to have produced obliteration of the tapped cyst, as there is no sign whatever of any reaccumulation, though several months have now elapsed since the date of the operation.

Lastly. Accumulated experience will be required to point out more precisely the special varieties of ovarian dropsy most likely to benefit from iodine injections, the proper times of operating, the quantities of the tincture to be injected, and other correlative points. Perhaps the want of success in some cases has arisen from an insufficient quantity of iodine being used, and from the whole interior of the cyst not being touched by it. The greatest advantage would of course be expected from it in the rare form of unilocular ovarian cysts. In the common compound cyst, the largest or most preponderating cyst is usually alone opened in paracentesis; and though it were obliterated, it would not necessarily prevent some of the other smaller cysts from afterwards enlarging and developing into the usual aggravated form of the disease.—Month. Jour. Med.

Puerperal Convulsions and Albuminuria. By M. M. Depaul and Mascaret. ('L'Union Méd.')—M. Depaul has read an able report upon a very instructive memoir by M. Mascaret, to the Académie de Médecine, upon this important subject. The author divides the cases of eclampsia into predisposing and occasional. He regards as special predisposing causes, first, labors, the sanguineous and lymphatico-sanguineous temperaments, infiltration of the legs; but he does not consider albuminuria, and in this M. Depaul confirms the views of the author, as an essential cause of the disease. M. Depaul cited three cases of puerperal convulsion, in which no trace of albumen could be discovered in the urine; one which had occurred in his own practice, one recorded by Dr. Leuer, and a third by Professor Dubois. Two additional cases are recorded in M. Mascaret's memoir. M. Depaul again refers to the frequency of albumen in the urine of pregnant women, and the comparative and absolute rarity of convulsions. Out of 41 women in whom the urine was found albuminous, observed by Dr. Blot at the Maternity, only 7 were seized with eclampsia. In order to collect these 41 cases, he examined the urine of 205 women, taken indiscriminately from the wards of the hospital. Further, M. Depaul cites two cases, in which, having examined the urine before labor without finding any albumen present, convulsions broke out, and the urine was found to contain albumen after the second fit in the first case, and after the fourth fit in the other case. M. Depaul also observed that the albumen disappears with remarkable rapidity after delivery, whilst not seldom convulsions only appear some hours or even some days after parturition. The reporters, however, admitted that albuminuria was too frequently observed in the course of gestation, and coincided too frequently with puerperal convulsions, not to render the investigation of the relation of these conditions necessary. M. Depaul observed that the common explanation of albuminuria in pregnant women was not to be found in inflammation of the kidney. In the autopsies he had
made, the kidneys were found either perfectly healthy, or simply congested. The true point of departure he believed to be, the modifications that gestation caused in the blood.

On the differential Diagnosis of Hydrocele, and the diseases with which it may be confounded. By R. G. H. Butcher, Esq. (Dublin Jour. Med. Sci.)

HERNIA.

Begins above.
Changeable in bulk.
Engages ring.
Feeling of weakness.
Can often feel intestines, or omentum.
Testicle at the bottom.
Opaque: in child sometimes transparent.
Base of tumor above.
Flatulence, dyspepsia.

HYDROCELE.

Begins below.
Unchangeable.
Ring free.
Feeling of weight.
Can feel nothing.
Testicle at back part.
Often transparent.
Base of tumor below.
Bowels not deranged.

VARICOCELE.

Soft, like earth-worms.
Changeable, like hernia.
Ring dilated often.
Testicle distinct.
Testicle wasted.
Tumor whole length of chord.
Tumor light.

HYDROCELE.

Tense, elastic.
Unchangeable.
Ring closed.
Testicle indistinct.
Enlarged, if distinguishable.
Tumor at bottom.
Tumor heavy.

VENereal TESTICLE.

Both engaged generally.
Tumor very heavy.
Hard all over.
Size moderate.
No fluctuation; sometimes small quantity of fluid.
Tumor slanting.
Painful to handling.
Solid contents.
Eruption, or sore throat.

HYDROCELE.

One tunica vaginalis generally.
Tumor not so heavy.
Hard only at back part.
Often very large.
Fluctuation.
Tumor perpendicular.
Not painful.
Fluid contents.
None such necessarily.

SCROFULOUS TESTICLE.

Round in form.
Never very large.
Solid.
Heavy.
Lies at the bottom of the scrotum.
Inflames in spots.
Suppurates, fungates.
Serofula in other glands.

HYDROCELE.

Oval in form.
Often very large.
Fluctuating.
Light.
Grows upwards.
Never so.
Never suppurates.
Not so.
### Fungus Hæmatodes.

<table>
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<tr>
<td>Shape, globular generally.</td>
<td>Oval generally.</td>
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<tr>
<td>Rapid in growth.</td>
<td>Slow in formation.</td>
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<tr>
<td>Painful.</td>
<td>Free from pain.</td>
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<tr>
<td>Opaque.</td>
<td>Transparent.</td>
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<tr>
<td>Elastic.</td>
<td>Fluctuating.</td>
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<tr>
<td>Chord becomes hard and knobby.</td>
<td>Chord sound.</td>
</tr>
<tr>
<td>Pains up loins.</td>
<td>No such pains.</td>
</tr>
<tr>
<td>Health impaired.</td>
<td>Not so.</td>
</tr>
<tr>
<td>Fungates.</td>
<td>Never.</td>
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</tbody>
</table>

### Cancer of the Testicle.

| Small. | Large. |
| Round. | Oval. |
| Painful on handling. | Not so. |
| No fluctuation. | Fluctuation. |
| Chord knobby. | Chord soft. |
| Adheres to scrotum. | Never. |
| Glands in groin enlarged. | Never engaged. |
| Shooting pains. | Never (in loins). |
| Fever peculiar. | No fever. |
| Fungates. | Never. |
| Death. | Never. |

In hydro-sarcocele the testicle will be found hard, painful, irregular, large at the back part, with some fluctuation in front. Testicle distinguished in hydro-sarcocele, not so in hydrocele generally. Shooting pains on handling the former, not so in the latter. If obscure, the tumor may be tapped, and then the enlargement of the testis will be discovered, and the water small in proportion to the size of the tumor.

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On the treatment of Hemorrhoids by the Galvanic Cautery. By Richard Steel, Esq. Having observed that in the recent discussion, at the Medical Society, on the subject of hemorrhoids and the several modes of treatment thereof by excision, ligature, nitric acid, etc., no mention was made of the galvanic cautery, I am induced to communicate the fact that the latter method has been most successfully applied by myself and also by a friend at my suggestion. His case is a peculiarly interesting one, having been previously treated by concentrated nitric acid, and subsequently by the galvanic cautery. It exhibits the great superiority of the latter in several important particulars, and in a more striking manner than any number of cases in which one method only has been employed.

The apparatus which we have used for igniting the coil of platinum wire has been made by myself, and consists of a modification of Wolstanton's battery of a dozen pairs, so contrived as to admit of being con-
veyed from place to place with the certainty of not deranging it; and it is set in action with ease and readiness when required. I had previously used a Grove's battery, which I had by me, but felt it desirable to arrange a battery better suited to be sent to a distance from home, and then found immediately ready for use.

The idea of using this plan of treatment for hemorrhoids was suggested to my mind on learning the satisfactory results of the galvanic cautery, as used by Mr. Marshall, of University College Hospital, for the destruction of morbid growths, also for producing artificial contraction of mucous membrane, especially of that lining the vagina, for the cure of prolapsus uteri. Having repeatedly employed the method so suggested for removing erectile tumors and semimalignant growths, I was struck with the comparative painlessness of the application, and at once conceived the idea of applying it to the treatment of hemorrhoids. I was confirmed in the idea on examining a case requiring an operation, and which presented so large a mass of redundant matter, that I was anxious to avoid, if possible, inflicting the severe pain involved in the repeated use of the acid on the one hand, and the danger of hemorrhage following excision on the other. Here was a diseased mass to be destroyed, and relaxed mucous membrane, producing prolapsus, to be contracted; the loss of substance caused by the actual destruction of diseased tissue primarily, and subsequently by the separation of sloughs, secured the first indication; the contraction of the cicatrices secured the second. The ignited platinum coil being applied more or less deeply, or over a greater or less surface, will produce any amount of destruction of parts or of contraction that may be necessary. The smaller amount of pain and of danger to the patient is such, that I shall in future use it in the treatment of this disease, in preference to any other method with which I am at present acquainted.

Case by Elmes Y. Steel, Esq.

I was consulted about three months ago, by a gentleman, under the following circumstances. For thirteen years he had been suffering from hemorrhoids with prolapsus, in so severe a degree as to be compelled to leave the army, which he did about seven years ago, when he placed himself under treatment in London, without obtaining relief. The malady subsequently became aggravated to the extent of incapacitating him for physical exertion of any kind, such being invariably followed by protrusion attended by extreme suffering and profuse hemorrhage. Deeming his case to be incurable, he had of late taken no other precautionary measures than those dictated by his own experience, for the purpose of alleviating in some degree the extreme suffering whereby too often his life was made a burden to him.

On examination, I found a mass, fully of the size of a cricket ball, consisting of hemorrhoidal tumors, varying in intensity of color and in degree of hardness, but all exquisitely tender to the touch. Having found by experience that the operation by ligature, however modified, was often followed by intense suffering, inducing irritative fever, whereas the application of concentrated nitric acid was always safe, certainly less painful, and frequently quite as successful, I determined upon using the latter method in the first instance.
Accordingly, on the 29th of last November, I applied the acid freely to the more prominent parts of the internal mass, avoiding the outer ring, which I had smeared with oil in the usual way. The pain thus occasioned was severe at the time, and continued for some hours, not altogether subsiding for several days, although not such as to require confinement to bed.

On December 4th, the hemorrhoidal mass somewhat lessened. A second and third application, at intervals of ten days, were followed by similar results; the hemorrhoidal tumors having sensibly yielded to the treatment, but still presenting a formidable appearance.

At this time, the suggestion of the galvanic cautery having been made to me by my cousin, Mr. Richard Steel, and he having supplied me with a battery of his own contrivance for the purpose, I determined upon resorting to it for the further treatment of the case.

On Jan. 18th, I proceeded to touch the more prominent of the remaining tumors with the ignited coil. The pain was comparatively so trifling as to be thought insignificant; and immediately after the return of the gut, my patient walked about the house as if nothing had been done.

On February 8th, the parts which had been touched by the cautery were found to have sloughed away, leaving sulci, which will, I doubt not, on cicatrization becoming complete, have effectually promoted the contraction of all redundant mucous membrane. The cautery was a second time applied with similar results, and so effectually, that the patient can no longer protrude the hemorrhoids sufficiently to admit of external examination. He can now use any exertion, such as lifting heavy weights, without inconvenience; and, for the first time during many years, he has relief from his bowels without pain or hemorrhage. He says that the galvanic cautery is painless in comparison with the nitric acid application; and I can vouch for the fact of its efficacy, as well as for the ease with which it can be applied to any extent that may be required. In a word, I feel assured that it is on every account a most valuable, safe, and convenient application for the removal of hemorrhoidal tumors.—Assoc. Med. Jour.

OBIITUARY.

Obituary Notice of M. Roux.—This illustrious surgeon is no more. He died of apoplexy, on the 23d of March. M. Roux was professor in the Faculty of Paris, surgeon to the Hotel-Dieu, vice president of the Academy of Sciences (Institut), member of the Imperial Academy of Medicine (of which he was formerly president), member of the Society of Surgery and a great many other learned societies, French and foreign, officer of the Legion of Honor, &c., &c. He was born at Auxerre in 1780, and consequently was 74 years of age at the period of his death. M. Roux went to Paris 1797, where he soon became acquainted with Bichat. From an acquaintance he became Bichat's friend and associate in his labors. During the concours of 1802, he contested a hospital place with Dupuytren, who he was destined to meet ever after in his path as an opponent. He was surgeon to
Beaujon Hospital in 1806, and was transferred to la Charité in 1810, where the great Boyer was also surgeon, and whose daughter he afterwards married. Boyer spoke of him as the most dexterous operator of the day. His most brilliant concours was in 1812, with Dupuytren again for an adversary; although unsuccessful, he made such an impression on the Faculty, that another chair becoming vacant some years after, it was awarded to him by an unanimous vote. "The ardor and learning" says M. Velpeau, "shown by M. Roux in these public struggles, have never been equalled by anybody." Although M. Roux's writings have not been voluminous, yet he has enriched the literature of his country by some admirable works. It is melancholy to think that he should have been snatched away at a moment when he only required a few months to complete the publication of a work, which is to give to the world, the treasures of an unparalleled surgical practice. But for his twenty-five years war with Dupuytren, how much more would we not have had from his pen? However, a constant struggle for supremacy with so formidable a rival, almost precluded the possibility of his continuing the work of composition.

The funeral of M. Roux took place on the 27th of March. The religious service over his remains was performed in the church of St. Germain-des-Prés. M. de Castelnau in his own terse style, says, "The funeral of M. Roux was worthy of his memory." His remains were deposited in the cemetery of Mont-Parnasse, where rests the illustrious Lisfranc. Six discourses were pronounced: by Messrs. Velpeau, in the name of the Institut; Malgaigne, in the name of the Faculty of Medicine; F. Dubois, in the name of the Academy of Medicine; Marjolin, in the name of the Society of Surgery; Larrey, in the name of the Military Surgeons, and Duchaussoy, in the name of the Hospital Internes. M. Malgaigne's discourse is an evidence of that wondrous power of intellect which characterizes the great orator. M. Velpeau's discourse was admirable as a true appreciation of his dead colleague's career. I cannot refrain from giving the apostrophe with which he concludes, it is exceedingly touching: "Venerated master, faithful friend, thou hast nothing to fear from the celestial life; thou hast done thy duty toward thy fellow-creatures, thy career has been fully, nobly performed! Thy memory will never perish; thy name, forever honored, will occupy a great and illustrious page in the history of useful, of learned men. From the abode of the elect, God will permit thy great shade occasionally to cast an indulgent look on us; then thou wilt know that among thy former students, there is one who will cherish thy remembrance, and be grateful to thee to his last hour; who, in bidding thee an eternal adieu, leaves thy grave, his heart bursting with tears and sorrow."
PART FOURTH.

AMERICAN MEDICAL RETROSPECT.

Proceedings of the American Medical Association, at its Seventh Annual Meeting, held in St. Louis, Mo., May 2d, 3d, 4th and 5th. The seventh annual meeting of the American Medical Association was held in Veranda Hall, in this city, on Tuesday, May 2d, 1854. In the absence of the President, Dr. Knight, of New Haven, at 11 o'clock, A.M., the Association was called to order by Dr. Usher Parsons, of Rhode Island, the first Vice-President.

Dr. Jas. R. Washington, on behalf of the Committee of Arrangements, welcomed the delegates, and tendered to them the hospitalities of our citizens, in a neat and appropriate address, which was responded to on the part of the Association by Dr. Parsons.

On the calling of the roll, according to States, about two hundred delegates answered to their names.

The roll being called, the President announced that the Association was organized. He congratulated the Association on the return of their anniversary; and expressed himself much pleased to see so many new delegates.

The report of the Committee on Publications was now read, and laid on the table. The Treasurer's report was also read and referred.

On motion of Dr. White, of New York, a recess of fifteen minutes was now had, to allow the delegates of each State to meet and nominate one of their number to form a Nominating Committee to report permanent officers for the Society.

On reassembling, the following gentlemen were reported as composing the Nominating Committee:


Leave of absence was granted to the Committee. During their retirement communications were read by the Secretary, Dr. E. S. Lemoine, from Dr. Knight, explaining his absence; from E. L. Bea-
dle, of New York, tendering his resignation as one of the Secretaries, and others.

Dr. Brainard, of Chicago, presented a resolution which provided, that after the meetings of the Association be held alternately in the Northern, Southern, and Western portions of the Union. The resolution gave rise to considerable discussion, and was finally laid on the table.

On motion, adjourned to 3 o'clock, P.M.

Afternoon Session.—On taking the chair, Dr. Parsons, the senior Vice-President, in the absence of the President, delivered an able and interesting address, which was listened to with interest, and which, no motion, was referred to the Committee on Publication, to form a part of the transactions.

The following letter from a permanent member at Marseilles was read:

**Marseilles, March 10, 1854.**

**Dr. Edward L. Beadle, Secretary American Med. Association:**

Please to state to the American Medical Association, at their meeting in St. Louis, that I have presented to the Imperial Academy of Medicine, at Paris, the sixth volume of their transactions, that it has been received by that distinguished body with much favor, and that it has been referred to a committee for examination and report (M. Velpean, Chairman).

I have also promised M. De Bois, perpetual Secretary of the Academy, to endeavor to procure for the Academy the five previous volumes, and I feel assured that the Academy would take much pleasure in establishing a correspondence with our American Medical Association.

With great respect, yours truly,

**John G. Adams.**

A communication was read from the Medical Association of the city of New York, in reference to the melancholy accident at Norwalk, Conn., which took place immediately after the adjournment of the Association last year, and by which so many of its members came to an untimely end. It was recommended that brief biographical sketches be prepared and published with the Transactions.

The following communication from the New Hampshire Medical Society was read:

At the annual meeting of the New Hampshire Medical Society, holden at Concord, June 1, 1853, the following resolutions were unanimously adopted:

**Resolved,** That it is the decided opinion of the New Hampshire State Medical Society, that no delegate should be admitted to membership in the American Medical Association, who represents a Medical society which numbers among its members any person or persons who adopt as their system of practice any of the forms of empiricism.

**Resolved,** That the Secretary of the Society be instructed to transmit a copy of this resolution to the Secretaries of each of the State Medical Societies, and to the Secretaries of the American Medical Association, previous to their next annual meeting.

**E. K. Webster,**

**Secretary N. H. Med. Society.**

**Boscawen, June, 1853.**

Dr. Gross, of Louisville, Kentucky, offered the following resolution:
Resolved, That hereafter it shall be considered disorderly for committees of arrangements of this Association to give costly entertainments.

This resolution gave rise to some discussion. Dr. McPleeters, of St. Louis, moved the following as an amendment:

Resolved, That in future, committees of arrangements be requested to dispense with all costly and extravagant entertainments. This amendment was accepted by the mover, and carried by a large majority.

The Committee on Nominations now made their appearance, and, through their Chairman, Dr. White, of Buffalo, N. Y., recommended the following for permanent officers:

For President—Charles A. Pope, M.D., of Missouri.
Vice-Presidents—E. D. Fenner, M.D., of Louisiana; N. S. Davis, M.D., of Illinois; William T. Wragg, M.D., of South Carolina; John Green, M.D., of Massachusetts.
Secretaries—E. S. Lemoine, M.D., of Missouri; Frank West, M.D., of Pennsylvania.
Treasurer.—D. F. Condie, M.D., of Pennsylvania.

The report was accepted, and the officers elected to fill their several stations. Dr. Storer, of Boston. Dr. White, of Buffalo, Dr. Brainard, of Chicago, and Dr. Reed, of Tennessee, were appointed a committee to conduct the newly-appointed officers to their seats on the platform.

Dr. Pope not being present, owing to sickness in his family, Dr. Fenner, the first Vice-President, took the chair, and returned thanks for the honor conferred on him by selecting him as one of the Vice-Presidents, in a few appropriate remarks.

Dr. Biddle, of Philadelphia, extended an invitation from the profession of that city to the Association to hold the next annual meeting in Philadelphia.

A resolution of the Detroit Medical Society was also presented by one of the delegates from Michigan, inviting the Association to hold its next meeting in Detroit.

The report of Dr. Condie, Chairman of the Committee of Publication, was read; the report closed with a series of resolutions, for the consideration of the Association, which provides that a fee of three dollars should be required of each member annually, to defray the expense of publishing the Transactions of the Association, and that the name of any member refusing or neglecting to pay the same should be erased from the list of permanent members. A spirited debate sprung up on these resolutions, and after being amended, so as to require that permanent members should be notified by the Secretary of their indebtedness before their names were stricken from the list, they were adopted without opposition.

Dr. Atlee, on behalf of the committee to procure a stone with a suitable inscription for the monument of Washington, reported that he had adopted, at the suggestion of the lamented Dr. Pierson, of Salem, the design for the stone, representing Hippocrates refusing the presents of King Artaxerxes, who invited him to go to Persia and succor the enemies of Greece. The sculpture was on beautiful marble,
by Samuel Beck, a young artist of Lancaster county, Pennsylvania, from a daguerrotype copy of Viardot's celebrated picture, presented to him by Miss Abby L. Pierson. The execution of the work is in the highest style of art, and evinces extraordinary talents in the artist. He also stated, that in order to complete the work, $400 in addition to what had already been received would be required, and those favorable to the undertaking were invited to come forward and contribute.

Dr. Charles Hooker, of Conn., was appointed Treasurer pro tem., Dr. Condie, the Treasurer, being absent.

Dr. Pope, the President elect, appearing in the Association, was conducted to the Chair, and on taking his seat returned thanks for the honor conferred on him in the following address:

Gentlemen:—There are occasions when the mouth is dumb, because the heart is full. I am unequal to the task of thanks. Honor, which is valuable according to its source, is in the present ease great indeed; for I behold around me the members of a noble profession, the cultivators of a yet nobler science, gathered from the wide extent of our beloved country.

I would that this undeserved and unexpected honor had fallen on an older and worthier than I, for many such I see before me. In one thing only will I claim equality: for, however unworthy in other respects, I yield to none in ardent devotion and ceaseless love to our time-honored art. But I would not claim more than I ought. Nor do I misconstrue the honor, which your partiality has conferred upon me; for well I feel that it was intended less as an individual compliment, than one to the West in general, and to Missouri especially. In this view, gentlemen, for them and for myself, I return you the warm unfeigned thanks of a grateful heart.

Relying on the partiality which has thus elevated me to my present position, and claiming indulgence for any short-comings in presiding over your deliberations, I shall endeavor to acquit myself to the best of my poor ability.

Again, gentlemen, I thank you.

Dr. N. Pinckney, of the U. S. Navy, was introduced to the meeting, and in behalf of the Medical Staff of the Navy, delivered an eloquent address, expressing in glowing terms the thanks of the medical officers of the navy to the Association for the aid they had rendered them in obtaining from Congress the assimilated rank they desired.

A communication was received from the Hon. L. M. Kennedy, inviting all the members of the Association and the Faculty of the city in general, to partake of the hospitalities of his house, in an entertainment to be given in the evening. A similar invitation was also extended by Drs. Moore, McPheeters, and Reyburn.

A communication was also read from the President of the Board having charge of the Institution of the Blind, of St. Louis, inviting the members of the Delegation to visit that Institution during their stay in the city.

After which the Association adjourned until 9 o'clock, Wednesday morning.
Second Day—Wednesday.—The meeting convened as per adjournment at nine o’clock, A.M., Dr. Pope, President, in the Chair.

The minutes of the preceding day were read, and after one or two slight amendments, were adopted.

The Chairman of the Committee of Arrangements reported fifteen additional Delegates as having registered their names since yesterday.

The names of several gentlemen of the profession were offered as members by invitation, and were accepted.

A communication from the American Medical Society of Paris, signed by Dr. A. Hammer, of St. Louis, and Dr. Murphy, of Cincinnati, on the subject of Medical Education, was presented, which communication, after some discussion, was ordered to be laid on the table.

The President announced that the reading and consideration of the annual report of committees would now be in order. The following chairmen of committees submitted abstracts of their reports of the diseases and epidemics committed to their investigation, as appearing in their several sections and districts.

Dr. D. F. Condik, of Philadelphia, on the Causes of Tubercular Disease, was not prepared to report, and requested further time.

Dr. Geo B. Wood, of Philadelphia, on Diseases of Parasitic Origin, not being present, had sent a verbal request to be discontinued. His request was accordingly granted.

Dr. John A. Atlee, of Lancaster, Pa., on Epidemics of New Jersey, Pennsylvania, Delaware, and Maryland, not being prepared to make a full report, requested to be continued on the same committee.

Dr. D. J. Cain, of Charleston, S. C., on Epidemics of South Carolina, Florida, Georgia, and Alabama, read an abstract of his report, which was referred to the Committee on Publication.

Dr. W. L. Setton, of Georgetown, Ky., on Epidemics of Tennessee and Kentucky, made a partial report, and asked to be continued, which request was granted.

Dr. George Mendenhall, of Cincinnati, Ohio, on the Epidemics of Ohio, Indiana, and Michigan, presented a report for the years 1852 and 1853, of which he read abstracts. The report was referred to the Committee on Publication, with the request to have it published in the proceedings of the present year.

Dr. Palmer and Atlee each spoke at some length of the great and lasting good that might be accomplished, if all the members of the Association would duly record their individual experience of epidemics, and report all such cases to the Chairman of the Committee.

Dr. R. S. Holmes, of St. Louis, Mo., on Epidemic Erysipelas, read an abstract of his report. It was referred to the Committee on Publication.

Dr. E. D. Fenner, of New Orleans, on Epidemics of Louisiana, Mississippi, Texas, and Arkansas. He read a comprehensive abstract of his report—dwelling principally on the ravages of the cholera and yellow fever, their causes and means of treatment.

Dr. Fenner had not completed his report, and Dr. McPheeters offered a resolution, that he be requested to complete his report, and submit it to the Committee on Publication to be published. The resolution was adopted.

Dr. Mussey, of Cincinnati, moved a suspension of the regular order of business and that Dr. Linton, of St. Louis, be requested to express his views on the pathology of yellow fever, as he understood that he entertained some peculiar views on the subject. This motion was adopted, and Dr. Linton, being called for, took the stand, and addressed the Association at some length on the subject referred to.
In the course of his remarks, he advocated the idea that vegetable decomposition was not necessary to the production of the autumnal diseases of this country. He considered yellow fever nothing more than an aggravated type of bilious fever, caused by the retention of hydrocarbonaceous substances in the blood. In other words, the agencies producing yellow fever were Northern blood subject to the heat of Southern latitudes.

A motion was made and carried, that Dr. Linton be requested to draw up the substance of his remarks, to be presented to the Committee on Publication.

Dr. Daniel Brainard, of Chicago, Illinois, on the Constitution and Local Treatment of Carcinoma—requested further time to make a full report.

Dr. N. S. Davis, of Chicago, Illinois, on the Influence of Local Circumstances on the Origin and Prevalence of Typhoid Fever, read a brief abstract of his report, which was referred to the Committee on Publication.

Dr. Donaldson, of Baltimore, on the Present and Prospective value of the Microscope in Disease, in a communication, stated that his report was complete, but he not being present, it was, without reading, referred to the Committee on Publication.

The report of the Committee on Medical Education was received, but owing to its length, its reading was passed over. It was referred to the Committee of Publication.

Dr. Pope, Chairman of the Committee on Prize Essays, reported that nine essays had been submitted to their consideration, of which, one was presented as a voluntary contribution. Many of these essays possessed undoubted merit both in matter and style; but the committee preferred to be governed in their choice by considerations of originality and practical import, and had therefore concluded to award but one prize. The essay selected is entitled, "An Essay on a New Method of Treating ununited Fractures and certain Deformities of the Osseous System."

On breaking the seal of the packet, Daniel Brainard, of Chicago, was announced as the successful competitor.

Dr. McPheeters moved that Professor Brainard take the stand and give the Association an abstract of his new mode of treating fractures, &c., which motion was carried, and Professor Brainard accordingly came forward, and in an able manner gave the requisite information.

Dr. Guthrie, of Tennessee, offered the following resolutions, which were unanimously carried:

Resolved. That in the Secretary of the Treasury's recommendation to Congress to abolish or materially modify the duty on such crude drugs, not producible in this country, as are used in the laboratories of the country in the manufacture of chemicals, we recognize a wise provision for the further protection of the profession, and the community at large, from impure and sophisticated medicines.

Resolved, That a copy of this resolution be signed by the proper officers of this Association, and transmit the same to the Secretary of the Treasury, and to the Committee on Ways and Means.
Dr. J. B. Johnson read a letter from Dr. Stephen W. Williams, asking that certain resolutions which he had offered at the last meeting in New York, in reference to the preparation and publication of memorials of the distinguished dead of the profession in this country, be taken up and acted on. On motion, the resolutions were called up and adopted, and the President authorized to appoint a committee to carry them out.

In conformity with the recommendation of the Committee on Nominations, Philadelphia was fixed on as the place for holding the next meeting of the Association.

Dr. McIlvaine offered the following resolution:

Resolved, That in the opinion of this Association, the practice of Professors reading lectures to their classes, no matter with how much care selected from the musty records of antiquity, is a miserable apology for teaching, is prima facie evidence of their inaptness to instruct, and is inimical to medical progress.

It was, on motion, laid on the table.

Dr. French submitted the following resolution, which was carried:

Resolved, That a committee be appointed to inquire what State or other Society, represented in this Association, are in fellowship with irregular practitioners.

Dr. Blachford, of Troy, read a letter from Dr. A. D. Spore, stating that he (Dr. Spore) had been for some time investigating the subject of Hydrophobia, to ascertain what influence the weather had upon the disease, and in the letter he requested that communications on the subject might be sent to him by members of the Faculty who had opportunities of making observations. Dr. Spore not being a Delegate, it was moved Dr. Blachford be appointed Chairman of a Committee for the investigation of this subject.

The following resolution was offered by Dr. McDowell:

Resolved, That a committee be appointed to investigate the improvements of the instruments for Lithotomy, by Nathan R. Smith, Paul F. Eve and Dr. McDowell.

The resolution was laid on the table.

The following was offered by Dr. S. M. Smith, of Columbus, Ohio, which was carried:

Resolved, That a Standing Committee of ______ be appointed by the Association on the subject of Insanity as it prevails in this country, including its causation, hereditary transmission, educational influences, physical and moral, social and political institutions, &c. Its forms and complications, curability, and means of cure and prevention.

Adjourned until three o'clock, P.M.

Afternoon Session.—The Association met as per adjournment.

Dr. White, of the University of Buffalo, submitted the following resolution, which was carried:

Resolved, That the thanks of this Association be presented to Dr. J. Knox, late President, for the very dignified, courteous and efficient manner in which he presided over its deliberations, and that he be respectfully requested to furnish the usual address for publication.

The committee appointed by the American Medical Association to
devise or consider some comprehensive plan for the more general, systematic, and thorough investigation of subjects connected with medical science, made a report, to which was appended the following resolution:

Resolved, That the American Medical Association hereby recommends all Medical Societies to establish, in accordance with the plan detailed in the foregoing report, special committees for the selection, investigation, collaboration, and publication, of all subjects of interest connected with medical science.

The resolution was carried, and the report and resolution was referred to the Committee of Publication.

Dr. Atlee communicated to the meeting that he had received a letter from Dr. Parish, Chairman of the Committee on Epidemics of New Jersey, stating that his report was yet unfinished, but would soon be ready for publication.

On motion, it was directed to be handed over to the Committee of Publication, when finished.

Mr. Davis presented some specimens of milk to the Association, which he explained would, if used, prevent many of the diseases to which children are subject, arising from using impure milk. He respectfully submitted the specimens to the consideration of the Association.

According to previous arrangement, the Association adjourned at four o'clock, p.m., in order to afford the members an opportunity to visit the country residence of Col. John O'Fallon by special invitation.

Third day, Thursday.—Association met at nine o'clock, a.m., Dr. Pope, President, in the chair.

After the reading of the minutes, six additional Delegates were reported as having been registered since yesterday.

The names of several were reported as members by invitation.

Dr. Atlee offered the following resolution, which was carried:

Resolved, That it shall be the duty of the Publication Committee to append to each volume of the Transactions hereafter published, a copy of the Constitution of the Association.

The following resolution, offered by Dr. Gross, was also carried, and Dr. Gross was appointed by the chair, the committee designated.

Resolved, That a committee of one be appointed by the chair to inquire into the causes which obstruct the formation and establishment of our National Medical Literature, and to report the subject at the next annual meeting of this Association, or as soon thereafter as practicable.

Dr. J. Berrien Lindsley offered the following resolution, which, on motion, was referred to the Committee on Medical Education, with instructions to report at the next annual meeting of the Association:

Resolved, That this Association earnestly recommend to the few Western schools which still retain the rule of making four years' practice equivalent to one term at College, the abrogation of said rule, as holding out a strong inducement and temptation to young men to enter upon the practice of medicine with little or no preparation.

Dr. Paul F. Eve, of Nashville, Tenn., submitted a resolution, which, after amendment, as follows, was carried:

Resolved, That a committee of three be appointed by the chair, to report at the next meeting of the Association, the best means for preventing the introduction of disease by emigrants into our country.
The Chair appointed Drs. Dickson, Griscom, and E. D. Fenner, said committee.

Dr. Linton, of St. Louis, offered the following, which was also referred to the above-named Committee:

Resolved, That in the opinion of this Association, quarantine establishments afford no protection to States and cities against the invasion of epidemics, such as cholera and yellow fever.

Dr. Penn offered a resolution to the following effect:

Resolved. That the members of the Committee of Arrangements, who are not members of the Medical Association, be invited to take seats in this Association, as members by invitation. Carried.

A communication was read from Dr. Peebles, Chairman of the Committee on Epidemics of Virginia and North Carolina, requesting to be excused from the Committee. The request was granted.

The following report of the Committee of Nominations was submitted by the Chairman, Dr. White:

The Committee on Nominations, in fulfilling the duty imposed upon them, recommend the continuance of several of the special committees previously created, and the appointment of some new ones. They, therefore, submit the following list of chairmen of special committees, with the subjects to them committed:

Dr. Worthington Hooker, of New Haven, Connecticut, on Epidemics of New England and New York.
Dr. John L. Atlee, of Lancaster, Pa., on Epidemics of New Jersey, Pennsylvania, Delaware, and Maryland.
Dr. D. J. Cain, of Charleston, S. C., on Epidemics of South Carolina, Florida, Georgia, and Alabama.
Dr. W. L. Sctton, of Georgetown, Ky., on Epidemics of Tennessee and Kentucky.
Dr. Thos. Reyburn, of St. Louis, Mo., on Epidemics of Missouri, Illinois, Iowa, and Wisconsin.
Dr. Geo. Mendenhall, of Cincinnati, Ohio, on Epidemics of Ohio, Indiana, and Michigan.
Dr. E. D. Fenner, of New Orleans, La., on Epidemics of Mississippi, Louisiana, Arkansas, and Texas.
Dr. James Jones, of New Orleans, La., on the Mutual Relations of Yellow and Bilious Remittent Fever.
Dr. D. V. Condie, of Philadelphia, Pennsylvania, on the Causes of Tuberculous Disease.
Dr. Jos. Leidy, of Philadelphia, Pa., on Diseases of Parasitic Origin.
Dr. A. P. Merrill, of Memphis, Tenn., on the Physiological Peculiarities and Diseases of Negroes.
Dr. F. P. Porcher, of Charleston, S. C., on the Toxicological and Medicinal Properties of our Cryptogamic Plants.
Dr. Daniel Brainard, of Chicago, Illinois, on the Constitutional and Local Treatment of Carcinoma.
Dr. Henry Taylor, of Mount Clemens, Mich., on Dysentery.
Dr. Horace Green, of New York, on the Use and Effect of Applications of Nitrate of Silver to the Throat in Local or General Disease.
Dr. P. C. Gooch, of Richmond, Va., on the Administration of Anaesthetic Agents during Parturition.
Dr. Chas. Hooker, of New Haven, Conn., on the Diet of the Sick.
Dr. E. R. Darney, of Clarksville, Tenn., on certain forms of Eruptive Fevers prevalent in Middle Tennessee.

Dr. Sanford B. Hunt, of New York, on the Hygrometrical State of the Atmosphere in Various Localities, and its Influence on Health.

Dr. Frank H. Hamilton, of Buffalo, New York, on the Frequency of Deformities in Fractures.

Dr. G. S. Walker, of St. Louis, Mo., on Diseases of the Prostate Gland.

Dr. H. A. Johnson, of Chicago, Ill., on the Excretions as an Index to the Organic Changes going on in the System.

Dr. Leroy H. Anderson, of Sumterville, Ala., on Typhoid Fever and its Complications as it prevails in Alabama.

Dr. W. H. Byford, of Evansville, la., on the Pathology and Treatment of Scrofula.

Dr. N. S. Davis, of Chicago, Illinois, on the Nutritive Qualities of Milk, and the influence produced thereon by pregnancy and menstruation in the human female, and by pregnancy in the cow, and also on the question whether there is not some mode by which the nutritive constituents of milk can be preserved in their purity and sweetness, and furnished to the inhabitants of cities in such quantities as to supersede the present defective and often unwholesome method of supply.

Dr. M. M. Faller, of St. Louis, Mo., on Puerperal Convulsions.

Dr. E. B. Haskins, of Clarksville, Tenn., on the Microscopical Investigation of Malignant Tumors.

Dr. Geo. K. Grant, of Memphis, Tenn., on the Sulphate of Quinia as a Remedio- 

Dr. Samuel M. Smith, of Columbus, Ohio, on Insanity.

Dr. Rene La Roche, of Philadelphia, Penn., on the Jaundice of Yellow Fever in its Diagnostical and Prognostical Relations.

Dr. Charles Q. Chandler, of Rocheport, Mo., on Malignant Periodic Fevers.

Dr. S. B. Chase, of Portland, Maine, on Typhoid Fever in Maine.

Committee on Plans of Organization for State and County Societies.—A. B. Palmer, M.D., Michigan; R. R. McIlvain, M.D., Ohio; D. L. McGugin, M.D., Iowa; E. R. Peaslee, M.D., New Hampshire; Thomas Lipseomb, M.D., Tennessee.

Committee on Medical Literature.—Robert J. Breckenridge, M.D., Kentucky, Chairman; A. A. Gould, M.D., Mass.; D. L. McGugin, M.D., Iowa; J. B. Flint, M.D., Ky.; O. M. Langdon, M.D., Ohio.

Committee on Medical Education.—Wm. H. Anderson, M.D., Alabama; A. Lopez, M.D., do.; Andrew Murray, M.D., Michigan; A. Ramsay, M.D., Tenn.; R. D. Ross, M.D.


Committee on Publication.—Pliny Earle, M.D., New York; D. Francis Condie, M.D., Pennsylvania; E. S. Lemoine, M.D., Missouri; A. March, M.D., New York; E. H. Davis, M.D., do.; C. R. Gilman, M.D., do.

Dr. Reyburn, of St. Louis, moved the acceptance and adoption of the Report, except so far as related to the Committee of Publication.

This motion gave rise to a lengthy and spirited debate. The question at issue was, whether the publication of the Transactions of the
American Medical Association.

Association should be removed from Philadelphia to New York. The committee reported in favor of the latter city, and the object of Dr. Reyburn's motion was to continue the publication in Philadelphia. Pending the discussion of this question, the Association adjourned until 3 o'clock, P.M.

Afternoon Session.—The Association met agreeable to adjournment, Dr. Pope, President, in the chair.

On motion, Dr. W. S. Maus, of Pekin, Illinois, was unanimously elected a permanent member.

Dr. Atlee offered the following resolution, which was carried:

Resolved, That this Association earnestly recommend to their medical brethren, in those States in which Societies do not exist, the immediate organization of State and County Medical Societies.

Dr. Phelps, of New York, read a long and able paper on the connection between Religion and Medicine, which, on motion, was referred to a special committee, consisting of Drs. Atlee, Sayre, and Marsh.

The unfinished business of the morning being in order, the question came up upon adopting the original report of the Committee on Nominations. A discussion arose, participated in by Drs. Breckenridge, Atlee, Sayre, Storer, McDowell, White, and others. It was, in character, much the same as that of the morning, becoming very animated, and at times personal feeling and sectional jealousy were evinced.

The original report of the Committee was at length adopted, which gave to New York the Chairman and a majority of the Committee of Publication.

After the vote was announced, the delegation from Philadelphia, through Dr. La Roche, announced that they would take the responsibility of tendering the resignation of Dr. Condie, of Philadelphia, Treasurer of the Association. After some little discussion, the resignation of Dr. Condie was accepted.

Dr. West, of Philadelphia, one of the Secretaries, then tendered his resignation, and the question being upon accepting it, it was lost.

Dr. Breckenridge, of Kentucky, then offered the following resolution, which was carried:

Resolved, That hereafter the majority of the Committee on Publication shall be selected from the Physicians of that city in which the Association may annually meet.

A vote of thanks was then unanimously returned to Dr. Condie for the able, zealous, and impartial manner with which he had discharged his duties as Treasurer.

A resolution was reported to amend the Constitution, which provides that its annual meetings shall be held on the first Monday in May, and substitute the second Monday. The resolution, under the rule, lies over for a year.

Dr. Edgar offered a resolution in regard to the compounding of medicine, and recommending apothecaries to use different colored paper in putting up poisonous drugs, with an appropriate stamp upon it, in contradistinction to other medicines.
Dr. Gross informed the Association that the second volume of the work of the late Professor Drake, of Cincinnati, was now in the press at Philadelphia, and would be issued early in the present summer. The second volume, he said, was on Practical Medicine, and will be entirely independent of the first.

On the recommendation of the Nominating Committee, Dr. Isaac Wood, of New York, was elected Treasurer to supply the vacancy occasioned by the resignation of Dr. Condie.

On motion of Dr. Atlee, thanks of the Association were tendered to the Committee of Arrangements, and to the profession and citizens of St. Louis, for the hospitality with which they have been received and entertained.

Dr. Mussey, of Cincinnati, was appointed to report at the next meeting, on the Effects of Alcoholic drinks in Health and Disease.

Several other resolutions were presented, and communications read, all of which were referred to committees. Adjourned.

**Fourth day, Friday.**—The Association met at 9 o’clock, A.M., and, after an informal session, adjourned sine die.

After the adjournment, many of the delegates, with their families, joined in an agreeable excursion on the Pacific Railroad, which had been politely tendered to them by the authorities of said road.

Thus closed the seventh, and, to us, an exceedingly pleasant meeting, of the American Medical Association, one which will long be remembered with pride and pleasure by the Profession of this city.

On Thursday evening, a sumptuous entertainment was given to the Association, in the spacious hall of the Mercantile Library Company, by the Physicians of this city. Some six hundred guests sat down.—Condensed from the *St. Louis Med. and Surg. Jour.*

**Observations upon Primary and Secondary Amputation.** By Prof. W. Stone, M.D., of New Orleans.—The principle of immediate amputation, although beyond all doubt correct, has caused the loss of countless limbs unnecessarily, and, I believe, of as many lives as it has saved. The error, evidently, is from over-estimating the security afforded by primary over secondary amputation. The first duty of the surgeon certainly is to secure, if possible, the life of his patient; and the second, to preserve as much of his person in as perfect a manner as possible. In the anxiety to fulfil the first duty, by over-estimating the security which amputation affords, limbs are often sacrificed that are curable, and by disregarding the proper time for amputation, a life may be lost that would have been safe without an operation. In severe injuries of the extremities, if fatal, death is produced either by the concussion, or subsequent pain and suppuration which exhausts the patient; or it may occasionally be from tetanus or gangrene. Against the first cause of death, amputation affords no security, on the contrary it favors it. The question of amputation before reaction, I believe, is settled by every American surgeon of experience in the negative. This subject was sharply discussed in England on the occasion of the death of the celebrated statesman, Huskisson, who had both legs or thighs crushed
Observations upon Amputation.

on the Liverpool and Manchester Railroad. The Liverpool surgeons attempted to bring on reaction, but every means failed, the concussion had thrown him into a fatal collapse. The London surgeons took the matter up, blamed the Liverpool surgeons, and urged that immediate amputation should have been resorted to, and talked nonsensically of the stimulus of the knife. When one hears such reasoning, he feels the truth of the remark made by some one in the last century, that surgeons were bad pathologists and worse physiologists.

In severe injuries, where the patient is thrown into collapse and amputation is necessary or unavoidable, if the case is critical, it is a nice point to decide when, exactly, it can be performed with the most safety. If the patient were in great agony and amputation could relieve it, there could be no doubt of the propriety of amputating at once, no matter what the state of the pulse might be; but this is not the case, the shock has been received, the mischief has been done, the parts are in a measure paralyzed, and no very severe pain takes place until reaction. The question in such cases is, whether the injured limb is a greater source of pain than the stump would be after amputation, and considerable allowance should be made for the shock of the operation. The discovery of chloroform enables us in a great measure to avoid the shock of the stimulus of the knife, but not entirely. My experience is, that when amputation is unavoidable, it is best to do it as soon as reaction has fairly commenced, while the patient is under the influence of the first shock of the injury, the pulse flickering, etc.; any disturbance of the system, pain or loss of blood, might cause a fatal collapse in a case that would be perfectly safe managed with tact and judgment. By reaction I do not mean a full resistant pulse. The nervous system receives the shock and is the first to react, as is shown by the increased sensibility and improved capillary circulation before any perceptible improvement in the pulse is observed; this, however, soon follows, and the pulse becomes more steady. When the system is suffering from a severe injury, it is often the case that stimulants do not act as such when put upon the stomach. In extreme cases, when the patient is in danger from collapse, it is evident to me that the stomach does not absorb, but is nauseated, and all the depressing effects of nausea are produced. The rectum can scarcely be said to sympathize with the system in general, and always preserves an active absorbing surface. Stimulants given by injection produce a ready effect, and I always use my stimulants in this way where the patient is in danger, even when he is perfectly able to swallow, for they are much more prompt and effective. If too long a time elapses, after an injury, before amputation, the sensibility of the limb, which at first was partially paralyzed, becomes highly exalted, and although we can, by the use of chloroform, prevent the shock from the operation, we have a fresh wound in parts in a morbid state; the stump is much more painful, and as a general rule does not do as well as when the operation is performed earlier. By the above, I mean a state of the parts before any decided inflammatory action has taken place, and my firm conviction is that where no large joints are involved, or parts injured that will give extreme pain to the patient, he will have a better chance for his life if we give him a chance for his limb
also, even if we have to resort to secondary amputation; I mean if the most favorable period for operating has passed—N. O. Med. News.

Obstinate Quartan successfully treated with Chloride of Sodium. By J. S. Wilson, M. D., of Ala.—Participating in the desire, now so prevalent in the profession, to obtain that great desideratum, a cheap and efficient substitute for the costly preparations of Cinchona, in the treatment of Intermittents, I have been induced to try common salt, in accordance with the recommendations of M. Piorry, Professor Dugas, and others. And as the desire alluded to can be consummated only by experiments and reports, to which each should contribute a share, I hope that no apology is necessary for reporting even a single case, especially when its interest is somewhat enhanced by an obstinacy which defied the more ordinary and established remedies.

Case. On the 24th March, I was requested to prescribe for G. W., a young man of sanguine temperament, and of sound constitution, naturally; but this had been impaired by frequent attacks of intermittent fever, which had produced, as usual, a pale cheek, and tumid spleen; these effects were accompanied by headache, mental and corporeal torpor, together with that indescribable sense of general indisposition characteristic of this abominable disease. And, as an evidence of the severity of the paroxysms, it may be added, that the last mentioned symptoms were persistent, continuing, more or less, on his "well days." He stated that several physicians had prescribed for him—that they had given him opium, and (perhaps) quinine, &c. &c., without "breaking them;" and I had, myself, several weeks previously, put him on Fowler's solution, with the same unsuccessful result.

Prescription: Blue mass, 10 grs., to be followed by easter oil, if necessary. Then, on chill-day, (20th.) begin ten hours before the time of the paroxysm, and take one of the following powders every two hours, with camphor mixture and laudanum, in willow-bark tea: R. Chloride Sodium, 360 grs. Make six powders.

27th. Says that he had his paroxysm at the usual time, and that it "shook him worse than usual;" pain in side (spleen) less, while fever was on: this was shorter, also. These symptoms considered favorable.

Prescription: Omit all other remedies, and take 60 grs. chloride sodium, three times a day, on well days. Then begin nine hours before chill time, (29th,) and take 40 grs. of the same every hour, in warm gruel.

31st. Has had no paroxysm. Take Fowler's solution, 5 gtt. ter in die, as a prophylactic.

Remark.—The cure in this ease must be attributed to the salt, as he took nothing else on 29th; for it can hardly be supposed that the gruel had any agency in it.—South. Med. and Surg. Jour.

Vesico Vaginal Fistula, complicated with Vesical Calculus, successfully treated by operation. By W. H. Mussey, M. D., of Cincinnati, O.—Mrs. M., 24 years of age, was confined in September last with her first child. There was no discharge from the bladder till two days after the labor had terminated, at which time a very large
quantity of water came away "suddenly." The discharge continued to be free, but uncontrollable, causing excoriations of the vulva. After attending three weeks, the physician made an examination, and discovered an "ulcer" on the anterior wall of the vagina. Three weeks later a fistulous opening in the vesico-vaginal wall was observed, and in November last, three successive attempts were made to remedy the calamity by operation, with only partial success.

On March 16th, I examined the patient and could pass my forefinger into the bladder, and proved the fistula to have a diameter of thirteen-sixteenths of an inch. The urethra was cut off from the bladder, excepting a strip of the superior wall, about the sixth of an inch in width.

At the second interview with the patient, she informed me that there was a stone in the bladder, which was readily perceived on the introduction of a sound.

On the 20th of March I proceeded, with the instrument of Mr. Civiale, to crush the stone. Several fragments were removed through the fistula, but owing to the position of the calculus, in the pouch and the contraction of the bladder from the impossibility of keeping it distended with fluid, it was feared the manipulations would cause too much irritation, and the completion of the operation was deferred. In the course of this operation, some fibres of cotton were removed, indicating the character of the nucleus. The patient, on coming out of the anaesthetic state, informed us, that when the "ulcer" was discovered, a lock of cotton, medicated in some way, was applied, and she "never saw it afterwards." The next day several small fragments of stone were discharged, and on the second day, a lock of cotton with fragments of stone attached, passed through the fistula. This nucleus after being dried, was one inch and a half long, the greatest width five-eighths of an inch, and in thickness one quarter of an inch; the calculous coating was one-eighth of an inch in thickness.

The bladder was repeatedly washed out with tepid water, till it was evident that no more fragments of the calculous remained, as none could be detected by the fingers in the explorations.

On the 10th of April I attempted the closure of the fistula. In order that the patient should have the benefit of the anaesthetic state, she was placed upon her back. The hips were elevated, an assistant on either side supported the limbs, and held away the vulva, another assistant depressed the perineum; for these purposes the instruments of Mr. Jobert de Lambelle (of the Hotel Dieu), were employed. The mucous surface of the vaginal wall, for half an inch in width around the fistula, (including its edge,) was scarified, and the stitches entered one-third of an inch from these scarifications, including the mucosal, without penetrating the mucous coat of the bladder. The "Clamp Suture" of Mr. Sims, of Georgia, was employed to hold the freshened surfaces in opposition. Threads of silk, (five in number,) were first passed, then the silver wire was drawn through and fastened by means of the perforated shot, two slightly curved leaden bars one-eighth of an inch in diameter, the anterior being one and a quarter and the posterior one and three-quarters inch in length. An elastic catheter was
kept in position in the Urethra, by means of tapes attached to a band around the body, the external orifice being depressed by means of a bit of sheet lead, so that the urine could not be conducted back into contact with the wound. This was removed and cleansed twice a day for three days, and after that once a day—the vagina and vulva being cleansed every day with tepid water, by means of a Gliyster Syringe.

The patient was kept on her back. On the ninth day the stitches were removed, but I was convinced that after the sixth day there was no tension upon them. There was a spontaneous evacuation of the bowels on the fifteenth day. On the eighteenth day the catheter was removed, and the patient allowed to rise.

On the twenty-seventh day of the operation, the patient returned to her home perfectly cured, there being no evidence that a particle of urine had passed the wound since the day of the operation.—Western Lancet.

On Chloroform in Rigidity of the Os Uteri. By, G. W. Ronald, M.D., Physician to the Louisville, Ky., Almshouse.—It is not my intention, however, to enter into an inquiry as to the cause of the rigidity of the os uteri, but to call the attention of the profession to the use of chloroform ointment, as I have found it the most expeditious, reliable, and safe mode of overcoming it. I do not pretend to say that it is a specific, for my limited experience in its use would not justify such a conclusion, having used it in but a few instances, but in these, with the most gratifying results. The first time that I made a trial of it was in the Louisville Almshouse, on the 28th day of January, 1852.

Mrs. C. aged 23 years, at 7 o'clock on the morning of the 28th, was taken in labor. I saw her at 10 o'clock. Upon making an examination, the os uteri was sufficiently dilated to ascertain a head presentation, though the membranes were not ruptured. The pains were powerful and strong, continued to return at short and regular intervals, and I consoled myself with the thought that I should be detained but a short time, yet hour after hour passed and still the os uteri had made no perceptible progress towards dilatation. The woman had become restless and despondent, intense thirst, sickness at the stomach with constant retching, throwing off the water almost as soon as swallowed. If the os uteri was touched, she complained of pain, it was hot and unusually rigid, feeling as if a tight band or cord had been drawn around the neck of the organ, which was resisting and unyielding. Having waited upon nature to overcome the difficulty until the patience of the woman, as well as of her attendants was completely exhausted, I determined to resort to some of the remedies usually recommended. Accordingly the arm was tied, and blood abstracted to approaching syncope. Tartrate of antimony, and the warm bath, all in their turn were brought into requisition; yet the condition of the organ had changed but little, though the membranes at this time had given way and discharged a portion of liquor amnii. These means having failed to procure the desired effect, I went to the office for the purpose of making an ointment of belladonna, but was disappointed in
finding none in the house. When I was in the act of sending to town for the article, it occurred to me that the ointment of chloroform might as readily relieve rigidity of the os uteri, as contraction of the muscles of the extremities, which I had often seen it do, having had it applied to my own person in an attack of cholera, by my friend and preceptor, Dr. T. S. Bell. The ointment was prepared by taking one drachm and a half of chloroform and thoroughly incorporating it with one ounce of simple cerate; which was freely applied principally upon the external surface of the neck of the organ. At the time of the application the woman complained of slight smarting pain, which passed off in the course of a few minutes, and had it been applied at the commencement, or during contraction of the organ, she would have made no complaint, as was fully proved in the subsequent cases in which I used it. Upon making an examination, twenty-five minutes after the application of the ointment, I was surprised to find the os uteri dilating rapidly, soft and pliant; and in one hour and twenty-seven minutes after its first application the woman was delivered of a fine, robust, and healthy boy.—West. Jour. Med. and Surg.

EDITORIAL.

CHOLERA (?) IN NEW YORK IN 1854.—Again we are called upon to record the probable presence among us, of that scourge of nations, cholera. We say probable, for as yet (June 26th) no symptoms indicative of the inception of an epidemic of a grave character, have presented themselves to our observation. That there have occurred in several parts of our city, cases of cholera, and that a very large majority of these cases have terminated fatally, is clearly demonstrated by the testimony of several physicians, and by the official returns of the City Inspector during the last four weeks. An abstract of which so far as relates to this and kindred diseases, we give below. It is not our intention at present, to enter upon a consideration of all the material facts connected with the rise of the present disease, or of its relation to the sanitary condition of our city; our object being confined to a general statement of some of the facts which have been more recently developed. Within the last few weeks there have arrived at Quarantine, Staten Island, three ships, each of which lost passengers at sea, with a disease, resembling in all its characteristics, cholera. The first was the ship "North America," 27 days from Liverpool, with 768 passengers; arrived the 16th day of May. This ship lost 17 passengers during the voyage, and on arrival at Quarantine, several others were sick. The sick were at once admitted into the hospital, and the well were bestowed in the U. S. Store House, their persons cleansed, their clothing aired, and all supplied with good nutritious food. The period required for Quarantine of passengers in good health, is 48 hours. Within this period of detention, cholera broke out among these passengers, and out of 120 or over, that were attacked, about 70 died. The second was the ship "Progress," with 715 passengers, 32 days from Liverpool; arrived the 18th day of May. She lost 44 from the same cause, but her passengers were all healthy on arrival at Quarantine.

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The third was the ship "Charles Crocker," 30 days from Liverpool, with 415 passengers; arrived June 3d, and lost 36 from the same cause. Her passengers were all subjected, after landing, to the same sanitary treatment, but no cases of cholera occurred among them while at Quarantine.

In regard to the appearance of the disease in this city, it is believed that about one half of the 128 deaths which have occurred during the four weeks commencing May 27th and ending June 24th, have been among recently arrived emigrants, who, regardless of all sanitary or hygienic regulations, have taken up their abodes in filthy, ill-ventilated, and already crowded courts, alleys or tenements. This was the case in Cherry, and Caroline, and Eighteenth streets, which were among the first which exhibited evidences of the approach or presence of the disease. At the present time, cases are mostly confined to crowded tenements, where large numbers are immured. But even here a thorough cleansing and ventilation causes the disappearance of the disease; e. g. as we are informed by Dr. Harris, in one of these human packing tenements, where there are one hundred and forty families in a house having a front of only forty feet, six fatal cases of cholera occurred between the 8th and 13th of June, in three apartments nearly adjacent; but upon purification of that portion of the premises, the disease has subsided. In another dismal and filthy alley in the same neighborhood, there occurred four fatal cases in the course of 48 hours, and the disease immediately subsided upon the free use of disinfectants about the premises.

That the disease, in question, has appeared without any of the usual prodromes of cholera, as seen in 1849, is asserted by many, but this view is by no means clearly substantiated by reference to facts, as the following comparative Tables show.

<table>
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<tr>
<th>Week ending</th>
<th>1849</th>
<th>1854</th>
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<td></td>
<td>Mortality.</td>
<td>Mortality.</td>
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<td>May 19</td>
<td>323 6 5 6 11</td>
<td>34</td>
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<td>&quot; 26</td>
<td>294 13 1 4 3 16</td>
<td>34</td>
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<tr>
<td>June 2</td>
<td>270 2 9 11 6 12</td>
<td>69</td>
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<td>&quot; 9</td>
<td>409 12 1 4 12 17 11 16</td>
<td>181</td>
</tr>
<tr>
<td>Total</td>
<td>1296 628 37 26 55</td>
<td>218</td>
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There is one point which these tables show, which is worthy of notice, it is this: while "cholera" has been gradually ascending the scale of mortality, the usual gastro-intestinal affections of the season have descended in the scale. May this circumstance arise from the well recognized fact, that all diseases which are cognate with, are swallowed up by the prevailing epidemic? Be this as it may, there is no disguising the fact that there exists a tendency towards the formation
Obituary.

1854.]

Obituary.

of an epidemic, and this fact has led the Boards of Health of this city and Brooklyn, to open a hospital in each city, for the treatment of epidemic diseases. The following is the first bulletin of the New-York Board:

MAYOR'S OFFICE, June 24, 1854.

The Mayor and the Commissioners of Health, in view of the possibility that the cholera may become an epidemic, have taken possession of the building No. 105 Franklin street, and are prepared to receive patients. This step we deem proper as a precautionary measure, although we are happy to state that the decrease in the number of cases, this week, is a favorable omen, and the disease is confined to no locality.

JACOB A. WERTHEVELD, MAYOR; EDWIN J. BROWN, President Board of Coun-
cilmen; NATHAN C. ELY, President Board of Aldermen; HENRY E. BARTLETT, M.D., Health Officer; WM. ROCKWELL, M.D. Resident Physician; JEB MILLER, M.D., Health Commissioner; THOMAS K. DOWNING, City Inspector.

Commissioners of Health.

OBITUARY.

DEATH OF DR. J. E. WEBER.—Died in the city of Bonn, Prussia, on the 27th of March last, of phthisis, J. EDWARD WEBER, M.D., late of this city. We regret to be compelled to record the death of one who, although young, had already gained the admiration and estimation of the learned of our profession of this as well as foreign countries. Owing to gradually declining health, Dr. Weber had retired from the troubles of an extensive practice in our metropolis to re-establish his health. But it was of no avail, he died of phthisis pulmonum in the best of his years, just entering a career which would have undoubtedly brought him to medical fame and immortality. He was the son of M. J. WEBER, M.D. Prof. of Anatomy and Physiology at Bonn, and born in the year 1827. Although always sickly (he suffered from his 14th year of age, with asthma, bronchorrheae, and with consecutive emphysema et bronchieatasis, which ran in the last years, contrary to all pathological rules, into tuberculous deposits in his lungs), he commenced, in his sixteenth year at the Frederick Wm. University, at Bonn, his medical study, and prosecuted it with the utmost diligence till he was promoted, maxima cum laude, to the degree of doctor of medicine, under the deanship of his father, after having defended his thesis on The Effects of Chloroform in 1843. Soon after his promotion, he emigrated to America, and served two years here, in the Ward's Island and Quarantine hospitals, as resident physician, where he took the opportunity to show his great talent and knowledge as a surgeon. Among his publications of interesting cases and successful operations, we only mention his operation for hydatids of the liver. If we peruse the description of this operation, we are struck with the deep mode of reasoning and thorough knowledge of surgical theory and action. If it was only for that operation he can be called a surgeon, whom to have lost so early, we must consider a great loss to our science. Previously to graduating, he published several articles of merit, among which was a prize essay, the subject of which had been proposed by the Minister of Education for several successive years. His last contribution to medical science was an article on the Radical Cure of Hernia, in the January number of this journal, with which our readers are familiar.
Death of Prof. Patterson.—Henry H. Patterson, M.D., died at his residence in Philadelphia, on the 27th of April last, aged 88 years. Dr. Patterson was born in Philadelphia, on the 15th of August, 1815. The deficiencies of early educational privileges were supplied by an overcoming zeal and great power of application from within, and his whole life was characterized by that kind of ambition that made him studious, thoughtful, original, and strong in purpose. His medical preceptor was the late Dr. Joseph Parrish, and his degree of "M.D." was obtained at the University of Pennsylvania, in 1836, having presented a thesis "On the Italian Doctrine of Counter Stimulus." Soon after graduation, he entered the Philadelphia Hospital, Blockley, as house physician, where he remained two years, after which he engaged in private practice. In 1848 he was appointed Professor of Materia Medica in Pennsylvania Medical College, which situation he held until the prostration of his physical powers, by chronic disease, compelled him to resign his chair in that Institution, upon which occasion the faculty unanimously made him Emeritus Professor of Materia Medica; a fit mark of their esteem and confidence. Dr. Patterson was a frequent contributor to periodical medical literature, and even while confined to his bed in his late illness, wrote that excellent Biography of the late Dr. Samuel George Morton, which is prefixed to the "Types of Mankind."

Death of Dr. A. S. Wot herspoon.—Died in Washington City, D. C., on the evening of the fourth of May, Alexander S. Wotherspoon, M.D., in the 37th year of his age. The deceased was a native of this city. He was a graduate of the College of Physicians and Surgeons, of the class of 1841. Subsequently he was House Physician in the New York Hospital, and a contributor to this Journal. In 1843, he entered the U. S. army as assistant surgeon, the active duties of which he discharged with zeal and fidelity. Uniting a good degree of literary with much scientific attainments, he was particularly qualified for the statistical department of the Medical Bureau, and it was in this station that his services were more particularly rendered. Dr. Wotherspoon, as a physician, was much beloved in private practice. He was the medical attendant of President Taylor in his last illness. He died at the early age of 37, but not until he left the mark of a good name as a rich inheritance to his family.

Death of Dr. W. H. Macne ven.—Died in Savannah, Ga., on the 12th of May last, of phthisis, William H. Macneven, M.D., of this city, aged 38 years. The deceased was a son of Prof. Macneven, of the College of Physicians and Surgeons, and afterwards of Rutgers' Medical College. He was a graduate of the College of Physicians and Surgeons in 1838. Our readers will remember him as the author of an exceedingly interesting paper, On the Mode of Propagation of Cholera, &c., in the second volume N. S. of this Journal, and also of several additional contributions to our pages. Dr. Macneven occupied, for several years past, the post of visiting physician to the Emigrant State Hospital, on Ward's Island. Possessing rare excellencies as a gentleman and physician, his untimely death is deeply deplored by the profession at large, as well as by his numerous friends.
TO READERS AND CORRESPONDENTS.

The following works have been received:—

Archives de Physiologie de Thérapeutique et d’Hygiène, sous la direction de M. Boccharbat, Professor d’Hygiène à la Faculté de Médecine de Paris. No. I. Janvier, 1854. Mémoire sur la Digitaline et la Digitale; par E. Homolle and T. A. Quevenne. Paris: Bailliére, 1854. 8vo., pp. 376. (From the Publisher.)

The Modern Treatment of Syphilitic Diseases, both Primary and Secondary; comprising the Treatment of Constitutional and Conferred Syphilis, by a safe and successful method; with numerous Cases, Formulæ, and Clinical Observations. By Langston Parker, Surgeon to the Queen’s Hospital, Birmingham. From the Third, and entirely re-written, London Edition. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 316. (From the Publishers.)

A Clinical Introduction to the Practice of Auscultation, and other Modes of Physical Diagnosis, in Diseases of the Lungs and Heart. By H. M. Hughes, M.D., Assistant Physician to Guy’s Hospital, etc. Second American, from the Second and Revised English Edition. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 304. (From the Publishers.)


Anatomical and Physiological Observations. By John Struthers, M.D., Fellow of the Royal College of Surgeons, of Edinburgh; Lecturer on Anatomy. Part I. Edinburgh: Sutherland & Knox, 1854. 8vo., pp. 299. (From the Author.)


To Readers and Correspondents.


The Pathology and Treatment of Pulmonary Tuberculosis, and on the Medication of Pharyngeal and Laryngeal Diseases, frequently mistaken for, or associated with Pthisis. By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institute of Medicine, and of Clinical Medicine in the University of Edinburgh. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 130. (From the Publishers.)

Transactions of the fifth annual Meeting of the Medical Society of the State of North Carolina, held at Raleigh, N. C., May, 1854. Wilmington, N. C., 1854. 8vo., pp. 97. (From the Society.)

Case of Strangulation of the Jejunum released by Gastrotomy. With Observations on the Diagnosis, and Treatment of Intestinal Obstructions within the Abdomen. By Joseph Ridge, M.D. (Reprinted from the Association Medical Journal), 1854. 12mo., pp. 20. (From the Author.)

Materia Medica or Pharmacology and Therapeutics. By William Tully, M.D. Vol. I. No. 12. Springfield, Mass., 1853. 8vo. (From Dr. Church.)


Catalogue of the Alumni, and of the Trustees and Faculty of Castleton Medical College, since its Establishment, in 1818. Published by direction of the Society. Rutland, Vt., 1854. 8vo. pp. 24. (From the Dean.)

Catalogue of the Officers and Students of the Cleveland Medical College. Session of 1853-4. Cleveland, O., 1854. 8vo. pp. 23. (From Prof. Delamater.)

This Catalogue contains a complete list of the Alumni of the School, since its organization in 1844.

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All remittances of money and letters on the business of the Journal, should be directed to the Proprietors.
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Art. I.—

Elkoplasty, (ἐλκοπλάστης Ulcer and πλάσσω) ; or, Old Ulcers treated by Anaplasty. (Read before the Buffalo City Medical Association, June 27th, 1854.) By Frank H. Hamilton, A.M., M.D., Professor of Surgery in the University of Buffalo, and Surgeon to the Buffalo Hospital of the Sisters of Charity.

Some writer has said, "old ulcers in 1830 will be old ulcers in 1860," which, not to be understood always in a literal sense, was intended only to express, in a brief and pertinent form, the proverbial obstinacy of this class of sores.

In most cases, the integument has been broken and destroyed by ulceration, and then, usually, bad health, or, perhaps, enlarged veins, have helped to perpetuate the lesion. In other cases, however, the ulcers are directly in consequence of severe lacerating injuries, which have at once torn away the skin beyond the power of nature to repair; and that although the health of the body and of the limb may be perfect. In such cases, the refusal of the ulcers to heal is entirely owing to the extensive loss of integument.

Actual loss of skin is repaired by one or both of two processes. By the development of new, from or upon the free
margin of the old skin, or by the contraction of the granulations and of the cicatrix, in consequence of which, the adjacent skin is drawn towards the chasm, and made, as it were, to slide over and cover it in.

This rule admits of but few exceptions. Occasionally, after a very long delay, the granulations acquire the power of forming new skin at various and isolated points of the sore. This process may now and then be observed in the healing of extensive burns, or, perhaps, in the closing up of an ulcer whose surface is excluded from the air. New skin may even find a matrix in the periosteum, as I have witnessed, and maintained several years since. (Buffalo Medical Journal, vol. vii. p. 205.) But the conditions are very rare under which these exceptions can occur. The rule remains as we have stated, and if ulcers are not closed by either the projection of new skin from the margins of the old, or by the contraction of the granulations and cicatrix, then, usually, they must remain open. To the action of both of these processes there is, however, a limit. The formative power of the old skin does not extend beyond a few lines. The new vessels, becoming more and more attenuated as they stretch inward from the periphery, lose, at length, the power of generating epithelial cells, or, if formed, they are too imperfectly organized to sustain an existence, and they crumble away from the slightest provocation. Slowly, but perceptibly, the opaque diaphragm proceeds to shut in the granulations, and for a long time encourages a hope that a cure is to be accomplished. But just when the work is almost consummated, a rapid disintegration sweeps away in a few hours the patient labor of many months. Again and again the reluctant labor is renewed, and as often suddenly, and without provocation, is it arrested and broken up. At the same time the granulations have ceased to condense, and the cicatrix to contract, either because these actions have attained their natural limits, or because the adjacent skin has reached its utmost tension, and affords effectual resistance to further stretching. Here the process of closure forever ends, and the "old ulcers of 1830 will be old ulcers in 1860."
Nature has done its utmost, and hitherto art has failed to complete the work.

I beg to suggest a procedure, which, hereafter, in some unfortunate cases of this class, may deserve a trial.

I propose to close the ulcer by an operation of anaplasty. In short, to imitate one of the processes of nature, by sliding in old skin to repair a waste, where the process of forming new skin has ceased, and been finally given up.

If we seek to obtain this supply from the neighborhood of the ulcer, around which the skin has already reached its utmost tension, we shall only substitute one ulcer for another. We must, therefore, generally look to the opposite limb, or to the limb of some other person, for the material with which the transplantation or engrafting is to be made.

The mode of accomplishing this, will not differ materially from that which has been generally adopted in anaplasty from remote parts, except that the ulcerated surface ought to be excised freely before the new skin is laid upon it.

By this means, I hope, gentlemen, not only to supply an amount of skin equal to the size of the piece transferred, but to furnish, also, a nucleus from which additional skin shall be formed. I hope to establish a new centre of life—an oasis—from whose outer verge a true and healthy vegetation shall advance in every direction over the exhausted soil.

It is not improbable, also, that the graft will itself expand, or be drawn centrifugally by the contraction of the surrounding granulations and cicatrix, conversely, as the skin about the ulcer had before been stretched and drawn centripetally, by a similar action of the granulations and cicatrix situated within its free margin, so that, after a time, it will cover more space, independent of any actual growth, than it did originally. The opposite of this happens usually in anaplasty, and would occur here, did the flap equal or exceed in size the wants of the parts to be supplied. The flap would contract, thicken, and project itself above the surface. But in old ulcers, it will generally be found impossible to
furnish a direct supply of integument equal to the loss. A deficiency must probably still exist, and sufficient, it is believed, to determine in the transplanted skin a necessity of expansion.

The value and practicability of these views are, I trust, in a measure established by the results, in the case which I shall now take the liberty of bringing before you.

You will excuse me, however, if I detain you a moment longer to explain to you that, so long as eight years since, I proposed the same operation, and had anticipated most of the results which I have now actually obtained.

In the report of my surgical clinic, for 1846, at Geneva Medical College, published in the Buffalo Medical Journal, vol. ii, p. 508, occurs the following passage:

"Indolent ulcer. M—— of Geneva.—This lad, now about fifteen years old, had the right leg and part of the thigh terribly lacerated, and almost deprived of its integument, by a threshing-machine, eight years ago. The wound has never closed entirely, but an indolent ulcer of great extent exists, surrounded by a broad margin of hard integument, from which sometimes new skin will form, and then it will rapidly crumble away, and the ulceration will extend, perhaps, beyond its original bounds. Thus it has continued to partially close and again open, during all this time; meanwhile, the health and strength of the lad have remained excellent, but the leg has become bent at the knee, and he walks with a halt. Two years ago Dr. Hamilton took a cast of the ulcer, which is now seen to correspond almost precisely with its present extent.

"Dr. Hamilton and others having tried almost every plan of treatment which would offer a prospect of success, and having so completely failed, as Dr. Hamilton believes, because the indurated margin, near two inches in breadth—all around the sore, is incapable of projecting from itself sound skin, the Dr. has proposed to the boy a plastic operation, with the view of planting upon the centre of the ulcer a piece of new and perfectly healthy skin. He proposes
to take this from the calf of the other leg (having secured the two together), not intending to cover the whole sore, but perhaps two or three square inches, which he believes will be enough to secure the closure of the whole wound in a short time."

Two years before the date of this clinic, when I took the cast alluded to in the above report, I had made the same proposition to the lad, and when he declined submiting to it, I appealed to his father, who was a worthless inebriate, to allow me to secure one of his legs to his son's, that I might make the transplantation from him. In no other way, I assured him, could he so much benefit his family.

I need scarcely say that permission was never obtained, and that I have never found an opportunity of determining the practicability of my suggestions until during the last year, and in the person of the man who is now before you.

The following is the report of the case, copied, in part, from the Hospital Records:

Horace Driscoll, aged 30 years; Irish laborer; had the skin and flesh extensively torn from the right leg by a dirt car, on the 3rd of November, 1852. He has been in the hospital most of the time since then until now. The wound has nearly healed several times, but never entirely; after exercise the whole would give way, and the ulcer again extend itself completely around the leg.

Jan. 21, 1854, I made the following operation:

The patient was laid upon his belly, upon the operating table before the class. A flap of skin measuring seven inches by four was then raised carefully from the calf of the opposite leg, extending in depth through the cutaneous and cellulo-adipose textures, until the fascia was in sight. Its remaining attachment to the body was by a broad and thick base. The haemorrhage was slight; no vessels were tied. Lint, spread on both surfaces with simple cerate, was laid between the flap and the surface from which it had been detached, other pledgets of lint similarly covered were placed on the outer surface, while over all and around the entire limb was
wrapt a large mass of cotton batting, secured in place by a lightly turned roller.

He was then laid in bed and perfect quietude enjoined.

Jan. 22.—During the night the wound has bled until the patient looks pale from the loss. The bleeding has now ceased.

Feb. 4th.—Two weeks since the flap was raised. The patient has had to be sustained with beer, his appetite having failed very much since the operation. The flap has been dressed in the same manner as at first, nearly every day. It looks healthy. No part of it has sloughed.

To-day the operation was recommenced before the class, by dissecting out the granulations and part of the cicatrix from the diseased leg, and thus forming a deep bed of the size and shape of the flap as it now appeared, both contracted and thickened. The flap was then made raw again on its margins, and its lower surface was shaved off, with the double purpose of removing the granulations, and of diminishing its excessive thickness. When the bleeding had ceased, the left leg was carried across the right, so that the tendo-Achilles and heel of the left leg rested upon the instep and ankle of the right—a thick cotton pad being interposed to prevent painful pressure. The flap was now brought snugly into its new bed, on the right leg, and well secured with interrupted sutures, a moderate compress, and roller. The two limbs were further secured immovably to each other by bands, and protected at various points by well made compresses, and the wounds carefully covered with lint spread with cerate.

Feb. 5th.—The wound has bled again, as after the first operation, although ice was applied diligently from the moment the dressings were completed. Much pressure was regarded as inadmissible. Bleeding ceased when he became faint, about three hours after the operation.

Feb. 13th.—Two weeks since the last operation, and four weeks from the first. Patient has required to be sustained constantly with beer and nourishing diet. His appetite
still remains bad. Bowels have not been moved in two weeks. He has not suffered much pain, only fatigue. Today the base was separated from the left leg, the flap having united through most of its edges and under surface, to the opposite leg. No bleeding of consequence followed. The parts were thoroughly washed and dressed with ung. basil. and a snug roller applied. Ordered sulph. mag. 3j.

Feb. 19th.—No movement of bowels. Repeat sulph. mag.

Feb. 20th.—One corner of the extreme end of the flap is beginning to slough.

Feb. 21st.—Bowels have moved. Sloughing of flap continues. Ordered yeast poultice.

Feb. 25th.—Line of demarcation formed, insulating about one inch and a half of the flap, at the corner where the sloughing commenced. Beyond this the sloughing never extended. The surfaces continued to close, and about one hundred days after the flap was laid down the healing was finally consummated, and now after a lapse of nearly three months, during which he has been acting as a subordinate dresser at the hospital, the ulcer has not re-opened or shown any tendency that way.

The wound made by the removal of skin from the left leg was completely healed over in about the same length of time as the ulcer on the right, and the whole left limb is now as sound and as perfect as before the operation.

Driscoll is, however, at present, by no means a well man. His health has suffered considerably from his long illness, and from his prolonged confinement in bed, which dates from the time of the accident, through most of the period, up to the time of the closing of the wounds since the operation. The cicatrix around the new skin is tender, and especially at one point where several pieces of bone exfoliated soon after the accident, and precisely over which, unfortunately, the sloughing of the flap took place. The ankle is also somewhat stiffened by the contraction of the skin, and of the gastrocnemii and tendo-Achilles, which latter were seriously involved
in the original injury. These, however, are conditions which the operation did not propose to remedy, at least only in a small degree, or they are temporary accidents, and will certainly yield to time and careful use. If they were to continue, however, it will not be denied that, in the permanent sealing up of a sore, which, but for this operation, must probably have remained open during life, he is amply repaid for all that he has suffered at my hands. I venture to predict that, within one year from this time, he will be able to labor nearly or quite as well as before the accident.

On the 12th of March, five weeks after the flap had been transplanted, it had united by adhesion to the adjacent skin, through about one half of its circumference. The other half was surrounded by a border of granulations and of new skin, varying in breadth from one to ten or fifteen lines; but only at a few points was the bridge of new skin complete. It was especially noticed that nearly all, probably nine-tenths, of this new skin had sprung from the margins of the flap, and only the remaining fraction from the adjacent cicatrix; demonstrating that after transplantation and complete separation from the parent limb, its vitality was unimpaired, and that its re-productive power, if I may so speak, was vastly superior to the re-productive power of the old cicatrix.

You may notice to-day also, that since the cicatrization was completed, the cicatrix formed by growth from the flap, has contracted; and, that, in consequence of this contraction, the flap has become expanded, or been stretched outward, and its surface has become flattened and firm, whereas, it was, at first, and for a long time, elevated above the surrounding skin, and flabby.

Summary:—

1st.—Ulcers, accompanied with extensive loss of integument, do generally refuse to heal, whatever may be the health of the body or of the limb.

2d.—Anaplasty will sometimes succeed in accomplishing a permanent cure, and especially where the health of the body and of the limb are perfect, and where, by inference, the re-
fusal to heal is alone attributable to the extent of the tegumentary loss.

3d.—The graft must be brought from a part quite remote; generally from an opposite limb, or from another person.

4th.—If smaller than the chasm which it is intended to fill, the graft will grow, or project from itself new skin to supply the deficiency.

5th.—It is not improbable that the graft will expand during the process of cicatrization at its margins, but especially for a time after the cicatrization is consummated.

6th.—In consequence of one or of both of these two latter circumstances, it will not be necessary to make the graft so large as the deficiency it is intended to supply.

Art. II. Practical Observations on the Remedial Properties of Simaba Cedron, and on its employment as a Substitute for Quinine. By Samuel S. Purple, M.D.

It will be remembered by those who take especial interest in investigations which relate to vegetable materia medica, that about 1850 the attention of the medical public was particularly called to "cedron," as an invaluable specific for the bites of venomous snakes. In the spring of 1852, Burtis Skidmore, Esq., of this city, placed in my possession, for examination, two of the kernels. This was my first acquaintance with "cedron," for at this time I had not seen Mr. Hooker's description and figure of the tree and cotyledons.* From the limited opportunity which these seeds furnished me of observing their effects in an obstinate case of intermittent fever, I became strongly desirous of testing its virtue on an extensive scale in this disease. Such an opportunity I failed in obtaining until September, 1853, when I received from Dr. J. A. Magrath, of Kingston, Jamaica, a package, containing about a pound of the cotyledons.

During the autumn of 1853, cases of intermittent fever were not of unfrequent occurrence in this city, especially in the vicinity of Canal and Hudson streets, and, in fact, in the neighborhood of most of the "main sewers" in different sections of the city. It is not our intention to stop here and offer an explanation of the causes which are, and must be, from necessity, continually at work in producing intermittent fever in this city. This would require a searching investigation into our whole system of drainage and supply, and would in no way answer the objects for which this paper is written. As before stated, cases of fever were not of unfrequent occurrence, and during the months of September, October, and November, nine cases were treated with the article under consideration. Of this number, six were recent, and three were of long standing, having successfully resisted quinine, Fowler's solution, and all the usual means resorted to in the treatment of the disease. Of the six recent cases, five yielded readily and permanently to the remedy, in doses and at periods that will be particularized in the following cases; while the remaining one resisted, successively, emetics, cedron, quinine, Fowler's solution, etc., and finally yielded permanently to beberine and nux vomica combined. Of the three cases of long standing, and previously treated by different remedies, unsuccessfully, two yielded permanently to cedron, and one yielded temporarily, returning under the use of the remedy, but finally yielded permanently to cedron, after the administration of an emetic; followed by ten grains of pil. hydra. in divided doses.

Case 1.—Mrs. E., aged 38 years, of nervous sanguine temperament, rather feeble health, the mother of five children, resided in Newark, N. J., during the summer of 1852, and there contracted intermittent fever, from which she slowly recovered under the use of quinine, having experienced three relapses in the course of the season. In the month of September, 1853, having resided in this city nearly a year, she was again attacked with the quotidian form of the disease, and consulted me in the intermission between the third and
fourth paroxysm. She was ordered, as there was considerable gastric derangement, fifteen grains pil. rhei. comp., to be taken immediately; and after the next paroxysm of fever, to take ten grains of the cedron in powder every two hours. At the period of the next (the fifth) paroxysm, she complained of slight headache, but experienced no chill. From this time she was ordered ten grains of cedron, in powder, three times daily, for ten days. She had no return of the disease, and enjoyed, after, her usual health.

Case 2.—Mr. B., book-keeper in a bank, aged 27, of spare habit, contracted intermittent fever on Staten Island, in the fall of 1852, which yielded to quinine. Late in the summer of 1853 he was again the subject of the disease, and consulted me some four weeks after the occurrence of the first paroxysm. Relying upon his own judgment, he had already taken quinine, in the same doses as the fall previous, with the effect of temporarily arresting the disease. Its return, after an interval of nine days, led him to resume the use of the quinine in increased doses, until singing of the ears convinced him of the propriety of consulting a physician. At the time of his first visit, finding that there existed much tenderness or pressure over the epigastrium, slight yellowness of the conjunctiva, and tongue coated with brown fur in the centre, with red tip and edges, he was ordered thirty grains of ipecac. in powder, with ten grains of calomel. This portion operated freely as an emeto-cathartic, and after the succeeding paroxysm of ague, he was ordered ten grains of cedron, reduced to powder by grating the seed on a nutmeg grater, every three hours. The paroxysm of ague, which was expected, at its usual period, was delayed some two hours, and was somewhat less in severity and shorter in duration than that which succeeded the action of the emetic. As there existed some pain in the bowels, which was supposed to arise from the action of the cedron, he was ordered the same amount as before, every four hours, combined with fifteen drops tinct. opii. comp. These directions were steadily adhered to for four days, when the paroxysms of ague hav-
ing ceased, he was directed to omit the paregoric, and use the same amount of cedron three times a day. These orders were followed for some two weeks, when the further use of the medicine was suspended. Mr. B. has had no return of the disease. At no time did he complain of singing in the ears, or any other unpleasant sensations, except the slight griping pain in the bowels, which could be attributed to the action of the cedron.

Case 3.—M. S., aged 29 years, by profession an accountant, of spare habits, and strong nervous temperament, in the summer of 1852, contracted intermittent fever, of the quotidian variety, at Morrisania, where he was then residing. His attending physician put him upon the use of quinine, which, in the course of five days, arrested the paroxysms of ague. Remaining, however, exposed to the same causes, the disease returned in the course of the third week, when he was again put upon its use, with the effect of arresting the disease, although more tardily than on the previous occasion. From this time he remained free from the disease, until January, 1853, when, from domestic causes, his usual health having become considerably impaired, he was attacked with the disease, with much greater severity than on either of the previous occasions. Tonics, combined with quinine, were ordered him by his medical attendant. These were perseveringly used, for a period of four weeks, with but slight beneficial effects, and, meantime, his general health had become still more impaired by the disease. Seeing that something more was required to arrest the paroxysms, he was, very properly, ordered an ipecac. emetic, which was followed by blue pill, in five grain doses, three times daily, until two paroxysms (the fourth day) had passed by, when he was ordered Fowler's solution, accompanied with a liberal diet, and, during the well day, a moderate use of London porter. Under this treatment, there occurred soon a decided improvement in Mr. S.'s case, and, although at the end of two weeks, he had no distinct ague-chill, yet there remained a periodical headache, accompanied with fever, and neuralgic
pains in the facial and inferior maxillary nerves. These, under the use of carbonate of iron and vegetable tonics, almost entirely disappeared, and from this time until the succeeding October, with the exception of an occasional chill, or ague paroxysm, he continued to attend to his usual business.

In the latter part of September, 1853, Mr. S. spent about a week on Staten Island, and, immediately on his return to this city, was seized with the tertian form of intermittent fever, for the cure of which, in the course of four weeks, he took an ipecac. emetic, quinine, Fowler's solution, nux vomica, and pil. hydrar., followed again by quinine, with but slight, or temporary benefit. His general health having now become considerably reduced, he was almost ready to despair of a cure being effected in his case.

On the 2d of November, I was first consulted in regard to the treatment of the case, and, as he had but two days previous taken an emético-cathartic, and there was but little chylopoietic derangement, he was immediately put upon the use of cedron in powder, and in twenty grain doses, every four hours in the froth of porter, with directions to suspend the remedy only during the hot stages of the disease. For four days he steadily persevered in the use of cedron, and at the end of this period, as there was a marked improvement—the paroxysms of fever having nearly ceased, and as there was present slight diarrhea, accompanied with griping pains in the bowels—the cedron was diminished to ten grain doses, each dose of which was combined with fifteen drops of tinct. opii camph. This treatment was continued for three days, when all evidence of paroxysmal symptoms had disappeared. Mr. S. was now ordered ten grains of cedron every morning, with a view to its tonic effect, for I had become satisfied that it possessed decided tonic properties, especially in those states of the system which call for the use of columba, gentian, and other vegetable tonics. Under this treatment, he gradually and permanently convalesced, and has since had no return of the disease.

Case 4.—A. N., aged 19 years, of marked bilious temper-
ament, and robust constitution, on the 26th of July, 1853, sickened with what he supposed was a bilious attack, which, under domestic treatment, continued three days, when he was seized with a severe fit of ague, about 11 o'clock, A.M., which was followed with much febrile excitement, intense pain in the head, etc., which, in its turn, was succeeded by profuse sweating. With this paroxysm, all sickness passed off, and the next day he considered himself in usual health. On the second day from the first ague fit, at m. he sickened again, with a paroxysm, the same as two days previous, when, for the first time, he consulted me. Believing his attack to be intermittent fever, he was ordered to take of cedron in powder, as much as could be held upon a Spanish shilling piece, every four hours, for forty-eight hours, omitting it only during the succeeding paroxysm, if it should occur. He took as directed, in all, ten doses, with the effect of permanently arresting the disease. He has since had no return of intermittent fever.

Case 5.—A little girl, aged about six years, daughter of Mr. H., of 29th street, was observed to complain, every other forenoon, of being chilly, which condition was followed by headache and fever. She was subjected to domestic treatment for a week or more, when the paroxysms of ague became well marked, and the fever was accompanied by delirium. When first seen by me, the centre of her tongue was coated with a brownish-yellow, the tip being red; she complained of lassitude, and considerable pain in the epigastric region. She was ordered ten grains of pulv. rhei, with three grains of calomel, which produced three evacuations of the bowels. She was then directed to take a teaspoonful of the following mixture every four hours: pulv. cedron, thirty grains; simple syrup, two ounces; paregoric, one drachm. These directions were carried out for thirty-six hours, and as the next paroxysm did not recur, she was ordered a teaspoonful morning and evening. Her recovery was complete, and although apparently exposed to the same causes, she has since had no return of the disease.
Remarks.—In addition to the foregoing cases, reported, and alluded to as treated in the fall of 1853, I have treated six cases during the past summer, (1854) exclusively with cedron, with the following results: Four with cure, prompt and permanent, one passed from my observation before the result was known, and the remaining one is still under observation, having resisted emetics, quinine, and beberine, previous to consulting me.

From these results and those obtained in neuralgic cases, which we think unnecessary to detail, there can hardly arise a doubt but that the cotyledons of the Simaba cedron, one of which is here represented, possess decided anti-periodic properties. And in this belief we do not stand alone. Dr. Cespedes, of Bogota; M. Herran, of France; Dr. P. Smith, of San Francisco, Cal.; and Dr. Magrath, of Jamaica, W. I.; have each testified, as will be seen hereafter, to its decided medicinal virtues in this respect.

Dr. Magrath, of Kingston, Jamaica, has used it extensively not only in the treatment of intermittent fever, but also in yellow fever. In this latter disease, he writes me, that it appears as useless as quinine, or any other remedy to assist the progress of the disease, in most of the cases in hospital, although it was thought that the skin of those who were taking it, was less dark or congested, than those who did not take it. His mode of giving it in intermittent fever, was in powder, or in pills, in ten grain doses every three hours, for twenty-four or thirty-six hours, and with the effect of successfully arresting the disease; he always gave it during the...
intermission, and it almost always prevented a second paroxysm if it failed in the first.

Thus it will be seen that the evidence which has already accumulated in regard to this plant, points to the fact that it possesses important anti-periodic properties. And perhaps upon further investigation, it may be found to be a valuable substitute for quinine—a desideratum long sought after. Our own observations have been confined to the cotyledons in powder in intermittent, and in tincture in neuralgia, dyspepsia, and chronic derangements of the stomach, involving impaired digestion. In these conditions we are satisfied that it possesses curative properties equal to columba, quassia, or any of the vegetable tonics, and in view of these properties, we feel assured that it is worthy of an exalted position among this classification of the vegetable Materia Medica.

To M. Planchon, according to Hooker, belongs the merit of giving a name and botanical station to the cedron plant. In his truly excellent Revue de la Famille des Simaroubes* he first described this plant from Mr. Purdie's specimens in Mr. Hooker's Herbarium. For the following description and figure, we are indebted to the London Journal of Botany, as before cited.

Simaba cedron, Planch.; trunco erecto ramis subumbellato-capitatis, foliis longissimis pinnatis glabris sub-20-jugis cum impari, foliolis subcoriaceis elliptico-lanceolatis acuminulatis basi obliquis, racemis elongatis compo sitis ramis rufescenti-subvelutinis, drupis magnis ovalibus solitariis.


Har.—New Grenada. Banks (near San Pablo) of the Magdalena, W. Purdie, Isle de Caybo, coast of the Pacific, Thomas Seemann.

Descr.—The height of the tree is not exactly stated, but it does not probably exceed twenty feet, with an erect undivided trunk not more than six inches in diameter, crowned with a dense and somewhat umbellate head of branches. Leaves glabrous, two feet and more long, pinnated with twenty or more alternate, rarely opposite sub-coriaceous, sessile leaflets 4–6 inches long, acuminate, oblique (or inaequilateral) at the base, penninerved; the rachis is terete, terminated by an odd leaflet. Racemes two feet or more in length, strict, branched, the main rachis and branches

clothed with minute ferruginous, velvety down, chiefly towards the apices; branches short, solitary or clustered; pedicels bracteolated. Calyx minute, cup-shaped, obscurely 5-toothed ferruginous-downy. Corolla of five, linear, obtuse or retuse, spreading petals, pale brown and downy externally. Stamens ten, short, arising from the back of as many staminiferous scales, which are erect, and approximate in a tube. Corolla of five, linear, spreading petals, pale brown and downy externally. Ovaries five, seated upon a columnar gynophore, downy. Styles five, united into one, above the base, and exceeding the stamens in length. Ovules, one in each ovary. Fruit, very large, solitary (by abortion); drupe of an oval form, oblique at the top, and having a scar below the summit, indicating the former site of the style. The soft portion of the fruit seems, in the preserved state, not to have been very soft and fleshy, it is lined with a horny endocarp. Seed large, solitary, suspended, its integument membranaceous, with a conspicuous chalaza. Albumen, none. Embryo, conform with the sides. Cotyledons very large, fleshy, white when fresh.

Simaba Cedron.
In regard to the history of its introduction into practice, we have nothing certain. M. Herran,* Chargé d’Affaires de la République de Costa Rica, in France, says that “it was only in 1828, that the native Indians brought to the market of Carthagena, some seeds of cédron. To prove their infallible virtue, they submitted animals and themselves to be bitten by the most dangerous serpents, called Toboba Corlia de la Montagne, etc., and the promptitude with which the poison was neutralized, was so marvelous that a single seed sold for a doubloon, (eighty-three francs).”

“During my long sojourn in Central America, I had recourse to the seeds of cedron, successfully, in eight different cases.”

Sir W. J. Hooker, who has given by far the most complete and scientific account of the cedron to be found,† says “By whom it was first brought into notice in Europe, I am not aware, but my earliest information respecting it was derived from Mr. Wm. Purdie, late botanical collector for the Royal Gardens, Kew, and now curator of the Botanic Garden, of Trinidad. At Bagota, Mr. Purdie had made the acquaintance of Dr. Cespedes, an intelligent physician of the country, who directed his attention to the plant in question, and who forwarded to me a drawing with very fair analysis of the flower and fruit.”

In his future journeyings, Mr. Purdie did not fail to search for the plant in its native woods, and on his way to the province of Antigua, near the Magdalena, he wrote word, July 1846: ‘I have had the good fortune to detect the celebrated cedron, a small tree with habit of the Jamaica Mountain-Pride, (Melia Azedarach). The seeds are here much sought after, and sold at one real each cotyledon, being considered an invaluable

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† Vide Description and figure of the Cedron of the Magdalena River, (Simaba cedron, Planchon). By Sir W. J. Hooker, D.C.L., F.R.S.—London Jour. of Botany, 1850.
specific for the bites of snakes, for intermittents and stomach complaints generally. The bark and wood also abound in a high degree with the bitter principle.’ The dried specimens sent by Mr. Purdie were further accompanied with the following note: ‘The cedron has an erect stem not more than six inches in diameter, crowned by an umbelate mass of branches, with large handsome pinated foliage; so highly are the seeds prized here for their powerful medicinal virtues, that they cannot be purchased for less than two reals, or one shilling each. I have had the testimony of medical men in Bagota in favor of their properties, and Dr. Cheyne has frequently tried them with success. Dr. Cespèdes, some years ago, was sent expressly on a mission from Bagota to the locality of this plant, which is in woods immediately behind the village of San Pablo, on the banks of the Rio Grand de Magdalena.’ The cedron is, however, probably more extensively distributed than Dr. Cespèdes and Mr. Purdie imagine, especially to the westward towards the Pacific, in New Grenada. Another collector of Kew Gardens, then and still on board of H. M. surveying ship ‘Herald,’ (Capt. Kellett, commander), transmitted specimens to Kew the following year, 1847, from the Isle de Caybo.”

Dr. Peter Smith, of the City Hospital, of San Francisco, received a letter dated Nov. 22d, 1849, from Don José Abal- dia, Govenor of Panama,* in which it is stated that, ‘the tree which produces the fruit, and is called the ‘cedron,’ is described in the scientific work of Dr. Cespèdes, one of their own naturalists. * * * * The tree grows abundantly in humid places, and as the wood is inapplicable to the uses of life, and the fruit neglected by animals on account of its bitterness, an abundant supply is predicted.”

I might here state that the first specimens I saw, those presented me by Mr. Skidmore, were obtained at Panama.

Dr. Horner, of the U. S. N., states† that Dr. Smith, of San Francisco, used for the cure of chronic dysentery and inter-

mittent fever, the kernels of the cedron, a fruit obtained at Panama. * * * * He gave them scraped in the dose of ten or more grains, and thought them equally as efficacious as quinine. The cedron has great celebrity among the people of the Isthmus, for the cure of snake bites, and he states that they carry it about their persons to have it in readiness for immediate use when needed. Dr. Smith gave me a number of kernels, and one entire pod, which I brought home for distribution. While crossing the Isthmus, I would have been much pleased to find the tree which yields this valuable medicine, but I was unable to obtain any accurate description of it, or of the places where it grows."

Dr. Pereira, in the last edition of his great work, on Materia Medica, makes no mention of this plant. On the 2d of Nov., 1850, however, he wrote Sir J. W. Hooker, regarding it in the following words,* "I am not acquainted with any observations made in England, or even in Europe, respecting the Simaba cedron. * * * * The specimen of the seeds and fruit, which I possess, were brought a few months ago from Panama, by a gentleman (not a medical man). They were given him by W. Barrington, Esq., an English surgeon at Panama. The statement accompanying them was to the effect that the seeds were much used, and with great confidence by the native doctors of the Panama country, both locally and internally, as the grand antidote against snake poison.

"To the taste these seeds are intensely bitter, and doubtless like the bitter barks and woods of other Simarubaceous plants (e. gr. Quassia and Simaruba) they possess the properties of other bitter tonics, and might be useful in dyspepsia, and perhaps ague."

From all that we can learn regarding its habitue and mode of procurement, we are led to believe that the only obstacle in the way of the use of cedron in medicine, is its apparently somewhat limited supply. We say apparent, for in a letter received from Dr. Magrath, we learn that "the

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* London Jour. of Botany, opit. cit.
Simaba Cedron in Fever.

1854.]

Purple on Simaba Cedron in Fever.

1854.

Purple on Simaba Cedron in Fever.

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cedron appears to be obtainable in quantity, with some little difficulty, from Carthagena; but a brisk demand, no doubt, would cause an equal supply.” The history of all new medicinal agents, derived from savage or semi-civilized countries, teaches us the fact, that at first, the remedy sought after is obtained with much difficulty; but we should not, from this cause alone, neglect to investigate or enquire into its uses; and should it, according to our belief, be found that this article possesses decided merit, and some advantages over quinine, we have no doubt but that some of our enterprising commercial druggists will find it to their interest to devise means for its introduction into our market.

Finally:—From the declared experience of various observers of the medicinal effects of the Simaba cedron, we are warranted in drawing the following conclusions regarding its therapeutic action:

That it possesses decided anti-periodic properties, and is therefore applicable in the treatment of periodic diseases.

That it is less likely than quinine to produce the aggregate of encephalic or neuropathic phenomena, induced by overdoses.

That it may, in large doses, repeated often, produce gripping of the bowels, and even diarrhoea; but that these conditions are easily controlled by appropriate medicaments.

That, as a remedy in intermittent fever, it possesses properties, in many respects, equal to quinine, and in most cases is equally adapted to the curature of this disease.

That, in the treatment of yellow fever, it does not appear to possess any particular advantages over quinine, but nevertheless is equally well adapted to fulfill the indications which call for the use of this latter remedy.

That it possesses marked tonic properties, and deserves a prominent place in this classification of the Materia Medica.

That in chronic dysentery, diarrhoea, dyspepsia, and all states of the stomach, accompanied with impaired or difficult digestion, its use will be found to be attended with benefit.

That, should a demand arise for its use in medicine, it is
believed that it will be found not difficult to obtain a supply, in quantities sufficient to afford it at a much less price than quinine.

ART. III. Amputations of the Lower Extremities, at Bellevue Hospital. By John O. Stone, M.D., one of the Surgeons of Bellevue Hospital.

Messrs. Editors:—The following cases of amputation were performed, at Bellevue Hospital, during the last three years. Some of them are interesting, and have a value in themselves; but, independently of this consideration, I wish to publish them, as a small contribution to statistical knowledge, and aid in solving the question, how far amputation is to be recommended as a means of cure?

A few years ago, I published in your Journal some statistics on amputations, and to them these cases from Bellevue Hospital can appropriately be added.

Very truly yours,

John O. Stone,

30 Waverly Place.

To Drs. Purple and Smith.

July 20th, 1854.

I.—Amputation of Thigh.

Case 1.—Amputation of Thigh. General Ostitis, etc.—A female, aged 26 years, has suffered from a diseased knee for more than a year. It was enlarged, as in scrofulous disease. The condyles apparently increased in size, and opposite to the joint there was a soft swelling, as if pus was enclosed in the joint. Since the commencement of the disease, the knee has been very painful, and now her sufferings are excruciating. The femur was felt to be enlarged to a considerable extent above the knee. She had lost much flesh, and had a general cachectic look.

In consultation, it was decided that the thigh should be amputated, which was done on November 22d, 1851.
On sawing the bone, it was observed that the saw traversed the bone with remarkable ease. The bone was found enlarged and softened, and it was thought best, for the purpose of going above the diseased part, to saw the bone again higher up. This was consequently done, an inch higher up, but not with the effect desired. The bone was still found enlarged and softened. There was great vascularity, and, although six hours were allowed to elapse before the stump was dressed, there was much oozing of blood. Fourteen ligatures were used. The bone itself was vascular.

The tibia and femur were found much enlarged, and the periosteum thickened. There was no pus in the joint, but great thickening of the synovial membrane. The cartilage covering the heads of the bones was removed in several places. The condyles of the femur increased in size, and covered on their sides with a deposit of new bone. On sawing open the tibia and femur, their interior was found red and vascular, the outer crust thin, and the reticular tissue enlarged, softened, and containing oily fluid. There was also, in the interior of both bones, a deposit of cartilaginous looking material, which was thought to be cancer; but, on examination under the microscope, no cancer cells were found. There was, what seemed to be, a sequestrum in the lower part of the femur, which extended quite into the condyles. The disease, I suppose, must be regarded as an inflammation of the bones.

For more than a week after the operation, the intense pain in the bone continued, reaching as high as the pelvis. Much pain was also felt in the back and abdomen. These pains served to prolong the suspicion that there might be malignant disease. Large doses of morphine were required to alleviate her sufferings, and she was put upon the use of he iodide of potash, three times a day.

Three weeks after the operation, the pains ceased. The stump had nearly healed; most of it by the first intention. The ligature of the femoral had not yet separated.

She continued doing well, and shortly after was discharged cured.
Case 2.—Amputation of Thigh. Leg crushed by a heavy piece of timber.—A consultation was held upon —, a laboring man, whose leg had been broken by the falling of a heavy piece of timber upon it. The patient had been addicted to the free use of ardent spirits. There was a wound in front and another behind, through which the gastrocnemius protruded, for an inch or more, in a lacerated condition. He lost much blood, and it was supposed to come from the posterior tibial artery. The bone was very much broken. A large coagulum filled both wounds, and sponge had to be inserted to restrain the hemorrhage. The surgeon on duty, who was the first to see him, cut off the protruded and lacerated muscle.

A consultation was held thirty-six hours after the accident. His condition was feeble. There was sighing, with a sunken countenance. The foot of the injured limb was cold; the bone much shattered, and the fracture supposed to extend into the knee joint. Ice had been applied to the limb; there was no reaction about the wound. He had lost a great quantity of blood. Pulse feeble, and 120 in a minute. It was the unanimous opinion of the three surgeons, who were present, that no operation should be performed, but that opiates with brandy should be given, with as much nourishment as he could take.

On the next day, the six surgeons of the hospital met in consultation. The majority decided in favor of amputation of the thigh—two of them were of the contrary opinion. No heat had returned to the foot, and very little warmth even about the wound. His pulse was 120 and upwards. All thought that the condition of the patient was unfavorable, and that death might follow the operation, and, if he continued to live, that the operation would have to be performed.

The question was, whether then, or at some future time, amputation should be resorted to. The majority regarded the present as giving the best chance for recovery; that the limb was severely injured, and of itself was a cause of irri-
tation; that the general constitution was depressed by it, and therefore it ought to be removed at once.

The minority thought that the symptoms of reaction were very slight, as indicated by increased warmth about the wound, and, therefore there was no cause for immediate interference; that sixty hours had elapsed since the injury, and he had not died of the shock, and probably would not; that the danger of sinking after the operation, if done at once, was very great, and would be lessened by a longer delay.

The amputation was performed on December 4th, 1852, in the circular method. Ether was administered. He fainted after the operation, but soon rallied.

On December 7th, his pulse was very quick, but he was cheerful. Did not see the stump, but was given to understand that it was sloughing.

He gradually sunk and died.

Case 3.—Amputation of Thigh. Caries of Patella. Synovitis, etc. February 19th, 1853.—A consultation was held to-day, on a man who had a disease of the knee joint. An abscess had extended up the thigh, and had been opened, but it still continued to discharge. Before this opening was made he had suffered much, but since then had improved in health. Near to the patella were two fistulous openings, through which a probe could touch the patella, which was bare and carious. The probe could also pass under the patella, and consequently into the cavity of the joint. The patient was feeble, but not in a discouraging condition.

It was advised, in this case, that the patella should be removed, for this was the chief disease, and by its removal no additional evil would be done, for the joint was already opened; if this were done, a free opening would be made into the joint, so that the pus could escape readily, and not be pent up, to excite constitutional irritation: if no good followed this practice, amputation was still a remaining resource; that amputation of the thigh, of itself, was very fatal, and ought not to be too hastily ventured upon; exten-
sive experience had shown that suppurating joints were abscesses, and ought to be treated as abscesses, in any other part of the body; that the free opening of them was generally followed by relief, and offered the best chance of saving life as well as limb.

The opposite opinion to this prevailed, and the limb was amputated. On examining the joint, after removal of the limb, it was proved that the patella alone was carious.

The patient died five days after the operation.

Case 4.—Amputation of Thigh. Chronic Disease of the Knee.—Owen ——, aged 22, had been a long while affected with scrofulous disease of the knee. Some weeks before the limb was removed, he had a soft fluctuating swelling on the side of the knee, which was supposed to be an abscess of the joint; but, on being punctured with a grooved needle, no pus escaped, no evil consequences followed the puncture. His sufferings from pain before and after this were intense, and led us to urge upon him the necessity of amputation. Weeks elapsed before he could conclude to have it done. Pain, fever, and sweats had wasted his strength, and nearly destroyed all his resolution. In October, 1853, he consented to the operation, and, after a consultation, the thigh was amputated.

On examination of the affected knee, the synovial membrane was found thickened and pulpy, and in its midst an abscess was discovered. The abscess seemed to have its origin from an ulcerated condyle of the femur. This man's lungs, before the operation, manifested dullness on percussion, and he was supposed to be tubercular.

In February, 1854, he had perfectly recovered, and grown fat.

Case 5.—Amputation of Thigh. Chronic Synovitis. Partial ankylosis, etc.—Rosa ——, aged 27, was admitted into the Hospital, Oct. 15th, 1852, for synovitis. Ulceration took place in the integuments, and bare bone could be touched with the probe. Her general health failed, and the leg was bent at a right angle with the thigh. On October 5th, 1853,
the thigh was amputated. Partial anchylosis was found. She recovered.

**Case 6.—Amputation of Thigh. Gangrene of Leg. Closure of Iliac Artery.** — ——, a seamstress, aged 17, had lived for months chiefly on bread and tea. She had been ill, before her admission, with what she considered fever, yet she had abundant flesh, and did not resemble a patient who had suffered from fever. May it not have been acute arteritis?

She was admitted in October, 1853, with an acute gangrene of the foot, which continued to extend until it approached the knee. Her sufferings were very great. No pulsation could be felt along the course of the femoral artery.

The leg was constantly enveloped in flannels, wrung out in hot water.

On Nov. 12th, 1853, the line of demarcation having for several days been fairly formed, the thigh was amputated. Sulphuric ether was given to full insensibility. Only one small artery required to be tied, and this did not seem to be the femoral.

This woman had sloughing at the stump, and of the integuments at the groin, and died.

The iliac artery was found closed with a plug of coagulum.

**Case 7.—Amputation of Thigh. Chronic disease.** — ——, a female, had been an inmate of the Hospital for many months, for a caries of the head of the tibia near to the articulation. The joint admitted of flexion and extension, and when the first consultation was called, it was not thought to be implicated. Several fistulae led down to the bare bone.

It was recommended to introduce sponge tents into the fistulae, so as to make pressure on the ulcerated bone. This was done, and in a short time a piece of bone, about the size of the last joint of the little finger, became detached, and was removed. More diseased bone was then felt. Her health became undermined, and, at a subsequent consultation, it was judged best to amputate the thigh. The limb was removed on the 4th of Feb., 1854.
The knee-joint was found to be only partially affected; there were fibrous adhesions between the patella and condyles of the femur, tibia was very little affected, and a cavity was found in its head, from which the piece of bone had been removed. There was no bare bone in the articular surfaces, and organized material covered the spot from which the piece of bone had separated. There was no pus in the joint.

If this woman’s general health had continued good, there is reason to believe that she would have recovered with a stiff joint. She did well after the operation, and perfectly recovered.

Case 8.—Amputation of Thigh. Accident.—On February 1st, 1854, a young boy, aged 8 years, was admitted into Bellevue Hospital, with both thighs broken by the swinging of a heavy piece of timber against them. In addition to the fractured thigh, the right knee-joint was opened by being ground by the timber. This limb was broken at its middle. The accident happened at 12 M., and the thigh was amputated above the fracture at 9 P.M. He had suffered much from shock, but had fully rallied. Chloroform was administered. The periosteum was found to be stripped from the broken thigh for several inches above the fracture, so that it became necessary to amputate at the upper third. He died.

Case 9.—Amputation of Thigh. Fungus Hematodes.—George ——, aged 37, had always been in good health, until three years since, when he met with a railroad accident. Two of his ribs and right arm were broken, and he suffered from concussion of the brain. Two years of health followed, when he had syphilis. Some of his family have had phthisis, but none to his knowledge have had cancer. He is of very intemperate habits.

About four months ago, while drilling a hole in a rock, he was seized with a sharp pain just below the left knee. On examining the part, he discovered a swelling, about the size of a walnut, over the tuberosity of the tibia. This tumor was very tender to the touch, and occasionally, when not
touched, he had lancinating pains in it, especially at night. It has rapidly enlarged, and became more tender until it assumed its present appearance. He is of good muscular development, face florid, no marked cachectic expression of countenance. Pulse 95, and full. Respiration rapid, 35 in a minute. Complains of a slight cough, which he has had for three weeks.

On the upper and anterior part of the leg, there is a tumor about the size of the two fists, nodulated, and of a dark venous color, near its centre there was a dark-looking fungus projection of small size, which bled on being roughly touched. The tumor was fluctuating, and when a grooved needle was introduced, it discharged a bloody serum. A probe could be thurst down to the bone, and the sensation conveyed to the hand was that which might be occasioned by the breaking of reticulated tissue, offering but slight resistance.

He was advised to have the thigh amputated at once, after waiting five days he consented to have it done. During this interval, the tumor was very painful, and he obtained very little sleep, even with the aid of large doses of opium. It grew very rapidly, and increased its lateral diameter so as almost to encircle the limb.

On May 25th the operation was performed. Dissection of the tumor: an incision was made through it and the tibia sawn longitudinally. The mass consisted mostly of coagulated blood. The cancerous growth was soft and irregular, and coagulated blood filled its divisions or interstices. Some parts of it approached to the condition of scirrhus. It was attached to the periosteum in front of the tibia, the bone did not seem to be implicated, nor were there any marks of disease in its interior. A large cancerous mass was also found on the posterior surface of the tibia, and united with the periosteum.

He was very much reduced for weeks after the operation, but now, July 15th, he is doing well. The cough has gone. The stump has healed, with the exception of a place, where the bone is exfoliating. He has gained flesh and color.
Case 10.—Amputation of Thigh. Caries of Patella. Suppuration of the Joint.—Bridget [name redacted], had been for months a patient at Bellevue Hospital. On admission, she had an ulcer over the patella, which finally exposed the patella. She was kept quietly in bed, the limb in splints, because it was anticipated that the joint might subsequently become involved. About six weeks before the amputation, synovial fluid could be pressed from under the integuments, and this was mixed with pus.

The skin which was undermined, was freely divided in order to give it a chance to heal. After this division, the joint itself was found distended with fluid. In a few days, a minute opening was discovered through which synovial fluid escaped. During this time, there was no constitutional suffering, and in order to avoid exciting inflammation the opening was not probed; but chills, fever, and local heat and redness were waited for, to indicate that the joint was suppurating.

In the latter part of May, pus and synovial fluid flowed out, and the joint became very tender and painful, and the pulse arose to 120. The opening was then probed for the first time. The probe passed directly into the joint. This opening was enlarged, so as to admit the passage of the finger into the joint. Pus, synovial fluid, and coagulated fibrine escaped. The under surface of the patella was bare, and so also were the condyles of the femur. The acute symptoms immediately subsided. On June 5th, the left side of the knee became red and fluctuating, and was opened with a knife, pus flowed out freely. There seemed to be now a prospect that she would do well. But she failed in strength, diarrhoea came on, and she began to suffer from bed sores, and in a consultation, it was decided that the limb should be amputated. This was done on the 21st of June.

On examining the joint, the bones which had previously been felt to be bare, were found covered with a velvety layer (granulations), with the exception of a small spot on the tibia, where the bone was still exposed. In fact the joint
was healing, and if the patient’s health had warranted longer delay, I feel confident that she would have recovered with an ankylosed limb.

I would now call attention to the similarity which exists between this case and case 3. In both, there was an ulcer over the patella, the patella in both became carious, and then acute synovitis followed with suppuration of joint. From these cases then we may conclude, that a carious patella must be regarded as a grave matter, for it may lead to suppuration of the joint, and endanger limb and life.

II.—AMPUTATION OF LEG.

Case 1.—Amputation of Leg. Ostitis. Chopart’s Operation and Amputation of Leg.—Barnay, was admitted June 4th, 1850, with disease of the tarsal bones of the left foot, of twelve months’ duration. About a year ago, after bathing in the river, where he remained longer than usual, he was seized with a severe chill, which was followed by pain and swelling of the foot. Blisters and poultices were applied, but did not afford any relief.

On admission, the foot was swollen to double its natural size, and there were three fistulae, one of which communicated with the bone, on the inferior aspect of the foot. The use of the probe caused excessive pain, and could with ease be thrust into the substance of the bone. On pressing together the tarsal and meta-tarsal bones, great pain was caused. There was no pain in moving the ankle joint, or on pressing the os calcis and astragalus together.

No hopes were entertained of effecting a cure, and on the 13th of August, 1850, the operation of amputation through the middle of the tarsus, (Chopart’s operation) was performed, in hopes of saving the heel. But after this operation, the astragalus and os calcis were found diseased, i. e. they were soft and compressible between the thumb and fingers. So soft were they, it was discovered that the knife had actually shaved off a portion of the os calcis, without meeting with resistance. Under these circumstances, it was judged wisest
to amputate the leg at once, before he had revived from the effects of the chloroform.

The bones of the leg when divided with the saw, were found to be affected with the same disease. There was a rarefaction of the whole structure, and an attenuation of the outer crust. The cells enlarged, and filled with oil. The tarsal bones were enlarged, very oily and soft.

The wound united mostly by the first intention, and on September 15th, the patient was going about the ward. He perfectly recovered.

This case reminds one of the 1st case of amputation of the thigh mentioned above, and designated as acute ostitis. The thinning of their outer walls, the enlargement of the interior cells, their softness, the contained oil, and the severe accompanying pain, stamp them as identical diseases.

Case 2.—Amputation of Leg. Injury from blasting rocks.——, aged 32, was admitted for an injury to the left foot, from blasting. The accident took place at noon. He then complained greatly of pain, and fifteen drops of Majendie’s solution of morphia were administered.

The toes had been completely carried away by the explosion, the tarsa meta-tarsal joint of the great toe opened, the meta-tarsal bone of the second toe fractured, the skin entirely removed from the sole and upper surface of the foot, with the exception of a tongue of skin three or four inches wide, which extended over the outer malleolus and united the skin of the sole with that of the leg; the tendons lacerated, and the os calcis injured, by the detachment of several spiculae of bone from it.

It was proposed at first to perform Chopart’s operation, and thus give the foot a chance of recovery; but the flap was torn and thin, and on replacing it, was found insufficient to cover the ends of the bones. It was therefore thought to be best to amputate the leg.

Reaction had fully taken place, and the operation was performed at 8 o’clock P.M. Chloroform was administered by one of the physicians of the Hospital, whose experience in the use of this agent, is as great as any one’s in the city.
There was nothing during the operation, which was worthy of note. The haemorrhage was completely controlled by the tourniquet, and the only blood lost, was that which was retained in the limb below the tourniquet. There was no delay in any part of the operation. But during the application of the last strap, in dressing the stump, when the use of the chloroform had been suspended, and the gentleman who administered it had left, the patient was found pulseless and breathless. The windows were at once opened, artificial respiration resorted to, and some brandy which was at hand thrown up the rectum, and immediately after this an ounce of oil of turpentine.

He gasped, breathed, and the pulse returned to the wrist. But it was very feeble, and soon sunk again. The chest and abdomen were covered with mustard cataplasms. Punching under the left hypochondrium seemed to have more effect than anything else in arousing him, for he would rally, start up in anger and remonstrate. After a time, he complained of the mustard, and asked for its removal. There was great disposition to sleep, and we had him removed to his bed.

He soon began to sink again, took brandy and carbonate of ammonia, and injections of turpentine and capsicum. The extremities were rubbed with camphorated oil, and hartshorn applied to the pit of the stomach. All were unavailing. He died at 2½ o'clock A.M., six hours after the operation.

The shock from the operation, perhaps, was somewhat instrumental in causing this man's death. But I cannot but believe that the chloroform acted injuriously, and that he might have lived if the chloroform had not been administered. Such is the impression left upon my own mind. The advocates for the use of anaesthetics would hardly be willing to make this admission. The French surgeons, some years since, first started the question of the utility of ether in primary operations, and several in this city have entertained the opinion, that after accidents it had a depressing influence.
ence, and consequently increased the chances of a fatal result. This opinion against these agents, in primary amputations is gaining ground, I believe, and especially against chloroform.

As to the assertion, that anaesthetics have the power of preventing shock, it may be said that it is doubtful. In this case, at least, it did not have this effect.

Case 3.—Amputation of Leg. Railroad Accident.—Nov. 1st, 1853. Timothy ——, 22 years of age, was, while intoxicated, the night before, run over by the Harlem railroad cars. He remained on the track, undiscovered, for the space of three hours, and lost much blood before his admission to the hospital.

The anterior tibial artery was wounded, the muscles much torn, the bones extensively broken, and a number of fragments, of several inches in length, removed. No hopes were entertained of saving a limb so much injured as this; but the condition of the patient forbade its immediate removal. He was pale, cold, with an extremely feeble pulse, and irritable stomach.

Warmth and stimuli were administered, and at five o'clock p.m., reaction having returned, the leg was amputated. No chloroform or ether was used. He survived the operation about 24 hours.

Case 4.—Amputation of Leg. Railroad Accident.—A young lad, nine years of age, had his leg crushed between a cart and a railroad car. It was amputated in March, 1854. Sloughing of the stump and protrusion of the bone followed. The dead portion was removed with the forceps. After a protracted period of three months, he recovered.

Case 5.—Amputation of Leg. Railroad Accident.—Francisco ——, a Portuguese, from Madeira, a laborer, aged 54, of temperate habits, was admitted, April 21st, 1854, with a compound and comminuted fracture of the left leg. The accident was caused by jumping from the cars, when in motion, and the passing of the wheels over his leg.

Three hours after the injury, he was brought to the Hos-
pital. He was much prostrated; the surface of the body cold, and the pulse easily compressed. The tibia of the left leg was broken into a multitude of small fragments, two of which had perforated the integuments. The fibula was also broken into a number of pieces, and the muscles and skin, in several places, lacerated. Over the inner head of the gastrocnemii, and just below the knee joint, the skin was torn for three or four inches, and the wounded muscle protruded through the aperture. Notwithstanding the amount of injury, the anterior and posterior tibial arteries could be felt pulsating, and sensation continued in the foot.

At five o'clock, p.m., it was decided that the limb should be amputated; but reaction not being fully established, the operation was deferred until 10 o'clock of the following morning. In the meantime, carbonate of ammonia and brandy were administered.

On the 22d of April, at the appointed hour, amputation was performed, just below the tubercle of the tibia. The single-flap operation was chosen, the flap being taken from the anterior surface of the leg, on account of the lacerated wound behind. The fibula was found broken above the place where the bone had been sawn, and, being loosened from its socket, was taken away entirely. Ether was used in this case.

He bore the operation well, his pulse neither failing in force or frequency. Throughout this and the following day, the surface of the body remained cool, pulse natural, and mind composed.

April 25th.—Had little sleep during the night; surface of the body cool; pulse 130; tongue dry and red; despairs of recovery, but is contented. The stump is painful, hot, and swollen, and shows signs of sloughing. The superficial veins leading from the stump are very prominent. We interpret this symptom to signify inflammation and obstruction of the femoral vein. Beef tea, quinine, and brandy, with morphine at night, were used.

From this time he gradually failed, and on May 3d died.
The femoral vein was much dilated, and contained within it a clot of fibrine. A large abscess was found between the vastus internus and os femoris. There was also a small quantity of pus in the joint.

**SUMMARY OF AMPUTATIONS OF THE THIGH.**

1. Secondary..... Ostitis, with necrosis .. Recovered.
2. Primary...... Leg crushed by heavy timber ...... Died.
5. Secondary...... " " " .................................. Recovered.
7. Secondary...... Chronic disease of knee .............. Recovered.
8. Primary...... Fract. of both thighs; knee joint opened ...... Died.
10. Secondary...... Caries of patella, acute synovitis, etc...... Recovered.

None survived the primary amputations, and \( \frac{1}{4} \) of the secondary died. The mortality, in all amputations of the thigh, was 40 per cent.

**SUMMARY OF AMPUTATIONS OF THE LEG.**

1. Secondary..... Chronic disease of the tarsus ostitis .... Recovered.
2. Primary...... Injury in blasting .. Died.
3. Primary...... Railroad injury .............. Died.
4. Primary...... Railroad injury .............. Recovered.
5. Primary...... Railroad injury .............. Died.

Only one survived after primary amputation of the leg, and that with difficulty, and after a tedious convalescence. We find, on taking both tables, that, out of six primary amputations of the lower extremities, only one lived, which is a mortality of \( 83 \frac{1}{3} \) per cent., and that the mortality in the secondary amputations was 22 per cent. On combining both primary and secondary, we have a mortality of 7 in 15, equal to 46\% per cent., in all amputations of the lower extremities.

We had, for some time, suspected that amputation, in all cases, was a formidable alternative; and in view of the awful mortality, after primary amputations, we are tempted to ask, if it would not be wise to refuse to operate in all cases of severe injury?
How happens it that so little is known of pressure in the treatment of cancerous affections? No mention is made of it in Cooper's Surgical Dictionary, the great work of reference that the medical practitioner is wont to consult when a rare case presents; no allusion appears to have been made to it in the late able report of Prof. Gross, on carcinoma, and no knowledge of its efficacy, I am confident, exists in the minds of professional men generally, for I have proved it by repeated conversations with physicians and surgeons, even professors of surgery, one of whom had been to Paris, in quest of professional knowledge. Now and then, one of the vanguard of the profession has told me he was aware of its utility, but had never tried it. I have not taken pains to refer to the standard systems of surgery, to see whether any thing is said of it or not. It is not taught in the lecture room, or there would prevail a knowledge of it among medical practitioners. Accident directed my attention to it. Having occasion to refer to the Cyclopaedia of Practical Medicine, in the preparation of a medical paper last fall, I stumbled on the able paper of Dr. Carswell, on scirrhus, and having a case under treatment, gave the article a careful reading.

It appears by this, that pressure was used by Mr. Young, an English surgeon, many years ago—his cases having been reported and published in London, in 1816. Subsequently, M. Recamier, one of the physicians of the Hotel Dieu, of Paris, adopted the practice, and "of 100 patients treated by him, for carcinomatous affections, sixteen appeared to be incurable, and underwent only a palliative treatment. Thirty were completely cured by compression alone; and twenty-one submitted to the same means, derived considerable benefit from it. Fifteen got rid of the affection radi-
cally, by means of ablation alone, or chiefly by ablation, combined with pressure; and six by means of compression and cauterization. In the twelve remaining patients, the disease resisted all the means employed."

This is a better aspect of things, certainly, in regard to cancerous affections, than is generally entertained. The opinion prevails that true cancer is hopelessly incurable, and whether in private or hospital practice, if the progress and treatment of cases are watched, it will be found, I think, that little is attempted beyond early ablation, and later, palliative treatment.

Dr. Gross' report to the American Medical Association, presents a gloomy view of the subject, indeed, entirely at variance with M. Recamier's results. Indeed, under the full impression that his views reflected the true state of medical knowledge, I was about to abandon the hope of there being any relief for my patient, in whose fate I felt the deepest interest. I will briefly glance at his "conclusions on the value of surgical operations in cancerous diseases."

1. From Hippocrates to the present day, it is regarded incurable by escharotics, or the knife; nature never cures, and no hope from internal remedies.
2. Excision is nearly always followed by a return of the disease in a few weeks or months.
3. After ulceration, excision but hastens the fatal result.
4. If the tumor be of rapid growth, or large, excision but hastens death.
5. Operations for soft cancers still more hopeless than for scirrhus.
6. Of the cases reported, the history is too imperfect to afford basis for diagnosis.
7. Cancroid affections, as of the lip, less sure to return after ablation.
8. Notwithstanding the bare twilight of hope from ablation, in cancer, still, if done early, the profession are for it.
9. The cases reported cured are believed to have been tumors of benign character.
10. All agree, if ablation be resorted to, it is best to be thorough in removing all, even at the expense of healthy surrounding tissues.

11. Save enough integuments to cover, and heal by first intention.

12. Great stress laid by all writers on regulated diet, in preventing relapse.

13. No remedy or method of treatment known that will prevent relapse.

14. Occasionally a second operation has prolonged, and even saved life, but generally as useless as the first.

Not a word is said of the employment of any mechanical means for methodical compression, while Dr. Carswell, in the paper referred to, places it in the first rank of curative agents. The remedies that retard or arrest cancer, according to him, are direct or indirect. "Among the former, or those which operate directly, the local abstraction of blood, by means of leeches, and compression, holds the first rank." Of those operating indirectly, are short allowance of food, and those powerful alteratives that promote absorption. Thus an entire change is effected in the nutritive function, and rapid absorption promoted, both by suction into the system through a jejune condition of the blood vessels, and methodical compression upon the part after local depletion. Here is sound philosophy — pumping and forcing, pulling and pushing at the cancerous tumor, to get it back into the blood. While fluid, it is harmless; so long as it swims, and is not allowed to localize itself, all is well, even admitting it to be a disease of the blood.

This view of the treatment of cancer, presented by Dr. Carswell, is taken from M. Recamier's work, which I think has not been translated into English. I will, therefore, draw from it a few brief conclusions, as presented by Dr. Carswell, to stand alongside of those drawn from Dr. Gross' report.

1. The results of 100 cases treated in the Hotel Dieu, above quoted.

2. All tumors, benign, suspicious, or malignant, yield to the treatment.
3. Mammary tumors, put under this treatment before degeneration, will continue to recede, though the pressure be discontinued. If pressure is used after degeneration, and discontinued, the tumor again enlarges, and may be aggravated.

4. Compression aids in preventing relapse, after ablation.

5. Chronic inflammation is resolved by compression.

6. Tumors of the neck of the womb are resolved by methodical compression, by means of a conical thimble, or tube pessary.

7. The rational inference is, that if this practice were generally employed early in all external cancers, ablation would be seldom required.

The internal remedy most relied on by M. Recamier is conium; but tonics and chalybeates must be combined, to aid in governing the nutritive function, and to answer the indications of each particular case. About one-third the amount of food usually consumed by the patient is the allowance found most reliable. The decoction of sarsaparilla is the drink recommended. The alcoholic extract of conium, two grains, gradually increased to six, or even twelve, twice a day, on an empty stomach, and continued three or four weeks, is the form of administration of the cicuta.

Dr. Dunglison, in his note appended to this article, says not a word of compression, but remarks: "The cachexia is the real morbid condition, and the cancerous affections, in particular organs, are but so many evidences of it," etc.

Now, so far as treatment is based on this assertion, it must, if rational, err of its object. Nor do I think any cachexia precedes the local deposits. The cancerous matter seems to be the offspring of a redundant and pampered nutrition, and to be formed in the blood, and laid up (a blind and fatal mistake) by deposit, as fat is laid aside. The corpulent, or lymphatic habit, is most liable or subject to it. "In persons, too, apparently in the enjoyment of the most perfect health, we often see the disease making its appearance in the form of a small pimple, proceeding more or less rapidly in its
course, extending in breadth and in depth, and terminating ultimately in death, in spite of all the means which art has devised." So says Dr. Carswell, and of the cachexia he speaks as follows:—"It is in this, the last stage of the disease, that the circulation and innervation become deranged, and that fever and a diminution of the nutritive function are first observed. It is likewise at this period, but more frequently a few days or weeks before death, that the skin assumes a pale earthy, or dully ochry tint; that debility and emaciation make rapid progress, and all the functions of the economy become implicated in the deteriorating influence of the disease. It is this group of the general symptoms which constitute what is called the cancerous cachexia."

I say, then, to treat a case in high condition of general health with alterative tonics, nutrients, stimulants, etc., thinking to resolve thereby a local tumor, or true cancer, on the presumption that some latent cachexia lies at the bottom of it, would be a signal error. Starvation, almost, were more rational, and add to this compression, and hygiene in its most rigid requirements, and you reach the indications. Drugging with hydriodate of potash, etc., may resolve benign tumors, but it never will resolve malignant ones. I have little confidence in alterative drugging.

This matter or doctrine of a latent depravity, lurking in the constitution, and proving the cause of cancer, is as improbable as it is unphilosophical. The fact of cancer appearing locally, while the constitution is in full vigor, is far from being "evidence" of a cachexia, if Dr. Carswell has rightly explained what the cancerous cachexia is; but the cachexia is rather the witness-bearer or effect of "cancerous affections in particular organs." This is rational, intelligible pathology, and leads to correct treatment—opens the door of hope to the otherwise doomed victim. The other view is a mystification, a cloak for ignorance, a seal set upon any advance in practice, the pronunciation of the patient's hopeless fate. The propagation of such errors in medical philosophy, is what has so firmly established the general belief, that can-
Cancer is incurable, and that nothing can be done. That a particular temperament, or habit, or constitution, may be more liable to cancerous forms of disease than another, under a mode of living favorable to their development, is all that can be maintained by a sound philosophy, as inherent in the system. The doctrine of hereditary taint is a ball and chain upon the foot of medical progress. Like begets like organization. Like organization is liable to take on like pathological action, when its like physiological action is disturbed by like causes. This is all that can be maintained.

Now, under this view, and the known power of regimen, or training, to entirely change the constitution—even the organization—no son of a cancerous parent stands in jeopardy, if his medical guide will put him in the right path, and he will but travel in it. The same of all other hereditary proclivities. This rational philosophy permits progress, stimulates science, and encourages hope.

Case.—Mrs. M. J., of corpulent habit, florid complexion, sanguine-lymphatic temperament, aged about forty, and the mother of five children, consulted me on account of a hard tumor in her left breast, of the size of a hickory nut, in the fall of 1852. She had noticed the tumor during the summer previous, and a peculiar reclining of the nipple toward the arm-pit, or laying itself down on the tumor, which was close upon the axillary side of it, and situated deep in the substance of the mammary gland. Her breasts were well developed, and the glands retained a firmness of structure that gave evidence of a healthy and unimpaired constitution.

I put her under the administration of iodine locally and generally, making use of a tincture of double the usual strength for topical application, and painting the breast nearly all over, except in the more tender region of the nipple, thus obtaining a counter-irritant effect, and a peeling off of the cuticle, after a few days. This was regularly repeated about once a week. Its administration internally was continued for three months, in small doses—two or three drops twice a day, of the same tincture. No beneficial effect was apparent.
For a twelvemonth the tumor continued steadily to advance, when it had attained to about the size of a hen's egg; the sub-cutaneous cellular tissue had become involved, and adhesion to the skin was apparent from the puckering that it presented, on moving or handling the breast. Sundry nodulated protuberances could be distinctly felt. Shooting pains were frequent, and becoming more and more troublesome. At this juncture, December, 1853, the case was examined by two distinguished professors of the Medical College of Ohio, and their opinions accorded perfectly with my own, that the tumor was a true scirrhus.

The general health of my patient being perfectly good, and the gloomy prospect from ablation, as per Dr. Gross' report before me, and the more cheering hope from Recamier's practice presenting, I put the patient under restricted diet, five grains of the hydriodate of potash, twice a day, and local compression by means of a pad worn in the body of her dress. This course was pursued two months with steadiness, when it became evident that the tumor was receding. The adipose tissue of the system was considerably reduced withal. Finding it next to impossible to maintain a uniform methodical compression upon the tumor, night and day, the power of an elastic steel spring truss suggested itself, and after repeated trials, I at length devised a perfectly adapted instrument, as seen in the above cut.
This instrument may be said to be a Hull's truss, with a joint in the front part of the spring, to adapt it to the specific purpose and location. The joint is rather firm, requiring considerable force to vary the angle, so that when a true fit is attained, it remains permanent. It thus adapts itself for either breast, and it may be worn equally as well with the spring encircling the chest above the mammae, and the obtuse angle at the joint pointing upwards, in the centre of the sternum, and the branch descending to adjust the pad upon the tumor. The pad, in this case, may be represented by the longitudinal section, centrally, of a hen's egg, one half of it being adopted for the pad, the rounded, stuffed side worn upon the tumor. To prevent hurting the nipple, I found it necessary to lunate the heel of the pad. The power of the spring, when in situ, is about that of one pound pressure, perhaps a little greater, being made from sheet steel, No. 22, and three-eighths of an inch wide. The temper of the branch portion is left unset, so that it may be more or less incurvated for exact adjustment. The curvature of the whole spring must, of course, be adapted to the size and shape of the chest, so as to fit without pinching. It is worn over the chemise, except the pad in front passes under to be applied to the tumor accurately, the bosom of the chemise, and waist of the dress aiding in sustaining the truss in its proper location. A soft compress, or two, of fine linen, or muslin, wetted in water, is kept upon the tumor, under the pad. The back pad is made very thin, so as not to show through the dress, and rests upon the muscular cushions, or either, or both sides of the spine.

This admirable arrangement of mechanical powers to the object in view, I believe to be new, and of great value in this department of surgery. It may be adapted to any form of mammary tumor, large or small, and when it is considered that cancer of the breast is the most frequent form of external cancer, its importance will be duly appreciated. The principle may be adopted in other forms of ex-
ternal cancer, and a truss adjusted by any ingenious practitioner to meet the wants or exigencies of each particular case. It appears to be equally applicable to encephaloid, scirrhus, and colloid cancers, and not only to these malignant tumors, but also to benign tumors, as wens, etc., etc. Its applicability to aeurismal tumors is obvious.

I am aware that gum elastic bandages and gum elastic bags partially inflated, have been used in making compression in the treatment of mammary cancer. I tried them faithfully in the case under consideration, and found them troublesome, oppressive, and inefficient. I find, practically, the truss is infinitely superior. It is worn night and day with perfect comfort, retaining its position without fillets, or straps and buckles of any kind, and possesses a capability of adjustment equal to a pair of spectacles. The Messrs. Rees, of Cincinnati, surgical instrument manufacturers, were the makers of the trusses I used, and were very accommodating, and faithful in executing my designs, until perfect adaptation and artistic finish were attained.

This will doubtless be read by practitioners, who, at first thought, will be surprised at the idea of putting a truss on a cancerous tumor! The doctrine is not generally promulgated that such a course of treatment is called for, or even admissible. Still it is not only defensible, but in truth the only rational treatment. Cancerous tumors appear to progress slowly or rapidly, according to the solidity or laxity of the textures in which they are situated, as a general rule, other things being equal, and hence it is perfectly rational to oppose their progress of growth towards the surface, and tendency to point and become open cancers, by suitable mechanical resistance. So far from being irritated by the practice, they take it kindly and without complaint or remonstrance, judging from the single case I am recording. It is not necessary the pressure should be great, but constant; and I have no doubt, but that local depletion by means of leeches may be advantageously used simultaneously, as recommended by M. Recamier, but it is both expensive and
troublesome, and, therefore, I omitted it, and trusted to low
diet and wet applications instead.

To proceed with the further history of the case before us:
it was about the first of March last, that I brought the pow-
er of a suitable truss to bear upon the tumor, after many
repeated efforts and trials of mechanical skill. The patient
had fallen away some under a short allowance of food, and
a constant use of the hydriodate of potash. The conium
was now substituted for the hydriodate, and a rigid adher-
ence to a very abstemious diet insisted on. Not over one-
third the usual quantity of food taken was permitted, but
every indulgence of a reasonable nature allowed as to varie-
ty, indeed, variety was insisted on, and the best quality of
food of its kind advised. This course was pursued about six
weeks, when it became manifest that the general health of
the patient was giving way under the use of the conium, or
drugging system. Commencing with two grains, twice a day,
of the alcoholic extract dissolved in water, and increasing
the dose daily, the patient had now been about two weeks
under the power of six grains twice a day, when the general
distress of the system became evident, by subsultus tendinum
in almost all the voluntary muscles, whether the patient
were awake or asleep. The irritability of the muscles was
so great, that I noticed repeatedly the quivering of a single
muscle of the wrist or ankle, like a gib-sail thrown into the
wind. Now and then, a severe and prolonged cramp would
seize upon a muscle. This derangement of the general
health of my patient by narcotic poisons I deemed unphilos-
ophic, the true course appearing to me to be the maintenance
of as high a state of the general health as possible, under so
limited a diet as to promote active absorption. According-
ly I discontinued all drugging, and put the patient under
the best system of hygienic rules I could suggest, such as
early rising and walking, riding, rambles in the country,
bathing, flesh-brushing, dumb-bells, visiting, and every pos-
sible method of agreeably engaging and occupying the atten-
tion; the diet being augmented to one-half the ordinary
quantity taken. Under this regimen the patient soon re-
bounded from the downward tendency, and began to ex-
press the utmost gratification. I should have observed that,
during the drugging period of treatment, in March, the men-
strual flow ceased, the greatest regularity having always
prevailed. This was a staggerer. The patient had not been
enceinte for ten years, though in good health, and living with
her husband in the most unquestionable harmony, and was
content to believe that it was "the turn of life" with her,
in which opinion I encouraged her, at the same time doubt-
ing the fact. Her health and spirits went on improving dai-
ly and weekly, and the scirrhus tumor kept receding and
"flatting out," literally, until a sub-stratum of it, like a flat
piece of shred leather, only remained. Since the first of
May, she has seemed and felt perfectly rejuvenated. Always
accustomed to a full diet and rather sedentary habits; she
is completely changed in her feelings, and astonished that
her greatest enjoyments now are those habits she never could
adopt or find other than irksome, and destructive of daily
comfort if indulged in, such as early rising and walking par-
ticularly.

About the middle of July, the fact of pregnancy became
established by the motions of the foetus being felt. It would
appear, then, that this patient has been above the breeding
point for the last ten years, and that her corpulency tended
to the formation of cancerous deposits. There could be
traced no hereditary taint whatever, admitting the truth of
the old foggy dogma. It would further seem that nature,
ever desirous to preserve the species, took alarm at the down-
ward tendency of the patient's health, and determined, if
possible, to cast off a shoot. At all events, conception took
place, whatever the law of nature may have been, about
which it may be idle, perhaps, to speculate.

The question of paramount interest, in this case, now
is, What will be the proper course to pursue, when lactation
takes place in the affected breast? The remains of the tumor
are there, although there is a chasm in the gland, equal to
the size of the truss pad, or one-half of an egg. The nipple
is underlaid by the hardened margin of the indolent remains of the scirrhous tumor, and, though nearly liberated from its retraction, is still partially held by the contraction of the tissues. Inasmuch as this is a very important portion of the gland, the lactiferous ducts being conveyed to this point, and probably rendered impervious by the lesion present, what course will be most proper and rational to adopt for the welfare of mother and child? Should the future offspring be allowed to draw nutriment from this breast, provided the function shall be found to be but slightly impaired? Will the exercise of the function of the organ have a tendency to awaken and renew the scirrhus development? May mammary abscesses be rendered probable from obliteration of the lactiferous ducts? Admitting the doctrine of hereditary taint, would the child’s chance of future escape be improved by removing it from the mother altogether, and substituting a wet nurse? Sundry interesting points are involved in the issues of this case, which, having no parallel precedents to govern my practice, will have to be met on what may appear to be the most rational and sound principles.

It is conceded that this case was a favorable one for success under this new method of treatment. How far it may be a type of scirrhus in general, I will not pretend to say, few cases having fallen under my observation; yet I am inclined to think it neither singular, nor unlike numerous others of this class of disease, that either run into open cancer, or are cut away by the surgeon, only to re-appear in the same or some other locality. At all events, the case is instructive, in the illustration it affords of the resources of mechanical surgery, and the efficacy of a rigid hygiene in fundamentally changing the constitutional habits. “One swallow does not make a summer;” to be sure; but if this practice were acted upon generally by practitioners in the incipient stage of cancerous tumors, I have reason to believe there would be many swallows of this kind, enough to make a summer of promise and hope to a large class of otherwise doomed sufferers.

Cincinnati, August, 1854.
Note.—In connection with the foregoing interesting discussion of the treatment of cancer by compression, we would remark that the author, though original in the adjustment of a truss to the tumor, with which to make compression, cannot claim priority. It appears, from Dr. Walshe’s great work on the Nature and Treatment of Cancer, p. 209, that Dr. Neil Arnott, more than ten years ago, invented an instrument for this purpose, having attached an air-cushion, which is thus described: “His apparatus consists of a spring, an air-cushion supported by a flat resisting frame or shield, a pad, and two belts. The spring, which is of steel, is the compressing agent, its strength being varied with the amount of pressure it may be desirable to obtain. The shield, varying in shape, somewhat, with the circumstances of particular cases, is generally slightly convex on the external surface, of circular or oval outline, and formed of a rim of strong wire, connected at two opposite points by a flat piece of iron, which serves for the support of the spring, screws, etc., the whole being covered with jean. To the rim of this shield is sown a sort of conical cap of soft linen, designed to receive the air-cushion, to keep it constantly slack, and prevent it from slipping about when applied. The air-cushion thus kept slack, fashioned into a sort of double nightcap, lying in apposition with the inner surface of the shield, and sufficiently filled with air to prevent the latter from pressing directly on the part which receives within it the tumor to be compressed. One end of the spring is attached by screws to the external surface of the frame, and the other end to a solid, but soft pad, placed wherever the contre-pressure is to be made. The straps are used to keep the apparatus steadily fixed.”

Dr. Walshe speaks very favorably of compression, and remarks that the chief reason why it has not taken its ground as a general system of treatment, is the difficulty of its application. This difficulty, he thinks, is triumphed over by the invention of Dr. Arnott.—[Eds. N. Y. Jour. of Med.]
ART. V.—Falls from Heights, with Cases Illustrative of some peculiar consequences of Cerebral Concussion, etc. By Elisha Harris, M.D., Physician to the New York Dispensary.

The following cases serve to exhibit some of the more unusual effects of falls from heights, while they happily illustrate the remarkable impunity with which such accidents are sometimes sustained, especially in young children.

Case 1.—Fall of a Child from a fifth story window. Fracture or Diastasis of the Segments of the Superior Maxillary and the Palatal Bones, with but slight Concussion of the Brain.

J. M., a boy, æt. 2 years, while playing in the vicinity of an open window in the fifth story of a dwelling-house, about six weeks ago, was precipitated upon the pavement in the court-yard below—a distance of some fifty feet. When taken up, he presented the usual symptoms of concussion of the brain, but when first seen by the writer, a few hours after the accident, the little fellow was partially restored to consciousness, and, so nearly as could be ascertained, there had occurred no vascular reaction. His pulse was feeble, and he seemed greatly exhausted from the loss of blood which he sustained from the mouth and nostrils. Upon examination, the head was found to have sustained no injury externally, except a severe contusion over the left temporal and malar regions; but, in the mouth, it was discovered that the superior maxillary and the palatal bones had been riven asunder on the median line, and that the segments of the latter bone were so widely separated that I inserted my fore-finger in the cleft, the soft parts being torn from the alveolar margin back to the velum palati. The ethmoid bone had also suffered some damage in its inferior portion, but no further injuries were discoverable. For some days after the accident, deglutition was rendered somewhat difficult, by the excessive tumefaction of the soft palate and velum; but aside from this, no unpleasant symptom supervened until after the expiration of the first week, when considerable collections of pus formed above the palatine arch, and were
discharged through the cleft. Some spiculae from the ethmoid bone were thrown off in the process of this suppuration. The ductus lachrymalis of the right side has at various times become obstructed from suppuration in its vicinity, and has required relief. At the present writing, suppuration has nearly ceased, and it is proposed, as soon as practicable, to attempt a re-union of the cleft edges of the palate, so as to restore the mouth and nostrils to their normal relations. It is believed that this may be readily accomplished by means of Sims' clamp suture.

**Case 2.—Fall from a height of 60 feet. Grave Concussion of the Brain and Depression of Skull, with Symptoms of Cerebral Compression. Recovery after four days, without any sign of Vascular Reaction. An attack of Epilepsy six weeks subsequent to the accident. Final perfect Recovery.**

H. V., a boy, aged 11 years, in August, 1850, fell from the top of a new, unfloored building, on Broadway. His head struck upon a stone in the cellar, which caused a severe contusion of the scalp, and an apparently great depression of the skull. When taken up, he was found to be cold, and nearly pulseless, and in this condition, with a slight increase in the pulse, he remained for more than twelve hours, during which time he frequently vomited. The breathing was occasionally stertorous during this period, and the eye seemed insensible to light. At the time I was called to take charge of the child, 16 hours after the accident, I found him profoundly comatose, pulse feeble, and beating only 50 per minute; the pupil extremely dilated, and the eye insensible to light; the extremities cold, and the head hot. On the left temporal region there was a well defined contusion, but the areolar tumefaction was so great, that it was impossible to determine whether any fracture of the skull had occurred. He continued utterly unconscious and in a lethargic sleep, until the expiration of the twentieth hour after the fall, when he began to exercise the power of vision, but it was not until after 36 hours that he became obviously conscious. Until this time the pulse had continued very feeble and slow,
ranging between 50 and 60 per minute, and the pupils had continued largely dilated. On the third day, the pupils became somewhat unnaturally contracted, but there was no marked vascular excitement, and the reaction, though complete, was so gradual as to be unobserved from hour to hour by the attendants. The period of reaction and restoration to perfect consciousness, extended from the 56th to about the 90th hour, inclusive. On the 5th day from the fall, though very feeble and excessively irritable, the lad appeared to be perfectly well. At this time, the tumefaction about the contusion had so far subsided as to enable us to determine the fact that there was a fracture of at least the outer table of the skull, and this fractured section was so much depressed as to render it highly probable, that the inner table was considerably impressed upon the brain.

The boy's health continued perfectly good during a period of six weeks after the injury, when he was attacked with epilepsy, which subsided after 48 hours, during which time he had three seizures. From that to the date of the present writing, he has continued perfectly healthy; though for a year or more subsequent to the injury, he was peculiarly nervous and irritable. The apparent depression of the skull has never been completely removed.

Case 3.—Fall, and violent Concussion of the Brain. Restoration to Consciousness on the third day. Recovery without any Vascular Reaction.—J. M., a young man, aged 23 years, while engaged in adjusting a plank in an unfinished edifice, on Broadway, lost his balance, and was precipitated into the cellar below, receiving the force of the fall partly upon the left temple, and partly upon the left shoulder, producing a luxation of the clavicle at its scapular articulation. The cerebral concussion was extremely violent; the vomiting and supervening coma were marked. The pulse continued soft and natural, though somewhat slow. The pupil was contracted. He continued in the condition above described for thirty-six hours, when he began to awake to consciousness. After four days he was fully restored, and at no
period was there any noticeable degree of vascular excite-
ment or reaction.

Case 4.—Fall of a Child, when playing upon an elevated
platform. Concussion of the Brain. Sudden restoration of Con-
sciousness, after ten hours of profound Stupor. Intellectual op-
erations resumed at the exact stage at which they were arrested by
the Fall.—C. C., a girl aged 6 years, a few days since, while
indulging in gay hilarity with her playmates, tossing and
catching playthings to and from them, on the pavement
below, failed to notice something that was thrown her, and
while hurriedly seeking for, and inquiring about it, made a
misstep and fell upon the pavement. The cerebral con-
cussion appeared to have been violent, and she was watched
with much anxiety until about the ten hours after the acci-
dent, when she, for the first instance, opened her eyes, and
manifested signs of consciousness; then instantly jumping
to the margin of her bed, she exclaimed: “Where is it?”
“Where did you throw it?” and immediately commenced
throwing little articles from her dress, exclaiming, “Catch
these!” By these acts she was manifestly continuing those
intellectual operations which had been so suddenly arrested
by her fall from the platform.

No marked vascular reaction occurred in this case; the
pupil was very much contracted during the first six hours of
the period of concussion, the pulse soft and hurried; she
vomited much, but did not open her eyes at any time until
the moment of her sudden restoration to consciousness. Her
recovery was perfect from that moment.

The peculiar point of interest in the foregoing case, in-
duces me to give a brief sketch of a still more highly instruc-
tive case, as illustrative of some very important and interest-
ing psychological laws. I received an account of the case
some time since, while on a visit to the neighborhood where
it occurred.

Case 5.—Violent Concussion of the Brain. Entire loss of
all Consciousness of any previous period of Existence, and of all
former Acquirements in Knowledge. Recovery, with the Intellect
in a Perfect, but Infantile Condition. Complete Restoration, after Several Months, of all former Intellectual Attainments.—Rev. J. E., a clergyman of rare talent and energy,—a man of sound and extended education—while riding through his mountainous parish, was, by a casualty, thrown violently from his carriage, and received a violent concussion of the brain. For several days he remained utterly unconscious, and at length, when restored, his intellect was observed to be in a state like that of a naturally intelligent child, or like that of Casper Hauser, after his long sequestration. The good man again, but now in middle life, commenced his English and classical studies under tutors, and was progressing very satisfactorily, when, after several months' successful study, the rich storehouses of memory were gently gradually, yet very rapidly, unlocked, so that in a few weeks thereafter, his mind resumed all its wonted vigor, and its former wealth and polish of culture. For several years he has continued his labors as a pastor, and has suffered no symptom of cerebral disturbance.

I am informed that the first evidence of the restoration of this gentleman's memory, he experienced while earnestly attempting the mastery of the Greek verb, an intellectual effort well adapted to test the penetrability of that veil that so long had excluded from the mind the light and the riches of its former hard-earned possessions.

The reader will, perhaps, recollect several cases somewhat analogous to this, as mentioned by Hennen, Larrey, Sir Astley Cooper, and other surgical writers.

Case 6.—Leap from a third-story window, during an Attack of Puerperal Mania. Considerable Cerebral Concussion. Slight Injuries. Immediate and perfect Restoration from all Mental Aberration, and speedy Recovery.—Mrs. M., aged 26, some ten days after confinement, resumed her usual household labors, and being a feeble woman, and of an irritable, nervous temperament, she had the misfortune to sink into a state of acute puerperal mania. She was not often violent, but being constantly tormented with the most terrific panophobia, she fre-
quently made vigorous attempts to escape from her countless imagined adversaries. This state of things had continued about one week, when she leaped from a window of her apartment, in the second story, upon the pavement below. This act she repeated on several successive days, and on each occasion she was immediately secured, and quieted in her room. Again she repeated her efforts to escape; she leaped into the street, ran several blocks, entered a large warehouse, ascended to the third story, and fancying herself still hotly pursued by her foes, she leaped from a small ventilating aperture, through which she could scarcely press her way, and the narrowness of which served to break her leap, and cause her partly to fall upon a low shed beneath. She was severely stunned by the force of the fall,—says that she "saw stars and felt very dizzy;" she was for a few moments insensible, but in a short time became perfectly conscious, and returned to her home clothed in her right mind.

It was immediately after this daring hegira that the writer first saw this patient, when he found her very much exhausted, timorous, but not particularly excitable; the countenance was placid, and the expression of the eye full of life. She expressed great joy and devout gratitude for her safe escape from the great perils of her frenzied flight and leaps, as well as for her delivery from the dreadful panophobia which had driven her to such heroic daring.

Her restoration to health was speedy and complete, and there has been no recurrence of any symptom of mental aberration. The question whether the sudden and happy restoration in this case was simply a result of the moderate concussion that the brain sustained, or whether the consequence of a more general shock, which the whole body suffered, or whether to be attributed to the enlarged and uncontrolled freedom that she enjoyed during her flight, the writer does not attempt to determine; though it appears highly probable that it was owing mainly to the cerebral concussion, for, on several previous occasions, she had made equally heroic attempts to escape, but never before had sustained any appreciable degree of cerebral concussion. She says that it
was only in this broken leap from the third story of the warehouse, that she ever felt any stunning effect, or was for a moment rendered unconscious.

There are some interesting psychological facts involved in the history of the last three cases that we have here detailed, which we may discuss at some future time, in connection with other cases of an analogous character; but we would in this connection, only call attention to one or two of the more practically important facts observed in the history of these cases.

It was observed in the first four cases, that recovery from severe cerebral concussion took place without any marked vascular reaction, though no measures were pursued to prevent such an event. In the third case mentioned, the young man was laid in a darkened and cool parlor, the head frequently bathed, and a little ammonia and milk occasionally administered. In several cases of cerebral concussion, occurring in children, the writer has witnessed the happiest recovery under similar circumstances. But what might have been the history of these cases, had the old practice of venesection and local depletion been resorted to, we cannot say; but it is probable that there would have occurred some degree of violent vascular reaction, and possibly some subsequent, if not consequent, cerebral inflammation. Vascular depletion during the stage of shock or depression, manifestly may be, and I believe it has often been, the cause of cerebritis occurring after cerebral concussion.

In the history of the second case, we see illustrated the safety and propriety of waiting for the full developments of the facts and events in such cases of injury, with probable cerebral compression, before attempting surgical relief.

Lastly, we see illustrated in several of these cases, the wonderful impunity with which falls are sustained by children, the remarkable and wisely designed protection which the brain enjoys, and the happy capacity of nature to protect the most important organ of the body against perils to which it is exposed, as well as to restore it from the most violent injuries received.
Art. VI.—Extracts from the Report of the Proceedings of the New York Pathological Society. (Selected and prepared by Committee of Publication.)

Specimens and Cases, by A. Clark, M.D., Prof. of Physiology and Pathology in the College of Physicians and Surgeons.

Heart Clots.—Prof. Clark presented a specimen of polypus of the heart, and remarked that he found so many of them that he could match all the polypi exhibited to the Society. This was not so white as others which he had exhibited, but it had the same kind of attachments. The man from whom it was taken was under observation but a few hours. He was very intemperate. Came into the hospital in the morning with pneumonia and capillary bronchitis, and died the same evening. This clot was found in the right side of the heart. One of the folds of the pulmonary valves was torn in two places. How this lesion occurred he did not know; it did not seem to be recent. The two openings through the valve could still be seen, one of which showed very well. An interesting point in regard to them, was that this polypus had insinuated itself into these openings, as also one higher up, and completely filled them. This clot was firm and somewhat more bloody than usual; he exhibited it as presenting the ordinary firmness of those usually supposed to have formed before death, though it had evidently occurred after death.

Waxy Liver.—Prof. Clark then remarked, that at the last meeting of the Society, he presented a specimen of what was sometimes called waxy liver. These specimens were rare, but he now had another to exhibit. The appearance was very much like that of the one formerly exhibited. This specimen, however, differed somewhat from the other, as a few of the cells contained a small amount of fatty matter, while the larger part of them are free from fat and seemed to be a new production. He supposed this ought to be called the “waxy liver,” and yet there seemed to be some diversity of nomenclature. The “serofulous liver” would perhaps better bring it within the range of the description of such cases. In this instance, however, there did not appear to have been any scrofula. The person from whom it was taken, had syphilis at the time of her death. The point of interest was whether she had syphilis and had been long treated with mercury, or whether she had scrofula. The specimen presented at the last meeting was a very good illustration of this point, for the man had scrofula as seen from two large ulcers under his arms, and
also had had syphilis and had been treated actively with mercury. In both instances there was a considerable amount of abdominal dropsy; in the last it was extreme, and was supposed before death to depend upon cirrhosis, but on post mortem examination this condition presented itself.

In regard to the character of the deposit, he did not think that any writer had fallen upon its true nature. Dr. Bennett had probably come nearer to it than any other writer, and he seems disposed to conjecture that there was a change produced in the cells of the liver after the absorption of fat; that it was a later stage of the fatty degeneration: that, in truth, the oily matter had been taken up and the fatty cells left. Dr. C. did not regard this as a fair explanation. It seemed to him that by the enlargement of this liver, producing the hardness observed in it, a new production of a peculiar nature resulted. He thought these cells were not deposited like ordinary cells in the tubes, but that they were diffused, obeying no particular rule. To enforce this statement he introduced a portion of the mesentery for the purpose of exhibiting the glands. These were swollen, many of them, of the size of a bead, were easily turned out from their beds; they were not remarkably hard, having no appearance of any heterologous deposit like tubercles, but still they were enlarged and pale. He found exactly the same material in great abundance that was observed in the liver; the cells were not found in the tubes, but in the fibrous tissue. The stroma of the glands running between the tubes seemed to be infiltrated with these cells. In order to ascertain if possible the nature of this deposit, whether it was a peculiar form of fatty degeneration or some new undescribed form, or, whether the reaction of chemical agents would be the same upon animal tissue, he treated sections of the part containing the cells with rectified sulphuric ether, in expectation, if it was fatty, that it would be dissolved. No change whatever was produced. He then employed boiling ether, but still no change was effected. They were next treated with strong acetic acid; this seemed to render the cells more transparent, but they remained entirely unchanged in form. This maceration was continued for an hour, and to be sure that the experiment was well performed, he placed a quantity between two plates of glass, but observed no change in their form, though the tissues about them were much more transparent, the fibres being then less distinctly visible than before. He then macerated them with boiling alcohol, which produced no change, though it reduced the sections to the consistence of spermaceti. Finally they were treated with nitric acid of various strength, and it was observed that, when the
acid was sufficiently strong to dissolve animal fibre, they did change, but when it was of less strength, they did not. This proved that they were animal in structure, and of a peculiar and undescribed form. In regard to their distribution, he said that they were so evidently distributed outside of the tubes and in the midst of the fibres in the glands, that the opinion which he had formed from the examination of the liver alone was probably a correct one.

*Adherent Pericardium.*—Prof. Clark exhibited a heart with the pericardium attached, which had been the seat of pericardial inflammation. The effusion of lymph was seen on both surfaces. There were two points of interest in the case; one, that it was associated with Bright's kidney, and meningitis, the last disease being apparently the fatal one. The second point was that, while attempting to catch the friction sound, he observed that at the height of an inspiration he could hear the second friction sound, while in the other portions of the respiratory act he could not hear it at all. He then directed the patient to take a full inspiration and hold it while he listened, when the increased distinction was so marked that no one could fail to recognize it almost instantly. The second sound was clearly developed by the procedure, while it was scarcely recognized in ordinary respiration. It occurred to him that this might be accounted for by the fact that the air, when we hold it in our lungs, is placed under considerable pressure, particularly when the lungs are partly filled, and, as a consequence of that, there would be a closer apposition of the pericardial surfaces than under circumstances of free respiration. He had had two opportunities, since this case occurred, of verifying this observation. In one it was perfectly clear, and in the other entirely absent. One was connected with a considerable amount of serous effusion, so much as to make the somewhat pear-shaped tumor which is frequently observed. This man did not give the peculiar sound at all; it could not be perceived at any period of the disease that these particular sounds could be heard any more distinctly in one portion of the respiratory act than another. But in a child suffering from pericarditis, he noticed that when it took a full inspiration the friction sounds did not seem to be very much heightened, but when it took a half breath they were heightened.

Prof. Swett remarked that he had never seen an allusion to this method of obtaining the second friction sound, but he had very recently had a case in which he observed that the friction sound became intense just at the end of an inspiration. He also had a case under treatment, in which these sounds came out clearly just at the end of an
inspiration, but were not distinguishable at other times; he had not, however, made it the subject of reflection. April 13th, 1853.

Chagres Fever complicated with Pneumonia and Bright's Disease.—The patient, a man, was received into Bellevue Hospital, suffering from Chagres fever. At the time of his admission, it was not known that there was any complication. He was in the Hospital about two weeks. Two days before his death, it was observed that his respiration was difficult, and that he was becoming stupid. The house-physician discovered, on examination just before death, that he had pneumonia, and that his legs and hands were swollen. His urine was tested, and an appreciable quantity of albumen was found, so that he had Chagres fever, pneumonia, and what is called Bright's disease. On post mortem examination, two days after these facts were noticed, it was found, that the left lung had undergone a very marked change, but the appearances were so little like ordinary pneumonia, that the house-physician concluded that his diagnosis was not correct. The lung was not crepitant in the least, though it was soft and flabby; about two-thirds of the lung, was in the condition described by Cruveilhier, as earunification. It was evidently the result of pneumonia, but probably the exsanguinated state of the patient interfered with the full development of hepatization. There was a small amount of fluid in the pleural cavities, which was probably effused during the last hours of life. The liver had the bronze color that is so common, but it could be bent about and rolled into a mass. If it hung over the edge of the table, it would hug the side like a wet rag; it was a little under size weighing three pounds and three ounces. The heart had undergone very much the same kind of softening as the liver, and was of a yellow hue; it bore a striking resemblance to hearts which have undergone fatty degeneration of the muscular tissue. The spleen ran away from the hand like water; half of it was absolutely fluid, while the remainder was so soft, that it could be broken down into a pultaceous mass. The softening was much more marked than it is ever seen to be in typhus fever. Another remarkable point, was the condition of the kidneys; they were very small, of a dark hue, and together weighed seven ounces. The first kidney opened, gave exit, without pressure, to pultaceous matter resembling that which escapes from the spleen in bad cases of typhus; the color of the cut surface, was brown mingled with gray, and in the latter were observed the granulations of Bright's kidney. The other kidney was not at that time opened, but on pressing it, the fingers would nearly meet from the opposite surfaces; the capsule contained gas of some kind, which
must have resulted from decomposition, as it could not be forced out. The autopsy was made 36 hours after death, and it could hardly be supposed that at this season of the year, would have commenced so early. The structure of this kidney was the same as the other, except that the degree of decomposition was somewhat less; the tubular portion was much less diseased than the cortical, and retained a good deal of its natural appearance. On examination with the microscope, the tubes were all found to be very granular, though there was no fat in them. It was not fatty degeneration then. The tubes were filled with granular matter, and there was not a single secreting cell in the whole of this pultaceous mass. Every cell had lost its nucleus, and the old cells seemed to have been changed or discharged by the bladder, and new cells in the debilitated state of the system, could not be produced. The cells were not round, but elongated in both the tubular and cortical portions, and were filled with a new and distinct form of cell lining. There was no pus, or fibro-plastic cells in the tissue. April 27th, 1853.

Apoplexy.—Thomas Connell, aged 48, native of Ireland, laborer, was admitted to Bellevue Hospital, on the 17th of Oct., 1853. As nearly as could be ascertained, the patient must have been drinking very freely for some weeks previously, but his health seemed to have been good up to the week before his admission to the Hospital. Neither he or his friends could give an intelligent account of the commencement of his sickness. On admission he was delirious, and walked with an unsteady gait, having much the appearance of a man intoxicated, but on examination he was found not to be in that state. Soon after being put to bed he became quiet, the pupils were contracted, pulse slow, small, and compressible, numbering 50 per minute. The skin was rather cool; he coughed a good deal, and a physical examination proved the existence of general bronchitis. The breathing soon became stertorous and he could not be roused. He was ordered half an ounce of brandy and a stimulating expectorant. Oct. 18th. The pulse had risen to 65, and was full and strong; the pupils were still contracted and insensible to light; tongue brown and dry. He ate moderately, and when asked how he felt, replied, "very well," but was still unable to give any account of himself. His bowels had not been moved since his admission. The brandy was discontinued, and an ounce of castor oil given; three grains of quinine were also ordered. He continued in this condition until the afternoon of the next day, when he again became apparently comatose, the pulse falling to 40 beats per minute, and the breathing becoming loud and stertorous.
On the 20th, his condition was much the same, but during the night it was again found necessary to give him brandy, the pulse having become scarcely perceptible. This alteration of symptoms continued, unimproved by tonics and stimulants, and he sunk rapidly and died on the night of the 21st.

Autopsy, 13 hours after death.—The dura mater was found much darkened by congestion of its blood vessels; between that membrane and the arachnoid, over the summit of the cerebrum on each side, there were two and a half ounces of uncoagulated blood enclosed in a patch of false membrane. The upper surface of the brain was much flattened by compression; the lungs and heart were healthy; the kidneys were congested but otherwise natural; the other viscera healthy.

Dr. Clark considered the occurrence of coma with stertor so markedly intermittent, as to lead to its being attributed to the congestion of intermittent fever, and for which quinine was administered, as one interesting fact in the case; and the effusion of blood which did not coagulate, and which may have been effused a week before admission, another. The effusion seemed to have been into the cavity of the arachnoid, immediately underneath the dura mater, and to have formed for itself an investing membrane. On close examination of the dura mater, he could separate a layer which he believed to be the arachnoid; if this be the case, then the whole dura mater covering the effusion, is lined by the arachnoid, and it is impossible to account for the membrane which encloses the unaltered blood, lying unattached to the cerebral arachnoid, unless we consider it false membrane, and yet the tissues investing the blood would scarcely appear to have been formed in 6 days. The limiting membrane was useful in preventing the farther extravasation of blood, and favoring subsequent absorption. He could scarcely suppose that the arachnoid could be separated into layers, one of which should embrace the cyst.

Hypertrophied Heart.—This specimen weighed 32 ounces; the chief enlargement was in the left ventricle, caused by disease of the aortic valves, two of which were so thickened and attached to the aorta as to admit of regurgitation. The patient was examined in the last stages of the disease, when diagnosis of the valvular lesion had become, as is usual, very difficult. Dr. C. remarked that he had been making some investigations to determine the mode of development in these cases of hypertrophy of the heart. He had taken a healthy heart weighing 9 ounces, and compared 50 of its fibres with 50 from this hypertrophied heart weighing 32 ounces. If there had been an increased development of fibre, those of the hypertrophied heart should
measure under the microscope three times as much as those of the normal heart, whereas they did not differ materially in size. The conclusion would be, therefore, that the growth of muscle demands the development of new fibre.

Encephaloid Disease in a Child.—The child was fifteen months old, and had been affected some four months with marked symptoms of tabes, but had suffered from general ill-health for a much longer period. The tumor became evident to the touch within the last three months. The mass occupied the whole of the abdominal cavity, and pressed up the liver, and with it the diaphragm, thus encroaching greatly upon the cavity of the thorax, and extended downward into the pelvic cavity, and was prolonged on the left side through the abdominal ring. On opening the abdomen two very large tumors were discovered, one fluctuating, and the other persistent. From the fluctuating mass flowed a wash-hand basin full of contents of a semi-solid consistence, similar to softened brain, and some of a more fluid glaring character. The mass appeared to be enclosed in the layers of the mesentery, though it involved other abdominal organs; the left kidney is affected, but the right is not; the liver is not involved, though there is a nodule near its free edge, which, from its color and other characters, is probably tubercular. Regarding only the many distinct tumors, enlarged mesenteric glands, and the miasmatic condition of the child, we might be led to consider this a very ordinary affection; but when we notice that the left kidney is involved, the immense size of the mass, its implicating many structures, and its rapid growth,—a different conclusion as to the primary origin of this disease may be arrived at. He was disposed to believe that it originated either in the mesentery, or left kidney. There can be no doubt that the disease is the softest variety of encephaloid; the fluid was transparent and ropy, with rounded, granular cells, somewhat smaller than those in the mass. These cells have a diameter somewhat larger than blood corpuscles. The interesting points are: 1, the development of so large a tumor in so short a space of time; 2, the uniform character of the large mass; 3, the resemblance between the fluid and solid portions of the disease under the microscope.

Scirrhus (?) Pancreas.—Specimen presented by Dr. Clark, for Dr. McPhail, of Brooklyn, with the following history: This patient was a married woman, 37 years of age, and the mother of five children. She first came under my care some three months since, laboring under dropsy of the abdomen and lower extremities. The kidneys were deficient in action, but the urine secreted was not albuminous; the bow-
els were constipated, consequent upon deranged hepatic functions. She had been living for more than a year in a very malarious district, some four miles from the city of Brooklyn, and all her children had there contracted intermittent fever. She presented the peculiar appearance of one resident in such an atmosphere, but had not suffered from febrile disorder. In the course of my attendance, I had to tap her upwards of six times, drawing off at the first operation about twenty-eight pints of a highly albuminous fluid. The medical treatment was directed to improve the condition of the liver and kidneys, without, however, much benefit. Only within the last ten days had she become jaundiced; but bilious vomiting was of frequent occurrence during the last month of her existence; still, she had long presented signs of gastric derangement, as nausea, eructations, red and glassy tongue, &c.

Autopsy.—Body emaciated, and deeply jaundiced; abdomen and lower limbs dropsical; peritoneum presented traces of inflammation; small intestines generally congested; liver much enlarged, indurated, and of a lighter color than usual; spleen somewhat enlarged. The pancreas was indurated, and thought to be scirrhous throughout, the thickening and hardening extending up along the common duct, and involving the tissues surrounding the gland, and the portal vessels. The kidneys were enlarged and congested; thoracic viscera healthy.

Dr. Clark remarked that, though the pancreas was enlarged and hardened, yet the disease was not malignant scirrhous. All the natural tissues of the pancreas can be found. It seemed rather a variety of hardening, and is worthy of exhibition as an additional illustration of the variety of true malignant disease in this situation. He did not remember to have seen a case where scirrhous began in the pancreas, though such cases are on record; he believed that the change in the specimen under consideration was often mistaken for malignant disease. The dropsy was probably the mechanical result of the constriction of the portal vessels by the enlargement of the pancreas. The kidneys are large, but have not undergone any of the changes of Bright’s disease. The stomach shows some of the little prominences spoken of as polypi; it would not be difficult to suppose these growths were malignant, if the pancreas had undergone a similar change. They are made up of duets, vessels, and fibrous tissue, and nothing else, so far as he had examined them. The duets are similar to those noticed in the stomach, and all communicate with a single tube; this tube penetrates the whole depth of the fibrous mass, which would seem to be little more than a gland, accessory to the performance of the functions of the stomach. Nov. 9th, 1853.
Syphilitic Vegetations.—These were removed from the vulva of a female. A careful examination of their microscopical structure showed them to be chiefly epithelial, of the variety usually found in the vagina. The cells are so closely packed as to resemble fibres, but they are distinguishable on close inspection. Besides these cells, there are a few free cells of small size, appearing to be nuclei. They contain a small amount of fibrous structure, and a few blood-vessels. Dec. 28th, 1853.

Specimens and Cases. By J. T. Metcalfe, M.D., Physician to Bellevue Hospital.

Retention of a dead Fetus, four Months in the Uterus.—Dr. Metcalfe presented a small fetus, supposed to have died at the third month. It was passed by a lady who had several children, and one previous miscarriage; she was very healthy and well-formed. She became pregnant about the first of last June, and progressed favorably nearly four months. Somewhere between the third and fourth month, her husband was taken suddenly ill, and she was very anxious on his account. She noticed that, for two weeks after this, the size of the abdomen continued to increase; but after that time it did not increase, but began to diminish, and continued diminishing, until she regained her natural size, and she concluded that she had been mistaken. The only change from her normal condition, which she had observed, was the cessation of the menses, and this swelling of the abdomen and its subsidence. There was no discharge from the vagina of any kind. Six weeks ago, she was called to visit her, as she had passed something while urinating; it came away without pain or premonition; she merely felt something in the vagina and removed it. On examination it appeared to be a very small foetus, with an umbilical cord six inches long. The head bore a striking resemblance to a duck’s head; the occiput and brain were in a tolerably fair state of preservation. She noticed, at the time of its expulsion, an offensive discharge from the vagina, and in a short time the placenta and a putrid mass were discharged. The next day she was perfectly well, with the exception of a slightly offensive discharge, for which she used a solution of chloride of soda. She continued well for four days; at the end of the fifth day she had some hæmorrhage, which required no treatment, except rest. The case was interesting, from the fact, that the dead fetus was retained four months in the uterus without producing any sensation whatever, or any influence on the general health; that during this time, there was a collection of fetid fluid in the uterus, that the abdo-
men diminished, and that haemorrhage came on so long after the expulsion of the foetus. The expulsion of a foetus, under these circumstances, seems generally not to be followed by haemorrhage, though it is frequently followed by a little offensive discharge. The lapse of time occurring between the death of the child and its expulsion seems to be very variable. He knew one instance where eight years had elapsed between the two periods. He supposed that after death it was partially absorbed; the anterior part of the belly, in this instance, was absent. *April 13th, 1833.*

*Aortic Disease.*—The patient was a German laborer, 63 years of age, of temperate habits, but subject to rheumatism and debility, attended by a slight cough. Dr. M. found him in his service, and understood that he was suffering from chronic bronchitis; and as he was reported to be improving, he made no examination of his chest. The house-physician, however, examined him repeatedly, not being willing to attribute his sufferings to bronchitis alone. But physical examination threw no light upon the case; the patient never complained of any symptoms which might lead to the suspicion of aneurism. On the 31st of May, he was suddenly seized with hæmatemesis, and vomited about two quarts of blood within six or eight hours, when death occurred. On examination, all the organs were found healthy, with the exception of the aorta. The heart was in every respect normal. An aneurism about the size of a hen’s egg rested upon the vertebrae, and had caused their absorption.

*Ulceration and Perforation of the Ileum.*—The patient, an American, 23 years of age, was admitted on the 25th inst., into Bellevue Hospital, in a moribund condition, and died within 10 hours afterwards. His habits were intemperate, and he had been ill for several weeks, suffering much from pain in the abdomen, and lately with diarrhœa. Although nearly comatose, on admission he showed signs of pain when pressure was made on the abdomen. On making the autopsy, the ileum was found to be ulcerated and perforated. The ulceration commenced about six inches above the ilio-cecal valve, and the bowels were agglutinated together in the neighborhood. Peritonitis was general without suppuration, and some feculent matter had escaped into the peritoneal cavity. The ulcers resemble those met with in dysentery, their general direction being transverse.

Prof. Swett considered these ulcerations, if not the result of tuberculosis, extremely interesting. He remembered a patient having a slight diarrhœa, and not thought to be dangerous, suddenly attacked with a tremendous haemorrhage from the bowels, of which he died in
two hours. A post mortem examination discovered several ulcers in the ileum near its termination, one of which had perforated a vessel of considerable size. The ulcers were no larger than peas, and had no connection with any typhoid fever. _June 9th, 1853._

Specimens and Cases. By Henry G. Cox, M.D., Physician to the Emigrant State Hospital.

**Pericarditis in an Infant.**—Dr. Cox presented the heart of a child 11 days old, who died with pericarditis, and the ovaries of a child 13 days old. The first child was apparently healthy at birth, but on the fourth day had a convulsion, with labored respiration, skin becoming alternately livid and clear, and nursing only occasionally. There was an indistinctness of the sounds of the heart, but nothing else abnormal was observed. On post mortem examination, the pericardium was found to be filled with serous fluid. In upwards of fifty post mortem examinations of children of about this age, he had never before observed appearances of pericarditis. The general symptoms might have been due equally to imperfect closure of the foramen ovale, or deficient aeration of the blood.

**Ovarian Dropsy in an Infant.**—The child from whom the ovaries were taken, was healthy and well nourished, had a healthy mother, and nursed regularly; convulsions occurring at intervals, was the first unfavorable symptom. The bowels acted well, every organ seemed to be in its normal condition, yet it died on the second day after the occurrence of the first symptoms. On examination, all the organs were found healthy, except the uterus and the ovaries; the former was dilated, and the os was as large as that of a child ten or twelve years of age; the latter were dropsical, the fluid being clear and transparent.

Dr. Elliott stated that he had made the post mortem examination of a child, at the Lying-in-Asylum, which died 36 hours after birth, and had the symptoms of cyanosis, though not perfectly well marked. Dr. Isaacs and Metcalfe were present at the autopsy, and recognized the appearance of well marked endocardial inflammation. The septum auriculare was distinctly thickened and gritty to the feel, and the foramen ovale was patent. _May 11th, 1853._

**Enlarged Spleen of an Infant, following Intermittent Fever.**—Dr. Cox exhibited the enlarged spleen of an infant five weeks old. Two weeks before confinement, its mother had suffered from intermittent fever, which disappeared before labor, and returned again a week after her confinement. When four weeks old, the child had an attack of
intermittent fever; the cold stage was short, but the hot stage lasted eight hours. Quinine was given to both mother and child, the latter taking three-fourths of a grain every three hours. During the following week the child had two convulsions, for which iodide of potassium was given; but it sank and died. On examination the lungs and heart were found healthy; liver congested; spleen enlarged.

Dr. Cox remarked that during the present year he had seen 17 cases of intermittent fever, occurring in children from five weeks to three months old.

*Hydrocephalus Internus.*—The patient was a female infant, aged 18 months, of German parentage. The mother stated that it was her tenth child, and was well until it reached the 16th week, when it became restless and feverish, and the head began to increase in size, and in eight weeks it became nearly as large as when admitted into the Hospital. It never had convulsions, and passed through the period of denticition without inconvenience, excepting a little diarrhoea. One of her children had died of convulsions, the remainder were still living. Her father and mother died of apoplexy, at the respective ages of 55 and 56. The father of the child is in good health. The treatment consisted of generous diet, and the iodide of potassium with tonics. The patient continued to decline, and died eight days after admission, without convulsions or any other symptoms.

On post mortem examination the anterior fontanelle was found unclosed, and the sagittal sutures unossified. The vessels of the brain were congested, and some of the cerebral convolutions nearly obliterated. The hemispheres separated from the weight of the fluid, which gave exit to 20 ounces of limpid serum from the lateral ventricles. The hemispheres were distended like two sacs, their walls at some points being not more than one-eighth and at others one-sixteenth of an inch in thickness. There were no floeculi in the fluid; the lining membrane of the ventricle was thickened; no granulations or roughness was found about the corpora striata or elsewhere; the choroid plexus was not anemic. There were no tuberules in the lungs, liver, spleen, or kidneys, nor were the mesenteric glands enlarged. A circumscribed point of pneumonia existed in the lower lobe of the right lung; it was in the second stage. Oct. 26th, 1853.

*Specimens and Cases.* By Lewis A. Sayre, M.D., Surgeon to Bellevue Hospital.

*Cancer of the Stomach.*—The person from whom the specimen was obtained, was originally a Canadian, a very robust, energetic, enter-
prising man, who had always enjoyed good health, until about six months since, when he met with some severe losses, after which he became melancholy. He had slight dyspepsia, but was not treated for it until he began to emaciate, and even then there were no symptoms present which led to a suspicion of his disease. He never vomited from first to last. He became more and more reduced until he was little else than a skeleton; still he was supposed to be suffering from phthisis. He went to a Hydropathie Institute in this condition, where he first came under observation, then in a dying condition. On placing his hand upon the region of the stomach, Dr. S. discovered a tumor which he decided to be cancer. On post mortem examination two or three quarts of serous fluid were found in the abdomen; the peritoneal surface was completely covered with little tuberculous masses, some of which were as large as a pea. The stomach and pancreas were agglutinated into one solid cancerous mass; the pancreas had well nigh the hardness of stone. The intestines were matted together and thickened; the colon was not larger than the thumb.

_Resuscitation of an Asphyxiated Infant._—Dr. Sayre narrated a case illustrating the beneficial effects of artificial respiration in the management of asphyxiated new-born infants. The child in this instance was born at half past twelve o'clock. By passing a tenaculum through the tongue and drawing it out, he succeeded in passing a male catheter into the larynx, and by ten minutes to three, respiration was established, and the cord from which no blood had as yet escaped, was ligated. The child lived three days and died in convulsions. _April 13th, 1853._

_Cancer of the Stomach._—Mr. Doyle, æt. 35, originally of good constitution, active and robust, of regular habits, but latterly dissipated, and liable to commit great excesses in diet, which caused great enlargement of the abdomen, was suffering, when first brought under observation, from dyspeptic symptoms. These had already continued eighteen months, for which he took different remedies. His health continued to decline, and four months since he was obliged to give up work; he could not retain any thing on his stomach, and in consequence became greatly emaciated, pulse feeble in the left wrist and absent in the right, and there was a strange appearance of venous congestion on one side of the trunk. A tumor could be felt above, and to the right of the navel. The diagnosis was scirrhous of the stomach. He died three weeks afterwards, and an autopsy was made 10 hours after death. The whole trunk, both lower extremities, and the right arm presented externally much congestion, and many points of extra-
vasation. The small intestines were perfectly empty and dwindled to the size of the finger, and the colon was but little larger. The patient had not had an evacuation of his bowels for three weeks, and had vomited incessantly until within nine hours of his death. The liver, kidneys, and spleen, were entirely healthy. The stomach was distended with about a quart of fluid which had probably accumulated during the last hours of life. The inferior portion of the stomach and the pyloric orifice were the seat of cancer, so constricting the opening as to render the passage even of liquids difficult. The man's father, mother, and two sisters had died of phthisis, but the lungs were healthy; the heart was very small. May 11th, 1853.

Specimens and Cases. By A. C. Post, M.D., Professor of Surgery in the University of New York.

Enchondroma.—Professor Post presented a specimen of enchondroma, removed from the palmar surface of the right thumb. The disease was of 25 years duration, and had been once removed, but had now returned. It consisted of two portions which were movable upon each other. The bone was originally firmly attached, but had been rendered movable by a blow from a stick of wood. The integuments were not adherent, and the operation required some nice dissection. The tumor was found adherent to the flexor tendons. He remarked that the disease had not been wholly extirpated in the first operation, and with all his care, some roughness still remained, which might serve as a nidus for a fresh growth.

Hysterical Paralysis.—Professor Post narrated the case of a lady, about 50 years of age, who was the subject of hysterical paralysis. She was affected with hysteria in her youth, and in some paroxysms gave evidence of extraordinary force. Lately, a little grandchild, having strayed away, one of these attacks came on, which, on its subsidence, has left her completely paralysed. She has no command of either extremity, but is able to move her head and neck. Sensibility remains perfect. She suffered much pain in the spine, which could be temporarily allayed by anodynes. Sept. 14th, 1853.

Tumor of the Lymphatic Glands of the Neck.—This tumor was removed from a boy 5 years of age, which involved the glands of the right side of the neck. It extended from the base of the jaw to the clavicle, and was situated below the sterno-cleido-mastoid muscle, and the deep faeia, lying upon the internal jugular vein. During the operation the sheath of this vessel was laid bare for several inches, demanding a long and tedious dissection. The patient was kept under
the influence of ether during the operation which lasted nearly two hours. He was much exhausted when he came out of the anaesthetic state; much of this was due to the unfavorable condition of the patient, who had eaten heartily before the operation. He vomited incessantly for 24 hours, when an enema was administered and he rallied. He has now a fair chance of recovery. Prof. P. regarded vomiting as an unfavorable symptom; the patient ate before the operation, contrary to his directions; he always instructs a patient to refrain from eating before the operation.

Mollities Ossium.—Prof. Post related the case of a man, 30 years of age, who, when a boy four to six years old, had necrosis of the thigh, followed by necrosis of one of the bones of the left arm, from which he recovered after a term of years. A few days since he was attacked with severe pain in the same arm, which swelled and became livid. He found him moribund, the arm being greatly swelled and painful; there was evident solution of continuity of the bone, and a false point of motion. On making an autopsy, the bone was found separated, but there were no marks of violence; it was simply an instance of mollities ossium, and turning in bed might have caused the lesion. Sept. 25th, 1853.

Specimens and Cases. By John O. Stone, M.D., Surgeon to Bellevue Hospital.

Rupture of the Heart.—Dr. Stone presented the heart, uterus, and right ovary of a woman, aged 53, who had died suddenly in Bellevue Hospital. He had not been able to obtain a complete history of the case, but mentioned that she had suffered severely from lancinating pains down the back, thighs, and right side. The right iliac fossa was the seat of a well marked tumor, while the left was fuller than natural; the right side was also exquisitely sensitive. There was also difficulty in urinating and a fetid seminal discharge from the vagina. She retired one evening in as comfortable a condition as usual, and was found dead in her bed, in the morning, having risen during the night. On examination, an abnormal opening was found existing in the right ventricle of the heart, and a large amount of fluid effused into the pericardium. The inability to urinate arose from the pressure upon the urethra of the distended uterus and the tumor which had been detected during life; this tumor was the transformed right ovary; a portion of it seeming to fluctuate was laid open and gave exit to a tea-cup full of grumous fluid and matter resembling ecephaloid. The uterine walls contained cavities filled with grumous blood, and the os was the seat of cancerous degeneration.
Cancer of the Breast.—Mrs. J. T., aged 44, married, mother of two children, was admitted to Bellevue Hospital, August, 18th, 1853. About three years ago, a small tumor appeared in the left breast, which continued to increase in size until the 15th of April, 1852, when it was removed, having attained the size of a hen's egg. The parts healed by the first intention and the neighboring tissues, remained in a sound healthy condition until the first of June, 1853, when a small well defined tumor appeared in the same situation as before. This speedily took on inflammatory action, and ulcerated; a fungus shot up, and rapidly increased in size, assuming its present appearance in magnitude and shape. For the past few months it has been stationary, discharging a sanious fetid pus. On the evening of the 16th of October, 1853, the patient arose from her bed and seated herself upon the floor; her attention was soon after arrested by the appearance of blood flowing upon the floor. On placing her in bed and removing the dressings, it was found that a branch of the mammary artery had given away, and was the source of the hæmorrhage. The flow was arrested by pressure and the external use of tannic acid, and did not again recur. The patient was very weak, and the pulse at the wrist hardly perceptible; she however rallied during the night under the use of stimulants. Since that time she has remained in an exhausted condition, and has been sustained by internal stimulants. She died Oct. 25th.

On examination the tumor was found attached to the sternum, and through this to the lungs, so that they could not be separated without considerable force, and were therefore removed adherent. The pericardium contained about a pint of serum. The other organs, viz., the liver, stomach, uterus, and intestines were found in their normal condition, with the single exception of a small patch at the pyloric orifice of the stomach, about as large as a quarter of a dollar. The tumor was not particularly examined at the time. Oct. 26th, 1853.

Specimens and Cases. By W. Parker, M.D., Prof. of Surgery in the College of Physicians and Surgeons.

Tuberculous Kidney.—The person from whom this specimen was taken, died at Bellevue Hospital, on the 18th inst. He was 40 years of age, intemperate, of an originally good constitution; last autumn had an attack of epididymitis. In March last he came to the Hospital, suffering from gonorrhoea and inflamed testicle, of which he soon got better, and left. He soon after returned with febrile symptoms and well-marked epididymitis; he had no pain about the loins; there was some difficulty in passing water and considerable irritation and inflam-
mation about the genital and urinary organs. This latter increased, suppuration ensued, and he finally sunk and died. Autopsy revealed this condition of the kidney with ulceration of the bladder, and some disease of the prostate gland. On laying open the kidney it was found to be the seat of most extensive tuberculous deposit. The disorganization had proceeded to an extent rarely observed, and yet no symptom of the disease had attracted attention during life.

Cancerous Deposit around the Vena Cava Ascendens.—The man from whom this specimen was obtained was 23 years of age. Two years ago he had a fall which resulted in injury to his left testicle, which soon after began to enlarge, but without pain, and without any material effect upon his general health. In July, he sought advice, but the nature of the disease was obscure; the enlargement was attributed to a hydrocele and an exploratory puncture made which proved the diagnosis incorrect. The patient being dissatisfied, applied to irregular practitioners, who attributed the difficulty to bad treatment. He, however, obtained no benefit from their remedies, and the testicle was removed. He was afterwards able to walk about, but continued to emaciate and complain of neuralgic pains, for which strychnine and morphine were administered in large quantities. Dr. P. was called to see him six weeks ago, and found him in tetanic spasms from the medication. These symptoms subsided, and he lived until six days since. A tumor had been detected in the left iliac region, which from its rapid growth and the general symptoms, Dr. P. had diagnosticated to be cancerous. On making the autopsy all the organs were found healthy, but behind the left kidney, and pushing it forward and upward, was the enlarged and diseased vena cava. The tumor which embraced it was encephaloid, and attached rather firmly to the spine; it also entirely surrounded the emulgent vein and artery of the kidney. The kidney was healthy. The urine was examined during the last six weeks and found to deposit uric acid and urate of ammonia.

Cancerous Mamma.—Prof. Parker exhibited two breasts, which he had recently removed. The first was from a lady, 27 years of age, unmarried, who, after exposure to cold, suffered from pain in her breast. This symptom subsided, but the organ continued to grow rapidly. Her general health remained good. The breast was removed, and on examination, under the microscope, the tumor was found to be cancerous.

The second specimen was taken from a married lady, the mother of six children, with no hereditary tendency to disease. Since the birth
of her first child, sixteen years ago, this breast has troubled her, being hard, and preventing her nursing her other children; lately it has grown rapidly. In the belief that it was cancerous, he advised its removal, which was consented to, and the operation accordingly performed. It was the most bloody operation of the kind that he ever performed, it being necessary to secure sixteen arteries. The patient has since done well. Dr. Parker remarked at some length upon the uncertainty of the rules for the removal of these tumors. He believed that many of these chronically enlarged breasts, being in a state of indolent inflammatory action, served as a nidus for the development of true cancer at variable periods of their duration. He referred to a case where this state of things had lasted twenty years; some time since, he advised the patient to let it alone, but more recently noticed a change in the character of the tumor, which led him to advise its extirpation. After its removal, it was found to be unequivocally cancerous; there has been no unfavorable symptom follow the operation. He believed an hereditary tendency to cancer would have developed a further train of symptoms. He referred to the lip as a site where tumors of this kind were often situated.

Art. VII.—A Case of Fourteen successive Miscarriages, terminating in Chorea and Death. By F. M. Ganett, M.D., Pitt County, N. C.

Mrs. B——, had enjoyed excellent health previous to her marriage, and during her first pregnancy, up to the fifth month, when she miscarried without any dangerous symptoms. She became pregnant a second time, and at fifth month miscarried again. In nine years from her marriage, she had fourteen miscarriages without ever having been delivered of a living child. The first six took place at the fifth month of her pregnancy, and in those that followed the intervals continued to diminish, the fourteenth being only three months. All the presentations were footling, but one, in which the vertex presented. About a week previously to the abortion in each case, the patient began to complain of bad feelings, pains in different portions of the system, languor; etc. Other than this her health was unimpaired. There was no uterine disease, that I could find out; there was no leucorrhoea, or discharge of any kind, and the menses returned regularly. Previously to her ninth abortion, no symptoms presented themselves differing from those of an ordinary labor. Chorea then developed itself so strongly marked, as to prevent locomotion to any extent. Her powers of conception re-
maintained unimpaired, and except the chorea which lasted until death; no other symptoms of disease presented themselves. The foetuses from this time presented appearances of having been dead longer than those previously delivered, and the last one was putrid. Soon after the birth of the last foetus, an attack of epilepsy occurred, and this came on at irregular intervals until her decease. For two weeks before the last confinement, she complained of severe pain in the head, which ceased entirely after the epileptic attack. Indeed, she remained in a state of stupor after the first attack. Her death took place three weeks after the last miscarriage. She complained previous to her death of pain in the epigastrum, and frequently scratched the part. A dark spot appeared at the seat of pain, but of what character I could not ascertain. The lochia never appeared after any of the abortions.

A number of deductions might be made, as regards the cause of the abortions. My own opinion is, that the cause lay in the nervous system. The subsequent attacks of chorea and epilepsy, seem to favor this view of the case.

Art. VIII.—Malignant Pustule. By E. D. Ayres, M.D., East Creek, N. Y. (Communicated in a letter to the Editors.)

The description of "A peculiar form of Malignant Inflammation of the Lips and Face, resembling Malignant Pustule," by Prof. Parker, in the May number of your Journal, attracted my attention, from the close analogy borne by some of the cases therein described, to an affection which I have several times encountered within the last year. As the description given by Prof. Parker is so applicable to the disease as I have met it, the difference in the treatment, and the fatality of the disease, are the only objects of this communication.

The first case that I saw, occurred in the practice of a neighboring physician, and from its malignant type, alarmed his friends, and counsel was desired. I was sent for, and arrived in the evening of the 10th of September last. I found the patient, Mr. B——n, 31 years of age, a farmer, of temperate habits and good constitution, with the inferior lip greatly swollen, everted, and of a livid hue, the lividity extending to the mouth and fauces, and the tumefaction to the upper lip, and downwards to the pomum Adami. The tongue was moist; there was considerable dyspnœa, and difficulty of deglutition. The pulse was rapid, but small and fluttering; and the patient had been greatly alarmed, but on the subsidence of the pain had become composed. The attending physician was not present, but from the urgency of the

...
ease, I was induced to lay freely open the tumesced lip, and ordered yeast poultice to be applied. I followed this immediately with hot brandy toddy, which was directed to be continued with a powder of two grains of quinine, and four grains of carb. ammonia, given once every two hours, and calomel, two grains, every four hours. The affection had made its appearance in the form of a pustule, some three days previously, and, as in Prof. Parker's first case, was situated just below the vermilion border. It was attended with a burning, smarting sensation, which, as the livid, tumesced areola made its appearance, changed to a steady, intense pain. It was now a hard tumor, without pain, and almost insensible to the touch, resembling at once, erysipelas and carbuncle, and differing essentially from both. The treatment as above directed, was continued thirty-six hours, with decided benefit, the patient evidently gaining strength. There was now added a few grains of the pulv. Doveri to the calomel, as somewhat severe catharsis had supervened.

This treatment was continued twelve hours longer, when slight ptyalism being apparent, it was suspended, as also the brandy. Beef tea, nourishing broths, the quinine and ammonia, were administered for twenty-four hours longer, when the patient was considered beyond danger. He rapidly recovered on nourishing diet.

The second case, Mr. C——r, by occupation a carpenter, 35 years of age, temperate, had previously enjoyed good health, was attacked with symptoms similar to the first case. The dyspnoea and dysphagia were not so prominent, and the pustule had made its appearance below the angle of the mouth, on the right side. The tumefaction confined itself, principally, to that side of the face and throat. The period of incubation was longer, the pustule having made its appearance some five days before the occurrence of alarming symptoms. The pulse was 64 and small, and the tendency to death by asthenia, marked. This case was treated like the first, but rather more vigorously; he took three grains of quinine and six of carb. ammonia, every two hours, for the first twenty-four hours. The alarming symptoms subsided in 72 hours, and he resumed his labor in eight days from the time of the first attack of distressing symptoms, and has since remained in good health.

I have seen, during the past winter and spring, three other cases, exactly similar to the above, and have heard of several deaths occurring in the practice of neighboring physicians, from a disease bearing the same description, and doubtless, the same disease. But in no case can I learn that death followed the early and vigorous application of the tonie, stimulant, and it may be antiseptic plan.
PART SECOND.

CRITICAL ANALYSIS.


Mr. Copeland published his Observations on the Principal Diseases of the Rectum in 1814; Mr. Calvert, on Hemorrhoids, Strictures, and other Diseases of the Rectum, in 1824; Mr. Howship, his Practical Observations, &c., &c., on the most important Diseases of the Lower Intestines and Anus, in 1824; Mr. Salmon, on Stricture of the Rectum, in 1828; Mr. Herbert Mayo, his Observations on the Injuries and Diseases of the Rectum, in 1833; but it was reserved to Dr. Bushe, of New York, in 1837, the date of Mr. Syme's first edition, to furnish us with the most complete treatise before or since published on the Malformations, Injuries, and Diseases of the Rectum and Anus. The volumes at the head of our article, are the most recent productions of the British press, and the names of their authors, especially of Messrs. Quain, Syme and Curling, are quite familiar to the American Surgeon. The works of Messrs. Quain and
Ashton being of the most recent date, will principally engage our attention. Mr. Quain's treatise is founded on a series of Clinical Lectures, and he has retained the colloquial, or personal form, which the language in oral addresses naturally assumes. His arrangement is such that the histories of cases exhibiting the most important of the phases of each disease precede the general commentary upon it. He remarks:

The object we have now in view being not the study of the natural history of disease, but the history of patients, their ailments, and their cure, the classification of the subjects of these lectures, beyond the grouping together those that present obvious affinities—is unimportant. I shall, therefore, proceed at once to the individual diseases, and first to one most frequently met with.

This disease is hemorrhoids, or piles. Although it seldom affects the young, it is remarkable, says Mr. Quain, that few persons attain to maturity without suffering from it more or less. Abdominal tumors, and pregnancy in the female, may give rise to the affection, but in far the greater number there is no appreciable internal organic change. An indolent life, a full diet, a torpid skin, and constipated bowels are sufficient to explain both congestions of the alimentary canal and of the head. A frequent resort to aperient medicines in time creates a habit, as difficult to be got rid of as any other habit. In practice, the plan of management, dietetic and medicinal, must be stated in detail.

Remember, that as much of the illness which is suffered is induced by the common things with which we are all constantly surrounded and influenced, so the relief and prevention of the evil is, in a great measure, to be obtained by the direction and control of these. Common things must be carefully attended to by the practitioner; things that are not common will command attention.

Although not often observed till after the age of puberty, Mr. Ashton had under his care, at the Blenheim Dispensary, a child two years of age, suffering from external piles, (p. 101). As to the comparative frequency in the two sexes, Messrs. Syme and Curling agree with Dr. Bushe, that they are more common in males; the urinary and genital disorders of the latter, combined with freer habits of living, more than counterbalancing the influence of pregnancy in the female. Dr. Bushe supposed that sanguineous repletion in the female is sufficiently relieved by the menstrual function, and Mr. Ashton states that in the majority of the cases of hemorrhoids occurring in females that have come under his observation, the catamenia have either been suppressed, or the function more or less deranged, though in some cases, he admits, this may have been rather an effect than a cause. At
the turn of life, observes Mr. Ashton, lethoric females are very liable
to be subjects of hemorrhoids, and, in some instances, these discharges
alternate with each other for some time before the uterine functions
entirely subside.

In an interesting paper by Mr. Brown, on some diseases of the Rectum
in women, resulting from certain conditions of the uterus, (Lond.
Med. Times and Gazette, March, 1854, pp. 232,) he remarks:

All authors, however, notice that diseases of the rectum are more
common in females than in males. I propose to inquire into the cause
of this statistical fact, and shall endeavor to show that it is attributable
to a uterine origin, and that the female rectum may suffer either
from mechanical interference with its functions, from the pressure of an
enlarged uterus, or from derangement of the circulation in that organ,
inducing a corresponding disturbance in the circulation of the rectum.

He then proceeds to illustrate, by diagrams, how these abnormal
conditions may give rise to hemorrhoids; but, after the opinions above
quoted, of Dr. Bushe, Messrs. Curling, Syme, and Ashton, we confess
that we are at a loss to know what value is to be attached to Mr.
Brown's "statistical fact" as regards the comparative frequency of
this affection in the two sexes.

A diversity of opinion prevails among surgical writers, as to the
structure of hemorrhoids. To facilitate our comprehension of this
matter, Mr. Quain enters into an examination of the natural disposi-
tion of the blood-vessels with which the rectum is so liberally supplied.
His remarks are illustrated by plates showing how the arteries in the
lower part of the bowel all join by transverse branches of good size,
whilst the veins form loops, and freely communicate with each other.
Mr. Curling likewise dwells upon the peculiar arrangement by which the
veins form a plexus, for it is in these that the alteration constitut-
ing the hemorrhoidal tumor takes place. Mr. Quain observes:

At an early stage, dilatation occurs, which in one part is gradual,
fusiform, (plate 2); in another it is abrupt, starting suddenly out of
the end of the loop into a rounded pouch. A degree of elongation
of the looped part accompanies these changes, so that the vessel is
lowered beyond its natural level (plate 2). During these alterations,
the dilated vein still circulates fluid blood. In a more advanced stage
the dilatations are still further enlarged, and they are found to contain
clotted blood, or fibrinous matter. From the aggregation of veins
thus dilated in different ways and in different degrees, loaded also with
blood, or one of its elements, more or less solidified, the hemorrhoidal
tumor is formed.

The anatomical structure of these tumors has a very important
bearing on the therapeutical measures which may be adopted. The
fact that we are dealing with veins, morbidly enlarged, may explain
the occurrence of pyemia, which has proved fatal after the operations
performed for their removal.

There can be no question that, in the language of Dionis, "nous
payons bien cher" for the liberal supply of blood distributed to the
rectum, and among the unpleasant consequences thus resulting, those
produced by haemorrhoids rank not the least. Judging from the
remarks of the distinguished surgeon to whom we have above referred,
a century since it was not "dans le pouvoir de la Médecine et de la
Clirurgie de les guerir radicalment," (Cours des Operations, etc.,
1746, p. 401,) and in these tumors, palliative measures only were rec-
commended. Indeed, with the views entertained by the ancients, it was
considered hazardous to attempt a radical cure. But what are the
opinions of modern surgeons, as to the propriety of effecting radical
cures in cases complicated with other diseases? Let us hear Mr. Quain
on the subject:

From the oldest times, it has been a common belief, if not a medi-
cal dogma, that losses of blood, under the circumstances just indicated,
are salutary; that, at all events, they prevent matters from getting
worse as regards the disorders we suppose to exist elsewhere, and
ought not to be arrested. For all such impressions or traditions in
the profession, there is, we are inclined to believe, some reasonable
foundation; and yet we ought not, in a matter of such great im-
portance, to be guided merely by impressions, however generally they may
be entertained. I apprehend that the opinion entertained, respecting
the healthful influence of fluxes of blood, arose, and continued to be
strongly held, when the abstraction of blood was largely used as a
remedy for actual disease. . . . . . May it not be, then, that
notions which have come down to us from a period when the large
abstraction of blood was considered necessary, should require revision,
when the opinion and practice in this respect have been much modi-
fied?

He then relates the case of a lady who, with bleeding hemorrhoids,
had symptoms of pulmonary disease; yet, as she suffered so much
from the pain and frequent recurrence of the bleeding, she submitted
to their removal by an eminent surgeon in London. In three years
from this period, this lady died of phthisis. At first view, this case
may be regarded as settling the question as to the propriety of operat-
ing under similar circumstances, but we are disposed to coincide with
the views of Mr. Quain, that merely with such a statement of facts we
cannot draw any inference from the case.

All the circumstances intermediate to the surgeon's operation, and
the active development of phthisis, are wanting. Moreover, we do not
know, from any well-observed examples, that the loss of blood will pre-
vent the active growth of tubercular disease, any more than it would cure it, or influence it beneficially in any stage of its progress.

On the other hand, is it not a fact incontestible, that whatever debilitates promotes the progress of tubercular disease? Have we not the testimony of Sir Benjamin Brodie, MM. Velpeau and Nelaton, that erroneous opinions have been entertained about the propriety of amputating in cases of arthritic disease, the supposed safety valve in tubercular disease of the lungs? Again, the practice of Dupuytren and Dr. Souberbielle, according to the "Mantèrre nouvelle de prat. l’Opération de la Pierre," by Sanson and Begin, and the "Traité de la Cystotomie," by Belmas, furnishes us with abundant proof that the removal of the stone, even where there is every indication of tubercular disease of the lungs, "peut arrêté les progrès de ces affections et gueri les malades."

True, Dr. Copland states that he has seen three cases in which fever, melancholia, and apoplexy have followed the arrest of the hemorrhoidal discharge, and Mr. Howship mentions the case of a gentleman subject to gout, who, soon after the arrest of the discharge by strong vitriolic lotions, died of gout in the stomach. A few years since, we removed hemorrhoidal tumors from a patient who some months previously had had an apoplectic attack, and this person died from cerebral disease in the course of a year after the operation. But although an habitual discharge may exert a salutary influence in moderating the flow of blood to the head, we doubt whether such can be the case in consumptive patients, when it is permitted to continue until it produces the waxy look, the bloodless lips, and defective energy, &c., &c., which is so often observed in such cases.

Mr. Syme, in referring to the popular prejudice which exists against interfering with bleeding piles, remarks that the worst consequences thus anticipated are hardly to be dreaded more than those directly sustained from the disease, "and the result of experience is quite opposed to the apprehension of harm being so produced." He relates a case illustrating the safety with which the hemorrhage may be arrested, even when of the longest standing and greatest extent. In many of these cases, he observes, there is reason to fear that the cause has been mistaken for the effect.

Mr. Curling agrees with Herbert Mayo, that these discharges help to ward off attacks of gout, and prevent fits of apoplexy, for which reason he would avoid the sudden drying up of such discharges as have become natural to the system, and Mr. Ashton is of the opinion that, where there is a predisposition, hereditary or otherwise, to

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apoplexy, gout, phthisis, hemoptysis, epistaxis, or other kinds of hemorrhage, local treatment must be a secondary consideration, and not adopted till the constitutional cause has been removed or palliated.

What is the best, the safest mode of effecting the radical cure of hemorrhoidal tumors? Cauterization, excision, and the ligature have had and still retain their advocates. Dionis, in 1746, recommended the use of the scissors, and Mr. Syme, in 1846, gives the preference to the same instrument in operating on external piles. But, although excision is the quickest and easiest mode of removing internal piles, he admits that it is "very apt to occasion a serious or even fatal hemorrhage." Sufficient proof of this may be found in the *Leçons Orales*, &c., of Dupuytren, who extensively employed excision even in internal piles; and in the Lectures of Sir Astley Cooper. Mr. Syme very justly remarks, that if other practitioners had been equally candid with Sir Astley, we should, doubtless, have had more testimony as to the danger of this operation. On one occasion where he himself had cut away an internal hemorrhoid, it was necessary to employ manual pressure for several hours to restrain the bleeding. In the *London Med. Gazette*, vol. xv., p. 843, Sir Benjamin Brodie states that he nearly lost two patients under the same circumstances, and, like Sir Astley, he abandoned the practice.

Dr. Bushe came near losing two of his patients after the excision of internal hemorrhoids, and became so much alarmed that he did not again resort to it. Mr. Cline was accustomed to state in his lectures that he removed internal piles by excision, but that "a timid surgeon removes them by ligature." We have tried excision in one case, and, from the troublesome hemorrhage which followed, we are satisfied to incur the imputation of timidity, which, according to Mr. Cline, applies to such men as the late Sir Astley Cooper, and Mr. Bushe, and to Sir Benjamin Brodie and Prof. Syme.

Is the ligature free from danger? The advocates of excision have attributed to this method, phlebitis, diffuse inflammation of the cellular tissue of the pelvis, peritonitis, tetanus, &c., &c. Mr. Curling states, that no fatal case of the kind has come under his notice, either in public or private practice. Mr. Quain has seen a single instance, and others have been observed by Mr. Copeland and Sir Benjamin Brodie. At a recent discussion of a paper by Mr. Henry Lee, "On an improved plan of removing hemorrhoidal tumors," read before the Medical Society of London, Feb. 11th, 1854, Mr. Henry Smith mentioned a case which had come to his knowledge, in which the patient died of tetanus from the application of the ligature. We think it was some
time during the year 1848, that Mr. Lee published a paper in the *London Medical Gazette*, in which he detailed cases where pus was distinctly traced in the course of the hemorrhoidal veins, and in which secondary abscesses proved fatal, from which Mr. Lee concluded, that it is not always safe to place a ligature upon the enlarged veins of the rectum, especially in the manner in which the operation is usually performed, viz., by passing a needle, armed with a ligature, through the base of the tumor, whereby it must occasionally happen that one of the larger veins of the rectum is transfixed, and its sides held apart by the ligatures tied on the opposite sides of the tumor. To obviate this danger, he proposed the application of the strongest nitric acid that can be procured, to destroy certain portions of the mucous membrane of the rectum, and to coagulate the blood in the veins of the part, so as to effectually seal the vessels against the entrance of any foreign matter. The use of nitric acid in the treatment of hemorrhoids, as is well known, was recommended by Mr. Houston, of Dublin, in his papers published in the Dublin Quarterly Journal of Medical Science, for March, 1843, and September, 1844. The particular form of the disease to which he considered this remedy applicable, was the florid vascular hemorrhoidal tumor. From the remarks of Mr. Lee at the meeting of the London Medical Society, to which we have above referred, it would seem that the nitric acid has been indiscriminately employed in Great Britain, and Mr. Ashton states that several instances have come under his observation, where mischief has arisen by attempting to destroy large growths with the acid; in three instances a communication had been formed between the rectum and vagina by its application in too large a quantity. The acid may be properly applied by means of a small piece of lint wound over the end of an eye-probe, but should not, according to Mr. Lee, be used in those cases where the mucous membrane has undergone an inflammatory thickening, or where, from long exposure, it has lost its villous character. At the above meeting, Messrs. Coulson, Hancock, Rowe, Harrison, Browne, and others who had been pupils of Mr. Copeland, expressed their preference for the ligature. Mr. Quain is disposed to regard the nitric acid with favor: "but, as I do not like changing from what I have long found an effective and safe plan of treatment (the ligature), I have not hitherto used the acid, or any similar application, for the cure of hemorrhoids."

In using ligatures, he would not apply them in large numbers, but would limit himself to two or three double ligatures, believing that it is better to have to return to the application of one or two more, than "to do too much even once in life." It is especially important
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to act upon this principle where the patient is in impaired health, or
debilitated by loss of blood. Excision he regards as the proper opera-
tion in external hemorrhoids, though he has found a lotion of nitrate of
silver, twenty grains to the ounce, very much abridge the duration of
the attack.*

We cannot dwell on the remarks of our authors under the head of
abscess. After alluding to the fetid odor belonging to the matter
in rectal abscesses, where no communication exists between the
intestine and the cavity of the abscess, he admits his inability to
account for the fact, and observes that the whole subject stands
in need of elucidation.

Having dwelt at such length upon the subject of hemorrhoids, we
must be brief in our notice of rectal abscess and fistula in ano.
The perusal of the case of "large abscess" near the rectum, de-
tailed at pp. 84, 86, reminds us of that reported by Dr. Sayre
in the March number of this Journal. Unlike the latter, how-
ever, the case terminated fatally. As to the propriety of operating
for fistula in ano in phthisical patients, Mr. Quain thus remarks:

"It has long been a common belief in the profession, that there is a
proneness to the formation of fistula among persons laboring un-
der phthisis; but facts recorded by two most accurate observers,
(M.M. Andral and Louis,) lead irresistibly to the conclusion that
this doctrine is erroneous." p. 116. Now at page 118, we find
the following: "With respect to further examples of the presence
of fistula in persons affected with phthisis, I need only state that
in the abstracts of cases, which I have drawn from my hospital
books, there is a good number respecting each of which it is nar-
rated that, on account of the existence, more or less, of such
symptoms as those detailed in the account of the last case, the
operation was declined." This "good number" is, we think, a
sufficient admission that the doctrine above alluded to is not, after
all, so "erroneous," as the reader would infer from Mr. Quain's
former remarks upon this point. Again: "Where the symptoms,
than, of tubercular disease are present, the operation for fistula is not
allowable. The wound does not heal; the sore is but enlarged,
and the surface secreting pus augmented. In short, the operation fails,
and, in failing, adds to the evil. I am not, however, disposed to look

* For some very interesting practical remarks, by Dr. John Watson, on the dan-
gers incidental to operations on hemorrhoids, we would refer the reader to the
number of this Journal, for July, 1844, p. 26.
Diseases of the Rectum.

upon a former threatening of phthisis as always a bar to the operation, if the health at the time be robust. I have more than once acted upon this view, and have not found reason to regret having done so.” p. 119. For some very interesting remarks under this head, we would refer the reader to Mr. Fergusson’s Practical Surgery, 3d Lond. Ed., p. 749.

Fistula will sometimes heal readily, even in patients affected with tubercular disease, and this, too, under medical treatment alone. Mr. Ashton speaks of a case of the kind, which was cured by washing the anus with soap and water, night and morning, and also after defecating, and not to allow the bowels to become constipated. p. 238. In this manner, the writer, “a tuberculous subject,” has, for some three years, kept a fistula in such a condition as to give but very little annoyance. Prolapsus of the rectum, commonly called “prolapsus ani,” is a very troublesome affection, especially among children, and, in ordinary cases, according to Mr. Quain, the constitutional state is at fault, “bread and butter” being the principal diet of the patients. Milk he regards as an essential element of the diet, and a little meat should be allowed. The child must be prevented from sitting beyond a very short time, when the evacuations are passed, and, if possible, the faeces should be passed while the child is lying on the back. If the bowel descends during the intervals of the evacuations, the child should be kept in bed, or on a couch. The grey-powder, with castor oil in small doses, combined with the compound cretaceous powder or mixture, and small quantities of opium, constitute the medical treatment pursued by Mr. Quain, and he asserts that he has known but a single instance in which this method has failed. An operation is seldom required in children, but, in the adult, the reverse is the rule. In females, of course, previous to resorting to any operation, inquiries should be carefully instituted to learn whether the prolapsus is owing to any abnormal condition or position of the uterus. The object of the operation is to bring about such a degree of the adhesive process as shall prevent the descent of the gut. The proceeding most generally adopted by Mr. Quain, consists in removing longitudinal folds of the skin, with a little encroachment on the mucous membrane, also, according to the method originally adopted by Dupuytren, and the principles laid down by Mr. Hey. The fold of integument is raised with a pair of forceps constructed for the purpose, and it is then snipped off with a pair of scissors bent on the side. But little dressing is necessary; lint dipped in water, put over the part, is all that is required at first. Afterwards, cleanliness, and an astringent lotion during the healing process. “Caution is required as to the extent of
the integument removed; I allude to the breadth of this. In the natural state, the skin of the anus is in folds, which are necessary to allow the enlargement of the orifice during defecation. In this act, the sphincter muscle is dilated, the skin but unfolded. If, therefore, the latter (the skin) should be too freely removed, there is, afterwards, difficulty in voiding fecal matter when it is formed, or lumpy."

He remarks that he has met with no instance of a return of the prolapsus after this operation, though M. Velpeau has referred to such in his *Leçons orales de clinique chirurgicale*, tom. iii., p. 135. He has succeeded in curing prolapsus by applying ligatures to small pieces of the mucous membrane, as in tying hæmorrhoids. This was the favorite method with Mr. Copeland, and Mr. Ashton considers it the most simple and effectual, and at the same time attended with the least pain.

In cases when, from age, debility, or other circumstances, an operation cannot be performed, the intestine must be supported by pads and a T bandage, or by a truss, like that recommended by Gooch in his "*Cases and Practical Remarks on Surgery,*" vol. ii., p. 158.

Upwards of 20 pages are devoted by Mr. Quain to ulcers of the skin and mucous membrane, under which head is included that painful affection known as fissure of the rectum. In the treatment of this, for many years, he was in the habit of resorting to Boyer's operation, viz., division of the sphinter ani; but in performing this on a certain occasion, the patient moved away, the bistoury having divided the mucous membrane and integument only. "It occurred to me at the moment, to ascertain if that slight incision would be enough to relieve the patient. The success was complete, and from that period I have used no other operation in ordinary circumstances." p. 165. In a note he remarks that he had supposed this method originated with himself, but he subsequently found, in a lecture by Sir Benjamin Brodie (*Lond. Med. Gazette*, vol. xvi., 1835), that he had been anticipated by this distinguished surgeon.

We pass over "Painful Contraction of the Sphinter Ani," in the existence of which, as an idiopathic affection, he does not believe; nor can we dwell on "Neuralgia of the Rectum," in which he has found the vapor of chloroform very beneficial.

Thirty-five pages are devoted to "Stricture of the Rectum," a disease of which, there can be no question, is often imaginary, but which may exist. Mr. Quain relates some very instructive cases under this head, showing what infamous quackery his patients have been subjected to by those who call themselves surgeons!
In the next place we find discussed "Concentric thickening and ulceration," "Tuberculated disease," and "Cancer of the rectum." Mr. Quain has detailed numerous cases illustrative of the symptoms and progress of the latter disease. As to the propriety of excision in this affection, he remarks that the evidence is to be drawn from foreign surgery; Lisfranc, boasting of curing in this manner six out of nine cases, whilst M. Velpeau is reported to have lost three out of six cases. (Mem. de l'Acad. Roy. de Med., t. 3.) "My opinion is, that if the disease should be strictly limited to a small space in the lower end of the gut, the removal might be effected with a fair prospect of advantage, but that otherwise it is wholly inadmissible." p. 261.

Should complete obstruction occur, of course an artificial opening is the last resource, and, according to Mr. Quain, the left colon in the lumbar region is, "beyond all question," the part to be preferred for that purpose, as the opening may there be made without opening the peritoneum. Those desirous of becoming fully acquainted with the present state of our knowledge on this subject, cannot do better than to consult the valuable paper of Mr. Caesar Hawkins, in the thirty-fifth volume of the Transactions of the Royal Medical and Chirurgical Society of London, or the elaborate work of Dr. Walshe.

The remaining portion of Mr. Quain's volume is occupied with the consideration of "Spasmodic Contraction of the bowels," "Polypus and Polypoid Growths," and "Foreign Bodies," in the rectum. In addition to these subjects, Mr. Ashton treats of "Malformations of the Rectum and Anus." He refers to a case in which the malformation was not discovered till twelve days after the child was born, in which the rectum was only reached by incisions made to a very great depth. During the past winter, the writer operated in a case in which the difficulty was not detected till 49 days after the child was born, and yet, by passing the knife to a very great depth, fecal matter was reached, and the intestines, for the first time, freely evacuated! At the time we supposed this case to be unparalleled, for we could find no record of an instance in which a child had lived for seven weeks without an evacuation, nor have we yet succeeded in finding the report of any case in which, after so long a period, an operation was successfully performed, but at a Meeting of the Edinburgh Obstetrical Society, May 12th, 1847, Dr. Lyell, of Dundee, communicated the particulars of a case in which a child lived upwards of 12 weeks, "without any fecal outlet but that of the mouth!" (Monthly Journal, August, 1847, p. 137.) In January, 1854, Mr. Fergusson performed Amussat's operation of opening the descending colon in the left loin, in a case of imperforate
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anus. The infant was nine days old at the time, and, at the last reports, was doing well. A report of this case was presented to the Pathological Society of London, at its meeting on the 7th February, 1854, and, in the discussion to which it gave rise, Dr. Crisp and Mr. Adams expressed their preference of this method, to pushing a trocar into the rectum from the perineum, but Mr. Ashton remarks, p. 334, "I imagine few English surgeons would propose to adopt the operation of Littre or Callisen for opening the descending colon, much less that of putting into practice that of Dubois, of opening the sigmoid flexure of the colon, and passing a strong probe through it towards the perineum, by pressure rendering the end prominent, if possible, then cutting down upon it."

Now, in a case like that observed by Dr. Lyell, in which the colon terminated in a cul de sac, floating loosely among the other intestines in the umbilical region, there is no alternative but to open the colon in the right groin, and not in the left, as was done by Mr. Fergusson.

But we must bring our remarks to a close. The works placed at the head of this article are all of a truly practical character. The treatise of Mr. Syme has passed into the third edition, although, like that of Mr. Curling, it is of moderate dimensions when compared with the more recent volumes of Messrs. Quain and Ashton. Mr. Curling is favorably known on this side of the Atlantic, by his excellent contributions on the subject of tetanus and the diseases of the testis, and the student may consult his work with the most implicit confidence in the merits of the author. The work by Mr. Ashton reminds us more of that on the same subject by Dr. Bushe than any that has since appeared. It is the most complete of all the works at present under consideration. Mr. Quain's volume is made up of Clinical Lectures, and is most richly illustrated with cases which have been under the care of its distinguished author. Coming from such a source, it cannot fail to receive the approbation of the profession, and its perusal must better qualify the practitioner to undertake the treatment of a class of cases which, when properly understood, may redound greatly to the surgeon's reputation, but which, if misunderstood and mismanaged, cannot fail to bring the latter into discredit, and to inflict unbounded tortures on their unhappy victims.

G. C. B.
Art. X. An Inquiry into the Pathological Importance of Ulceration of the Os Uteri; being the Croonian Lectures for the year 1854. By Charles West, M.D., Fellow of the Royal College of Physicians, Physician-Acoucheur to St. Bartholomew's Hospital, and Physician to the Hospital for Sick Children. London, 1854. (8vo. pp. 95.)

The fact that the questio vexata in uterine pathology was made the theme of the last course of the Croonian Lectures, before the Royal College of Physicians, affords evidence that, notwithstanding all that has of late been said and written upon this subject, the investigations and conclusions in this department of pathological study are as yet neither complete nor satisfactory. That the theme for these lectures was wisely selected as a highly important and practical topic, the learned physicians before whom they were delivered, and all who may peruse them, can bear testimony; for all who have noted the progress of this department of pathology, and have attentively studied the prolix issues from the press on this subject, in England and France, and especially those physicians who have made extended and careful investigations in reference to the nature and relations of uterine diseases, must have felt that there yet remains wide scope for original and highly important study connected with this subject, and that such investigations are urgently demanded.

In the investigation and discussion of the subject of the lectures now before us, the eminent physician-acoucheur of St. Bartholomew fully sustains and confirms his reputation as a faithful and philosophical observer, and a candid and scientific writer—a character so happily illustrated in his excellent treatise on the Diseases of Children. Happily conceiving the true method of studying the facts which concern uterine pathology, and omitting all controversy in reference to technicalities, Dr. West at once undertakes the examination of the facts bearing upon the important question that forms the subject of his lectures. He freely admits—and his own investigations even demonstrate, the frequent occurrence of those morbid conditions of the mucous covering of the os and cervix uteri, popularly denominated ulceration, but he is not prepared to admit, without better proof than has yet been offered, that this particular lesion is the widely-acting and determining cause of all the Protean forms of the diseases of females. By ingenious and varied arguments, he attempts to exhibit, in their true relation, the train of morbid processes in the more common uterine disorders, at the same time pointing out various errors into
which he conceives that certain popular writers upon inflammation and ulceration of the cervix uteri have fallen.

In the commencement of his remarks upon the ordinary sources of disorder of the womb, Dr. West calls particular attention to the physiological phenomena attendant upon the performance of its highest function, that of reproduction; and he refers to the history of the fibro-cell development, or growth of the uterus during pregnancy, and the subsequent fatty degeneration of the same structure after delivery—the beautiful theory so satisfactorily demonstrated by the lamented Franz Kilian. In this connection, he remarks that—

In these changes, the body of the uterus, and the lining of its cavity, bear a far greater part than either the substance of its cervix, or the mucous membrane which line that canal. The mucous membrane of the body only is developed to the decidua, and it alone is thrown off after delivery; the lining membrane of the neck undergoes much slighter alterations, and is not deciduous.

At present, we are too imperfectly acquainted with the nature of those changes, which I have thus briefly sketched, to be able to say exactly what influence is produced by the accidents which interrupt the course of pregnancy, and originate the processes of degradation of the uterine tissue prematurely; or what results may follow from disease succeeding to delivery at the full period. We may confidently hope, in time, to know more; at present, we have learned from everyday experience that such occurrences interrupt the ready return of the womb to the size and condition which are natural to it in the unimpregnated state; that the organ is apt to remain permanently increased in size; that this enlargement is often more especially marked in the more lowly organized cervix; that, under such circumstances, the menstrual function is usually, in some respect or other, ill performed, while secretions are likely to be furnished from the organ, differing in quantity and quality from those which proceed from it in a state of health; that the performance of all the sexual functions is very apt to be attended by pain; that impregnation is less likely to occur; and that, if pregnancy should take place, there is very great probability of its coming to a premature termination.

This set of symptoms, however, or, at least, many of them, are met with, independent of pregnancy and its consequences, supervening sometimes, indeed, under the influence of causes which evidently, and in a marked manner, interfere with the generative functions, but coming on at other times slowly, and, as far as we can discover, without cause. How are they to be explained? Do they proceed from an invariable pathological occurrence, which is present in every case, how wide soever may be, in other respects, the points of difference between them; or are they the indications of disordered functions, which may depend on causes as various as those which produce vomiting, or occasion dyspnoea? The inquiry is manifestly an important one; its elucidation will be the object of these lectures. It has been said that there is an invariable, or almost invariable, cause of these symp-
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toms—that, be the remote occasion of them what it may, inflammation and ulceration of the neck of the womb is their immediate cause—that the key to the right understanding of uterine diseases is to be found in the correct appreciation of the importance of this condition, and the cardinal point in their treatment consists in the adoption of means for its cure.

After recapitulating the leading facts and inferences insisted on by Dr. Bennett and others, our author indulges in the following sarcastic, but, as we conceive, very just remarks:—

As uterine pathology is simplified, beyond expectation, by the discovery of an almost invariable cause of the most diverse symptoms, so uterine therapeutics, also, are made easy, according to the writers whose opinions I am relating, by one remedy being found almost always applicable for the cure, be the duration or its severity what it may.

* * * What caustics to use, how often to repeat their application, how to prevent or to remove those inconveniences which sometimes result from their employment, are questions discussed as of chief importance; since to these remedies all other local measures, as well as all general treatment, are but secondary and subservient.

Dr. West remarks that the evidence by which to try the accuracy of such statements is very various in its kind, and also of very various worth. This evidence he arranges under four principal heads:

1. A comparison of these statements with what is known concerning the anatomy and physiology of the uterus in a state of health.
2. The microscopic evidences of morbid anatomy.
3. The evidence afforded by the history of those cases in which ulceration of the cervix uteri occurs, unconnected with other disease.
4. The frequency of ulcerations of the os uteri under those circumstances in which they ordinarily come under our notice, and call, or are supposed to call, for our interference.

After considering the evidence under the first head, Dr. West offers the following remark:—

If, structurally, so lowly organized—if, physiologically, of such secondary importance—if so much less subject than the body of the uterus to alterations in its intimate structure—and, if so comparatively insensible even to rude modes of therapeutical interference—it certainly does appear to me that the assumption, that some slight abrasion of the mucous membrane covering this part is capable of causing a list of ills, so formidable as are attributed to it, ought to rest for its support upon some other and stronger foundation than any inference fairly deducible from anatomical or physiological data.

In seeking evidence under the second head, Dr. West has studiously avoided the errors and defects marking the statements and conclusions of such observers as M. Pichard, Dr. Ashwell, and M. Lair, the negative and indefinite results of whose necrosopic investigations on this
subject, are manifestly defective and valueless. The question which Dr. West seeks to decide, is, "With what frequency, and associated with what other changes, do we meet with indications of inflammation and ulceration of the os and cervix uteri, in the bodies of women after puberty, and especially during the period of sexual activity?"

Dr. West's observations, amounting to only sixty-two cases, were made on patients who died in the medical wards of St. Bartholomew's Hospital, of some other than uterine disease. Of these sixty-two cases, thirty-three uteri were found healthy, and twenty-nine diseased; ulceration of the os uteri existed in seventeen cases; existed alone in eleven; with diseased lining of the uterus, in three; and with induration of the walls of the uterus, in three instances. In five cases, there was found induration of the wall of the uterus, without ulceration of the os; and in seven cases, there was disease of the lining of the uterus, without any disease of the os.

After giving a very extended and minute history of the morbid appearances of the uteri in these twenty-nine cases, Dr. West remarks that—

Other evidence, indeed, must be adduced than that which analogical reasoning from the facts of physiology has suggested, or than that which examinations after death have furnished, before we shall be entitled to reject the opinion that inflammation of the cervix, and ulceration of the os uteri, are occurrences of very serious pathological importance, the occasion of nearly all the ills which affect the physical well-being of women. * * * Tempting though this hypothesis may be, and numerous the difficulties which it may appear to solve, we yet have found that it is opposed by the facts of physiology, and unsupported, to say the least, by the results of anatomical investigation.

As regards the evidence referred to under the third head, Dr. West considers, that "in almost every woman, whose uterus becomes prolapsed beyond the external parts, we may observe the effects which ulceration of the os uteri commonly produces, the symptoms to which it generally gives rise, etc."

It is from this class of cases that he adduces all his evidence of the negative and unimportant consequences of ulceration of the cervix uteri alone considered. But the conclusion expressed above, though apparently legitimate enough, is by no means necessarily correct; for it is sufficiently manifest, that whatever may be the extent of the irritation incident to the ordinary lesions and morbid conditions of the os uteri, and how important soever the sympathies thereby excited, the occurrence of the important organic displacement referred to is an event sufficiently grave, and perfectly adapted to absorb or obscure all other morbid symptoms and sympathies incident to the lesions in ques-
tion. It has fallen to our lot to have seen a large number of the un-
fortunate class of patients here referred to, and we have uniformly
observed that the sufferings and the symptoms resulting from the dis-
placement, have obscured all the ordinary symptoms incident to a
morbid condition of the cervix uteri, however extensive the ulceration,
congestion, or induration of this part. Further, we conceive that there
is very little similarity between the ulceration occurring in the proce-
dent uterus, and those morbid conditions usually seen in the cervix
uteri in situ.

Under the fourth head, Dr. West enters upon a very extended and
carefully digested series of investigations of what clinical observa-
tion generally teaches concerning ulceration of the os uteri—its course,
symptoms, and importance. This series of investigations are included
in twelve distinct divisions.

1. An examination of the question of the alleged peculiar suscep-
tibility of the cervix and os uteri, and their readiness to take on ulcerative
disease, etc. This investigation is based upon the history of forty
cases in the venereal wards of St. Bartholomew’s, in twenty-seven of
which cases, Dr. West states that he found the os and cervix uteri abso-
lutely healthy.

2. An investigation to determine the effect of the ulceration of the
os uteri upon the fecundity of the female, based upon the history of
1960 married women, 980 of whom were healthy, and 980 of whom
were suffering from uterine disease—117 of this number being cases
of ulceration.

3. The period of life at which ulceration of the os uteri occurs most
frequently.

4. Alleged causes of uterine ailment, and the ratio of ulceration in the
same.

5. Duration of symptoms at commencement of treatment. (Show-
ing that patients suffering from ulceration, do not apply for treatment
at an earlier period, after attention is called to the uterine symptoms,
than do those affected by uterine affections, without ulceration.)

6. A table showing the state of menstruation in cases of uterine
disease, with and without ulceration of the os.

7. An examination of 258 cases of uterine disorder, in 240 of which
there was leucorrhœa, to show the relation of that symptom to ulcer-
tion of the os uteri.

8. A table showing the seat of pain in the two classes of cases of
uterine disease.

9. An examination with reference to the state of the uterus in the
two classes of cases.
10. A table showing the different scats, and comparative frequency of different forms of ulceration of the os uteri, in 121 cases.

11. A table showing the degree in which the different forms of ulceration existed.

12. An examination of 16 cases, in which there existed extensive ulceration of the orifice of the womb, showing the various conditions of the uterus associated therewith.

The following are the most important conclusions to which Dr. West arrives, as the result of his statistical investigations:

1. Uterine pain, menstrual disorder, and leucorrhoeal discharges—the symptoms ordinarily attributed to ulceration of the os uteri—are met with independently of that condition, almost as often as in connection with it.

2. These symptoms are observed in both classes of cases, with a vastly preponderating frequency at the time of the greatest vigor of the sexual functions, and no cause has so great a share in their production as the different incidents connected with the active exercise of the unproductive powers. But it does not appear that ulceration of the os uteri exerts any special influence either in causing sterility or inducing abortion.

Similar conclusions follow, also, concerning induration, and hypertrophy of the cervix uteri.

Thus it is seen that conclusions widely different from those given by Dr. Bennett, Mr. Whitehead, and others, are arrived at by Dr. West, by pushing investigations in a different direction from those popularly pursued, in reference to the questions at issue in uterine pathology. But legitimate and satisfactory as these conclusions of Dr. West appear, from the statistical data he has given, we do not conceive that these deductions can be considered as established facts in uterine pathology, any more than are some of the more crude deductions of certain pathologists, whose theories his figures seem to demolish. Every one who reads Dr. West’s writings must be satisfied, however, that as an accurate observer and a truthful writer, he is perfectly reliable. The candor and the earnestness of his investigations, and also his mode of analysis and study of facts, are models for the pathological student. It is a sufficient criticism upon Dr. West’s conclusions, as indicated above, to say that it is certain that some of them would be essentially modified if he should pursue a series of as rigid investigations in reference to the following questions:

1st. In the treatment of cases of uterine disorder, attended with lesions of the os and cervix uteri, what amount and kind of benefit is derived from attending to the special lesion in question?
2nd. What number of such cases prove utterly incurable, until special curative treatment is directed to the diseased cervix, and what proportion of the cases so treated do speedily recover?

3rd. What is the number and the character of those cases of abortion that are associated with disease of the cervix uteri, as the only discoverable disease of the generative organs, and in what proportion of such cases is recovery from the local disease followed by successful pregnancy?

In his closing lecture, Dr. West enters upon investigations of the greatest practical importance, concerning the various causes of the more common uterine ailments, and the constitutional and functional relations of such affections, the latter of which he considers of far greater practical importance than the former. In a large proportion of such cases, he finds, as the primary and principal derangement of health, a morbid state of the circulating fluids, dyspepsia, imperfect depuration of the blood, a rheumatic or other unhealthy diathesis, etc.; and lastly as a matter of prominent importance, he mentions the subject of morbid deficiency and morbid excess in the involution of the uterus, after delivery, as proposed by Prof. Simpson, in the Edinburgh Monthly Journal, for 1852. To inflammation and disease of the body of the uterus, and of the lining membrane of its cavity, Dr. West attributes far greater importance than to any abnormalities affecting the cervix and os. In reference to granular inflammation of the os, and certain forms of ulceration, Dr. West makes some important suggestions. He justly remarks, that, with reference to the morbid state of the os uteri, there is much need of careful microscopic research.

On the subject of the popular therapeutical management of uterine disorders, Dr. West offers some searching and practically important criticisms which every physician should heed. So far as the use of the most potent caustics is concerned, he boldly avows their inutility, and even concerning the ordinary applications of nitrate of silver, etc., to the cervix uteri, he would dissent from the views popularly entertained. In his opinion, the treatment proposed by Dr. Bennett comes far short of that essential need of merit, utro, cito, et jucunde.

The questions proposed by Dr. West, and the discussion upon which he has entered in these lectures, are of the highest practical importance and interest, and they also possess the peculiar merit of originality and fairness, contrasting strikingly with certain crude and dogmatic attempts at similar efforts, put forth by Dr. Robert Lee, and others.

We are happy to learn that these lectures are soon to be republished.
in this country, and this fact renders unnecessary any further notice of the work in this place. We feel assured that its intrinsic merits, and the peculiar excellencies of the author’s style, will secure for it a more extensive reading than any similar treatise has enjoyed. All who peruse it must feel that its talented author has done a good work for the profession; yet it requires no spirit of prophecy to foresee that many a lance will yet be broken by the gallant knights of science, ere the great questions at issue between uterine pathologists, will be finally settled.

E. H.


There can be no more convincing proof that the web, which Aristotle threw around science, has been thoroughly broken and destroyed, than the publication of such works as the one whose title heads this article. Perhaps it is a fault of Mr. Radcliffe, as it is of many others, that he is too fond of erecting new theories, and discarding those sanctioned by time, but the philosophical and candid, as well as the able manner in which he thinks and writes, renders his pen attractive, whether or not we yield assent to his views. Certainly the doctrine of muscular contraction, which he attempts to overthrow, has been considered one of the best established in physiology.

It is held by Mr. R., that muscles, instead of contracting by the stimulation of vital and physical agents, contract only when this is suspended or diminished. Hence such facts as the following: the involuntary muscles, receiving in a less degree the stimulus of nerves and blood, contract more frequently and strongly than the voluntary; the rigor mortis occurs soonest after death in those who have been exhausted by old age or by chronic disorder; the sedative, cold, causes contractions, in other words, the absence of the stimulus, heat; when a muscle is at rest, the galvanometer indicates electric currents passing between its ends and sides; not from end to end, or side to side; during contraction, there are no currents whatever. (M. Dubois Reymond.) In other words, contraction occurs when electrical action is suspended. So a muscle in a state of permanent contraction, as from strychnia, or in tetanus, has no electric currents. (Reymond.)

If a temporary abeyance of vital electricity causes muscular contraction, why do currents of artificial electricity induce it? Mr. Radcliffe speaks thus on this point:—
Take a simple galvanic cell, and the skinned hind leg of a frog, and apply one pole to the end of the thigh, and the other to the foot. If the poles be so arranged that the current is from the foot to the thigh, a slight contraction happens on closing the circuit, and a violent one on breaking it; if, on the other hand, the poles are reversed, and the current be made to pass from the thigh to the foot, there is a violent contraction on closing the circuit, and a slight one on breaking it. The slight contractions only continue for a short time, but the violent contractions remain until the muscular irritability is exhausted.

Now in analysing this experiment, it must be remembered, that there is a natural current from the foot to the thigh, and remembering this, the explanation is not difficult. What then is the influence of the artificial current in relation to the violent contractions? When the natural and artificial currents pass in the same direction, each current must intensify the other, and yet the contraction does not happen until the artificial current is suspended. When, on the other hand, the natural and artificial currents pass in opposite directions, and the one must neutralize the other, the contraction happens during the time of neutralization. It is coincident with the negation of electrical action.

Chemical agents cannot be said to excite contractions. "On the other hand, chloroform, ether, alcohol, and some other agents, which are manifestly stimulant, cause decided relaxation in the muscular system, when they are introduced into the circulation."

Our limits forbid a farther examination of this new physiological doctrine, which is certainly ably and plausibly presented, and our readers must judge of its correctness for themselves. Its significance in a treatise on epilepsy and allied affections, is apparent. As in a physiological, so in a pathological condition, muscular contractions are due, Mr. Radcliffe thinks, to a lack, in one way or another, of the usual stimulation. Epilepsy, chorea, delirium tremens, mercurial poisoning, cholera, tetanus, ergotism, etc., are considered by him diseases of debility. Convulsions, under all the circumstances of their occurrence, are accompanied by the weak pulse, pallid surface, and other symptoms of debility, and when depleting measures are serviceable, they are so by relieving organs overpowered by congestion, or by deleterious substances.

The following quotations will show Mr. Radcliffe's treatment of epilepsy.

Good, substantial food, of which a large portion is beef or mutton, is given to epileptics in many lunatic asylums, and with unquestionable benefit. For my own part, I am in the habit of recommending a very liberal allowance of stimulants, and I am fully satisfied, from the results of this practice, that there is no disease in which they are more needed than in epilepsy. I have notes of cases in which recovery was delayed until the patient had been persuaded to take wine. More than
Once, a patient had told me, that he has succeeded in warding off a fit by a glass of wine, or by a draught of ale.

It is in keeping with these considerations, that epileptics are benefited by coffee, which is a powerful stimulant, and not by tea, which is a sedative.

Arguing from the great readiness with which the muscles are fatigued, and the very marked slowness of the reparative process after fatigue, the natural conclusion appears to be, that they ought to be rested rather than exercised; and experience confirms this conclusion.

After speaking of the administration of tonics, which he recommends, especially quinine and iron, and of turpentine and naptha, which, though beneficial to the epileptic, are disagreeable and nauseating, he proceeds:

After this it occurred to me to try camphor, and this I did, in doses of two or three grains, either alone or in combination with quinine or iron, one or both, according to circumstances. Being given in the form of pills, it was free from the principal objection applying to the two former stimulants, and it had this peculiar advantage, that instead of irritating the urinary and generative organs, like turpentine, it exercised, or seemed to exercise a direct quieting influence upon them. In other respects, as tried in several cases, the result was not less satisfactory.

Next in order I gave a fair trial to chloric ether, and still with very decided benefit. Under ordinary circumstances I gave half-drachm doses of this preparation, either alone or in combination with the ammonio-citrate of iron, or quinine, or naptha, and in all cases, it proved to be a very favorite and effectual remedy, particularly with children. Sometimes I substituted Hoffman's anodyne in place of the chloric ether; and sometimes, when the need of a stimulant has seemed to be very urgent, I have associated the two; but it has always seemed that this form of ether is far less pleasant, and efficacious, than chloric ether.

In cases where, and at times when, an occasional stimulant effort was necessary, I have recommended the aromatic spirit of ammonia, either alone or in combination with ether, and the result has really been certain and satisfactory.

Mr. Radeliffe also recommends counter-irritants, and the hot bath as external stimulants.

The following extracts on the treatment of affections allied to epilepsy deserve attention.

In tremulous disorders abstinence forms no part of the treatment. A person who trembles habitually, whether young or old, trembles more before a good meal than after it. In chorea it is still the same. The obstinacy of the laryngeal spasm in hooping cough is in direct relation to the debility of the patient. The corpse-like appearance of catalepsy is wholly inconsistent with the idea, that gluttony had been a cause of the disorder. Tetanus, likewise, in spite of all
prejudices to the contrary is now admitted to require the most assiduous administration of nutriment.

Tonics do not appear to be necessary, except now and then, in such chronic cases as chorea, hysteria, or catalepsy, or in such states of convalescence as follow after tetanus. In these cases, and under these circumstances, quinine and iron will probably be found to be the most valuable of this class of remedies. Stimulants, on the other hand, appear to be as indispensible as they are in epilepsy.

In ordinary tremulousness, sal volatile and ether are admitted remedies, and so are they in delirium tremens, in subsultas, and in mercurial trembling. In chorea I am in the constant habit of giving large doses of chloric ether, in conjunction with the ammonio-citrate of iron, and I can speak very positively as to the benefit resulting from this practice. I have not had the opportunity of carrying out these principles in hydrophobia; but if I had, I would do so without any hesitation. I would give frequent draughts of ether, and hot brandy and water, along with turpentine injections; and if the act of swallowing was very distressing, I would multiply the injections, and administer the ether and brandy in this manner.

In the spasmodic stage of hooping-cough, I can testify as to the great benefit resulting from large doses of chloric ether, along with steel or camphor mixture, according as the patient was anæmiate or not.

Mr. Radcliffe believes that chloroform suspends convulsions by its stimulating effect.

From the foregoing extracts the reader will learn the peculiar views of Mr Radcliffe, and the facts upon which they are based. The point of greatest interest is in reference to their influence upon the treatment of convulsive affections, and in this respect it will be perceived that he advances nothing new, but rather confirms the resort to, and perseverance in, the use of old remedies. The work is rather suggestive than practical, and will tend to awaken a new interest in the pathology of these obscure diseases, which must result in important discoveries.


Pulmonary consumption is a disease so common, and one that has been so much studied, that it might be doubted whether any thing new can be offered on the subject. But if we mistake not, this treatise contains important practical matter, with which the mass of physicians are still unacquainted. The work comes to us strongly recommended,
from the favorable position of the author for studying this disease, as physician to a large hospital devoted exclusively to consumption. It contains the results of his observations and investigations of the most important and practical subjects connected with phthisis, with the statistics on which his conclusions are based. We shall merely present some of the more important facts brought to light by his labors, leaving it to the reader to receive the full benefit of the volume by its perusal. In speaking of the symptoms of consumption, the author makes the following interesting remarks on hæmoptysis:

The ordinary cause of hæmoptysis is doubtless, compression or obliteration of the pulmonary veins by the tubercular deposits, in consequence of which, blood interrupted in its natural channels, overflows or exudes into the neighboring bronchi. If this explanation be correct, hæmoptysis, moderate in amount, must be regarded rather as beneficial than alarming. By preventing the stagnation of unhealthy blood, it must tend to oppose the extension of tubercular disease, and as far as a conclusion may be drawn from the cases under my care, the influence of hæmoptysis of considerable amount would seem to have been rather favorable than otherwise. You will observe that some of the cases of phthisis recorded in the table, accompanied with copious hæmoptysis, were remarkably slow in their progress. In six of the cases, the quantity of blood expectorated at once has exceeded a pint, and the time which has elapsed since the occurrence of the profuse hæmoptysis to the present period, has been in these patients respectively, six months, twenty-two months, twelve months, ten months, eight months, and five years. * * * * It is better to moderate this symptom, by producing determination to other organs, than to employ direct astringents. You will find great benefit in many cases from the administration of a dose of calomel or mercurial pill, with henbane, followed by the use of half-drachm doses of sulphate of magnesia, with diluted sulphuric acid, administered twice a day.

The expectoration in consumption, Dr. Thompson divides into four kinds, corresponding with the stages of the disease; first, the salivary, or frothy; secondly, the mucus; thirdly, the floeculent; fourthly, the purulent, or porræceous. He believes that the proportion of salts in the sputum is in "an inverse ratio to the degree of inflammation present." "As an approximation to the proportion of saline matter in the solids expectorated, we may mention from twenty to thirty per cent in catarrh, from fifteen to twenty in the more opaque mucus of chronic bronchitis, and rather less than ten in the puriform expectoration of advanced phthisis."

The author speaks of a microscopic plant, resembling the torula of the yeast, which he found in the sputum of a boy, and which he thinks came from a cavity under the right clavicle. This cryptogamic growth from the lungs, appeared identical with that discovered by Dr. Hughes
Bennett, and described by him in the Transactions of the Royal Society of Edinburgh, for 1841.

The pulse of the consumptive, Dr. T. regards of considerable diagnostic value. That of a healthy adult has been shown by statistics, collected by Dr. Guy, to vary in frequency according as the individual is sitting or standing; pulses of 60, 50, 100 and 120 in the sitting posture, rising respectively to 66, 93, 119, and 147 when standing. In the phthisical he remarks:

The difference produced by change of posture is comparatively trival. * * * In cases of debility, change of posture produces so much more effect on the pulse than in the healthy state, that Dr. Knox regarded this indication as a sort of asthenometer. The importance of this fact, in connection with our present subject, is obvious; since the debility associated with phthisis might be expected to counteract rather than to produce the inaptitude of the pulse to be modified by change of posture. If you compare the pulse of a consumptive patient on different days, you will often find that its variations in frequency are more considerable than can be readily explained; but on the days when the pulse is the least frequent, you will usually find the difference produced by change of posture to be greatest.

The author believes, that, as phthisis advances, the amount of solid constituents in the urine undergoes a change; the uric acid increasing, and the urea diminishing. His explanation of this is, that defective aeration of the blood prevents the conversion of uric acid into urea, and he has noticed, that during the administration of cod liver oil, the proportion of these elements became more natural.

In the following extracts, we learn the author’s appreciation of prolonged expiration, as a sign of tuberculous deposit in the lungs:

During the time of my attendance on the out-patients of this institution, I made this symptom, prolonged expiratory murmur, an object of particular notice, and among 2000 consumptive patients, it proved to be the most remarkable of the physical signs, in 288; those cases presenting bronchial complications being excluded. Haemoptysis had occurred in 91 of these cases, that is in 31 per cent., a proportion calculated to confirm my opinion of the significance of the prolonged murmurs, and at the same time sufficiently below the average frequency of haemoptysis in the first stage of phthisis, to support the assumption that the prolonged expiratory murmur takes precedence of other characteristic signs, which are commonly assumed as requisite, in order to prove the existence of consumptive disease.

With a view to the correct appreciation of the sign under our consideration, keep in mind the situation, degree, persistency, and simplicity in which it is presented. Prolonged expiratory murmur, slight in degree, if heard only on the right side is inconclusive, but if confined to the left, is far more significant. The more limited the space over which it is heard, the greater the probability that phthisis is the
cause. The persistency of the sign, for a considerable period, if unattended with symptoms of bronchitis, emphysema, or pneumonia, indicates some permanent obstacle to the free exit of the air, and, in a majority of instances, this obstruction is of a tuberculous nature. In cases depending on pulmonary congestion, the expiration, after cupping and other appropriate treatment, usually resumes its natural character; but excluding this, and other complications, before noticed. I have not recorded any instance, in which this sign, once fully established, ever ceased to be obvious, unless superseded by other signs.

Although in many instances, no specific complaint was made by the patients, except of debility, and although, in this respect, improvement occurred under suitable treatment, it was yet common for the murmur to increase in duration, and deviate more and more from its natural character, whilst sooner or later, dull percussion, bronchophony, hurried breathing, quick pulse, emaciation, and night perspirations, too often occurring in succession, afforded affecting testimony to the correctness of the first diagnosis.

Fistula in ano, according to Dr. Thompson's statistics, has a decided retarding effect in the course of phthisis, and should be considered a salutary complication. He says:

Among the causes tending to retard the progress of pulmonary consumption, I am disposed to mention fistula in ano. A few years since there happened at one time to be under my care nine consumptive patients, affected with this disease. I had the curiosity to inquire into the duration of the malady in each case, and found, on adding the periods together, and dividing by the number of patients, that I obtained an average of two years and nine months, although the disease had not in any instance, advanced beyond the first stage. When you reflect that the duration of phthisis in a majority of cases, does not exceed eighteen months, you will concur with me in the impression, that fistula may possibly, in the way of derivation or counter irritation, retard the progress of the malady. Practically, this subject claims particular attention. When the surgeon operates on fistula in the phthisical, the wound is inapt to heal; but, were it otherwise, the operation would be a measure of questionable propriety, if the disease tends directly or indirectly to abate consumption.

After describing the diarrhea attending phthisis, and objecting to the more powerful astringents, as likely to produce the opposite condition of the bowels, Dr. T. observes:

On the whole, there is no remedy for this affection, which has acted so satisfactorily under my observation, as the trisnitate of bismuth, which I commonly administer at intervals of four or six hours, in doses of five grains, combined with three grains of gum arabic, and two of magnesia. A larger dose may be given with safety, but that specified, has appeared to me the most appropriate for the purpose. It is probable that in many cases phthisical diarrhea depends more on the condition of the vessels in the neighborhood than on the ulcers themselves, and the bismuth probably exerts a tonic influence on these
Thompson on Pulmonary Consumption.

vessels, as well as on any ulcerations. This opinion is not altogether speculative, since I have had opportunities of observing the power of this remedy, when scattered over the languid granulations of cutaneous ulcers, in restoring them to a firm and healthy character. The bismuth is not so prompt in its effects as acetate of lead, and therefore requires to be used with perseverance, but when care has been used to correct collateral derangements, I rarely fail in two or three days to observe amelioration of the symptoms, with this advantage—that the good effect is permanent, and without incidental disadvantages. Indeed it usually gives a better tone to the digestive organs generally, and corrects the sinking feelings about the epigastrium, with which the consumptive patient is occasionally distressed.

The following remarks relate to what the author terms wavy inspiration:

The inspiratory sound instead of being equally sustained from its commencement to its termination, is divided into several parts. Sometimes it is more feeble than natural; at other times rather harsh, but not necessarily altered in character.

An examination of my notes, recording the history of about a hundred patients, in whom wavy inspiration was a principal symptom, has convinced me that there are certain varieties of this kind of inspiration, with which it is important to be familiar. One of these varieties probably depends on obstruction to respiration, produced by pleuritic adhesion. This variety of the sign occurs in nearly equal proportion on the right and the left side; it is, I think, increased by pressing the stethoscope firmly over the part: it is often attended with pleuritic friction sound, and is usually very distinct.

Another variety is apparently associated with rheumatic conditions. The wavy inspiration thus produced is usually high in tone, often rather widely diffused, and variable in situation, and usually accompanied by pain in the part. In confirmation of the opinion just expressed, it may be incidentally mentioned, that small doses of colchicum are useful in the treatment of this affection, and that the use of lemon-juice is likewise advantageous. This latter remedy has also appeared to me of service in some instances of intercurrent pleurisy in the consumptive.

A third variety occasionally accompanies bronchial affections, and under such circumstances the cause may be detected by the coexistence of ronchi and other symptoms characteristic of bronchitis. Interrupted inspiration, however, according to my observation, in a great majority of instances, has no necessary relation to either of these conditions. The sign, in a very large proportion of cases, is limited to the left side, (contrasting remarkably in this respect with prolonged expiratory murmur,) and this fact is inconsistent with the idea of its necessary dependence either on pleurisy or phthisis. The usual situation of the sound is near the apex of the lungs in front, but occasionally I have observed it at the posterior part of the chest, where, indeed, it may occasionally be present without attracting notice. * * * * I was once accustomed to regard the sign which I have now brought un-
under your observation, as a proof that phthisis had actually commenced, but more extended opportunities of watching patients, in whom it has continued for many years, without becoming complicated with any other indication of disease, have induced me to modify that opinion. It is true that I have certainly often observed wavy inspiration at one part of the chest when pectoriloquy or cavernous respiration could be elsewhere detected, or when other indications, local or general, of advanced consumption have been present, and in a greater number of instances, the wavy inspiration has been superseded by the occurrence of bronchial respiration, dullness on percussion, dry crepitation (crackling) or other more or less decided evidences of the establishment of phthisis; but in a still greater proportion of cases it has continued for a considerable period, to be the only important evidence of deviation from the natural state. Often, indeed, I have watched the symptom for years, without observing any transition to serious disease. Of 105 cases, carefully recorded in the course of an investigation which I formerly made, regarding this symptom, 32 afforded grounds for suspecting tubercular disease; such, for example, as dullness on percussion, or prolonged expiratory murmurs; in 22, haemoptysis had occurred; in a murmur could be heard over the pulmonary artery. But of the remainder, many were not affected even with a cough, and their complaints were usually expressed in general terms, as of "delicate health," "easy fatigue;" or if they made any reference to the chest, it was seldom of any thing beyond slight oppression of respiration, or of "seeming to breathe through thin eambric." It is, therefore, reasonable to conclude, that, if this form of interrupted inspiration be an indication of tubercular disease, it is the earliest local sign with which we are acquainted. The question, however, naturally occurs, can this symptom depend on mere functional disturbance, and disappear, leaving the subject of it in apparent health?

Having devoted some attention to this inquiry, I must acknowledge that although wavy inspiration, when dependent on pleurisy, bronchial affection, or rheumatism, may disappear, I have not satisfied myself of its removal, (unless superseded by more serious symptoms,) in any instance unconnected with the conditions which I have specified.

It will be remembered that Dr. Thompson's lectures, when published in the Lancet, attracted considerable attention from the author's investigation of the red margin on the gum, and the importance which he attached to it, as a sign of phthisis. We take the following, on that subject, from the work before us:

In the investigation of chronic diseases, one of the most important objects is to ascertain, as far as possible, the condition of the blood, and the degree of firmness or tenuity of the bodily structure in general. * * * The introduction of some poisons into the system, is occasionally manifested at the edge of the gums, where they are reflected around the teeth. * * Considerable attention to this inquiry, has impressed me with a conviction of the frequent existence, in consumptive subjects, of a mark at the reflected edge of the gums,
usually deeper in color than the adjoining surface, and producing a festooned appearance by the accuracy with which it corresponds with the curve of the gingival border. This mark is, in some patients, a mere streak—in others, a margin, sometimes more than a line in breadth. In the most decided cases, this margin is of a vermillion tint, inclining to lake. * * As a general rule, the line is most distinct around the incisor teeth, but it is frequently apparent also round the molars.

I have requested my clinical assistant Dr. Bateman, to draw up a table of the appearance of the gums in the forty-seven cases under his immediate supervision. In the first division, containing the particulars of twenty-six men, you observe that only six are free from the margin, and that twenty who present the margin, have also distinct symptoms of consumption. In five of those without the line, there is also freedom from other consumptive symptoms; the diseases in these patients being respectively emphysema of the lungs, hydatid cyst, diseased liver, pleurisy, and diseased heart. Only one of the phthisical males, a boy, aged twelve, has unstreaked gums; and although the margin is occasionally observable in children, it appears to me, as far as I have yet noticed, to be more frequently absent in them than in adults. * * *

You will see that of twenty-one phthisical women, there are no less than eight without the margin, and it is remarkable, that in each of these cases there is cavernous cough or other undoubted evidence of the existence of vomica. The exceptions amongst the female patients are far more frequent, as is apparent from the table.

Mr. Thompson says that this appearance is not confined to advanced phthisis, but is sometimes one of the earliest signs present.

In the hospital with which the author is connected, more than 600 gallons of cod-liver oil are used annually in the treatment of phthisis.

Our usual plan, says he, is to give one or two drachms twice a day at first, gradually increasing the quantity to half an ounce three times a day, and I have seldom found any advantage accruing from going beyond this limit. * * You may wish to form an opinion regarding the comparative efficacy of the different kinds of cod-liver oil. In my early trials of the remedy, six years since, forty or fifty cases were treated with the coarse kind, resembling what is used in preparing leather, and the average benefit derived, did not materially differ from that effected by the purest varieties subsequently employed. At a later period, I had the curiosity to try these different kinds, combined with liquor potassae and peppermint oil, giving alternately the coarse and the purified cod oil, and recording the report of the patients; and it is a curious fact, that the majority actually gave the preference to the mixture in which the coarser oil was introduced. Objections have been made to this combination as complicating the treatment with the addition of a medicine, by some persons supposed to be inappropriate; but my experience is favorable to the use of liquor potassæ, especially in the early stage of phthisis, and theoretical arguments might be deduced in its favor.
Occasionally, although not frequently, the stomach rebels against the oil however purified, and in whatever combination; and I have been accustomed in consequence, under such circumstances, to introduce the oil endernically.

Three years since I was requested to see a gentleman, from the country, confined to his bed, emaciated, hectic, and, apparently, failing rapidly, with a cavity at the apex of the right lung. There was considerable diarrhea and thinking the internal use of cod oil unseasonable, I ordered an ounce, combined with oil of lavender, to be rubbed into the chest night and morning. This gentleman gradually rallied, and returned to the country, where he advanced much in strength and weight, and rode about on horseback. I examined him last year, and, judging from the physical signs, found the size of the cavity materially reduced.

Other cases are given, showing, apparently, benefit from cod-liver oil thus used, and the author quotes from a Dr. Klencke, who believes that he has improved the condition of cats and dogs, by an endermic application of this agent.

Dr. Thompson is of opinion that hæmoptysis, when active, contra-indicates the use of the oil, as this enriches the blood, but when the hæmorrhage is passive, "means which tend to enrich the blood, are calculated to lessen the hæmorrhagic tendency, and its occurrence is by no means an adequate reason for the discontinuance of the oil." So diarrhœa, unless there be an erethitic state of the alimentary mucous membrane, the author thinks does not contra-indicate its use; on the other hand, he believes the medicine rather astringent than laxative.

An account of Dr. Thompson's experiments with various remedial agents should not be omitted. Considering the composition of cod-liver oil, he was induced to try animal charcoal, in doses of fifteen to twenty grains, but with no perceptible benefit, except, that it occasionally checked diarrhœa. Olive and almond oils, were also useless, and the former occasionally caused nausea. The animal oils, at the head of which stands cod-liver oil, he considers of undoubted benefit. In 1849 he treated fourteen patients with oil obtained from the foot of the young heifer (neat's-foot oil). Three of these patients derived essential benefit, the disease being arrested, four were slightly relieved, five received no obvious advantage, and two retrogressed rapidly. Excepting cod-liver oil, this remedy was the most beneficial of any tried. Sperm oil, and almond oil, with phosphorus—the phosphorus being given because cod-liver oil contains it—appeared productive of some, but not very decided benefit.

The author quotes from various writers to show that in different countries and ages, remedial powers has been attributed to the fish and other animal oils, and he continues—
The conclusion to which the observations just detailed conduct us, is, that the other varieties of fish oil, differ from that obtained from the liver, rather in degree of palatableness and agreeableness to the stomach, than in any essential difference of virtue; that neat’s-foot oil is less strictly similar; modifying the blood, indeed, in a corresponding manner, but differing from the liver oils in degree of aptitude for assimilation, according to peculiarities in the digestive organs of the individual patient. It may therefore be regarded, not so much as an equivalent, as a rival to the cod-liver oil. Where cod oil fails, sperm or whale oil would probably be useless, but the failure of the oleum jecoris aselli is no proof that the oleum bubulum may not be administered with the hope of advantage, and from its greater cheapness, and less penetrating odor, it might be largely tried in the way of inunction.

Either oil may sometimes be advantageously substituted for the other, and although that of the cod will in the majority of cases prove most effectual, I think you are now in the possession of facts showing that the neat oil is likely to prove a useful addition to our medical resources, and that both these oils probably act similarly, in combining with albumen, and assisting in the supply of the chyle granules which enrich the blood.

I must not conclude this letter without impressing on you the importance of the persevering use of animal oils, when they are found appropriate. We must give them sometimes alternated with steel, or other tonics, even for many years, if we would overcome the liability to a return of the symptoms.

The statement made in this lecture regarding vegetable oils requires an important qualification, in consequence of experiments which I have made during the first eight months of the present year (1853), with oil of cocoa-nut, which appears to me to possess medicinal properties similar to those of cod-liver oil. The results in the first thirty patients to whom I administered it, bear comparison with those obtained in the first thirty-seven patients for whom I prescribed cod-liver oil, chiefly in the year 1845, as related to the Medical Society of London, and briefly described in some of the medical journals (Lancet, June 27th, 1846.) Amongst the patients to whom cocoa-nut oil was given, there were some instances of arrested phthisis, as decided as any I have been accustomed to attribute to the use of cod-liver oil, over which it possesses advantages in reference to economy and palatableness; and it is interesting to remark, that its efficacy was experienced by some who had previously taken cod oil uselessly, and by others who had discontinued it on account of nausea.

We cannot close this notice of Dr. Thompson’s work, without expressing our satisfaction in its perusal. The position of the author, the statistical data upon which his conclusions are based, and the candor which marks his reasoning, will render his treatise acceptable to the profession.
BIBLIOGRAPHICAL NOTICES.


The first number of this periodical has been received from the publisher. According to the announcement, the Archives will be issued quarterly in numbers of from 150 to 300 pages in 8vo. The number before us contains the elaborate Essay of M. M. Homolle and Quevenne upon Digitaline, which obtained the prize of 1000 francs in 1844, from the Société de Pharmacie. As we have already given our readers, in a former number of this journal, (Sept. 1851,) an analytical notice of this monograph, we have only to add, that its authors have continued their investigations with a painstaking, conscientious spirit; but so far as we have discovered, have not found reason to change the opinions which they expressed in the original article, and have rather strengthened old facts than added new ones. They have pursued a system of vigorous experimentation which gives to their work an exact and scientific tone; and we shall expect to find the same qualities in the future numbers of the Archives, as it is the intention of the director to publish therein those researches which have been pursued for a series of years, and have been executed upon so large a scale, that they cannot find a place in the ordinary scientific periodicals.

The May number contains a memoir of M. Quevenne, upon the physiological and therapeutical action of the preparations of Iron. Each number will be devoted to one monograph on some special subject, and will be sold separately.


The essays which this volume comprises, have for the most part already appeared in the Medical Journals. They were originally prepared for the students which attended the author's lectures, during the last winter, and now appear in a separate volume, with such notes and additions as his other engagements would allow him to make. These papers are sixteen in number, under the following heads:—1. On the Supracondyloid Process; 2. On the Oblique Muscles of the Eye in Man and Vertebrate Animals; 3. On Double Stomach in Man; 4. On the Nerves of the Orbit; 5. On open Foramen Ovale and the Foetal Heart; 6. Case in which the Pulmonary Artery gave origin to the Descending Aorta and Left Subclavian Vein; 7. Anatomical Inquiry into the Mode of Action of local Blood-Letting; 8. Dissection in a Case of Paralysis of the Common Motor Oculi Nerve; 9. Description of an Esquimaux Female Pelvis; 10. On the Semilunar Valves of the Heart; 11. On Rudimentary Ribs; 12. On Branches from the Fifth Pair of Nerves to the Muscles of the Eye; 13. On Diverticula from the Small Intestines; 14. On various points of Anatomy, considered in a Review; 15. On the Abnormal Anatomy of the Arm;
16. On the Fascia of Scarpa. In the preparation of these papers, the author exhibits much patient research, with a philosophical cast of thought. The contents of the second part are announced in this, and we shall forbear noticing critically any of these papers, until the appearance of that volume.

ART. XV.—The Modern Treatment of Syphilitic Diseases, both Primary and Secondary; comprising the Treatment of Constitutional and Confirmed Syphilis by a safe and successful Method; with numerous Cases, Formulæ, and Clinical Observations. By Langston Parker, Surgeon to the Queen's Hospital, Birmingham. From the third and entirely re-written London Edition. Philadelphia: Blanchard & Lea, 1854. 8vo. pp. 316.

Since the issue of the first edition of Mr. Parker's work, in 1838, Syphilis has been studied in all its forms, with a degree of enthusiasm and rivalry never before known. That edition was nothing more than a compila­tion, and as such reflected very truthfully and completely the existing state of knowledge on that subject. The present edition, however, makes somewhat higher pretensions. It is in truth a new work, as every line has been carefully revised, and entirely re-written where the author's views have changed, and the whole amount of matter has been greatly increased by the additions which have been made. It contains now the result of the author's experience in hospital and private practice, extending over a period of twenty years, during which he has personally treated more than eight thousand cases. These cases have all been carefully tabulated, thus rendering available in the preparation of the present work, a vast amount of valuable clinical knowledge. The opinions here advanced, and the rules of practice recommended, may, therefore, well be regarded in the light of high authority. The author enters but little into a discussion of the mooted points of the subjects which he treats, directing attention rather to matters of practical interest. The work abounds with details of illustrative cases, and the most useful formulæ in the treatment of the various forms of this disease, are very properly given.


The two works whose re-publication is here announced, are of widely different pretensions as well as merit. The work of Dr. Hughes is designed as a manual for the student, "to prepare and to help him to examine for himself;" and for that reason is "simple, plain, and colloquial." The well known facts in auscultation and percussion, are
stated concisely yet intelligibly, to the avoidance of the introduction of extraneous matter, and the discussion of merely theoretical notions. It is well adapted, therefore, as a manual for the learner, or as a guide book for the practising physician, who has no leisure to search for practical hints in large treatises. It will be perceived that this is the second American, from the last revised and enlarged English edition.

The work of Professor Skoda, of which we now have the pleasure of welcoming an American edition from the translation of Dr. Markham, belongs to a far more consequential and important, yet not less useful class of publications. The author cultivates the field of original inquiry, and boldly advances as the pioneer in the science of physical diagnosis. The peculiar views advanced in this volume have now been before the profession since 1841, when the first edition was published at Vienna, and have during that long period been the subject of unsparing criticism. Still they have quietly triumphed over the prejudices of professed critics and jealous rivals, and the fourth edition of his work finds many and ardent admirers. We must reserve for a future occasion an illustration of the theories of Professor Skoda, many of which from their direct antagonism to commonly received opinions, deserve the most serious and attentive consideration. Meanwhile we commend this work to the attention of the student of physical diagnosis, and urge its careful perusal both from the high position and authority of the author, and the intrinsic merit of his investigations.

Art. XVII.—Healthy Skin: a popular Treatise on the Skin and Hair, their Preservation and Management. By Erasmus Wilson, F.R.S., Author of "a Treatise on Diseases of the Skin," etc. Second American, from the fourth and revised London Edition. With Illustrations. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 291. This little volume designed for popular instruction, in regard to the management of the skin in health and disease, has been well received, as is seen by the demand for the fourth London, and a second American edition. Mr. Wilson ranks deservedly among the best teachers in this department, and his work as we should anticipate, abounds in useful and instructive matter.

Art. XVIII.—A Universal Formulary: containing the Methods of Preparing and Administering Officinal and other Medicines; the whole adapted to Physicians and Pharmacists. By R. Eglesfield Griffith, M.D. A new edition, carefully revised, and much extended, by Robert P. Thomas, M.D. With Illustrations. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 651. This edition of Dr. Griffith's work, has been greatly improved by the revision and ample additions of Dr. Thomas, and is now we believe one of the most complete works of its kind in any language. The additions amount to about seventy pages, and no effort has been spared to include in them all the recent improvements which have been published in Medical Journals and systematic treatises. A work of this kind appears to us indispensable to the physician, and there is none that we can more cordially recommend.
PART THIRD.

FOREIGN MEDICAL RETROSPECT.

PRACTICAL MEDICINE.

Abdominal Tympany.—The following interesting clinical lecture by Dr. O’Ferrall, we take from the Dub. Hos. Gaz.—Abdominal tympany is met with under various forms; it announces the meteorism of fever, and it accompanies many of the inflammatory and nearly all obstructive diseases of the alimentary canal. There is one form, however, which seems allied to the condition termed hysteria, but which presents some physical characters simulating organic disease, and which requires some patience and care in order to establish a satisfactory diagnosis.

A girl, twelve or thirteen years old, is brought to you for advice, on account of supposed abdominal disease. You observe that she is pale but not emaciated; that the abdomen projects unnaturally, and that her mode of progression is very peculiar. The chest is thrown back, the arms hang, the spine is remarkably curved, and the child walks exactly like a woman balancing a large ovarian tumor or gravid uterus. The usual percussion in the erect position will soon enable you to assure yourself that there is no dropsical effusion into the peritoneum. You now proceed to examine the abdomen in the horizontal position. Expiration is imperfect, and the respiratory act becomes frequent and embarrassed as the examination proceeds. You remark that the tumefaction is not uniform; a shallow transverse depression running across, a little above the umbilicus, marks the abdominal swelling into two portions. In a girl, aged thirteen, recently measured, the circumference of the abdomen across the upper portion was 32 inches; across the lower portion of the abdomen 59½ inches; and across the middle, 27½ inches. The abdomen generally feels resisting, and remarkably elastic; the resistance at the right hypochondrium gives a sensation of a more solid nature, and in some instances pressure in this situation appears to make the patient wince. It deserves to be remarked, however, that the seat of sensibility is not always the same in different cases. Percussion over the lower half of the abdomen elicits a loud and prolonged resonance; over the left hypochondrium the tympany is short and more acute in tone, while in the right hypochondrium a distinct and marked dullness is afforded to percussion.

Now with this evidence before you, to what conclusion can you rea-
sonably arrive? There is no dropsy, and the existence of mesenteric or malignant disease appears opposed by the general condition and expression of the patient. Hepatic enlargement appears the most probable supposition. But the position in which the patient is lying, with the spine arched prominently forward, instead of receding from the pressure of examination, throws a difficulty in the way of this opinion. This want of accordance between the symptoms and physical signs, leads you naturally to examine the thoracic cavity. You proceed to percuss the right chest from above downwards; percussion yields a clear sound down to, and even below the very margin of the false ribs. This solves the difficulty, and proves that the dullness in the right hypochondriate cannot proceed from enlarged liver, because, if this viscus was enlarged, its increase in the upward direction would necessarily have compressed the lung, and produced dullness as high, perhaps, as the nipple.

But there is the hypochondriate tumor, what can it be? If not an enlarged liver, what is it? Why, manifestly, a displaced liver. There is dullness on percussion below the margin of the false ribs, where it ought not to be; and above the margin of the ribs, where it ought to be dull, it is clear. Something has evidently pushed the liver down from its place, and against the anterior walls of the abdomen; what can that be? It is not any thing contained within the cavity of the thorax. There is no evidence of either emphysema, pneumothorax, nor empyema; and if nothing within the chest has pushed down the diaphragm, in the manner indicated by the displaced liver, it is most likely that the diaphragm must have descended by its own contraction. It is difficult to imagine a strained contraction of a muscle, like the diaphragm, for long periods of time; but there seems to be no other means of accounting for the phenomena. And when we consider the many well authenticated cases of long-sustained muscular tension which have been recorded as having occurred in catalepsy, as well as in the so-called mesmeric condition, it does not appear unreasonable to suppose that such a persisting contraction of the diaphragm and abdominal muscles may be maintained in certain states of the nervous system, and produce physical signs similar to those I have described. Watchfulness is often a characteristic of this peculiar condition. In general, it will be found impossible to discover the patient in a state of sleep so profound as to render them unconscious of examination.

In a case of this kind, recently under observation in St. Vincent's Hospital, all other means of procuring temporary relaxation of the muscles having failed, it occurred to me that the cautious use of chloroform might be employed for this purpose. This was done before the class of pupils, to whom, as an instance of abdominal tumor, the case was an object of peculiar interest. Being very cautiously employed, the chloroform was very slow in its operation. The pulse remaining satisfactory, it was persisted in until a condition of sleep was produced. The most remarkable change now took place in the appearance of the abdomen. The recti muscles became relaxed, and sank backwards, until the surface of the abdomen became actually concave. The upper
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and lower tumor subsided, and now, on percussion, the dullness beneath the ribs was replaced by a moderate degree of resonant, and percussion on the lower ribs no longer sounded preternaturally clear; the diagnosis was complete. As soon as consciousness returned, the tumor was found to possess every character as before described.

Sir Benjamin Brodie has described a curious state of the voluntary muscular system, in which paralysis of the lower extremities was supposed to exist, but in which there is really only required a strong will on the part of the patient in order to develop the seemingly absent power. In practice we frequently meet with such cases, and there is reason to believe, with Sir B. Brodie, that the want of a strong will to execute the power is the essence of the morbid condition. It would be a curious subject of inquiry, whether a condition nearly opposite of the nervous system may not exist, in which with scarcely a consciousness on the part of the patient, muscles known to be voluntary are capable of extreme and prolonged contractions, in defiance of all advice or persuasion, and to the manifest inconvenience, and even suffering, of the individual.

Cases like that here described are occasionally subjected to treatment, the result of erroneous diagnosis, founded upon a hasty or imperfect physical examination. I have known instances where the iodine plan was carried to its utmost limits, in the hope of reducing a supposed abdominal tumor. The treatment should consist of such means as are calculated to improve the general tone of the system and promote a cheerful temper; shower baths, calisthenic exercises, and exercises in the open air. The bowels are, in many cases, regularly moved, although the swelling persists, and terebinthinate purgatives have no effect upon it. I have known the lower swelling diminished by the rectum tube, but the return of the swelling almost immediately succeeds its employment. The chalybeate preparations are generally indicated by the state and appearance of the patient. Moral treatment is not without its influence; but nothing in this way will avail without obtaining the confidence of the patient in your friendly disposition towards them.

The physical diagnosis is, in those cases, that on which you must rely, to prevent your employing injurious remedies. Now, in a careless examination, physical evidence might create a difficulty; if limited to the abdomen itself, it might confirm any previous suspicion of the existence of abdominal disease; extending, however, the field of its application, physical evidence removes the difficulty, and throws a clearer light upon the physical condition of the organs. Physicians of large experience must be familiar with, and prepared for such difficulties; but the student cannot have too many aids to guide him in his investigation of obscure disease.

[The employment of Chloroform in hysterical cases simulating pregnancy has been highly recommended by Prof. Simpson. The distended abdomen immediately becomes collapsed, and admits of the most satisfactory exploration.]

N. S.—VOL. XIII., NO. II. 20
On the Treatment of Gangrene of the Lung by Inhalations of Turpentine Vapor.—Four cases of gangrene of the lung have been treated by Professor Skoda in the following manner: The essence of turpentine is poured upon boiling water, and the patient is directed to inhale the vapor for fifteen minutes every two hours. Sulphate of quinine is administered also in the usual doses. The first case was that of a servant affected with limited gangrene of the superior lobe of the right lung. After six weeks of this treatment, it became impossible to detect either infiltration or gangrene of the organ. On the contrary, the respiratory murmur had returned over the whole region. Three months afterwards the patient was seen in good health.

In the second case, an inn-keeper of mature age and strong constitution became the subject of a gangrenous cavity in the lower lobe of the right lung, consequent upon disease commencing March 11, 1852. On March 21, the patient commenced the inhalations of the vapor of turpentine: he continued without repugnance, for five or ten minutes every two hours, taking, at the same time, the usual doses of quinine. At the end of three weeks, the expectoration, which had been extremely abundant (a pint and a half daily,) became reduced to a quarter of a pint. The inspirations had been employed four times a day. At the end of six weeks, the patient could quit his bed. His strength was returning, the appetite was improved, and his general aspect favorable; but the expectoration continued to be fetid from time to time, and was always sanious. The right side of the chest was painful, and respiration labored, but the air entered the circumference of the lower lobe; the respiration being uncertain and accompanied by feeble râles and sibilance. The patient went into the country, where he continued the turpentine inspirations twice a day up to the middle of July, when both cough and expectoration had entirely disappeared. In the month of December, 1852, he came to M. Skoda for a certificate of health. There was no pain, nor oppression, nor cough. He had recovered his embonpoint and his strength; there was no retraction of the thorax; vesicular respiration everywhere. In the third case it was not in the Professor's power to persist in the plan. The fourth case is still under treatment. A butcher, of strong constitution, had a gangrenous cavity in the inferior lobe of the left lung. He fell ill about the end of May, 1852. The inspirations of turpentine were commenced June 4. At the end of a week, the fetid expectoration, which daily equalled two pints, had entirely disappeared, and the patient considered himself well, because the pain and the oppression in breathing had diminished; the appetite was returned, and the sleep was tranquil. He, therefore, left off inhaling the turpentine, which was extremely disagreeable to him. On June 19 there came on a severe shivering fit, with cough and dyspnoea, and during the following night the patient expectorated several pints of extremely fetid sputum of dirty brown color. The inspirations were recommended, but the patient used them as little as possible, on account of the irritation which they produced in the air-passages. In eight days the quantity of matter brought up had greatly diminished, and the pulse was normal, but there was pain in the chest. The patient lay immoveable upon his back in a state of great weakness and pros-
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nevertheless at there the right but that rest, both by attracted those rounded perficial the state, tumor, ing may, however, of the improvement tock, Mrs. Casr the right nasi of A Marshall—Th upon January 1854.—Dublin Hospital Gazette.

Spasmodic Tic (?) in new-born Infants. By Alfred H. M’Clintock, M.D.—The diagnosis in these cases lay between paralysis and spasmodic tic, an affection so designated and first described, I believe, by Marshall Hall, and which Romberg calls “minischer gesichts-schmerz”—a term which his translator, Dr. Sieveking, thus renders: “histrionic spasm of the face.” The symptoms, carefully weighed and considered at the time, inclined me, and two very competent observers who saw these cases along with me, to the opinion that they were not examples of ordinary facial paralysis. But this point as it may, however, they are still highly interesting, and have a direct bearing upon the subject of nervous pathology.

Case 1.—Mrs. B. was delivered of her first child after a rather protracted labor. Ergot of rye was administered towards the conclusion, as the pains were very inert; the child, a well grown boy, was still-born, but by the employment of the ordinary restoratives was completely resuscitated. The next morning it presented the following appearances:—Upon the occiput and posterior part of the right parietal bone was a tumor, such as is commonly found after tedious labors. On the left side of the head, and corresponding to the temporal ridge, was a superficial yellow slough, about an inch and a quarter in length, surrounded by an inflammatory margin. As long as the child was at rest, no change in the features or symmetry of the face was observable; both eyes opened and closed nearly alike, at least, when in the former state, the lids of the right were, perhaps, a degree farther apart than those of the left. When the facial muscles were called into action, great distortion resulted on the left side—the corner of the mouth and ala nasi being drawn up and the eye tightly shut; at the same time, the right side of the face was not utterly blank and void of expression, as we see it in paralysis. Local treatment was applied to the injury on the left side of the head, and in the course of a few days the wound put on a healthy appearance, and healed rapidly. A considerable improvement also took place in the distortion of the countenance, and at the end of a fortnight, when the child ceased to be under observation, scarcely any difference existed between the two sides of the face.

Case 2.—A woman was delivered, after twenty-four hours illness, of a fine healthy boy. At next visit the nurse called my attention
to the child's face, which on a first glance, seemed paralysed on the right side; a more careful scrutiny, however, altered this opinion. During the quiescent state of the features, no difference was discernible between the right and left sides; but when the child laughed or cried, then the muscles of the left side were thrown into strong action, and considerable distortion ensued. From the close similarity in the symptoms with those of the former case, I was led to examine the child's head: a small grey slough, surrounded by inflammation, was discovered on the integument covering the left parietal bone, near its anterior inferior angle. The treatment employed was purely local, and in the course of some days the facial muscles acted with undisturbed harmony.

Paralysis of one side of the face, apparently from compression of the portio dura in labor, has been frequently noticed. Osianer,* Landouzy,† and Evory Kennedy,‡ have each met with, and recorded examples of this. In all such cases the paralysis was, of course, on the same side with the injury. Now, in the foregoing cases, the reverse was the fact, the seeming paralysis being on the side opposite to the injury. This circumstance, taken per se, is certainly not of any positive value as disproving the existence of paralysis (though it may serve to account for the opposite condition); but setting it aside altogether, and confining our attention to the right, or apparently palsied half of the face, certain peculiarities were observable, unlike what is ordinarily seen in paralysis of the muscles supplied by the facial nerve, and tending to suggest doubts as to the actual presence of any such condition. For example, each patient had full command over the orbicular muscle of the right eye; in one instance, certainly, this eye was slightly more open than its fellow, but there was no other evidence of any impairment in the motor power of the orbicularis muscle. Again, in smiling, laughing, or crying, this same side did not at all present that blank, expressionless appearance which is so characteristic of a paralysed condition of the facial muscles; on the contrary, it struck us, on the moment, that the partial want of animation in this half of the face was owing to the undue and preponderating action of the muscles belonging to the other half. Subsequent and more mature reflection inclines me to think that this opinion has some foundation in facts, and is sustained by analogy, and I have headed this communication accordingly, as some denomination should be given to it; but I am far from asserting dogmatically that the right name has been selected. It is to be regretted that these cases were not reported more in detail, seeing that they involve so delicate a point of diagnosis; but, in fact, they occurred when I was assistant at the Lying-in Hospital, and I merely noted down, at the time, the salient features of each case. By a curious but not uncommon sort of coincidence, they presented themselves to my notice within a few weeks of one another, and no additional instance, of a similar nature, has since come under my observation." Dub. Hos. Gaz.

Gallic Acid in cases characterized by Excessive Secretion. By W. Bays, M.D.—It is obvious, that while in some cases excessive secretion is in itself a diseased action, that in others it is an effort of Nature to cast out some poison or peculant matter circulating in the blood, and therefore curative. We have examples of the former in pyrosis, and of the latter in the sweats of rheumatism, in the diarrhoea which precedes erysipelas, and some other disorders, and which proves critical in some fevers. Still, after rejecting all these as unfit cases for the exhibition of gallic acid, a large number yet remain, in which excessive secretions result from debility, or a generally relaxed state of their natural organs, or of the capillaries of the parts whence they are excreted. Where this obtains, there is certainly no remedy which acts more pleasantly and admirably than gallic acid, giving, as it does, general tone and vigour without the slightest tendency to induce febrile excitement. In pyrosis, where this disease is unaccompanied by extensive ulceration, or organic malignant disease of the stomach, or by disease of the liver, the most marked benefit will follow the use of the remedy. Gallic acid, here, not only checks the secretion with a certainty and rapidity I have never seen follow the administration of any other remedy, but it gives general tone to the stomach, increases the appetite, and (what I very little expected when I first used it) in many cases removes constipation. This I can only account for on the supposition that the relaxed atonic state of the stomach which favors pyrosis is continued throughout the alimentary canal, the constipation in these cases arising from want of power in the muscular coats of the intestines to expel the feces. This want of tonic is remedied by gallic acid. The cases of pyrosis which have fallen under my observation, since I have adopted the gallic acid treatment, have been very few; indeed I believe it to be a very infrequent form of disease in Brighton. Out of 945 cases of general disease, which have come under my care at the dispensary during the past twelve months, only eight patients have suffered from this disorder. These have been all females. I have the notes of five of these cases before me. The first was a female of twenty-five years of age, unmarried; she had been for eight months suffering from pyrosis and obstinate constipation, during which period nearly every remedy of reputed value had been administered. She was completely cured in two days. I kept her under my care for three weeks, continuing the gallic acid and occasional doses of castor-oil. I have seen her since, and though some months have elapsed, she has remained perfectly well. The second case was a female, forty-nine years of age. The pyrosis ceased after the second dose of the medicine. She discontinued the treatment a week afterwards, and had a slight return the following morning, which again gave way to the medicine, and by a continuance of the pills for three weeks she has remained perfectly well ever since. In the third case, the remedy proved equally successful. In the fourth a married woman of thirty-five, who had suffered from the disease nine months, this distressing symptom abated considerably at the fourth day, and entirely left her on the eighth day. In the fifth case, a female of forty-five, there was no return after the first dose. In one case only have I found it fail,
and this woman is still under my care; she is forty-nine years of age, and is, I fear, the subject of malignant disease, together with organic disease of the liver. All the first five cases presented a general similarity in the relaxed muscular fibre of the body, and pale watery appearance of the mucous surfaces. In diarrhoea and dysentery, after the removal of any irritant matter by a gentle aperient, I have found the diseases yield, and a healthy tone easily restored to the intestinal membrane, by moderate doses of gallic acid every two or four hours, with a teaspoonful of castor-oil every morning. There is a class of phthisical cases to whom gallic acid is an almost inestimable boon. I allude to those in whom the expectoration is frequently tinged with blood, and who no sooner appear to improve a little, in general health and strength, than slight haemoptysis recurs and again reduces both. I have at this time several such cases under my care, who are improving slowly yet steadily under five-grain doses of gallic acid taken three times daily, in conjunction with cod-liver oil and other remedies. In one of these cases the man has been now under my care for twelve months. When I first saw him, he was reduced almost to a last extremity by the constant haemoptysis and profuse expectoration, and suffered so greatly from dyspnœa as to be unable to follow his occupation (that of a painter). Three vomicae have discharged themselves since he has been under my care, and yet he is improving, and has for the past ten months been able to resume his business, and to continue it all through the winter, and can walk up hill or mount stairs without much distress. While he continues both cod-liver oil and gallic acid, he does well; if he leaves off the one, his haemoptysis returns; or if he discontinues the other, he becomes weak and languid. Gallic acid is also valuable in conjunction with the oil, in enabling the stomach to bear it without nausea. Another great benefit to phthisical patients from the exhibition of gallic acid is the tone it imparts to the stomach, restraining the inordinate appetite and promoting its power of digestion. The stomach is often greatly enlarged in this disease, and its coats relaxed and atonic, hence the benefit alluded to. In the distressing night-sweats and diarrhoea which characterize some stages of phthisis, the remedy, though of the utmost service, requires a nice discrimination in its use. It must be commenced in small doses and carefully increased, since the cough will be aggravated materially if the secretions be too suddenly suppressed. But if gradually increased doses be given, I have found that not only are the sweats and diarrhoea moderated, but that the breathing becomes more easy, the expectoration causes less effort, and the digestion greatly improves. The reason of this varied improvement easily appears, if we bear in mind the single action of gallic acid, its solubility and entrance into the blood. It contracts the capillaries and glandular apparatus of the alimentary canal. It contracts their walls, and diminishes their general calibre. It gives the same power of contraction to the elastic and muscular tissues of the lungs, thus enables them to expel accumulations of mucus or pus, and it produces the same action on the skin, enabling it to check the exhausting exudation from its surface. It is evident while contemplating these various demonstrations of the power
of the remedy, that in order to produce benefit in phthisis, they must be only gradually brought to bear on the secretions, and that great care must be exercised lest too sudden an impression be produced. In chronic bronchitis the same caution must be used in checking the profuse expectoration, but I know no remedy more easily managed than gallic acid, and none so calculated to permanently arrest the diseased secretion, and to restore tone to the bronchial tubes and their lining membrane. I ought parenthetically to observe that I have always found that peneiling the tonsils and uvula with a solution of nitrate of silver (of from five to ten grains to the ounce) night and morning, greatly assists in relieving the cough both of phthisis and bronchitis. The dose I have given in these cases has been from five to ten grains, or die. In diabetes we should expect some benefit from gallic acid.—Assoc. Med. Jour.

Failure of Male Fern and Kousso in the Treatment of the Tape Worm.—The following remarks are appended to the histories of several cases in the Edinburgh Monthly Journal, in which extract of male fern and kousso failed to dislodge the tape-worm, by George Patterson, M.D.—1. It would appear from the above cases that the kousso and eterhal extract of male fern, are, like all other remedies that have hitherto been prepared for tape-worm, liable to, at least, occasional failure. At the same time it is certain, from the effects that followed upon their administration in these instances, that they are remedies of great power, very obnoxious to the parasite, and therefore valuable additions to our means of treat'ment.

2. I should be disposed to believe from what was observed in these cases that the same remedy is not suited alike to every case; but that in one subject the kousso, in another the male fern, and in another the turpentine will be found to be the most appropriate remedy. Thus, in the second case, neither the male fern nor the kousso brought off any of the worm, while turpentine invariably did so. In the first, on the contrary, turpentine and castor-oil were repeatedly given before the male fern, without having the least effect. Again, we sometimes find the worm, not only detached and dislodged, but carried downwards and expelled by the male fern and kousso, unaided by any purgative; while at other times they require to be followed by the administration of a purgative dose. As to the comparative energy of the kousso and male fern, it would appear from the above cases (in which both were successively given to the same person) to be nearly equal, and in the phenomena attendant upon their operation both remedies are very much alike.

3. The first of the cases I have narrated is in many respects a remarkable one. It furnishes a striking portraiture of the symptoms of the disease in a very aggravated form; and the immense number of joints that were discharged at various times, both singly and in pieces of several feet in length, would seem to indicate either, that there must have been more than one of the parasites in the man's body, or else that it is capable of reproduction and of attaining its for-
mer growth in an incredibly short space of time after large portions of it had been detached.

4. The same case affords an instance of the worm finding its way into the stomach, portions of it being stated to have been brought up by vomiting in round balls. This is a more common occurrence with other kinds of intestinal worms. Thus I have met with several instances, both in children and adults, where lumbrici have escaped by the mouth or nose. In one case of an hysterical and hypochondriacal female the circumstance of one of these worms having escaped by the mouth produced an impression that she still had one in the windpipe. The sensation, which was partly hysterical and partly perhaps due to an enlargement of the thyroid body, led to continual efforts to bring up the worm and dislodge it with the finger, which necessarily produced increased local irritation, and the failure of which aggravated her despondency and low spirits. She mainly resorted to several medical men, including myself, for relief—neither reasoning nor such remedial measures as the nature of the case suggested having succeeded in overcoming the delusion.

5. In the second case we have an instance of the co-existence of another kind of worm with the tape-worm. This is worthy of notice, principally as showing (what has been pointed out by Dr. Watson and others) that the term "solitaire," which some French writers have applied to this worm as a distinguishing characteristic, is not correct.

6. Besides the above three cases falling under my own notice in the course of a few months, I have heard of another instance under the care of one of the medical gentlemen of this town, in which the kousbo brought off several yards of a tape-worm, but equally failed to eradicate the disease. One would be almost disposed to argue, from so many instances of a somewhat rare affection observed within a short period among persons, the majority of whom are natives of the place, that the disease is more than usually common in this locality. On inquiry, however, among the oldest practitioners of the town, they inform me that this is by no means the case, and that whatever fortuitous circumstances may have concurred to multiply instances within so short a period, their experience of such cases is not larger than that of the generality of medical men in other places.

Cardiac Murmurs without Valvular Deformity.—At a recent meeting of the Medico-Chirurgical Society of Edinburgh, Dr. W. T. Gairdner stated that the result of his inquiries on this subject were as follows:—1. It is impossible in the dead heart to imitate precisely the physiological conditions of the closure of these valves, so as to prevent reflux. The nearest approach to these conditions is when water is injected, with moderate force, into a ventricle in a state of tonic contraction. The slightest amount of relaxation in the muscular fibre of the dead ventricle determines regurgitation. 2. On the right side (as was observed by Hunter and Wilkinson King) regurgitation is more certainly and more freely produced in experiments on the dead heart than on the left. The chief reason of this difference, however,
is the usual absence of rigid tonic contraction after death in the right
ventricle, and the greater readiness with which its thin walls yield to
distention. No argument can be drawn from this difference, as to the
existence of a "safety-valve function" in the living and healthy heart.
3. The impossibility of securing in the dead heart the physiological
conditions of closure in the living, together with other considerations
derived from the structure of the valves, prove that a certain amount
of tension must be exercised upon the tendinous cords, through the
muscular structures of the ventricle, before the counter-pressure of
the blood upon the valves can be exerted so as to close them against
regurgitation. 4. Too great tension is fatal to the closure of the
valves, as well as too little; and there is reason to think that the col-
umnae carneae are so disposed as to maintain, by a very beautiful and
delicate adaptation, a nearly uniform state of tension of the valves
throughout the contraction of the ventricle. 5. Not only must a
graduated tension be exercised upon the tendinous cords, but the col-
umnnae carneae must be approximated at their bases, so that the whole
of the tendinous cords act, as it were, from one point in the centre of
the ventricle, towards which all the edges of the valvular fringe are
drawn. Thus the cylindrical curtain, which hangs from the auriculo-
ventricular opening during the diastole of the heart, is converted (as
Bouillaud has correctly pointed out) into a cone with the apex down-
wards; and the counter-pressure of the blood upon the under surface
of this conical curtain brings its edges into apposition, and completely
closes the valve against regurgitation. 6. To sum up the physiolog-
ical conditions of closure of the auriculo-ventricular valves: it is in-
dispensable, a. That they shall be acted on by the columnae carneae,
and kept thereby in a certain state of tension; b. That the counter-
pressure of the blood shall then come into play, and float the valves
upwards towards the openings which they are destined to cover; c.
That the forces a and b shall be simultaneously exerted on the valves
when in a favorable position for complete closure: i. e., with the col-
umnnae carneae and chordae tendineae massed together, and the free edge
of the valve drawn towards the axis of the opening. 7. All these
conditions may be shown to concur in the systole of the healthy heart.
8. The condition a is vitiated to a greater or less extent by disease or
degeneration of the columnae carneae or chordae tendineae; also by
great hypertrophy or dilatation, and more particularly by hypertrophy
with predominating dilatation of the ventricles. In certain cases of
simple hypertrophy, however, with inconsiderable dilatation, the in-
crease in size affects all the structures pari passu: and in these it
may happen that the valve preserves its normal relations by the elon-
gation of the tendinous cords and muscular columns. 9. The condition
c is vitiates whenever dilatation predominates largely over hypertro-
phy; for then the contractions of the ventricles are inadequate to bring
the columnae carneae together at any period of the systole; they re-
main therefore permanently apart, and the tendinous cords instead of
drawing the edges of the valves towards the axis of the opening, may
actually cause them to diverge from it. It is unnecessary to do more
than point out that sacculated aneurisms of the ventricle, globular
polypi between the columnae carnea, and other morbid conditions, may produce a like result.—*Edinburgh Monthly Journal."

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**Surgery.**

_On the propriety of opening the Bowels soon after the operation for Strangulated Hernia._ By J. S Gamgee, Esq.—The various conditions in which we find cases of hernia at the time of operation, admit of their arrangements under four heads. 1. Those cases in which the intestine is in good condition, and inflammation has not yet manifested itself; 2. Those in which, though the bowel is in very fair condition, there are local and general signs of a moderate amount of peritonitis; 3. Those in which the bowels are notably discolored, but of good consistence; peritonitis being intense; 4. Those in which there is threatening gangrene of the gut.

Let us consider the first class of cases. Since it is reasonable to suppose that in a case of strangulated hernia that has been operated upon, a part at least, of the uneasiness dependent upon the intestinal function is immediately due to its restoration, we should in this class of cases theoretically be disposed to promote the action of the intestines, when it does not occur spontaneously, a short time after the constriction has been removed. Such practice seems the more reasonable, in that there can be no fear of aggravating inflammation which does not exist, and in that there is reason to believe that the expulsion of the accumulated feces is tantamount to the exclusion of a possible, if not probable, cause of inflammation.

In the second class of cases, the first part of the argument used above applies, but not the second; for inflammation exists, and the question arises, whether the administration of purgatives, theoretically indicated by the necessity of restoring the intestinal functions, may not be productive of evil by aggravating the inflammation. From what I have seen, however, these fears would not disquiet me. I think there is more chance of the progress of inflammation being checked by the expulsion of irritating feces, and restoration of the gut to its function, than of its being aggravated by the stimulant action of the purgative.

In the third class of cases, in which the bowel is in moderate condition, but the peritoneum intensely inflamed, it is reasonable to believe that the constipation, although in great measure dependent upon the atony which has resulted from long inactivity, is likewise due to the disturbance of innervation incident upon the inflammation. It seems hence prudent to respect the objections of those who allege that the inflammation may be aggravated by purgatives; but while antiphlogistics are being actively employed, there is no reason for objecting, if the bowels do not act, to enemata; the probabilities of their doing good are much greater than those of their possible perniciousness.

In the fourth class of cases, (threatening gangrene of the intestine,) inasmuch as there is more to fear from the action of the intestines, though it be but moderate, than from their inactivity, though it be extreme, enema and purgatives appear contra-indicated so long as there is reason to fear disorganization of the gut.
From the foregoing considerations, three rules for practice, in cases in which the operation of herniotomy is not followed by spontaneous action of the bowels.

1. When the condition of the gut is good, and there is little or no peritonitis, an oleaginous enema should be given an hour or two after the operation, and repeated after three or four hours in case of failure, or a purgative exhibited by the mouth.

2. When the peritoneal inflammation is intense, even though the bowels be in fair condition, antiphlogistics must be perseveringly employed; and though a simple enema may be given in the first six hours, it is inadvisable to excite the action of the bowels until the next day, either by more active enemata or purgatives by the mouth.

3. In the case of mortification threatening the gut, the bowels should be kept quiet by opium, and purgatives and enemata abstained from until the danger of perforation has passed.—Assoc. Med. Jour.

Periodical Hemorrhage after Surgical Operations.—M. Bouisson, of Montpellier, has brought prominently forward the fact that distinctly periodic losses of blood are occasionally met with as one of the forms of hemorrhage after surgical operations; and that this intermittent form of hemorrhage must be carefully distinguished from other kinds dependent on local accidents or conditions of the wound, on particular states of the blood or circulating system, on arrest of any ordinary discharge, either catamenial or hemorrhoidal, or on physical or moral excesses. The previous abode of the patient, in a malarious locality, the regular periodic character of the hemorrhage, the coexistence of a certain amount of febrile disturbance, and the occurrence of the bleeding at the crisis of the attack (as it were, as the substitute for sweating,) are the principal grounds on which we may diagnose this form of consecutive hemorrhage. In certain cases all these conditions are fulfilled; but in a few, M. Bouisson believes that the intermittent character only is to be detected, there being no regular febrile access, just as we observe in the masked fevers, or fiéves larvées. Finally, the most interesting fact connected with these periodic hemorrhages is, that they yield positively and promptly to full doses of quinine, even when other internal treatment, as by astringents, has apparently failed. M. Bouisson remarks that this periodic hemorrhage from wounds after operations, has received little attention from surgical observers, probably owing to its rarity, except in localities prone to the development of malarious influences. In his special "treatise on periodic diseases without fever," M. Casimir has mentioned periodic bleedings from mucous surfaces, but not from wounds. Professor Sanson has briefly alluded to periodic secondary hemorrhages, deriving his knowledge also from observations in Montpellier. Besides this nothing but scattered allusions to the subject exist in surgical literature.

The special cases brought forward by M. Bouisson may thus be analyzed. They are four in number,—viz., an amputation of the great toe, in a girl 18 years of age; amputation of the leg in a male aged 36 years; amputation of the thigh in a male of 21 years; and re-
moval of the forefinger, with its metacarpal bone, for encephaloid disease of the latter, in a female aged 34.

As to the influence of locality, the first patient came from the neighborhood of Arles, in which intermittent fevers are so common. The second was placed in a particular ward of the Hospital Saint Eloi, in which intermittent fever often made its appearance amongst the patients. No special local circumstances could be traced in the third and fourth cases. The periods at which the haemorrhage began in each case, the number and dates of its recurrences, and the mode in which it was apparently affected by the administration of quinine, were as follows: In the first case, it began on the evening of the fifth day after the operation, before any ligatures had come away; it recurred at the same hour on the sixth and seventh days; during the early part of the eighth day, 10 grains of the sulphate of quinine were given, and the bleeding never recurred. In the second case, the haemorrhage first happened on the ninth day after amputation, no ligature being loose; it recurred at the same hour on the following day; on the eleventh day, 12 grains of quinine having been irregularly given, it again happened at the usual hour, but in more moderate quantity; on the next day, the remedy being persevered in, it ceased. In the third case, the haemorrhage began on the evening of the eleventh day, and recurred at the same hour on the thirteenth and fifteenth days, missing the intermediate days. It was diminished on the fifteenth day by 10 grains of sulphate of quinine, and arrested entirely by its repetition on the seventeenth day. Powerful astringents had been first tried. In the fourth and last case, the first haemorrhage took place at seven o’clock in the morning of the fourth day after the operation; it was renewed at precisely the same hour on the fifth. Quinine being administered, it did not happen on the sixth day; but the patient having then neglected to take that medicine, a fresh bleeding happened at seven in the morning of the seventh day; but by subsequent attention and an increase of dose, further bleeding was arrested. In all four cases, great care was taken to determine that the haemorrhage was a general oozing, and not from any particular vessel. Sometimes even compression was employed, but without success. In all cases, the quinine seemed alone to arrest the haemorrhagic attack; and its use was invariably continued for some days after the bleeding had ceased. As to the general symptoms accompanying the attacks of bleeding, they were, in the first and second, well-marked, consisting of a cold and then a hot stage, at the height of which the bleeding occurred. In the third case there was no cold stage, but merely a slight febrile accession. In the fourth example no general disturbance at all was manifest: the remarkable periodicity of the attacks alone serving as a guide in the diagnosis and treatment.

M. Bouisson refers generally to other cases, collected from the clinical records of Montpellier. It is proper to add that he by no means neglects the ordinary rules of treatment in cases of consecutive haemorrhage. That an intermittent or periodic consecutive haemorrhage from the general surface of the stump occasionally happens—that its cause is constitutional and similar to that which gives rise to
Operation of opening the membranous portion of the Urethra in Retention of Urine from enlarged or diseased Prostate. By James A. Lawrie, M.D.—The cases in which it is impossible, without force, to pass a catheter into the bladder, in retention of urine from enlarged prostate, although not numerous, constitute in my experience the greatest number of examples of impossible catheterism. I have met with three such: one in hospital practice, ten or fifteen years ago; a second, in private, three or four years ago; and a third, in private, in the course of this summer. The first was punctured above the pubes, in my temporary absence, by my friend and colleague Dr. Buchanan; the second I punctured above the pubes; and the third I relieved by the operation I am about to describe. All proved fatal. Practical writers, in describing the methods of reaching the bladder in cases of impossible catheterism from diseased prostate, allude, as far as I know, to two methods only—puncture above the pubes, and forced catheterism through the prostate gland. Both are objectionable; the first is almost always a fatal operation, and the second sometimes causes dangerous hæmorrhage, or may condemn the patient to the uncertain use of the catheter for the rest of his life. Besides which, it is at times impossible, as happened in a case in the infirmary here several years ago, in which every catheter tried, bent in the forcible attempts made to thrust it into the bladder.

So far as I know, no proposal to puncture through the perineum in this class of cases has yet been made. Sir B. Brodie says, "it will be of no service here . . . to make an opening into the urethra beneath the pubes." With all deference, this is the very operation which will be of service—it is one which I have taught for many years in my lectures, and which it is the object of this notice to recommend to my professional brethren. I shall describe the operation, and add a case in which it was performed. The instruments required are, a common curved or rectangular lithotomy staff, a sharp-pointed bistouri, or lithotomy knife, and a straight metal or elastic catheter. Before Dr. Buchanan invented his rectangular staff, I used the common curved staff, grooved on its under surface; but now I greatly prefer the former, taking care that the under limb of the instrument is not too long. The patient being placed and tied as for lithotomy, the staff is introduced and held as for lithotomy—i. e., pushed down upon the rectum, and the angle made to project towards the perineum. The point of the staff ought merely to reach the apex of the gland, or pass about half an inch into it. Hence the necessity for having the under portion of the staff short. The urethra is now to be
opened by thrusting the knife into the groove of the staff, not deeper than merely to make sure that the canal has been opened, and immediately withdrawing it, making an incision just large enough to admit the finger. The finger being placed in the wound, a straight metallic catheter is introduced into the urethra, and lodged in its membranous and pervers prostatic portions. The staff is now withdrawn, and we have a straight catheter in a short straight canal, which a little gentle manipulation enables us to lodge in the bladder and relieve our patient. As it is of importance to have a thorough command of the catheter, I use one twelve inches long, slightly curved, and perforated at the point; the slight curve enables us to glide it under the arch of the pubes, and over a projecting third lobe, while the perforation at the point allows us to withdraw it over the probed wire, and to lodge and retain in its place a short elastic tube. The following will show that the above proposal is not merely theoretical.

Case.—Some weeks ago I was asked to see, in consultation, a gentleman upwards of 80, and found him labouring under retention of urine of several hours continuance. Before my arrival, a common sized catheter seemed to have reached the bladder, but gave vent to blood only. Not having a prostatic catheter with me, and urgent engagements calling me elsewhere, I was obliged to defer farther attempts till the evening, when I completely failed to empty the bladder. As it was now late, and the patient was a little way out of town, it was agreed that I should return at six in the morning, and, if possible, reach the bladder by incision. I took Dr. Buchanan with me, who tried the prostatic and his compound catheter without success. I immediately performed the operation as above described, and with the utmost ease, and by the simplest possible operation, drew off a large quantity of bloody urine. The relief was great, but only temporary; the old gentleman sank, and died in about twenty-four hours.

Want of success, in this case, does not militate against the operation. Every thing was against it—the great age of the patient, the previous repeated attempts to introduce catheters, the loss of blood from the urethra and prostate, and exhaustion, made recovery all but impossible. In similar cases, let careful, but not too frequent, attempts be made to pass the prostatic catheter, and if these fail, let the urethra be opened at once in the manner recommended, and I have no fear of the result.—Glasgow Medical Journal.

Surgical Removal of Opacities from the Cornea.—M. Szokalski contributes to the Revue Médico-Chirurgicale a compte-rendu of thirty-two cases in which he has practised this operation. He performs it by scraping the cornea with a delicate knife, as we scrape paper to remove ink marks from it. The epithelium of the cornea adheres pretty firmly in all cases, but, when opaque, is often so tough that it cannot be removed at one sitting. The proper substance of the cornea is still more difficult to remove; in fact, the author considers that, when it yielded to his mode of treatment, the success was owing, not to mere mechanical abrasion, but to the process of absorption set going by the irritation which the operation produces. This sounds like common
sense, and at the same time goes far to invalidate M. Szokalski's own results, and to induce the prudent surgeon to trust to gentler means of stimulating the absorptive process. These we see wonderfully efficacious in cases of which we might at first despair. Mueh, however, as all practical oculists know, depends upon the age of the patient. In infants, we never despair, though the cornea be apparently quite opaque, so wonderful are the cures which nature sometimes effects; and M. Szokalski's neglect to notice the age of those on whom he operated, renders his results much less useful than otherwise they might have been.

Of the thirty-two eyes, the authors reckons fifteen successful, and eight partially successful operations. In five cases, there was no change effected, and in four the occurrence of inflammation rendered it necessary to stop the proceedings. Of the fifteen successful cases, there were eight in which the opacity was limited to the corneal epithelium, five in which it affected the superficial layers of the cornea proper, and three in which it was deeper still, as it was in all the eight partially successful cases. Thus, taking into consideration the remarks we have already made as to the spontaneous disappearance of opacities in young subjects, and our author's own admission as to the modus operandi of his process in the ease of the deeper albugines, we do really think that the use of stimulating collyria, etc., and time, would have produced results as favorable as his. Again, he states that three of his total failures were cases in which the opacity was merely nebulous and superficial; and, above all, the accidents graves which happened in four cases, were of the most serious description. He states that, when inflammation does occur as a consequence of these proceedings, it always affects, not the conjunctiva, but the iris and other internal parts of the eye, and may terminate in complete destruction of the globe! Our conclusion is, that the operation is not to be recommended, except in occasional cases, where the opacity fails to yield to judicious treatment of the ordinary kind, continued for many months, where it is dense enough to render the eye useless, where the other eye is also blind, and where the formation of an artificial pupil is out of the question. One remark of the author we may quote—that his scraping process is much more likely to produce inflammation when carried on near the circumference of the cornea. This is so far fortunate, since it is precisely in that part that opacity of the cornea is of least consequence.—Assoc. Med. Jour.

Amaurosis from Suppressed Secretion.—M. Duval, in the Gazette Medicale for May, records several cases of amaurosis, following suppression of habitual perspiration from the feet, and evidently depending on congestion of some part of the organ of vision, so induced. The cure was effected by maintaining the warmth of the feet by various appropriate means, (among others, filling the stockings with flour of mustard and powdered sal ammoniac !) and by a course of alterative purgatives and mercurials.
DISEASES OF FEMALES.

The Use and Abuse of Potassa Fusa and Potassa Cum Calce in the treatment of Uterine Diseases. By Henry Bennet, M.D.—More than nine years ago, Dr. Bennet first introduced potassa fusa and potassa cum calce as valuable agents in the treatment of uterine inflammation. They had since been used by many practitioners; but, he believed, not always with the caution which was imperatively required; and he was therefore anxious to lay down, even more carefully than before, the rules which ought to be attended to in resorting to so powerful an agent. He had obtained cylinders of potassa cum calce, in the proportion of two parts of potash to one of lime, which did not deliquesce, and were nearly as manageable as nitrate of silver, and therefore free from many of the objections urged against potassa fusa. The conditions of local uterine disease in which he considered that caustic potash, or the actual cautery was applicable, were the following: Chronic inflammation or inflammatory ulceration of the mucous membrane covering the cervix, or lining its cavity, intractable to other treatment; chronic inflammatory hypertrophy of the cervix, also intractable to other means; and lastly, chronic inflammation of the body of the uterus, in which form of disease the potash is merely applied to the cervix to produce a derivative issue, as we would apply an issue to the back in disease of the spine.

In the first class of cases, the caustic potash is used to modify the morbid vitality of the diseased tissues, and to substitute a healthy reparative action. In cases of hypertrophy, the elimination of a moderate sized eschar on the enlarged cervix is attended with acute congestion or inflammation of the subjacent hypertrophied tissues; and under its influence the latter soften and melt, as it were, or are absorbed. The object was not to destroy the enlarged cervix, but to procure its absorption. When applied to the cervical canal, the caustic potash reached the mucous follicles concealed between the rugae of the arbor vitae, which are occasionally the seat of chronic inflammation, and resist every other means of treatment. Although caustic potash was one of the most valuable contributions ever made to uterine pathology, Dr. Bennet considered it an ultima ratio, a last resource, only to be employed when all other means of treatment, general and local, had failed. If used cautiously, there was no danger whatever incurred by the patient; but if incautiously or imprudently employed, serious results might follow. The inflammation produced in the cervix might pass to the uterus. The vagina had also been compromised by the extension of the caustic; and in several cases, the potash having been employed too freely to the cervical canal, the os or canal had been nearly obliterated by subsequent contraction and adhesion of its parietes. To prevent these accidents, he advised practitioners never to attempt to destroy the hypertrophied cervix, as had been proposed, but to be satisfied by producing the eliminatory inflammation already described, to use the potassa cum calce cylinders which do not deliquesce; and when the potassa is applied to the cervical canal, to apply it very gently, and to pass a bougie through the canal once or twice a week for six weeks. Dr. Bennet never resorted to this treat-
ment in passive hypertrophy; either of the cervix or uterus, which he thought might be left to nature, time, and general treatment. It had been often stated that the use of caustic potash to the cervix left indurated cicatrices, which might impede subsequent labors. This was by no means the case. So far from producing induration, this mode of treatment removed it, and facilitated parturition. Indeed, he was becoming more and more convinced of the truth of a statement he had made many years ago, that rigidity of the os in labor was nearly always the result of previous inflammatory diseases.—Lancet.

Incision of the Cervix Uteri in certain cases of difficult labour.—A rigid condition of the os and cervix may prove so formidable an impediment to labour as to justify incisions. This occasionally happens when the parts are in a healthy state; but it occurs more frequently from the existence of malignant induration. Incisions may also be made with propriety when the os is undilated and it is necessary to apply the forceps, in consequence of the head of the foetus being retained in a transverse position at the superior strait of the pelvis. In such circumstances it cannot affect by its pressure the natural dilation of the cervix. The two following cases (reported in the Journal de Méd. et de Chir. for March, 1854), which illustrate the advantages of incision of the cervix in each of the conditions referred to, occurred lately in the practice of M. P. Dubois, at the Hôpital de la Faculté.

Case 1.—On the 13th Feb., at 2 a.m., a woman at the full term of her pregnancy was taken with labour pains. On the 14th, at 2 p.m., dilation of the os was complete. She continued to suffer on the 15th; and on that day, at 10 a.m., M. Dubois found the cervix stretched, and an annular stricture causing an evident impediment to the spontaneous termination of labour. Two incisions were made in the opposite sides of this ring by means of a probe-pointed bistouri (bistouri boutonné), and shortly afterwards the child was expelled.

Case 2.—On the 17th Feb., a woman with a deformed pelvis could not bring forth in consequence of the head of the foetus occupying a transverse position at the superior strait of the pelvis. Death of the foetus being imminent, M. Dubois incised the cervix right and left, and being thus enabled to apply the forceps, extracted a child, which was well formed and full of vigour.

In incising the cervix, it is perhaps safer to operate with blunt-pointed scissors guided upon the finger, than with the probe-pointed bistouri; but if care be taken, either instrument may be used. It is important to remember, as was above remarked, that the incisions ought to be made in a lateral direction. In this way the bladder and rectum are not placed in jeopardy of being injured by an extension of the incisions, incident to tearing during the expulsion of the foetus. When the womb is affected with cancer, there is always some danger of the incisions of the neck being extended by a rending process into the body of the organ; and therefore in such cases special caution is required.—Lancet.

N. S.—VOL. XIII.; NO. II. 21
THERAPEUTICS.

Chloroform Vapor in Tenesmus.—Ehrenreich relieves the tenesmus of dysentery by the vapor of chloroform passed into the bowel through a syringe and common canula.

Belladonna in Salivation.—Erpenbeck used the extract of belladonna gr. ij ss. in an emulsion in 24 hours with perfect relief.

Sciatica.—Trousseau inserts a medicated pea over the nerve composed as follows: ext. opium and belladonna aa grs. xxxvi. py, guaiac and mucilage q. s. for 20 pills. When these pills are dried and covered with fine powder of guaiac, they become as hard as wood.

Glycerine in Dandruff.—Mr. Shaw of Middlesex Hospital, uses glycerine in ptyriasis of the scalp, in the form of an oil mixed with an agreeable perfume.

New Salt of Quinine.—Bartella, an Italian physician, speaks highly of the sulpho-tartrate of quinine, which he obtains by combining equal parts of the sulphate of quinine and tartaric acid; it is much more active requiring but half the dose of the former.

Pitting in Small Pox.—Dr. Hughes Bennett recommends the frequent application of the following preparation to prevent pitting in small pox: carbonate of zinc, three parts; oxide of zinc, one part, rubbed with olive oil to a proper consistence.

Haemorrhage in Carcinoma Uteri.—Remilly arrests the haemorrhage by injecting every five minutes perchloride of iron 15 parts to 250 of water.

Turning.—Dr. Snow remarks, that nothing so much facilitates turning of the child, when the parts have become wedged as the inhalation of chloroform.

Quinine in Urticaria.—Mr. Startin gives quinine as follows: quin. disulph. gr. xij; ammon. sesquicarb. 3 j; magnes. carbon. 3 ss; aquae 3 viij; fiat mist. 3 ss ter die sumend.

Nævus.—Dr. Cumming advises to apply a compound of 15 grains of tartar emetic to 3 i of galbanum plaster on a piece of thin leather, cut accurately to the size of the tumor. Inflammatory action is set up and the vessels obliterated.

Phthisis, Diarrhoea of. Dr. T. Thompson.—Give five grains of trisnitrate of bismuth combined with three grains of gum arabic, and two of magnesia, every four or six hours.

Night perspirations of.—Give four grains of oxide of zinc, and four grains of extract of hyoscyamus, made into two pills, every night for a time.

Compression of Arteries in Neuralgies.—Allier reports a case of long-standing neuralgia of the orbito-frontal nerve cured by compression of the carotid of the same side, made during the morning with short intervals every quarter of an hour.

Ulcer from Irritation of Nails.—Mr. Ure applies a hot saturated solution of alum continuously to the part. This induces rapid absorption of the thickened cuticle and prompt cicatrization of the ulcerated surface.
On the use of Opium and Astringents in Dysentery. By Prof. A. Flint, M.D.—Opium. From an early period in the history of medicine, opium has entered into the treatment of dysentery. It would be difficult to find any authority in the medical literature of past ages, for the disuse of opium in this disease. The only difference of opinion has related to the degree of reliance to be placed on it, and the liability to injurious effects if given largely. Medical opinions and practice, at the present moment, exhibit the same agreement and differences. Almost every practitioner prescribes opium, to a greater or less extent, in dysentery; some regard it as the chiefly important therapeutical agent in the treatment, and others look upon it as simply adjunctive. It is consequently employed much more freely by some practitioners than by others.

The immediate apparent effect of this remedy is often striking. Sometimes it appears promptly to arrest the disease. Instances of the latter description, however, are not sufficiently numerous to warrant the inference that the remedy has an efficacy which can properly be styled specific. We can readily account for more or less relief of the distressing symptoms of dysentery—the tormina and tenesmus—by the anodyne properties of opium. It is serviceable in another mode, in which, perhaps, consists its chief efficiency, viz., keeping the inflamed part in a state of quietude. It does this by arresting the peristaltic movements, and by relieving the tenesmus so that the patient does not feel impelled to make frequent efforts to evacuate the bowels. The remedy may exert a curative power in other modes which, with our present knowledge, are not understood.

To secure the ends just stated, opium must be given in doses sufficient to produce a decided impression. Experience teaches that the quantity requisite to produce the desired effect differs widely in different persons, and in different diseases, irrespective of pain. This is a very important practical point. A dose of opium which affects one person in a sensible manner, has little or no apparent effect on another person under similar circumstances; and in some diseases in which pain is not a prominent symptom, there is an extraordinary tolerance of this drug. The latter appears to be true of dysentery. Opium
may be given, in some cases, at least, of this disease, in large doses
without any manifestations of its narcotic properties; and it must be
given in large doses to secure the desired remedial effects. I have
known twenty-four grains of the sulphate of morphia to be taken in
twenty-four consecutive hours, by a patient not habituated to the use
of opium, with no evidence of narcotism, nor could this quantity be
diminished without marked aggravation of the symptoms.

Bearing in mind the differences in susceptibility to the remedy, it is
of course highly important to avoid any risk of too great narcotic
effect. This is to be done by increasing the doses, by degrees, up to
the requisite amount, allowing intervals between them sufficient to es-
imate the effect of each dose.

Taking into view the modus operandi of opium (so far as it is ex-
plicable), we can understand why its good effects may be more marked,
after free purgation. The intestine is more likely to remain in a qui-
escent state in proportion as it is free from fecal contents to excite
peristaltic movements, and provoke acts of defecation.

The different preparations of opium may be employed according to
circumstances. Those which are most prompt in their action are pre-
erable, in order that the effects of each dose may be better estimated.
Concentrated preparations are also frequently retained, when those
more bulky are rejected by vomiting. The salts of morphia are par-
ticularly eligible in cases in which irritability of the stomach exists.
Opium in tincture, or aqueous solution, and the salts of morphia, given
by enema, often have a very happy effect. Frequently this mode of
administration is ineffectual in consequence of the speedy expulsion of
the enemas. This is very apt to occur in the course of the disease
after their frequent repetition; and sometimes, under these circum-
stances, to persist in their use is injudicious, the irritability of the rec-
tum being increased by them, and the efforts of defecation rendered
more frequent and painful than would otherwise be the case.

Other injections are employed in dysentery. A strong solution of
the nitrate of silver sometimes appears to allay the tenesmus, and ren-
der the dejections less frequent; in other cases it produces no such ef-
fects, and sometimes occasions severe pain. As a local application to
the inflamed mucus surface, its action must of course be very limited,
especially if the injection be made into the rectum alone. Carried
higher up into the intestinal canal by means of a long tube, it may be
brought into contact with a larger portion of the affected surface, but
even by this mode its action must still be limited. I cannot speak of
the latter mode from personal trial of it. Creasote, in mixture, ap-
ppears, in some instances, to allay the irritability of the rectum. Strong
testimony is borne, by numerous practitioners, to the relief afforded by
large enemas of simple cold water, repeated more or less frequently.*

Astringents.—Various astringent medicines are in common use in

* In a case, coming under observation since this was written, in which he-
morrhage from the bowels occurred after the dysenteric symptoms had greatly
diminished, enemas of cold water appeared to produce a decided effect in ar-
esting the flow of blood. They were also grateful to the patient.
dysentery, viz., the acetate of lead, the nitrate of silver; and, of vegetable astringents, a great number such as tannic acid, rhatany, kino, catechu, etc. These are very rarely, if ever, relied upon to the exclusion of other remedies, and they are usually given in connection with opium. It is, therefore, difficult to estimate the effect which belongs to them separately. The impression formed from my own experience is, that they are comparatively of small utility. It is desirable that the utility, or non-utility of this class of remedies should be determined, because, in the first place, if useful, it is important not to deprive ourselves of their aid; and, in the second place, if not useful, although directly they may not be injurious, they are likely to prove so, indirectly, by appropriating a certain portion of that dependence which otherwise we should place on remedies more efficient for good.

—Clinical Report.

On Treatment of Rheumatism in New York Hospital. By J. B. Chapin, M.D. Resident Physician.—The plan of treatment usually pursued was: If the patient presented himself with unusual excitement of the skin and pulse, to administer a mixture of sulphate of magnesia and tartarized antimony until the skin was relaxed, and the pulse reduced to a more natural standard. The Rochelle salt was then directed in drachm doses, every two or three hours during the day time, till the urine was rendered alkaline, when it was gradually suspended. A lotion of carb. potass. 3 j. with opium 3 ij. to the pint of water, was directed as an external application. The administration of the salt was not attended with disagreeable consequences, with the exception occasionally of some ulceration about the fauces,—in no case was its action so severe upon the bowels as to require its entire suspension. The persons attacked were in the full vigor of health, and the character of the disease acute in its form. The frequency of administration of the remedy was governed very much by the reaction of the urine.

On the admission of the patient, the urine was tested, and, in all cases, was found to be of acid reaction, and the secretion of the skin presented the usual acid odor. The treatment was generally commenced the second or third day after admission, and the urine was rendered of decided alkaline reaction in an average of five days after its commencement; the longest period it resisted the alkaline reaction having been twenty days, and the shortest two. The secretions of the skin have not, I believe, been noticed to alter. In one case, attended with profuse perspiration, which yielded readily to treatment, the colored shirt the patient wore entirely lost its color; and it was suggested whether the same change did not take place in the perspiration as in the urine. The average amount of the salt administered was from five to seven ounces.

The average date of commencing improvement was seven days after commencement of treatment, coinciding, in the large majority of the cases, with the commencing alkalinity of the urine. The improvement was invariably permanent, and after the urine was rendered alkaline, no new articulations were affected, as a general rule.

The average period of convalescence was twelve days after admission,
and the whole duration of the disease, including the period previous to admission, was twenty-two days. Of thirty cases treated by Dr. Swett, during April and May 1853, during which time no uniform course of treatment was pursued, the average duration was five and a half weeks. One of the most gratifying results of the alkaline treatment was the diminished frequency of cardiac complications. Twenty-one of the twenty-five were free from any complication, three were admitted with aortic obstruction, and one with mitral regurgitation. Not one patient was attacked with any heart complication during the treatment of the disease. Comparing this result with the practice last year, it was found that four had mitral regurgitation, six aortic complication, and three suffered from pericarditis; thirteen in all, out of thirty.—N. Y. Med. Times.

On Imaginary Diseases. By Stephen W. Williams, M.D.—Some of the most distressing complaints to which humanity is liable, are diseases of the imagination. They are a species of monomanic insanity, frequently beyond the reach of medicine, and often beyond the acutest reasoning of the physician and the divine. They not unfrequently lead to the most depressing melancholy, to despair, and even to suicide. They also often lead to actual disease, particularly of the chylopoietic viscera. Imaginary hallucinations, however, sometimes lead to pleasurable sensations, as in the case of the man who fancied himself to be the Lord and Saviour of the world, who was tried before Lord Erskine. This phantom of the imagination must only be productive of pleasurable sensations, during its continuance. How many men have fancied themselves to be Presidents, Kings, and Emperors, Generals, and Commanders of armies, and have led their soldiers on to victory. But I will proceed to the relation of a few cases, which have fallen under my observation.

A patient called upon me a few years ago, who fancied that he had the venereal disease from cohabitation with a cow—he was a simple fellow, and was much alarmed about himself. The complaint had been upon him four or five years, or he fancied that it had. He called upon a noted empiric in a neighboring city. He saw him but a few minutes, and gave him some medicine, for which he charged him fifty dollars. He paid him nine dollars, all the money he had with him, and for more than three years he continually dunned him for the remainder, till he paid no attention to his letters, although he threatened to sue him. I had another patient in the same region, whom he treated in a like manner. I ascertained to my own satisfaction that the only actual disease he had upon him was occasioned by masturbation, though he fancied that he still labored under the venereal disease. I assured him that he was cured, but I never could make him believe it, and I was obliged to give him some little placebo or nostrum, to satisfy his mind.

He called upon me once in about three months, for the space of five or six years. He died some time in the course of the year 1853, but, as he lived some distance from me, I did not see him in his last sickness, and do not know of what complaint he died, though, I believe, it was pneumonia. So far as my observation goes, the venereal disease has never been known to prevail among animals.
Shortly afterwards, I had another patient who fancied that she took the venereal disease twenty-two years ago, from washing the linen or making the beds of two young men, who she imagined had that complaint. It was never known that they had the disease; on the contrary, it was almost certain that they never had it. She never knew anything about the venereal disease until six years afterwards, when she accidentally heard some old woman talk about that complaint, and afterwards she fancied that she took it six years before, in the manner described. The delusion lasted but a short time, and she married soon afterwards and had three children. The two youngest died either in the birth or soon after. Just before the birth of the last child, she fancied that she had the same complaint, but she said nothing to me about it. Her child died when two or three days old, and she mourned herself almost into a state of derangement, in consequence of it. She fell under the care of another physician, who, for a biliary derangement salivated her severely. She was then about 40 years of age. Some time afterwards she fancied that she was pregnant again, when, in fact, the irregularities of her menstrual flux were owing to the critical period of her life. Her old vagaries returned upon her, and she firmly believed that she had the venereal disease from the same cause. I could not reason her out of it, and as she had fretted herself into sickness, she persuaded me to put her upon a course of mercury, which I told her would probably cure her, as it was almost or quite a specific. My principal object was to induce a new disease upon her, and turn her attention from the subject of her delusions. I also believed it would be of service to her on account of her biliary affections. I salivated her, and I thought I should hear no more about her old complaints. But they soon returned upon her imagination with violence. I knew that her delusions were in consequence of mental derangement, as her grandfather, mother, and sister had previously been afflicted with mania. She was willing to go to the Insane Hospital, and her husband soon after carried her there. She was benefited for a while, by her residence there, but soon after her return home she relapsed again, and again went to the hospital, and again regained her health, both mentally and bodily. She has now been with her family several years, without any return of her complaints.

A short time ago, I was called in haste to a young man not far from 22 years of age, who had partially castrated himself by removing one of his testicles with a razor. His intention was to remove both of them, but he bled so profusely that he was deterred by it. He lost an enormous quantity of blood, and I was obliged to tie the spermatic arteries as soon as possible, which I found very difficult to do, on account of the retraction of the cord. He had been troubled for more than a year with involuntary seminal emissions, which weakened him very much. He had a fever a little more than a year before, which left him quite debilitated, and he had not entirely recovered from it. He was told by one of his confidential companions, that he could never be cured of the complaint in any other way than by castration. He was also told of a young man in a neighboring town, who was afflicted in the same way, and that he performed the operation of castration upon himself,
and was cured by it. This was the cause of this young man's resorting to this fool-hardy and dangerous act.—N. J. Med. Reporter.

Conclusions regarding Yellow Fever, deduced from the Epidemic of 1853. By Prof. J. L. Riddell M.D.—1st. That our Yellow Fever of 1853 has not been personally contagious; that the poison, virus or material cause producing it, does not emanate in an active condition from the person of the patient laboring under the disease.

2d. That the disease has been marked by characters of infection and infectious communicability, the poisonous matter (doubtless some species of living organism) maturing its germ or spores on the surface of solids devoid of life, surrounded by confined or impure air; which germs become diffused in the impure atmosphere.

3d. Three peculiar conditions seem to favor the development of the infection. 1st. The absence of ozone, the great chemical promoter of oxidation, which absence permits the undue development of obscure cryptogamic life. 2d. Abundant emanations from decomposing and disintegrating organized matters, complex products, gaseous, liquid, and solid, the papulum or blastema of cryptogamic growths. 3d. The presence of the specific organism, whose perfected spores constitute the material cause of Yellow Fever.

4th. That the towns and plantations of the Southwest have this year derived their Yellow Fever from New Orleans.

5th. That although black vomit fevers or types of yellow fevers may perhaps originate in this region, yet that the germs of our epidemic of 1853, have probably been derived from countries further South.

6th. That the mixture of equal parts by weight, of black oxide of manganese, sulphuric acid and water, which in the cold will continue for many days to develop ozone, promises to be the most convenient, most economical and most efficient disinfectant ever used; and therefore deserves hereafter a fair trial.

7th. It is proper and feasible for New Orleans to have some kind of quarantine in certain months of the year, which will exclude filthy persons, filthy clothing, and filthy ships, until they are fumigated; and goods from West Indian, South American and Mexican ports, until they are fumigated.

8th. The city should be kept cleaner than heretofore, by efficient drainage, and sanitary regulations carried into effect.

9th. Legal ordinances should be framed and carried into effect, to prevent the undue huddling together of human beings within the limits of the city.—N. O. Med. and Surg. Journal.

Surgery.

New Mode of Treating Un-united Fractures of the Humerus. By Prof. F. H. Hamilton, M.D., of Buffalo.—It is the universal practice, so far as I know, in dressing fractures of the humerus, to place the forearm at right angles with the arm. Within a few days, and generally, I think, within a few hours, after the arm and forearm are placed in this position, a rigidity of the muscles and other structures has
ensued, and to such a degree that if the splints and sling are completely removed, the elbow will remain flexed and firm; nor will it be easy to straighten it. A temporary false ankylosis has occurred, and instead of motion at the elbow joint, when the forearm is attempted to be straightened upon the arm, there is only motion at the seat of fracture. It will thus happen that every upward and downward movement of the forearm will inflict motion upon the fracture, and inasmuch as the elbow has become the pivot, the motion at the upper end of the lower fragment will be the greater in proportion to the distance of the fracture from the elbow joint. No doubt it is intended that the dressings shall prevent all motion of the forearm upon the arm; but I fear that they cannot always be made to do this. I believe it is never done when the dressing is made without angular splints, nor is it by any means certain that it will be accomplished when such splints are used. The weight of the forearm is such when placed at right angles with the arm, and encumbered with splints and bandages, that even when supported by a sling, it settles heavily forward, and compels the arm dressings to loosen themselves from the arm in front of the point of fracture, and to indent themselves in the skin and flesh behind. By these means the upper end of the lower fragment is tilted forward. If the forearm should continue to drag upon the sling, nothing but a permanent forward displacement would probably result. The bones might unite, yet with a deformity. But the weight of the forearm under these circumstances is not uniform, nor do I see how it can be made so. It is to the sling that we must trust mainly to accomplish this important indication. But you have all noticed that the tension or relaxation of the sling depends upon the attitude of the body, whether standing or sitting—upon the erection or inclination of the head—upon the motions of the shoulders, and in no inconsiderable degree upon the actions of respiration. Nor does the patient himself cease to add to these conditions by lifting the forearm with his opposite hand, whenever provoked to it by a sense of fatigue.

This difficulty of maintaining quiet apposition of the fragments while the arm is in this position, at whatever point the arm may be broken, become more and more serious as we depart from the elbow joint, and would be at its maximum at the extreme upper end of the humerus, were it not that here a mass of muscles, investing and adhering to the bone, in some measure obviates the difficulty. Its true maximum is therefore near the middle, where there is less muscular investment, and where, on the one hand, the fracture is sufficiently remote from the pivot or fulcrum to have the motion of the upper end of the lower fragment multiplied through a long arm, while on the other hand it is sufficiently near to the armpit and shoulder to prevent the upper portion of the splint and arm dressings from obtaining a secure grasp upon the lower end of the upper fragment. It must not be overlooked that the motion of which we speak belongs exclusively to the lower fragment, and that it is always in the same plane, forwards and backwards; but especially that it is not a motion upon the fracture as upon a pivot, but a motion of one fragment to and from its fellow. This circumstance I regard as important to a right apprecia-
tion of the difficulty. Motion, alone, I am fully convinced, does not so often prevent union as surgeons have generally believed. It is exceedingly rare to see a case of non-union of the clavicle. Of forty-seven cases of fracture of the clavicle which have come under my observation, and in by far the greater majority of which considerable overlapping and consequent deformity has resulted—of this number only one has resulted in non-union, and in this instance no treatment whatever was practiced, but from the time of the accident the patient continued to labor in the fields and hold the plough as if nothing had occurred. I have therefore seen no case of non-union of the clavicle where a surgeon has treated the accident. Indeed, what is most remarkable, its union is more speedy, usually than that of any other bone in the body, of the same size. Yet to prevent motion of the fragments in case of fractured clavicle with complete separation and displacement, except where the fracture is near one of the extremities of the bone, I have always found wholly impracticable. Whatever bandages or apparatus I have applied, I have still seen always that fragments would move freely upon each other at each act of inspiration and expiration, and at almost any motion of the head, body, or upper extremities. It is probable, gentlemen, that you have made the same observation. From this and many similar facts I have been led to suspect for a long time, that the motion has had less to do with non-union than was generally believed.

I find, however, no difficulty in reconciling this suspicion with my doctrine in reference to the case in question; and it is precisely because, as I have already explained, the motion in case of a fractured humerus, dressed in the usual manner is peculiar. In the fracture of the clavicle through its middle third, (its usual situation,) the motion is upon the point of fracture as upon a pivot; although, therefore the motion is almost incessant, it does not essentially, if at all, disturb the adhesive process. The same is true in nearly all other fractures. The fragments move only upon themselves, and not to and from each other. I know of no complete exception but in the case now under consideration. Aside of any speculation, the facts are easily verified by a personal examination of the patients during the first or second week of treatment, or at any time before union has occurred, both in fractures of the humerus and clavicle. The latter is always sufficiently exposed to permit you to see what occurs, and as soon as the swelling has a little subsided in the former case, you will have no difficulty in feeling the motion outside of the dressings, or, perhaps, in introducing the finger under the dressings, sufficiently far to reach the point of fracture. I believe you will not fail to recognize the difference in the motion between the two cases. Such, gentlemen, is the explanation which I offer for the relative frequency of this very serious accident—non-union of the humerus. I know of no other circumstance or condition in which this bone is peculiar, and which therefore might be invoked as an explanation. Overlapping of the bones, the reason assigned by some writers, is not sufficient, since it is not peculiar. The same occurs much oftener, and to a much greater extent, in fractures of the femur, and equally as often in fractures of the clavicle;
yet in neither case are these results so frequent. Nor can it be due to the action of the deltoid or of any other particular muscles about the arm, whether the fracture be below or above their insertions, since similar muscles, with similar attachments on the femur and on the clavicle, tending always powerfully to the separation of the fragments, occasioned only deformity, but not non-union.

If I am correct in my views, we shall be able sometimes to consummate union of a fractured humerus where it is delayed, by straightening the forearm upon the arm, and confining them to this position. A straight splint, extending from the top of the shoulder to the hand, made of some firm but moulding material, and made fast with rollers, will secure the requisite immobility to the fracture. The weight of the forearm and gland will only tend to keep the fragments in place, and if the splint and bandages are sufficiently tight, the motion occasioned by swinging the hand and forearm will be conveyed almost entirely to the shoulder joint. Very little motion, indeed, can in this posture be communicated to the fragments, and what little is thus communicated, is a motion which experience has elsewhere shown not disturbing or pernicious, but a motion only upon the ends of the fragments as upon a pivot.—Buffalo Med. Jour.

On Scirrhus, and Fungoid Affections of the Female Mamma.
By Prof. J. P. Mettauer, M.D.—The recent report in regard to "the results of surgical operations in malignant diseases," of Dr. Gross, chairman of the committee appointed by the American Medical Association, to examine into and report upon that subject, does not accord with my experience in the treatment of those affections. I have extirpated 42 mammae, 28 of them affected with scirrhus, and 14 with fungoid. Of the 28 cases of scirrhus, 15 were in a state of ulceration, and 13 without the slightest ulcer, or disposition to it. Of the 14 cases of fungoid, 8 had ulcerated, and 6 had not. Of the 42 cases, 23 were perfectly cured, and, at the date of this paper, continued well—more than three years now since the last one was operated on. Of the successful cases, 19 were scirrhus and 9 fungoid disease.

One of the cases alluded to, commenced as scirrhus, and finally, after three years continuance, ulcerated. When the patient came under my care, the ulcer had existed six months. I found the whole mamma implicated and somewhat enlarged, and three large axillary tumors, one about the size of an ordinary peach. The subject of this case was a negress about 47 years old, and when she was placed under my management, had become considerably emaciated. Her previous health had been very good. She had borne several children, but for 15 years had been sterile.

The mamma was naturally large, and although the ulcer was quite extensive, a sufficient flap on each side of the incision was preserved, and of healthy integuments, to cover the wound without much traction. The entire mamma, and the three axillary tumors were removed in the ordinary way, and without much difficulty. The wound was closed with sutures and adhesive plasters, as is common; and the water dressing, with a suitable bandage, was employed. The bowels were purged
daily; until all danger of traumatic fever had passed. The case recovered rapidly; and in 14 days, the patient left the infirmary entirely well.

In the course of 10 months, this woman returned to the infirmary with a second tumor, in the exact situation of the first, and fully as large. It was in an ulcerating condition, and very much in all respects, of the same shape and appearance as the one upon which I had operated. There were also two tumors in the axilla, one fully as large as the largest of the first. Had I not removed, in the first operation, the entire mamma, it would have been difficult for me to be convinced that the present was not a disease of the mammary gland, so closely did it resemble the first tumor. The general health had become much impaired. There was considerable emaciation. This tumor was quite hard, but less so than the first. Its growth had been exceedingly rapid since it had attained the size of an egg. The disease reappeared along the line of union in five distinct places—and nearly at the same time—as small tubercles about the size of a large shot, unattended with pain, and were exclusively located in the cicatrix. As these tubercles enlarged, they amalgamated, involving the contiguous parts. The disease, as already stated, had existed 10 months, when the woman returned, yet the axillary swellings had only been perceived two months previous to that time.

These tumors were again extirpated, not, however, without considerable difficulty, especially those of the axilla, by reason of their close connection with the axillary vein and artery. They were removed, and the extensive wound resulting being managed as in the first instance, speedily healed up. In 18 days the cicatrix was perfectly formed.

For two months after the healing of the wound, every thing went on most favorably. The general health had greatly improved. At this time, three small tubercles made their appearance, at different regions of the cicatrix, resembling, from the description I received of them from an intelligent individual, the first that appeared. Without delay they were extirpated, and I took care to remove, with each one, a liberal portion of the surrounding structures. The wounds were closed in reference to union by adhesion, and a speedy cure. The water dressing was also employed, to prevent undue inflammation, and the bowels purged daily for three days, as auxiliary to that agency. In 12 days the wounds healed perfectly.

After this operation, the tubercles reappeared, and were extirpated six times,—the woman having submitted to nine distinct operations—two of which were exceedingly severe and painful. The ninth operation, however, seemed to remove the last vestiges of the disease; and the woman now, (seven years since,) is well and entirely free from any suspicion of a return. The disease, in its first appearance, undoubtedly was scirrho-cancer; but in its reappearance, it assumed a fungoid appearance; and such alteration I have thrice observed in cancer of the female breast. How far the want of the mammary gland may have influenced the disease, in reappearing, to assume the fungoid form instead of scirrhous, I am not prepared to state; but in the three in-
stances in which it did put on that form, it succeeded the removal of
the mamma for scirrhous.

This case is interesting in several aspects. It certainly was interest-
ing to the patient and surgeon, as it caused the woman great suffering,
and the surgeon not a little trouble. But its chief interest relates to
the precedent it furnishes, in deciding upon, or rejecting operative
procedure, in cancer and fungoid diseases of the female breast. Had
no operation been performed, this woman certainly would have died.
If the reappearing tubercles had not been extirpated, there is not the
 slightest reason to doubt that they would have resulted in tumors of
the nature of those operated on; as they were of the same form and
appearance, and originated in similar locations. The remarkable re-
covery in this case was due, evidently, to the frequent operations; and
from repeating them when the tubercles were small, and before the
surrounding textures became implicated. And, it is probable, if a
like mode of operating were adopted in the treatment of scirrhous and
fungoid, located in other organs of the body, they would more fre-
quently be cured. I ascribe my success, in the treatment of these dis-
 eases, only in part, however, to the mode of operating described, in the
case in question. An important item with me, in the management of
such patients, is the constitutional treatment generally pursued with
them, after recovering from the operation. And this treatment con-
 sists of aperients; the occasional employment of mercurials to improve
the condition of the secretions generally, but more especially the bili-
ary; the nitro-muriatic acid mixture; tonics, both mineral and vege-
table; the cod-liver oil; in some cases iodine and mineral tonics; a
well regulated diet; narcotics, if needed; and free exercise in the
open air, if it will not expose patients to catarrhal affections, or to ex-
hausting fatigue; and the treatment should be perseveringly continued.
I believe that these discouraging and too often incurable diseases have
often proved fatal, by reason of an unwillingness with surgeons to med-
dle with them, and a disposition to advise unfortunate patients against
active surgical measures; when, if an early resort to extirpation had
been proposed, and carried out in practice, many lives might have been
saved. A refusal on the part of patients, too, to submit to the repe-
tition of surgical operations in these cases, more especially if discour-
aged by friends, and not frequently by their medical advisers, also,
has, in many instances, consigned individuals to the grave who could
have been cured; and the case here referred to, is an instance in point.
This woman was advised by her friends not to submit to a second op-
eration; but I urged her to adopt the contrary course. She heeded
my advice, and her life was saved. These tumors kill, generally, if
left to themselves. By extirpating them early, before the constitution
becomes recontaminated, and while the disease is, in a great degree,
local, the only rational chance for a cure is afforded. My rule, now,
is to operate in every instance, unless the disease is already manifest-
ing itself as a pervading constitutional affection; or the patient is too
feeble to sustain an operation; and, to repeat it as often as the disease
reappears, as early as possible after its return; and to continue to do
so until the fell disease is hunted down and eradicated from the sys-
tem.—Virginia Medical and Surgical Journal.
Case of Osteo-Aneurism. Two Operations. Death. By Prof. P. F. Eve, M.D.—The patient was from Marshall County, this State; was a farmer, about 60 years old; who, a year before his application to me, had detected, while combing his hair, a tumor over the left parietal bone. When pressed for its cause, he had an indistinct recollection of a slight blow on that side of his head three months before its appearance, from the limb of a tree. But this was so slight, he merely mentioned it, knowing no other source to which to attribute its production. I think the aneurism probably had no connection with external violence, but arose from an intrinsic cause, disease in the vascular system of the bone affected. As the tumor increased in size, the patient began to be annoyed by a peculiar sensation in it, which led to the detection of its pulsation; he became too, a little deaf.

It was just twelve months after the aneurism was first observed, that the patient came to Nashville; having already consulted the profession pretty extensively, both personally and by letters. The tumor now measured fifteen inches in circumference; to protect it and somewhat restrain its growth, a leaden cap was worn, the edge of which, by pressure, had depressed the integuments all around it, and of course acted upon the occipital artery, and posterior branch of the temporal. There was distinct pulsation throughout the swelling, but it was not very forcible; and a vibratory thrill was noticed upon auscultation. Pressure upon the arteries of the scalp made no perceptible change in its circulation. The general health of the patient was good; he possessed a cheerful disposition, but was exceedingly anxious about his affection, and often expressed the opinion it would destroy life.

By arrangements, Mr. V. returned to the city after a brief visit home, and was subjected to the following operation on the 8th of November last. With a curved needle, ligatures were deposited under the courses of the posterior branch of the temporal and occipital arteries, and these were tied tightly over compresses—twelve long pins (not the common, but bought in Paris), were next thrust into different parts of the aneurism, with the design of coagulating its contents. The patient was placed upon a rigid diet; requested to keep quiet; to be freely purged with salts; and to have ice applied to the tumor. I have very little doubt, had this treatment been faithfully carried out, but that it would have been successful, so far as to have coagulated the blood, at least, a portion of it circulating in the aneurism. Unfortunately, it was just at that season of the year when ice could not be obtained, and the patient becoming restless, determined to return home, in spite of all entreaty to remain in Nashville. An impression was made upon the affection, I think, chiefly by the pins, though it still pulsed, but less distinctly; and with much reluctance, these were now all removed, with the two ligatures, at the end of three days, and this treatment entirely abandoned. Mr. V—— declaring he was peculiarly constituted in this respect, and home he would and must go.

On the 19th of the same month (Nov.), I again operated on our patient, now at his own residence. The two arteries of the scalp passing in the direction towards the aneurism, were exposed by incisions and ligated, but without making any impression upon its pulsation.
Surgery.

As it had once been punctured by the family physician, who was now present, and that without much haemorrhage, an opening was cautiously made into the tumor, and the finger introduced came immediately in contact with large, loose spiculae of bone, one compared even in width to the finger. To verify this unexpected condition in the case, Drs. Johnson and Kennedy, two excellent professional gentlemen, and who had seen most of it, were requested to examine this new feature in its diagnosis, and did so; though at the expense of some haemorrhage, for the circulation in the part was exceedingly active. Finding it impossible to restrain the bleeding, which threatened to be fatal, by lint thrust into the aneurism, or by compresses upon it, four or five pins were passed through the edges of the divided scalp, and ligatures twisted around them. This, fortunately, promptly and permanently arrested it.

When the patient fully recovered from the effects of chloroform, he was made acquainted with the true nature of his affection, and apprised of the fact that death was almost certain in his case, either from haemorrhage or inflammation of the brain. Morphine was given pretty freely immediately after the operation. On the second day he had some inflammatory reaction, which was relieved by purging with salts. On the third day he had very little fever, no delirium, but complained of some pain in his shoulders and arms. During the night of the fifth he became speechless, and died just as he was entering upon the seventh day from the operation. The dressing to the aneurism had not been disturbed, nor had the least hemorrhage occurred. The patient very evidently died from inflammation of the brain, caused by the operation. No post mortem examination was permitted.—Nashville Jour. of Med. and Surgery.

Schirrhous Tumor of the left Tonsil. Removal. By Prof. Eve.—This production was congenital in a negro boy now aged eight years, and had acquired the size of a turkey's egg; it would have weighed several ounces.

The patient came from Hickman county; presented no symptoms of scrofula, but was apparently healthy, with the exception of a large sub-maxillary tumor on the left side. It was not attached to the skin, was firm and resisting, smooth on the surface with a slight depressing line running in its longitudinal direction. The tonsil on that side projected between the half arches, and the root of the tongue was also slightly inclined to the opposite side.

By careful incisions the facial vein was avoided, but the artery was necessarily divided, and the sub-maxillary gland included in the removal of the diseased mass. It was found not practicable to dissect this from the tonsil, and drawing it outwards and forwards, it was cut off from the attachment to this organ. After applying ligatures to three vessels, a sponge was made to fill up the space now left vacant. This was removed in twenty-eight hours, and by simple dressings, the parts have nearly healed up within three weeks, when the patient leaves the city to-day for home. I learn he has fully recovered.—Ibid.
Progress of Cholera in New York.—In pursuing further the object contemplated in our last number—a general statement of some facts developed by the present epidemic of cholera in this city—we present our readers with a continuation of the tables of the comparative mortality of the epidemics of 1849 and 1854. One of the interesting facts which these tables show, and which must attract the attention of the most casual observer is, that the periods of greatest intensity of both epidemics are consonant, or in other words, that the disease, in each epidemic, arrived at its climax during the tenth week from its commencement. Now if we compare these tables with those published in our number for Nov. 1849, we find that in Philadelphia and Boston, the epidemic of 1849 was likewise ten weeks arriving at its acme. It would be interesting to follow out this point in reference to the epidemic at present prevailing in each of those cities, but as the material for such purpose is not at hand, we are prevented from doing so. That there is a fixed law governing the rise and progress and decline of cholera epidemics under all similar circumstances, is certain. In all the large cities and manufacturing districts of England, in the epidemic of 1848-9, this fact was strikingly illustrated, as will be seen by consulting the Report on cholera by the Royal College of Physicians of London.

But there is another fact developed from these tables, which is worthy of the attention of the reader. It is frequently asserted that during the prevalence of an epidemic, all diseases which are cognate, are swallowed up by it, or in other words, that while cholera prevails, all diarrhœas and dysenteries are prodromes of the disease, and should be considered as a portion of it—"that diarrhœa is cholera." We see no reason why such a belief should prevail. The tables show the usual mortality from bowel diseases, in addition to the choleric disease. In fact, they show more than the usual amount of deaths from diarrhœa and dysentery; and would lend color to a suspicion that we have prevailing in our midst at least two, if not three epidemics. That the characteristics of the diarrhœa of cholera are well marked, needs no argument to prove; no one who has observed an epidemic of cholera will have failed to notice that the stage of diarrhœa is as well marked, and as easily defined, as either of its other stages, and that in all its phases, it presents characteristics entirely distinct from the ordinary diarrhœa or dysentery, which now prevails coexistent with it.

The increase in the number of deaths, from the four bowel affections, noticed in the first table, has so to speak, further confirmation in the fact, that for several years past there has been a gradual increase in the mortality from diarrhœa, dysentery, cholera morbus, and cholera infantum, diseases, the sum of the mortality from which, is greatly augmented by the decided influx of immigrant population—a class peculiarly prone to these affections. That both cholera and the diseases just mentioned have not been particularly rebellious to treatment, will, we think, be readily acknowledged by all who have become practically acquainted with the present epidemic.
On referring to the following table it must be borne in mind that the epidemic of 1849 commenced during the week ending May 19, while that of the present, dates from the week ending June 3d, or three weeks later in the season.

<table>
<thead>
<tr>
<th>Week ending 1849</th>
<th>1854</th>
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</thead>
<tbody>
<tr>
<td>J'ne 10</td>
<td>425</td>
</tr>
<tr>
<td>&quot; 23</td>
<td>473</td>
</tr>
<tr>
<td>&quot; 30</td>
<td>754</td>
</tr>
<tr>
<td>July 7</td>
<td>702</td>
</tr>
<tr>
<td>&quot; 14</td>
<td>901</td>
</tr>
<tr>
<td>&quot; 21</td>
<td>1490</td>
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<td>&quot; 28</td>
<td>1962</td>
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<tr>
<td>Aug. 4</td>
<td>1278</td>
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<tr>
<td>&quot; 11</td>
<td>1011</td>
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<tr>
<td>Total</td>
<td>8375</td>
</tr>
</tbody>
</table>

In order that our readers may become possessed of the facts which bear upon the diseases to which we have passingly alluded in the foregoing sketch, we present below a table which embraces the yearly mortality from the diseases mentioned, for a period of four years preceding each of the great epidemics of cholera. The per cent. of mortality can be easily computed if we bear in mind that in 1830, the population of this city was, according to the census returns, 202,589; in 1845 it was 371,223; and in 1850, it was 515,394.

<table>
<thead>
<tr>
<th>FIRST PERIOD.</th>
<th>1828</th>
<th>1829</th>
<th>1830</th>
<th>1831</th>
<th>1832</th>
<th>1845</th>
<th>1840</th>
<th>1847</th>
<th>1848</th>
<th>1849</th>
<th>1850</th>
<th>1851</th>
<th>1852</th>
<th>1853</th>
<th>1854</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera..</td>
<td>1108</td>
<td>508</td>
<td>839</td>
<td>149</td>
<td>254</td>
<td>259</td>
<td>970</td>
<td>1209</td>
<td>1121</td>
<td>1440</td>
<td>1360</td>
<td>1389</td>
<td>1410</td>
<td>1429</td>
<td></td>
</tr>
<tr>
<td>Diarrhoea..</td>
<td>1555</td>
<td>126</td>
<td>128</td>
<td>130</td>
<td>130</td>
<td>201</td>
<td>284</td>
<td>657</td>
<td>739</td>
<td>1260</td>
<td>792</td>
<td>1190</td>
<td>774</td>
<td>763</td>
<td></td>
</tr>
<tr>
<td>Dysentery..</td>
<td>109</td>
<td>14</td>
<td>16</td>
<td>23</td>
<td>9</td>
<td>10</td>
<td>34</td>
<td>45</td>
<td>24</td>
<td>44</td>
<td>44</td>
<td>162</td>
<td>259</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Chol. Morbus..</td>
<td>19</td>
<td>12</td>
<td>16</td>
<td>23</td>
<td>9</td>
<td>10</td>
<td>34</td>
<td>45</td>
<td>24</td>
<td>44</td>
<td>44</td>
<td>162</td>
<td>259</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Chol. Infantum..</td>
<td>117</td>
<td>168</td>
<td>172</td>
<td>284</td>
<td>408</td>
<td>427</td>
<td>992</td>
<td>988</td>
<td>988</td>
<td>992</td>
<td>715</td>
<td>721</td>
<td>916</td>
<td>922</td>
<td></td>
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</table>

The remedial agents that have been most relied upon in hospital practice, consists of camphor, calomel, chloriform, and astrigents, for arresting the discharges, after which stimulants, consisting of carbonate of ammonia, mustard, hot air bath, and brandy, as demanded by the exigencies of individual cases. The mortality has been greater, fifty per cent., owing to the impaired constitutions, and advanced stage of the disease, of the cases admitted.

N. S.—VOL. XIII., NO. II. 22
Medical Schools—Session of 1854–5. The season approaches for the opening of the winter session of our Medical Colleges. To these Institutions, now numbering upwards of forty, each having its full complement of teachers, is entrusted the great interests of the profession in this country. They are to give the stamp to the future character which it will maintain whether high-toned, practical, and scientific, or mercenary, empirical, and superficial. Their responsibilities, therefore, are of no ordinary kind, and their claims to patronage should be thoroughly canvassed by every physician who has pupils in charge, to whom he acts as an adviser. Let him consider well the real advantages of the different schools for giving such instruction as he knows from experience they must need, with the qualifications of the various teachers to employ such advantages for the pupils greatest good.

We have frequently spoken of the advantages of New York for medical teaching, and deem it our duty to recur to them again in the annual announcement of the opening of our Medical Colleges.

The most important advantage which mere location can give one Medical school over another, is in respect to clinical teaching. The time is fast approaching when clinical teaching will be deemed an indispensable part of a thorough course of didactic instruction. A growing disposition manifests itself yearly among all ranks of students to obtain access to the wards of hospitals, and learn from actual experience, and apply at the bedside the lessons which they have but indifferently learned in the lecture room. And it is gratifying to witness this increasing estimation of clinical studies, for it is the only true method of graduating a clear-minded, practical class of physicians, who can safely go from the College halls into the active and responsible duties of their profession.

In this single respect, location gives to the Schools of New York, an advantage well worthy of consideration. The materials for clinical instructions at their command exist in the greatest abundance. The immense native and immigrant population that seeks medical advice and assistance at her public charities is without parallel. The following statistics gathered from the annual reports of the several Dispensaries exhibits the number of patients treated at these Institutions during the year 1853. City Dispensary, 46,338; Eastern, 22, 114; Northern, 14,075; Demilt, 9,006; North Western, 4,948, total, 97,481. If we add to this number the patients treated at the different Hospitals, Asylums, etc., the aggregate will not fall below 150,000.

We are aware that this exhibition of figures has little significance, unless this wealth of material is rendered available to the student. Although there is not, we regret to say, in any of our Hospitals or Dispensaries a systematic and well regulated system of clinical instruction, yet no obstacles exist to prevent the student from accompanying the physician or surgeon in his daily rounds of duty, and examining for himself, and acquiring such hints, in regard to individual cases, as will be of infinite value to him in his future practice. These advantages, mcagre it is true, when we consider the opportunities for rendering them serviceable to the student, are, neverthe-
less, highly appreciated by him, if we may judge by the eagerness with which he seeks daily the wards of the Hospital. We trust the day is not distant when the present artificial system of instruction will be broken up, and our Hospitals and Colleges will exist as single institutions.

The only changes in the Facultys of the different Schools of New York, as far as we are informed, occur in the College of Physicians and Surgeons. Owing to the continued illness of Prof. Bartlett, the course on Materia Medica in this school will be delivered by Prof. Smith. Prof. Clark will unite the course on Practice to that on Pathology, and relinquish the course on Physiology to Prof. John C. Dalton, Jr. Dr. Dalton is an experienced lecturer, and successful experimental Physiologist, and this arrangement can but give entire satisfaction to the patrons of the school.

Of the different Medical Schools, whose announcements appear in our columns, the oldest is the Medical Institution of Yale College. Founded by one of the most eminent surgeons of this country, Dr. Nathan Smith, this College has maintained the very highest character for learning throughout its long career. Existing as the medical department of Yale College, and partaking largely of the literary and scientific character of the parent Institution, its graduates have been numerous and of the highest order of respectability, and have taken high rank in their profession.

Castleton, Vt., Medical College, was chartered in 1818. It has long held a high rank among country schools, and has always called together large and respectable classes. Its faculty for this long period, embraces the names of many of the most eminent men in the profession. In its recent changes, it has made valuable accessions. Two full courses of lectures are now given annually, of four months each.

The Medical Department of the University of Buffalo is a young but vigorous school, easy of access to students, and favorably situated in one of the most flourishing and enterprising towns on the western lakes. The College, a model building, is situated in close proximity to the Hospital of the Sisters of Charity, an institution accommodating about a hundred beds, and one of the most admirably conducted Hospitals in this country. The professors of Surgery and Medicine belong to the medical staff of this College, and clinical instruction is regularly given without interfering with the daily course of lectures. Possessed of such advantages with an able and accomplished faculty, the Buffalo School is destined to excel and rank among the very first schools in this country.

The Geneva Medical College is the revival of that old and popular school, whose discontinuance we noticed soon after the commencement of its last session. The faculty has been entirely re-modeled with a single exception. We hope their success in re-establishing this School will be equal to their efforts in so praiseworthy an undertaking, and that Geneva College, the worthy successor of the College of Physicians and Surgeons of Western New York, will again be the seat of sound medical learning.

We need not speak of the advantages of Philadelphia, for medical
teaching. She has long had the monopoly of both medical teaching and medical publishing. We wish, however, to notice the changes which have lately been made in the Pennsylvania Medical College. The faculty of this school has recently undergone some important modifications which have resulted in the appointment of Alfred Stillé, M.D., to the chair of Practical Medicine, and John Neill, M.D., to the chair of Surgery. This is the third school in Philadelphia, as regards the number of students; but as respects the character of its faculty and facilities for instruction, it has no superior. The accession of Drs. Stillé and Neill to its faculty, the former Physician to St. Joseph’s Hospital, and an accomplished scholar, and the latter Surgeon to the Pennsylvania Hospital, and well known to students by his text books, will give to this school great and deserved prominence.

The Medical Department of the University of Nashville is a Southern School, organized in 1850, and bids fair to become one of the most prominent schools in the South. From an able address delivered at the commencement of the term for 1852, by Prof. Bowling, we learn that its first session opened with the unusually large class of 121 students. In this introductory, Prof. Bowling presents the advantages of the Nashville School, and its claims upon the south in a strong light, but with satisfactory reasons. Its faculty embraces some of the most popular and honored names in the profession, and aided by the natural advantages of location, this school cannot fail to become one of the most important in the South.

For further information in regard to these schools, we refer to their several announcements.

Professor Paine.—We are happy to learn that Professor Martyn Paine, of the Medical Department of the New York University, has been elected a Corresponding Member of the Gesellschaft für Natur und Heilkunde zu Dresden. He is the first American upon whom the honor has been bestowed.

**OBITUARY.**

Death of Dr. W. J. Burnett.—Died in Boston, on the 1st of July, Waldo J. Burnett, M.D., aged 26 years, of phthisis. He was an eminent naturalist and a distinguished writer. In a future number we hope to give some interesting particulars of his short, but distinguished scientific career.

Death of Dr. I. Green.—Died at Cornwall, N. Y., on the 3d of July, Isaac Green, M.D., of this city, aged 38 years. He was a member of the surgical staff of Bellevue Hospital.

Death of Dr. J. Dennis.—Died at the State Emigrant Hospital, Ward’s Island, New York, on the 13th of July, Joseph Dennis, M.D., one of the house physicians of said Hospital. He was a graduate of the College of Physicians and Surgeons of this city.

Death of Dr. Jose Vargas.—Died in this city, on the 13th of July, Dr. Jose Vargas, Ex-president of the Republic of Venezuela, aged 68 years. He held for some time the respective chairs of Professors of Anatomy, Surgery, Chemistry, and President of the University of Caraccas. He was also a distinguished author.
TO READERS AND CORRESPONDENTS.

Want of space in the editorial department of this number, compels us to announce in this place the fact that the New York Academy of Medicine offers a prize of one hundred dollars for the best essay on the Pathology and Treatment of Cholera Infantum. The regulations governing the competitors, are those usually offered in the bestowment of literary prizes. Also:—

That Dr. John F. Metcalfe of this city, has been elected to fill the vacancy in the Faculty of the Medical Department of the City of New York, occasioned by the death of Prof. J. A. Swett, M.D.

The following works have been received:—


The Principles of Animal and Vegetable Physiology: a popular Treatise on the Functions and Pneumonia of Organic Life. To which is prefixed a general view of the great departments of Human Knowledge. By J. Stevenson Busnan, M.D., Physician to the Metropolitan Free Hospital, etc., etc. With one hundred and two illustrations on wood. Philadelphia, Blanchard and Lea, 1854. 8vo. pp. 234. (From the Publishers).


To Readers and Correspondents.

Human Physiology: designed for Colleges and the higher classes in Schools, and for General Reading. By Worthington Hooker, M.D., Professor of Theory and Practice of Medicine in Yale College. Illustrated by nearly two hundred engravings. New York, Farmer, Brace, and Co., 1854. 12mo. pp. 389. (From the Publishers.)

Common Sense, or the Mechanical Pathology and Treatment of Chronic diseases of the Male and Female Systems. By E. P. Banning, M.D. Fourteenth edition, Revised and enlarged, with 38 illustrations, together with two lectures by the Author. New York, Wilson and Co. 12mo. p. 341. (From the author.)

Transactions of the Medical Association of Southern Central New York, at the Annual Meeting held at Homer, June, 1854. Auburn, 1854. (From Caleb Green, M.D.)


We are in receipt of our usual exchange Journals.

Communications intended for publication, and Books for Review, should be sent free of expense, directed to Drs. Purple and Smith, Editors of the New-York Journal of Medicine, 183 Hudson-street, New York. Persons at a distance may direct parcels, or exchanges, paid as above, under cover, to M. J. B. Baillière, Rue Hautefeuille, Paris; or H. Bailliére, 219 Regent-street, London; or Lindsay & Blackiston, Philadelphia; or Wm. B. Ticknor & Co., Boston. The attention of Correspondents is respectfully requested to the above, as the Publishers are frequently subjected to unnecessary expense for postage and carriage.

All remittances of money and letters on the business of the Journal, should be directed to the Proprietors.
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Traité Pratique des Retrécissements du Canal de l’Ureètre par M. le Dr. F. Reybard. Ouvrage couronné par l’Académie impériale de médecine qui lui a décerné en 1852 le grand prix d’Argenteuil (12 mille. Fr.) pp. 600, with plates. Paris, 1853. 399

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The Principal Forms of the Skeleton and of the Teeth. By Professor R. Owen, F.R.S., etc., Lecturer on Comparative Anatomy, etc., etc. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 329.

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Art. 1. *Operations on the Rectum and Anus for Malformations, Laceration of the Sphincter, Hypertrophy of the Sphincter from Spasmodic Action, Constriction, and Ulceration of the Rectum and Colon.* By W. Parker, M.D., Professor of Surgery in the College of Physicians and Surgeons, New York.

Congenital malformations of the rectum and anus claim the especial attention of the practitioner; 1st, because of their frequency; 2nd, the necessity of prompt interference; and 3d, the ill success of the various operations undertaken for their relief. Of the frequency with which these cases occur we have no accurate means of judging except from personal observation. It is sufficient, however, to know that they are liable to occur in the practice of any physician, and that they require early recognition and prompt attention. Not that the life of the patient is placed in immediate jeopardy if relief is not given at once, for it is a fact that the little sufferer will often live for weeks and indeed months without having the bowels evacuated by the natural channel. But such cases are exceptional and do not serve as guides in practice. The success of the various operations which have been
undertaken for the cure of these malformations is truly discouraging. Amussat denies that they ever succeed, and it is well known that Mr. Brodie has refused to operate, preferring to leave the case to nature. Operative surgery, however, has been too successful in relieving other grave deformities of the body, to make us despair, or even doubt of its ultimate success in remedying these serious malformations.

These malformations consist of 1, *Closure of the anus* by a membrane resembling the external integument; the bowel terminating at the anus, and the septum being so thin that the fluid collected within protrudes whenever the child cries. These cases ordinarily require only a crucial incision and the removal of the corner of the flaps thus formed, and some care to keep the opening patulous by means of tents.

2. The anus may be *completely absent*, its place being occupied by a dense fibro-cellular structure, and the bowel terminating in a cul-de-sac above. This deformity is much more serious than the former. The operation usually performed for its relief consists in puncture with a trocar or bistoury and the subsequent introduction of tents. The most novel operation in these cases was recommended by Amussat, and by him first performed. It consisted in dissecting up this cul-de-sac, drawing it down and attaching its border to the external integument.

3. The anus may be *contracted* so as to allow of the escape of the meconium only in drops. This condition is relieved by slightly incising the contracted orifice, and afterwards dilating it with sponge tents. If it depends upon a partial septum stretched across the passage, this must be divided.

4. The anus may be perfectly well formed, and appear natural, but at a variable distance above its orifice, generally about one and a half inches, the bowel is by a firm septum stretched across its passage. These cases are liable to be overlooked owing to the normal appearance of the external parts. They are, however, easily diagnosticated, when the attention is called to them. By
passing a probe up the rectum, it meets the obstruction, and where the septum is thin, an impulse is given to it whenever the child cries. This malformation is relieved, like the former, by puncture or incision of the occluding membrane.

These are the more ordinary forms of malformation of the anus and rectum, and those to which I wish especially to direct attention. In common with others, I have performed the various operations above mentioned with the most indifferent success. In some cases, death followed from an unknown and inappreciable cause. Again, it was the result of purulent absorption, especially in those cases where it was necessary to penetrate deeply in order to reach the bowel; and finally, the mass of cases terminated fatally by closure of the artificial passage, the constant tendency of which to contract being the greatest obstacle to overcome.

I have recently, however, resorted to a simple expedient which has seemed to avail something in the ultimate success of the operation, and to which I wish to direct attention. It consists in introducing the finger forcibly into the artificial tract and thus dilating it freely, both at the time of the operation and subsequently at short intervals. In three cases treated in this manner within the last year or two, two recovered, and the third died from neglect. The following brief notes of cases treated by some of the different methods alluded to will serve to show the fatality of these various operations:

Case 1.—I was called, on the 24th of February, 1840, to see an infant which was born on the 21st, at 8 A.M. The child had had no evacuation of its bowels, and an imperforate rectum was found to be the cause. The anus and sphincter were entirely natural, but, on introducing a probe, a septum was encountered about one and a fourth inches from the verge of the anus. An operation being decided upon, the trocar and canula were carried through the obstructing tissue, and on the withdrawal of the former, the meconium was freely discharged. A flexible catheter was introduced and an injection thrown freely into the bowel. The case
progressed favorably until the seventh day when the child died from neglect.

Case 2.—I saw a child on the 14th of March, 1841, which was born on the 12th, with an imperforate rectum, the closure being three-fourths of an inch from the anus. The bowels were very tumid. I introduced the trocar and canula and succeeded easily in giving free exit to the contents of the bowels. The child died, however, eighteen hours after the operation.

Case 3.—This was a female child also having imperforate rectum and two days old when first seen, on the 16th of October 1841; it was suffering very much from the retention of the meconium. The septum was found to be one inch from the anus. I operated, as in the preceding cases, with the trocar, and had no difficulty in freely discharging the bowels. The same measures were also employed to keep the passage open, and with success; the child perfectly recovered.

Case 4.—I was called on the 7th of December 1841, to see a fine male child, born on the 3d of the same month, who had passed nothing from its bowels. The rectum was found imperforate at the distance of half an inch from the anus. The abdomen was very much distended, and the child had suffered from convulsions during the previous twenty-four hours. I punctured with the trocar and succeeded in unloading the bowels freely. The child died on the following day.

Case 5.—I saw this child 39 hours after birth. It had an imperforate rectum, the septum being one inch above the anus. The operation was performed as in the preceding cases, the trocar penetrating to the depth of two inches from the verge of the anus, before it entered the bowel. The meconium was freely evacuated, and the urgent symptoms relieved, but the child died in nine hours after the operation.

Case 6.—I was called to see an infant in Williamsburg, twenty-four hours old, which had an imperforate anus; there was no trace of an anus discoverable. When the child cried, I could detect with the finger a perceptible im-
pulse communicated by the bowel to the intervening substance. I made an incision, and succeeded in penetrating the cul-de-sac at the depth of one and a half inches. On the introduction of the catheter the meconium flowed freely. The child died.

Case 7.—This child had an imperforate anus, for which an operation was performed on the fourth day, with entire relief. Four days later, it was found necessary to repeat the operation, as the artificial passage had been allowed to close. But it proved impossible to find the old passage, and accordingly a new one was made with the trocar. Not succeeding however, in giving exit to any feculent matter, injections of warm water were used, and afterwards sweet oil, which escaped without any trace of feces. A catheter was introduced, but with no better result. A small dose of calomel was ordered, and further attempts to reach the bowel delayed for several hours. Upon a second trial, the cul-de-sac, was reached without difficulty, and a free discharge from the bowels followed. The severe symptoms were relieved, the vomiting which had been troublesome subsided, and the case assumed a favorable appearance. A portion of flexible catheter was retained in the passage, and injections with warm water employed from time to time. The case progressed favorably after this operation and ultimately perfectly recovered.

Case 8.—I was called to see this child, when two days old; it had passed nothing from its bowels, the abdomen was greatly distended, there had been efforts made to relieve it, but without success. The obstruction was about three-fourths of an inch from the anus. The operation was performed with the trocar, and the meconium freely discharged. Instead of withdrawing the canula and treating the case by the introduction of tents, as previously, I determined to dilate the passage freely by the introduction of the finger. To accomplish this, a knitting needle was passed through the canula as a guide to the opening in the bowel, and the canula being withdrawn, the little finger was carried forcibly along
the needle to the bowel, thus freely dilating the passage. On removing the needle, a pledget of lint was introduced, and the physician in attendance advised to pass his finger daily the whole length of the passage. The case progressed very favorably for several weeks, but this precaution being finally omitted, the child died.

**Case 9.**—I was called to see a female child twenty-four hours old, December 12th, 1853, which had an imperforate anus. It was small, but well formed, and apparently healthy. The operation consisted in passing the trocar up to the bowel and evacuating its contents, which was done without difficulty; it was completed, as in the former case, by introducing the little finger, and forcibly dilating the passage. This practice was continued from day to day, and thus the tendency to the contraction of the passage and its ultimate closure, was effectually prevented. The child recovered.

**Case 10.**—This was a fine male child, which was brought to me on the second day after birth, with an imperforate rectum. I operated as in the two last mentioned cases by the introduction of the finger after the withdrawal of the instrument, and freely dilated the passage. As in the preceding cases, the patients were left in charge of others, to carry out the treatment, and the failure seemed due to neglect, I determined in this case to attend to it personally. The parents were therefore, directed to return with the child every two or three days. They did as directed with great punctuality, and the passage was frequently and thoroughly dilated, but without causing the child any inconvenience. This dilatation was continued several weeks, when, as the passage showed no tendency to contract abnormally, this practice was discontinued. The child continued to thrive finely, but died when about two years old, of croup.

**Case 10.**—Laceration of the Perineum and Sphincter Ani during Parturition—Cured by division of the Sphincter and subsequent closure of the Perineum by Sutures.

I was called on the 24th of October, 1849, to see Mrs.
M——, who had recently been delivered of her first child. Her labor was terminated with instruments, and an extensive laceration of the perineum, involving the sphincter ani, followed their employment. I was called in consultation a day or two after her confinement, to relieve, if possible, by an operation, her unfortunate condition.

On examining the parts, I found the laceration very extensive, extending fairly through the sphincter ani, the edges being widely separated, and the torn ends of the muscle drawn upon either side toward the coccyx. The appearance of the wound resembled that which is produced on dividing the orbicularis oris, the edges of the wound being drawn widely and permanently asunder by the contraction of the muscle.

The appearance of the wound suggested the method of cure. It would be difficult to retain the approximated edges of the lacerated parts of the anus in apposition while the sphincter remained in its present condition, strongly retracting its lacerated edges towards the coccyx. I accordingly proposed to divide the sphincter subcutaneously, but thoroughly, on each side of the coccyx, and then, after trimming the edges of the perineal laceration, approximate the lips of the wound, and retain them by deep clamp or quill sutures. The operation was acceded to by the gentlemen in attendance, and I proceeded at once to operate.

The sphincter was thoroughly divided at the points above indicated, and the edges of the wound, paired, were easily approximated and retained by the quill suture. The bowels were confined by opiates for several days and finally moved with injections of sweet oil. Union readily took place, and the result was most satisfactory.

Remarks.—Rupture of the perineum has been justly considered one of the most serious accidents of parturition, so difficult have these wounds proved of cure. It has, indeed, been advised to leave them wholly to nature, as not susceptible of treatment. The success of the operation in the preceding case, one of the most formidable that can occur, dem-
onstrates the fallacy of such an opinion. These lacerations of the perineum may vary from a simple rupture of the fourchette to a complete division of the vulvo-anal septum, involving the sphincter ani. This latter is far the most serious, as presenting the greatest obstacles to cure.

Two principal methods of cure have been proposed. The first is, to effect a reunion by rest and cleanliness, without the resort to surgical means; and the second, to promote union by surgical interference. Surgical and obstetrical writers seem to be about equally divided in the adoption of these methods. Among the French, Boyer and Duparque favor the former, and Dubois and Roux the latter. Mr. Brown, in his recent work,* concludes in regard to the opinions of English writers:—"On the whole, the prevalent opinion in England appears to have been that, from the uncertain, and, most frequently, unsuccessful, results of the operations devised, and from the apparently insuperable difficulties to be contended with, it was better merely to aid the efforts of nature in narrowing the wound, and in lessening the evils attendant on it." The method of treatment by rest and cleanliness is generally all that is required when the laceration is slight, and it is adopted immediately after the accident has occurred. But in those severe cases, when from the use of the forceps, or mismanaged labor, the rent extends completely through the sphincter ani, the suture offers the only reliable means of cure.

The different forms of suture used have been, the interrupted, the twisted, and the quilled, and of these the latter is generally preferred. Mr. Higginbotham reports a case in the Lancet, vol. 2, 1849, in which the laceration extended through the sphincter ani; he used the interrupted suture in two places, and applied the nitrate of silver to the skin along the edge of the wound. "The wound united by the first intention; the eschar surrounding the laceration, made by the

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caustic, had the power of fixing the parts as if adhesive plaster had been applied.” The operation was performed thirteen years before the date of the report, and during that time the patient had remained well, and borne nine children without any return of her trouble. Several cases have been reported cured with the hare-lip pins and twisted suture, but the quilled suture is much more frequently used at present than any other, and is decidedly preferable to those mentioned. In repeating this operation, however, I should prefer to use the clamp suture of Dr. Sims, of this city, which I believe would be admirably adapted to these cases, and for the introduction of which into surgical practice he is deserving of great credit.

There was one step in this operation to which I would call particular attention, as contributing not a little to its success, viz., the complete division of the sphincter ani upon each side of the coccyx. By this simple measure, the tension was entirely taken from the posterior lips of the wound, which had previously been widely separated and drawn outward and backward, and the edges were in consequence readily approximated and easily retained in apposition. The necessity of this step to overcome the principal obstacle to the retention of the opposed surfaces in easy apposition, was impressed upon my mind while contemplating the appearance and anatomy of the parts engaged. The sphincter ani muscle having a strong and unyielding attachment to the coccyx, acted powerfully and constantly in separating its anterior lacerated portion, and, of course, in drawing asunder the rent in the perineum. The remedy for this difficulty very naturally suggested itself. By dividing the coccygeal attachments of this muscle its action would be destroyed and its power to prevent the perfect and undisturbed contact of the wound would be neutralized. The result of its division justified this conclusion, for not the slightest difficulty occurred in accomplishing this hitherto formidable task, and obtaining union throughout by the first intention. To relieve the strain upon the sutures, where the perineum is rigid and tense, Diffenbach made elliptical incisions upon each side of
the median line; and recently, Mr. Hilton, of London, has, by subcutaneous incision, divided the coccygeal attachments of the sphincter and levatores ani muscles, for the purpose of changing the direction of their action from the coccyx towards the pubes.

At the time the above operation was performed in 1849, I was not aware that the division of the sphincter had ever been recommended, much less practised in these cases. It appears, however, according to Mr. Brown, that Saucerotte once operated in a similar manner, and Mr. Erichsen states (Science and Art of Surgery) that it was advised by Copeland, and approved by Bransby Cooper. Within the last year or two, Mr. Brown, of London, has operated in this manner very successfully, and in his work, above referred to, the different steps of the operation are finely and accurately illustrated by engravings. He is a warm advocate of the operation thus modified, and reports eighteen cases thus successfully treated.

It will be observed that my operation was by subcutaneous incision while that performed by Mr. Brown involves the external, as well as internal parts. In regard to the subcutaneous incision, he remarks [Page 41], "A subcutaneous incision of the sphincter has been suggested, but it will not furnish the results aimed at. The muscular fibres of the sphincter must be completely severed, and also the investing integument, to annihilate all traction." This objection is without foundation, as the puckered, folded integument of the anus, when once the sphincter is divided, is capable of indefinite extension, and exerts not the slightest traction upon the flaps of the wound. As to the results which subcutaneous incision furnish, we need but refer to the above case to prove that they are satisfactory.

Case 11.—Hypertrophy of the Sphincter Ani — Obstinate Constipation from its Spasmodic Action — Relieved by free Division.

Mrs. C., an intellectual lady, aged 26, of a highly nervous temperament, and also imaginative, married about four years, but never pregnant, came under observation in 1852.
She had been a sufferer from her childhood, from a peculiar form of constipation, or rather a retention of the contents of the bowels from a peculiar cause. It seems that when about six years old she passed from her bowels some lumbricoides, the appearance of which, or the sensation which they produced, made a strong impression upon her mind. It happened subsequently that her imagination controlled the action of her bowels by inducing spasmodic action of the sphincter ani. She became so morbidly sensitive whenever her bowels were about to move, that under the impression that worms were about to pass from her, the sphincter would close firmly and entirely prevent the passage of faeces. In this manner a whole month often passed with repeated, but vain efforts to procure a dejection from the bowels. At every attempt, no sooner would she arrange herself for defecation, than the approach of the faeces to the rectum would induce a spasmodic and uncontrolable action of the sphincter and render all her efforts abortive. This state of things had continued for years, and was very perceptibly impairing her health. An actual movement of the bowels could be obtained only by the aid of active cathartics and it was then attended by the most intense suffering. She had resorted to various remedies, change of diet, etc., but with no benefit.

On examination, no disease of the anus or rectum, as fissures or ulcerations, could be detected on the most careful exploration; the only abnormal appearance was an enlargement of the sphincter muscle, which was in a truly hypertrophied condition, being markedly increased in bulk and strength. I directed her to restrict her diet to laxative food, such as rye, mush, wheaten grits, raw oysters, etc., and prescribed aperient medicines, and belladonna ointment to be applied to the anus. These measures, however, had no special or permanent benefit.

I then proposed the operation of dividing the sphincter muscle, which was submitted to, after a little hesitation. She was brought under the influence of an anaesthetic and the sphincter was divided freely upon both sides.
vour system was considerably excited by the anaesthetic, but she recovered from the operation with no unfavorable symptoms. The result of the operation was very satisfactory, as the morbid sensibility was almost entirely relieved, and the evacuation of the bowels rendered comparatively easy. She was seen recently and remarked that the operation had benefited her very much.

Remarks.—Spasmodic contraction of the sphincter ani is generally associated with, and dependent upon, ulcer or fissure of the anus. It may, however, exist independently of such causes, and is then dependent upon some other source of irritation, or upon a hysterical condition of system.

The preceding case is closely allied to the latter, though differing sufficiently to form a separate class of cases. The loss of consent and sympathy between the different muscles necessary to the expulsion of the feces was, due to a purely mental cause, and not to a morbidly sensitive condition of the reflex spinal system. In the early history of the case, the action of the diaphragm and abdominal muscles was normal, the passage of the feces along the bowel to the rectum produced no spasmodic action of the sphincter muscle, but when the expulsive act was about to be completed, the imagination became strongly excited, and the sphincter was closed involuntarily. This act was repeated from time to time, and finally became a fixed habit. The sphincter, in the meantime, by its unwonted action and powerful contraction, to resist the force of the abdominal muscles in effecting an evacuation of the contents of the bowels, of necessity gradually acquired bulk and strength, as in the case of any other muscle impelled to unusual exertion. Its action at length became purely spasmodic, being excited by the passage of feces along the rectum, and the act of defecation could not be completed unless the intestines and abdominal muscles were stimulated to unwonted action by powerful cathartic medicines.

Spasmodic contraction of the sphincter ani, independently of any local disease, has been described by Boyer, Dupuy-
tren, Mr. Brodie, and others. The former seems to have been the first to describe the disease and point out the proper method of treatment by division of the sphincter. In an article in the Journal Complementaire, t. 2, p. 24, On some Diseases of the Anus, he relates three cases which he treated in this manner with success. Dr. Bushe, of this city, in his work on the Diseases of the Rectum and Anus, also describes a form of spasmodic contraction of the sphincter, in which no local disease is discoverable, and which admits the passage of the finger without pain. Mr. Brodie speaks of it as a disease of not very uncommon occurrence, and remarks that "it is met with chiefly in women, especially those who are disposed to hysteria. It is, however, met with in other women, and sometimes in the male sex."—(Lond. Med. Gaz., vol. 16, p. 20)

Mr. Quain, however, in his recent work,* denies that spasmodic contraction of the sphincter ani ever occurs as an idiopathic disease, and states, that after an attentive examination of the cases reported as such by Boyer, he does not find any which confirms the opinion held by this surgeon. He regards them all as "examples, not of an idiopathic affection of the sphincters, but of disease of the mucous membrane, with sympathetic spasm of those muscles." It is true, as he remarks, that it is often very difficult to find the local ailment, and, therefore, it is liable to be overlooked; but in the present case there can be no doubt that the spasmodic affection of the sphincter was entirely independent of any local disease.

This hypertrophied state of the sphincter, dependent upon its spasmodic action, is an interesting fact. Brodie mentions it in his lectures, above referred to, as follows: "The contraction of the sphincter at first appears to be merely spasmodic, without any other change of its condition; but you know that, in proportion as muscles are called into greater action, so they become increased in bulk; and, in conformity with this general rule, when spasmodic contraction of the

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sphincter muscle has existed for a long time, the muscle becomes considerably larger than it was in its natural state, before the disease existed." In the present case it was largely developed.

The only measure likely to relieve this complaint, is, obviously, division of the sphincter. This object the operation will certainly effect temporarily, and if it completely break up the habit, the relief will be permanent. The patient in the present instance was, at first, perfectly relieved by the operation, and though not entirely cured, still expresses herself greatly benefited. Her bowels now move regularly every day, with only an occasional Seidlitz powder.

CASE 13.—Constriction of the Anus in an Adult, of many years duration—Relieved by Division of the Sphincter Muscle.

Miss ——, aged 33, of Columbia Co., N. Y., consulted me for a complaint from which she had suffered fourteen years, and which she called "piles." The most prominent symptom was extreme costiveness, a passage from her bowels being obtained with great difficulty and severe pain, and only as the effect of active cathartic medicines. The difficulty was slowly progressing, and now rendered her life very miserable. She had been treated by many physicians, and used a great variety of remedies. She had never been examined, and was somewhat diffident when this measure was proposed as necessary to a complete understanding of her case.

She at length submitted, and, instead of hæmorrhoids, I found the anus nearly closed, the passage being not larger when forced than a common quill. There was no scirrhus, the stricture being due to simple contraction. She was informed that she could be benefited, and perhaps entirely cured, by an operation, and that medicines would be of no service whatever, in effecting a cure. She consented to the operation, after several days reflection. Ether was administered, and the sphincter divided deeply at three points. The usual dressings were applied—free hæmorrhage occurred, so as to require a tampon to restrain it—but the wounds cicatrized
readily, and she was soon able to realize the benefit of the operation. For a considerable time the relief was complete, and she considered herself cured; latterly, however, the former symptoms have begun to recur, and it is probable that, eventually, another operation will be required.

Remarks.—Narrowing of the anus in the adult, uncomplicated with scirrhus, is a rare disease. It may occur as the result of operations for haemorrhoids, or from ulcerations, located in its immediate vicinity. Mr. White describes a form of contraction, (Obs. on Strictures of the Rectum,) where it has resulted from the matter of syphilis and gonorrhoea; and Dr. Bushe also reports a case which was attributable to this cause. The narrowing or contraction of the anus in the present case was not traceable to any cause, but seemed due rather to a chronic thickening of the submucous tissue. Mr. Ashton* mentions having seen two cases of contraction of the anus by infiltration of lymph, but in both instances the complaint had been preceded by dysenteric symptoms. The treatment usually followed in these cases, is gradual dilatation with bougies. This method of overcoming the difficulty, is very tedious and painful. I should much prefer free division of the sphincter, and subsequent dilatation with bougies if necessary, as being less painful and troublesome, and affording the fairest prospect of ultimate recovery.

Case 14.—Ulceration of the Rectum and Colon—Division of the Sphincter, Cured.

I was consulted Oct. 20th, 1853, by Judge P. P., of New Orleans, for an affection of his bowels, from which he had suffered severely for a year or more. It appears that during the prevalence of the cholera in that city, he had been accustomed whenever his bowels showed any tendency to looseness, to take large doses of anodynes and astringents, and by this means confine them for several days. The consequence of this over-treatment, was a severe attack of dysen-

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tery. He recovered from the acute symptoms, but the ulcerations of the rectum and colon remained. For the relief of the distressing symptoms which they gave rise to, he had resorted to a great variety of treatment; and when he first consulted me in this city, he was on his return from Paris, where he had been under the care of different medical men of eminence, but without obtaining much relief.

His symptoms at this time were of the most aggravated kind, being increased by his sea voyage; he was much emaciated; countenance anxious, mind gloomy and greatly depressed: pulse 120 per minute; skin hot and dry; passages from the bowels frequent, containing blood, mucus and pus, and accompanied with severe tenesmus; the whole tract of the colon very tender on pressure. On examining the rectum, the finger encountered a rough ulcerated surface, very painful and hot, and extending as far as it could reach. The nature of the difficulty was evidently ulcerations of the rectum and colon, from a previous attack of dysentery.

The treatment which I adopted was perfect rest in bed, anodynes to allay the irritability of the system, and a nitric acid issue, six inches long and two wide, along the course of the sigmoid flexure and descending colon. The effect of this treatment was soon manifest in a diminished action of the bowels, less tenesmus, composure of body and mind, and a general improvement in all the functions of the body. He steadily improved, and on the 25th of December left for the South, quite restored to health; although his trouble was not entirely removed.

On the 4th of June, 1854, he again came under my care, suffering from his former complaint, in, if possible a still more aggravated form. He had come from New Orleans by sea, and experiencing a rough passage, the severe and torturing symptoms of his disease had been increased, and the system reduced to a state that made him despair of recovery and threaten self-destruction to end his sufferings. The dejections from his bowels were now almost constant, attended with the most painful and harassing tenesmus, a constant
burning sensation in the rectum, and a consequent irritability of the system that admitted of neither refreshing sleep or rest.

I placed him under treatment, and in succession adopted such measures as seemed most suitable to his condition. Injections of nitrate of silver thrown high up, sulphate of zinc, etc., anodynes, and astringents with tonics, were variously administered, but with no benefit whatever. The weather now became hot and oppressive, his contemplated visit to Europe had to be given up, the passage having been already engaged, and there was great danger that his system would soon sink under the disease. The ulcerations were evidently extending, and more and more of the tract of the colon became daily involved; the pulse was 120 per minute, and often more; stools frequent and bloody; fever at night, and extreme restlessness.

As all the remedies had been faithfully tried which offered a chance of success, I now proposed to him an operation as the only measure likely to afford relief. He gave his consent without hesitation, and accordingly, on the 15th of July, I proceeded to divide the sphincter ani. He bore the operation well, and the relief was almost immediate. Pills of nux vomica and conium were given, and nourishing diet. The tenesmus and constant disposition to evacuate the bowels subsided, the irritability of the system diminished rapidly, and his progress towards recovery was uninterrupted. On the 6th of July he sailed for Europe, in a comfortable condition, and suffering from none of his previous symptoms. I have occasionally heard from him since and to the present time he remains well, with no tendency to a return of his former trouble.

Remarks.—The operation of dividing the sphincter in ulcer of the anus and rectum was first practised by Boyer, and with great success, in several cases which had resisted obstinately all local and general treatment. The correctness and necessity of this treatment are obvious; if rest is essential to the healing of an ulcerated surface, in no other way
can it be more effectually secured in ulcer of the anus, than by destroying the action of the muscle upon which it is situated. The very existence of an ulcer at this point precludes all hope of a spontaneous cure. Rest is essential to the healing process, and yet the necessary irritation which the ulcer produces, induces a constant and painful action of the sphincter, entirely incompatible with cicatrization of the lesion of the mucous membrane.

Division of the sphincter where ulcerations of the rectum and colon co-exist, dependent upon a previous attack of dysentery, has not attracted much attention. And yet the same necessity for the operation exists in this as in the preceding instance. The constant irritation of the ulcers situated just within the anus keep up the most painful, spasmodic action of the sphincter, which compels the patient to strain almost constantly at stool, and these efforts still further aggravate his condition by forcing along the bowel and over the irritable ulcerated surface, small quantities of fecal matter, pus, and blood. It is evident that the sphincter plays a most important part in this morbid process, and should that muscle cease to act, it could not fail to follow that the bowel would be easily quieted, and the conditions necessary to the cure would be obtained.

Mr. Ashton, before referred to, seems to regard these cases as nearly hopeless. He remarks, "should ulceration attack many points of the intestine, and extend high up, the probability will be a fatal termination of the case, in spite of the most judicious measures we can employ." The success of the operation in the case above related, certainly one of the most aggravated kind, fully justified my expectations, and establishes the importance of such procedure, in similar cases. I had operated, in 1848, upon a female, from Mass, for ulcer of the rectum by division of the sphincter, with equally favorable results; and I was induced from my experience in that case, to resort to the same operation in this instance.
Art. II.—Influence of the Poison of the Northern Rattlesnake—
(Crotalus Durissus)—on Plants.* By J. H. Salisbury, M. D.

It is a curious and well known fact, that some of our most deadly poisons are animal secretions, and that the very animals—the very tissues which secrete these powerful proximate organic principles, are as susceptible to their deleterious influence, when introduced into their circulation, as the tissues of the most harmless animal would be under similar circumstances. It is also well known that many vegetable products are highly poisonous to animals. But the influence of animal and vegetable poisons upon plants, has—although a subject scarcely less interesting in a physiological point of view—excited but little attention. The simplicity of the plant's structure, renders the field one of peculiar interest, in the way of studying the general action of medicinal agents and poisons upon organized tissues.

On the 18th of June, 1851, a large female rattlesnake, which had been caged in the N. Y. State Cabinet of Natural History, for about a year, without food, died. On dissection, its stomach and intestinal canal were found entirely empty. The sac into which the poison is emptied was laid open, and the virulent matter (of which there was little), carefully removed and placed in a porcelain capsule. About fifteen minutes after its removal, four young shoots of the lilac—Syringa Vulgaris, a small horse-chestnut of one year's growth—Aesculus Hippocastanum, a corn plant—Zea Maize, a sunflower plant—Helianthus Annuus, and a wild cucumber vine, were severally vaccinnated with it. The vaccination was performed by dipping the point of a pen-knife into the poisonous matter and then inserting it into the plant just beneath the inner bark. No visible effect, in either case, of the influence of the poison was perceptible till about sixty hours after it had been inserted. Soon after this the leaves

* The principal facts in this article were formerly published in the Trans. of Amer. Scientific. Assoc., but as through this medium they have obtained a limited circulation, especially among medical men, I desire to bring them more directly before the profession by publication in a medical periodical.
above the wound, in each case, began to wilt. The bark in the vicinity of the incision exhibited scarcely a perceptible change; in fact it would have been difficult to have found the points, if they had not been marked when the poison was inserted. Ninety-six hours after the operation, nearly all the leaf-blades, in each of the plants, above the wounded part were wilted, and apparently quite dead. On the fifth day the petioles and bark above the incisions began to lose their freshness; and on the sixth, they were considerably withered. On the seventh day they appeared about as they did on the sixth. On the tenth, they began to show slight signs of recovery. On the fifteenth, new but sickly appearing leaves began to show themselves on the lilacs, and the other plants began to show slight signs of recovery in the same way. Neither of the plants were entirely deprived of life.

It was interesting to mark the progressive influence of the poison. The first indication of the derangement of the healthy functions of the plants was observed in the leaves: these began to wilt and die at their edges and apices; and this death gradually and uniformly advanced on all sides towards the midrib and petiole, till the whole or nearly the entire leaf-blade was destroyed.

It is an interesting fact in physiology, that the plants first exhibited signs of death in the leaves; and still more interesting, that this death commenced first in the leaves, on the side of the plant, in which the poison was inserted. The facts materially deducible from these experiments are:

1. That the effects of the poison of the rattlesnake upon plants and animals, when introduced into their circulation, by a wound, are similar.

* This shows a less perfect system of Anastomosing vessels than exists in the animal.

† It is stated on good authority, that the poison of the snake can be taken into the stomach of the animal with impunity; its dangerous effects being only exhibited when introduced into the circulation by a wound. It would be interesting to note its influence on the animal when applied externally, to the skin, to see whether its deadly effects would be modified by the absorbents.
2. That it requires a much longer time for it to affect the plant, than the animal.*

3. That the effects were invariably exhibited on the parts above the wound, and in no case affected the leaves below it.†

4. That it invariably affected first the leaves on the side of the plant in which the incision was made.

5. That its influences were first rendered visible on the edges and apices of the leaf-blades.

Art. III.—Reclamation on the Treatment of Ulcers by Anaplasty.

By John Watson, M.D., Surgeon to New York Hospital.

In our current medical literature we occasionally meet with the announcement of surgical operations and of other performances, as novelties, which have no claim to be so considered. In some instances of this sort, I have seen friends and acquaintances unjustly overlooked; and in some, again, I have had reason to complain on my own account. Up to the present time, however, I have been willing to allow whatever little may have been added to the stock of surgical knowledge by myself to make its own way in the world, and pass for what it is worth, independent of the source whence it came. Nor should I on the present occasion deviate from this course, had I not in view the correction of an evil which appears to be on the increase.

The eagerness with which the busy practitioner is now and then solicited to write for the periodicals, and the little time he usually bestows upon his literary contributions, may offer some excuse for the unintentional oversights, or acts of injustice to which I now allude. But it should be remembered that the desire of being useful is not the only

* It should be stated, in order to show that animals were readily affected by the poison of the snake, that a short time previous to its death, a rat bitten by it died in two hours.

† This was probably owing to the small quantity of poison inserted in each case.
I would not do our critics and reporters the injustice to suppose that in any considerable number of instances, the oversights to which I allude, are intentional. Hasty composition and deficient information will explain the most of them. We are all, more or less, subject to forgetfulness. We receive impressions in reading or conversation, which, in due time, we turn to good account in practice; but, inattentive to the source from which they are derived, we may act upon, or write about them, as our own; place them, without suspicion of error, to our own credit; and lay claim to the results obtained from them as if they had been the original and spontaneous suggestions of our own minds. Now, this is among the evils at present existing under the sun; an evil, however, which by a little careful study, may easily be obviated.

And here permit me to say, that I have been more immediately led to these remarks by the perusal of an article in the last number of this Journal, entitled "Elkoplasty," or "Old Ulcers Treated by Anaplasty," from the pen of my worthy friend, Dr. F. H. Hamilton, of Buffalo; in which article Dr. H. reports the case of an ulcer on the leg, cured by an anaplastic operation which he performed in January last. In the same paper Dr. H. claims to have proposed this method of treating ulcers as long ago, as 1846; and to have at that date, in his clinic at Geneva Medical College, "anticipated most of the results" which he has "now actually obtained."

As an offset to these claims, it is but justice to say, that in his proposal, as well as in his results, Dr. H. has been anticipated, on at least two occasions, by myself, once in April, and once in July, 1844.

The first of these operations was for the cure of an old ulcer on the forehead, the result of syphilis, and complicated with necrosis and exfoliation of nearly the whole external
table of the os frontis. A report of it appeared in the American Journal of Medical Sciences, for October, 1844, (page 537); and the details of it, under the head of "Melopoplasty, or Forehead-mending," were again published in the first volume, (page 711,) of Townsend's translation of Velpeau's Surgery; which appeared in this city, in 1845.

In this case, after vivifying the edges of the ulcer with the knife, and quickening its surface with a wash of concentrated aqua ammonia, I succeeded in covering the diseased surface by means of three large flaps; one of which was taken from the integuments of the temple on either side of the ulcer, and the other from the scalp above it. The recovery was rapid and complete. The patient afterwards officiated for some years as a nurse at the New York Hospital. The improvement in his appearance effected by the operation, was beyond all expectation. To the observer standing at a little distance from him, the lines of cicatrization on the forehead were barely visible; and his elevated and open countenance gave hardly any traces of its former loathesomeness and deformity.

Since this first operation, I have had but one occasion to recommend a repetition of it on the forehead. But in that instance, the patient died of an intercurrent and acute disease, before the operation was attempted. My second operation of the sort was for the cure of an ulcer on the foot. I cannot at present refer to any printed notice of it. But the case, at the time, was much talked about, at the Hospital and elsewhere, and has often been the theme of conversation since. I give the particulars of it from my own note-book. It is also recorded in the N. Y. Hospital Case-Books. (First Surgical Department, vol. 3., case 50, page 291.)

G. C., a young English seaman, was admitted by an order from the British Consul, in or about the year 1834, having by exposure to severe weather at sea, lost the greater portion of his left foot, and all beyond the tarsal bones of the other foot. The injury at the date of his admission, had been of several months' duration. The ulcerated surfaces
left by the sloughs, had already partially cicatrized. But the loss of substance was so great that the patient could no longer use his feet in walking, and was obliged to move about upon his knees. After remaining for some months under treatment, the cicatrices becoming firm, he was supplied with an apparatus for each foot, somewhat after the manner of a Scarpaso shoe, having a firm wooden portion in front to supply the lost portion of the foot. By means of this apparatus, and subsequent modifications of it, which were the result of his own ingenuity, he was soon able to walk about upon his feet; and, being an active and intelligent man, he was appointed nurse in one of the surgical wards, in which capacity he still continues at the Hospital.

But, from time to time, the pressure of the shoes gave rise to much inconvenience, and occasionally to ulceration on the face of the stumps; obliging him at intervals to lay aside his shoes, and take to his knees again in walking. He had been for some months in this condition, in the early part of 1844. The principal uneasiness at that time was from a callous ulcer on the stump of the right foot. The annoyance from this was such as to compel him for a season, to remain in bed. After more than two months' confinement in this way, failing to effect a cure by milder means, I proposed to him an anaplastic operation. To this he readily consented, and it was accordingly performed on the 30th of July, 1844.

It consisted in carrying the point of a bistoury through the callous integument completely around the circumference of the sore, and at about the distance of a line from its outer border; in shaving off the surface of the sore, and quickening the whole of it, up to this line of circumvallation; in dissecting up a flap of integument from the top of the foot, and by the twisting and gliding process, bringing this down and securing it by sutures over the surface of the ulcer, so as to leave no raw surface exposed; and finally, in approximating the integuments at the gap, on the top of the foot, from which the flap had been taken.

The operation was a painful one, and gave rise to consid-
erable inflammation. A narrow border of integument along the lower edge of the flap, sloughed away; and for a day or two the case seemed to threaten a disastrous result. But the inflammation subsiding, the reparative process soon followed; and, in less than three weeks from the day of the operation, the line of cicatization was completed, and the ulcer closed. The patient, however, did not immediately afterwards resume the use of the shoes. But in the following November he was again about the house on his feet, and attending to his usual occupation. Since that period, his right foot has given him little or no uneasiness, but he has at times some trouble from tenderness in the other foot.

In connection with these cases, I might refer to several others of more or less importance, in which similar anaplastic measures have been adopted at the Hospital by my colleagues and myself, for the removal of deformities, the closing of fistulous ulcers, in the covering of ulcerated stumps. But proceedings of this sort are sufficiently common. They are to be looked upon only as special applications of the already well-established rules of anaplastic surgery; and in this light they have no claim to be spoken of as novelties.

The only marked differences of treatment between the case reported by Dr. Hamilton, and those spoken of above, so far at least as principles are involved, are that in his the flap was taken from the opposite limb, and in mine, from the immediate vicinity of the ulcer. He used the knife in quickening the ulcerated surface; whilst in one of my cases the knife was used, and in one, a wash of concentrated aqua ammonia. I do not see the force of the argument in favor of taking the flap from the opposite limb, so long, at least, as available integument can be procured near by. The difficulty of transplanting a flap from a remote point is hardly to be over estimated; and when from a different limb, the restraint to which the patient must be subjected during the process of adhesion is, to make the best of it, frightful; and never to be imposed upon any one, except under circumstances of the most urgent necessity.
But so far as the mere closing of simple ulcers is involved, thanks to the elasticity and yielding power of the skin, the anaplastic method is rarely necessary. In those of moderate size, and in some, too, of immense size, nature does the work of reparation with very little assistance, provided, always, that this little be judicious. And on those, again, of greater size, such for example, as result from extensive burns and scalds, or from diffuse gangrenous erysipelas, a flap of sufficient dimensions to cover them could hardly be removed with safety from any part of the body.

New York, October 9, 1854.

Art. IV.—Suggestions relative to the Pathology and Treatment of Cholera. By J. P. Batchelder, M.D.

"I have read," says Dr. Davey, "and not without care and attention, the opinions and advice of many gentlemen in that Journal, (the London Lancet); but I have failed to detect any thing like a rational exposition of the nature of this calamitous visitation; and what is more, I have sought in vain for a philosophical—i.e., a scientific plan of treatment which shall aid us to combat this oft-recurring epidemic—Cholera.

No two medical practitioners seem agreed as to either the proximate cause of this malady, or the indications of treatment to be kept in view. Whilst one advises mustard emetics, one acids, one alkalies, one opium, one calomel, one brandy, one astringents, as chalk, lead, etc., others, not the less zealous, and of equal practical acquaintance with the disease, will be found to recommend tincture of muriate of iron, croton oil, and so on, without end. If all this be true, and who can doubt it after reading our own and the other medical journals of this day?—it must follow that our profession is somewhere at fault—that it has not yet assumed that deliberative tone, and those cautious and logical inquiries so indispensable to the right apprehension of a delicate and difficult subject, like the present one.
The succeeding remarks I am not without hope will, in some degree, facilitate a solution of the seemingly mysterious question—‘What is cholera, and how is it to be treated?’ In answer to these questions, we most respectfully propose to offer the following suggestions:—The very essence of this disease consists in a copious effusion of the more fluid or watery parts of the blood into the stomach and bowels, from which they are generally expelled by vomiting and purging—effects mainly imputable to two circumstances. 1. The want of accord between the physical properties of the effused fluid, and the sensibility of the membrane lining those viscera—deprived of its epithelium. 2. The mechanical distention occasioned by the quantity (usually very large) of the effusion within their cavities.

A sudden and violent contraction of the extreme vessels (one more steady and less violent comprises the main predisposition) forces the blood inward upon the internal organs, and causes their vessels to be abnormally distended, which excites them to contract. These vessels, contracting, move their contents in the direction in which they meet with the least resistance, and ultimately force them into the cavities of those organs. In this we have said cholera consists, and in this it differs from all other diseases. This, indeed, constitutes its specific character—logically speaking—its specific difference. The premonitory diarrhoea, although reckoned as one of the stages (diarrhoeal) of the disease makes no part of cholera proper. It is only a predisposing cause—the most powerful and certain of all others, to usher in the disease.

If, just previous to the effusion, the vessels on the surface should relax, there would be a reflow of the fluids, and none of them would find their way into the intestinal canal. There might be chills and fever, but no cholera. Up to the period when effusion takes place, the analogy between cholera and intermittent fever, seems to be complete. The same cause which produces the one may produce the other, which explains the fact why intermittent fever so frequently
Batchelder on Treatment of Cholera. [Nov.,

precedes cholera. The cause which produces the difference between the two diseases we may not be able to point out; but we hope to be more successful in regard to the difference itself.

The effused fluid is neither a secretion, nor an excretion, but one of the constituents of the blood, which flows in a series of minute vessels, adapted and particularly appropriated to its circulation; its effusion, therefore, must be viewed somewhat in the light of an hæmorrhage, in which one of the constituents of the blood only is allowed to escape; but this, however, important as a practical suggestion, explains nothing. We are as much in the dark as ever, why one or all the constituents of the blood do not find their way into the stomach and bowels. Here analogy steps in to our relief.

The mucous membrane which lines the alimentary canal is, in its organization, analogous to the skin. It is, in fact, to the internal, what the skin is to the external surface of the body.

Now the skin is covered with a cuticle, which prevents the escape of certain fluids, and also precludes the absorption or admission into the body of certain agents which would prove not only detrimental but destructive in the highest degree.

Without this beneficient provision of nature, no one, even here in this highly-favored city, where we have a street-commissioner, health-wardens, and a board of health could live an hour.

For the further preservation of life, a similar provision in relation to the internal organs was necessary, and has been made.

The epithelium, or internal cuticle, is similarly constituted and arranged, and for precisely the same purposes—to permit the passage of certain secretions into the intestinal canal—to prevent the escape of the blood proper, or any of its constituents, as the serum, which circulates in the capillaries of the mucous membrane, and also to prevent the absorp-
tion, or admission of the noxious matters which abound in that canal.

The analogy relates thus far, to the structure and function of the parts in their normal condition. Let us extend it a little further—into the region of pathology.

If the cuticle be merely separated from the skin, an effusion of serum certainly follows, as in the case of a scald, a blister, erysipelas, bullae, etc., an occurrence which we believe never happens without such a separation; and in cholera it is now a well established fact, that the discharges are mostly composed of serum—serum of the blood.

Reasoning from analogy, we infer that an extensive detachment of the epithelium or internal cuticle, has taken place in cholera, which constitutes the peculiarity or distinctive character of the disease;—that it is indeed its proximate cause, or the state which immediately precedes that which constitutes cholera. The microscope has indeed settled this question, for it has discovered in "the first excretions large quantities of epithelium in various stages of development, which was identical with that of the enteric mucous membrane."*

The removal of the epithelium from "the enteric mucous membrane," unstops the mouths of innumerable little vessels which open into the cavities of the stomach and bowels, and allows the serum of the blood to escape in ten thousand streams, which soon renders that fluid (the blood) incapable of sustaining the functions of life. Every organ is completely unstrung; hence the fearful, sudden, and almost certain fatality of the disease.

*In all cases examined by the microscope, of the first excretions there were found large quantities of epithelium in various stages of development, and which was identical with that of the enteric mucous membrane;* but the stools which were examined during the latter premonitory, or collapsed stage contain-

* I have just been told by Dr. Budd, one of the intelligent physicians attached to the Franklin street hospital, that he had had the liquid found in the stomach and bowels (which were filled and distended to their utmost capacity with the rice-water discharge) examined microscopically, and that it contained a large quantity of epithelium. This patient had neither vomiting nor purging during the progress of the disease, yet all the other phenomena incident to it, were found most distinctly marked in all the organs.
TREATMENT.—When called to treat a dangerous disease, especially if epidemic, the first question the physician asks himself, is, what is its special mode of destroying life? In none is this inquiry of graver import than in cholera; and in few is it more easily answered, for nearly all its phenomena indicate that it causes death by exhaustion, technically—"death by anaemia;" if so, a single ounce of fluid lost or saved, may make all the difference between the recovery or death of the patient.

What then shall we first attempt to do? Stop the vomiting? No; but constringe and close the open mouths of the vessels which are pouring the fluids into the stomach and bowels.

FIRST INDICATION.

Stop the Effusion into the Intestinal Canal.—The acetate of lead is one of our most powerful styptics;* and has been more used, especially when combined with opium, in modern practice, for restraining internal hæmorrhages than any other medicine. The dose should be from two to six, or eight grains, according to the urgency of the case with one grain of opium; given immediately after every evacuation—especially if by vomiting. Everything depends on this mode of administering the remedy. Thus given, the stomach being empty it comes in contact with the vessels, and will remain long enough in that organ to have some, perhaps full effect. A single dose given early and in this way, has sometimes stopped the vomiting and

* A saturated solution of the acetate of lead, repeatedly injected into the nostrils is a very certain remedy for epistaxis; it will seldom if ever fail to arrest the hæmorrhage. It is almost equally efficacious in restraining the bleeding or oozing of blood from vessels too small for the ligature.
arrested the disease. This preparation appears to answer all the primary indications; the lead constricts the vessels, while the opium induces the external capillaries to relax, and lessens the sensibility of the internal; eases the pains, allays the cramps and spasms, and controls other inordinate actions; and all are acquainted with its efficacy (which is sometimes rather inconvenient) in suspending the secretions and peristaltic movements of the bowels. In some cases, the lead will not be retained a single minute; then, other stringents, as tannin, must be substituted. The trinitrate (oxyde) of bismuth is an excellent remedy for staying the vomiting, especially when the matter vomited is blue or greenish. The acid character of the discharges suggested the use of this article. It may be combined with the bicarbonate of potash, which stimulates the kidneys. The trinitrate, to be effectual, must be given in much larger doses than are generally prescribed. We are in the habit of ordering it in doses of half, two-thirds, or even a tea-spoonful, after each vomiting; and in common diarrhoeas accompanied with acidity, the same doses every fourth or sixth hour. In these affections, if acidity be absent, it is of little use. It may be combined with opium, but does not, like the acetate of lead, counteract the narcotic effect of that drug. The diluted sulphuric acid has been much used as an astringent in various kinds of haemorrhages and especially of late “at the Westminster Hospital in cases of choleraic purging.” “Nor is this practice entirely empirical, for, if this acid acts beneficially in haemorrhage it may be supposed to act similarly in cholera, the serous discharge of which (to borrow an idea of Sir Henry Marsh) may be called ‘a white blood haemorrhage.’” I have used it in no case of cholera; yet from the accounts given by several gentlemen of great respectability in the profession, I have formed a high opinion of its efficacy, and would try it without the least hesitancy, should the treatment herein recommended fail, or not agree. It ought to be given “in half-drachm doses, repeated at short intervals.” Dr. Fuller says: “My own conviction is that in sulphuric
acid we have an antidote—a specific—against choleraic diarrhoea,” &c. Against this “choleraic diarrhoea,” I want no better “specific” than the acetate of lead and opium, for, with the recumbent posture and perfect quietude, it will stop that “diarrhoea” in every instance—often a single dose will do it. The posture and quietude of which we have spoken is essential—sometimes the patient cannot raise his head or even his hand, without causing an effort to vomit or purge.

SECOND INDICATION.

Prevent the Determination of Fluids to the Internal Surfaces.—On account of the vomiting and constant copious flow of serum into the stomach and bowels, it is exceedingly difficult to stop the effusion by the use solely of of internal remedies; recourse must therefore be had to appliances which are calculated to counteract or prevent this inward movement of the fluids. Could this be accomplished, it would of itself answer our first indication. It may however, be effected in part by counter-irritants, as dry heat, dry cupping, etc.

Dry Heat is now more commonly employed in this affection than formerly, and as it induces the vessels on the surface to relax, is a proper remedial agent in this stage of the disease, if judiciously applied.

In times gone by, warmth was communicated by flannels wrung out in hot water, or by steam, raised by means of bullets of wood, or hot bricks dipped in water, and laid by the side of the sick, under the bed-clothes, and persisted in until the poor patient was well nigh parboiled. We have some doubts as to this item (none in regard to this mode of practice) of treatment unless prescribed with caution. The warmth at first, should be very gentle, and increased as the patient becomes better pleased and reconciled to it. His body and limbs are icy cold—as if on the point of freezing—the contrast between present feelings and those excited by the application of even gentle warmth, are considerable and often distressing; hence cold is frequently more grateful than warmth. If a member were frozen or severely
chilled, the intelligent physician would commence his treat-
ment by applying snow or ice-water, and not warm or hot
water. The algid stage of cholera should be regarded and
treated somewhat in the same way—cold or cool water first
—then warm, and subsequently dry heat. When a limb is
much chilled or frozen, the vessels on the surface and per-
haps through the whole member, are in a state of extreme
contraction, and the object of making cold applications at
first, is to prevent the too rapid relaxation and over-distention
which an elevated temperature would certainly incite and
induce, and which would be followed by inflammation and
mortification; a result very sure to follow when frost-bitten
parts are not judiciously treated.

*In 1832 the Thompsonians at first profited largely by this practice, but
not having skill enough to treat their cases judiciously in other respects,
they failed most signally. I do not know that they succeeded in curing a
single patient.*

**Mutatis Mutandis.**—The same holds with regard to the burn-
ing sensation at the pit of the stomach of which the patient so
uniformly complains, and as uniformly calls for cold drinks
to allay; but experience has fully proved that this sen-
sation is more promptly and certainly removed by giving
at first warm, and soon hot, and subsequently stimulating
drinks.* The warm or rather hot drinks, are in the first
instance disliked, and sometimes for a season refused, but,
ere long, the patient will take them rather than not have
any liquid, and beginning to experience the relief which
they are calculated on true pathological principles to afford,
soon gives them the preference. They should be given by
the tea-spoonful in quick succession.

**Dry Cupping** is the most prompt and effectual method of
making counter-irritation. It should be on an extensive
scale. Instead of common cupping glasses, tumblers of a
large size should be employed. They should be applied to
the abdomen and also to other parts of the body, and allowed
to remain until they fall off; indeed, several should be kept
on all the while, or as much of the time as consists with the
comfort and circumstances of each patient. These act not merely as external irritants, but for the time being hold the fluids as it were in their grasp and prevent their being turned inward, and ultimately discharged from the body; the application should therefore be as early made and as little interrupted as possible.

In the second stage of the disease—we admit but two—the stage of contraction and of relaxation, (usually termed the stages of collapse and excitement) dry cupping may be improper.

The Application of Bands or Ligatures to the Limbs near the Body.—Thus applied, they obstruct the determination of a portion of the fluids to the internal organs, and effectually prevent the further contraction of the capillaries on the surface and in the limbs. They likewise co-operate with the cups in holding a considerable quantity of the fluids in reserve for the support of the vital powers and functions. They will often prevent an ague when applied in anticipation of its attacks; so will several tumblers, applied as cupping-glasses on each side the spine as soon as the patient begins to experience uneasy sensations in the back or loins, or an inclination to yawn.

Stimulating Applications.—As sinapisms, cayenne pepper, blisters, etc., the mustard plaster or poultice is very generally employed, but it is an inconvenient, filthy, unpleasant application—an abomination which seldom, if ever does much good. These appliances are most effectual when they follow the cupping-glasses, but should never interfere to prevent their use. After cupping, a blister is a valuable remedy. Applied to the back of the neck it is useful in preventing or lessening congestion or effusion about the brain, and upper part of the spinal marrow, and should therefore be seldom omitted.

Third Indication.

Stop Profuse Discharges from the Skin.—When the vomiting and purging have nearly or quite subsided, a cold clammy exudation from the surface commences.
As it respects manner, the internal and external exudations are analogous. In both, the capillaries contract, while the pores remain open, and allow the fluids to escape. To arrest this discharge from the skin, we have to deal with the capillaries themselves as well as with the pores. If, then, the physiological relation between these vessels and their pores or outlets be disturbed (as it is in the hot or cold fit of an ague) the effusion would in neither case happen. To stop this effusion, we must either make the cutaneous capillaries contract (as in the cold fit of an ague) so as to prevent their contents reaching the pores; or cause them, the capillaries, to become so over-distended (as in the hot fit,) that the pores will hold tight, and prevent the egress of those fluids. The first, the effect on the vessels, is produced by the firm application of a bandage to the limbs and trunk which compresses the capillaries, and is probably not without some effect on the pores. The second, the over-distension of the capillaries is accomplished by the application of powerful cups, as described in a former part of this paper. But for the fact that this transudation from the surface does not commence before the internal effusion has nearly or quite ceased, the bandage would be clearly contra-indicated. The bandage tends to stop the effusion; and at the same time forces the fluids inward for the use of the internal organs—the cups cause the capillaries to be over-distended, and so stop perspiration: hence we find the skin comparatively dry when they are removed, especially, if the effect has been powerful; and it remains in that state some time after their removal. The puking and purging may have ceased, yet this profuse out-pouring from the skin, drains the system and finishes what they had left undone; it must therefore, be regarded as a symptom of fearful import. Although not identical with the rice-water discharges, but somewhat analogous to the normal perspiration, it is, therefore, permitted to pass through the natural pores of the skin without requiring, as in the internal discharges, the separation of the cuticle. Whether this be so or not, the
excessive discharge under existing circumstances, is adequate to the destruction of the patient. I have seen it so profuse, as to run in streams; stand in pools in the hollows about the neck, near the clavicles, and drench the patient's clothes and bed-clothes so as to make them wringing wet.

FOURTH INDICATION.

Support the Powers of Life.—Stimulants and cordials in the course of the disease are of immense value,—in most cases necessary—in some, absolutely indispensable.

I take the liberty to recommend a compound, which I have used with great satisfaction in a few cases, and which has been employed at my suggestion by a considerable number of professional friends, who have expressed themselves equally well satisfied with its effects. The following formula, according to my experience, is the best.

R. Chloroform,
Tinct. Opii,
Spts. Camp.,
Alcohol a a 3ij,
Ol. Cinnam., gtt. 8. m.

Dose, from 15 to 30 or 50 drops in a little brandy and water, every five, ten, or fifteen minutes. The frequency and quantity of the dose must depend on the urgency of the symptoms. This compound is very similar to that proposed by Dr. Hartshorne, a distinguished physician of Philadelphia, from whom the hint was taken. I know of no stimulant which is more efficient and grateful to patients—none which more uniformly relieves the sense of weakness and sinking at the epigastrium, which is so frequently experienced in this and most other diseases of exhaustion, as haemorrhages, etc.

Second Stage, or Stage of Excitement.—The law of the system is, that contraction shall be followed by spontaneous relaxation, which is usually commensurate with the previous contraction.* Obedient to this law, the vessels

* Owing to the frightful drainage of the system, this relaxation, even when it happens in cholera, is seldom in any just proportion to the previous contrac-
on the surface do in some cases of cholera relax, and become filled with blood; when the flush appears and warmth returns. This is the stage of excitement, and hopes of recovery begin to be entertained, and are sometimes realized; but generally the unfortunate patient dies; and why? for two reasons:—1. When the reaction shall have occurred, there will not be blood enough remaining in the vital organs (the heart, lungs, and brain), to enable them to carry on the functions of life.

2. The separation of the serum of the blood from the crassamentum, particularly in the nervous centres, and its effusion into the cavities of the brain, cranium, and spinal canal. * Numerous dissections have most satisfactorily proved the reality of these results. They are, I conceive, quite characteristic of the disease, and serve to explain some of its symptoms:—for instance; may we not infer, that the cramps and spasms in the abdominal muscles and in the limbs are owing to the processes by which these changes are effected—especially in the spinal cord? After awhile, these cramps and spasms cease, because the changes in the spinal marrow, which induced them, have been accomplished—the serum has been separated and poured out, and there is little or nothing left in the capillaries of the cord to maintain the functions of animal life.

Notwithstanding the copiousness of this effusion, there are generally no signs of compression, either of the brain or spinal marrow. The symptoms present, evince feebleness of action in these organs, which has been induced on the

* This separation and effusion seem to be a part, and parcel of the disease. They have been found in every post mortem, I have witnessed; and I am informed by the gentlemen having charge of the cholera-hospitals in this city, (whose experience in this matter is by no means small, and whose zeal cannot be too highly appreciated and commended), that they have made no autopsy in which these phenomena were not present. The effusion varies in quantity;—I have seen it amount to twelve or fourteen ounces.
one hand by emptying their capillaries, and on the other, by filling their veins (which have no valves) with grumous blood. These veins do not perform the function of the parts, but merely act in subserviency to the capillaries which circulate the colorless fluids, and actually do the work of these and of all other organs; but the grumous blood in the veins, unlike the colorless fluids in the capillaries is nearly, if not quite, unfit for any purpose.

The quantity of blood in the veins, and the effused serum in and about the brain and spinal marrow does not probably exceed the normal quantity of those fluids in these organs, but they are separated; and one, the serum, is out of place—extravasated; consequently neither answers the purposes it was designed to answer in the animal economy; these facts afford the reason why there is no compression. Now and then, it is true, a case presents with symptoms of apparent compression, a condition, owing to the vigorous contraction of the capillaries or substance of the brain, &c., which occasions a state somewhat analogous to that "induration of an organ which results from an expression of its fluid," and consequent gathering together of its constituents.* In consequence of this induration, there may be symptoms resembling those of compression; even convulsions, delirium, &c.

It has been supposed that, if a fluid suited to the demands of the system were injected into the blood-vessels, it might supply the place of that which had been lost, and help to recover the patient; but of this there is little probability; for how is the large quantity of effused fluid which so uniformly occupies the cavities of the arachnoid, of the brain, of the skull at its base, and the spinal canal to be removed? How is the thick, tarry, grumous blood which fills and distends the cerebral veins and vessels elsewhere to be refitted for circulation and use?

* The medulla spinatis seems in some instances to be actually lessened in size, which accounts for the possible existence of the great quantity of fluid which we see now and then issuing from the spinal canal during an autopsy.
CONSECUTIVE FEVER.

The transition from the first to the second stage effected, cholera often assumes the form of fever,* which demands an appropriate treatment. Two indications seem to present:—

1. To equalize the circulation.
2. Promote deficient secretions.

If there be much determination to the brain, (or any other organ) the same course should be pursued as would be proper in analogous cases from other causes; cupping—wet or dry; perhaps a few leeches to the temples, or what is much better to the septum narium, cold applications, &c. Dry cupping has always seemed to have a good effect, and is attended with no risk whatever. To produce the full effect, the cups should be large and applied not to the organ itself, but in the vicinity. After the cupping or leeching, blisters may be, and generally speaking should be, applied. Laxatives may be proper; but purging is seldom if ever required. An active purge has not unfrequently turned the scale against the poor patient. An enema of salt and water, if large, will many times answer every purpose, and is much safer than even the laxative.

The James’ powder, or pulv. antimonialis, either alone or combined with the Dover’s powder, or calomel in small doses, should be given. With the former, in one or two grain doses, calomel acts as a sudorific. As there is a deficiency in the urinary secretion, diuretics may be very judiciously prescribed.

The cause now superadded to the two formerly mentioned (the congested state of the veins and the effusion of serum, in and about the brain and the spinal cord,) which renders the disease so apt to prove ultimately fatal, is the retention

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* Respecting this consecutive fever, many medical men think, that opium should be used with great caution in the early stage, in which we have recommended it; but the symptoms, which have given rise to this caution, are produced by the disease, and not by that drug, for we have seen them in cases in which no opium had been given.
of urea in the blood. With a view to its elimination, colchicum in some form or other is a valuable remedy. The acetous extract, we think, the best. The well-known property of this article to promote the secretion of uric acid (which suggested its use in this affection), contributes, as far as it goes, to free the system of this noxious agent. Colchicum also acts as a diuretic, and combined with digitalis, also as an absorbent.

We should continually keep in mind the important fact, that, when the superficial vessels relax, and allow the blood to re-occupy them, (the system having been drained or excessively depleted), there may not be blood enough remaining in the vital organs to sustain their action; consequently it is necessary to restrain or repress entirely for a time this reflux, in order to prevent the extinction of life. Here the tight bandaging again comes into play—not to effect exactly the same purpose, but the same result, for which it was recommended in a former part of this paper. It should be applied to the limbs, from the extremities to the trunk.

**Prevention.**—Now the prevention of a disease has a direct reference to the predisposition; and also to the predisposing and exciting causes. It is believed that the specific cause of cholera is seldom, if ever, so intensified, as to produce the disease without the concurrence of the predisposition, and the application of an exciting cause. It is then clear if the predisposing and exciting causes be avoided, the disease will certainly be prevented. The causes of this predisposition are bad air, bad food, bad clothing; in general terms, bad living;—over-exertion, fatigue, want of sleep; previous sickness, especially if attended with copious discharges, as diarrhoea, hæmorrhage, &c.; depressing passions, as fear, anxiety, &c., intemperance; indeed, whatever materially interferes with the nutrition of the system. A mere glance at the effects of these causes is sufficient to satisfy any one of their ability and fitness to produce this predisposition; for all must have observed the paleness which follows even
their brief application, and also the emaciation which is sure to succeed, when the application is more persistent. The more stringent the predisposing cause; or the more marked the predisposition, the less powerful need be the exciting cause which ushers in the disease: For instance, when the action of the external and internal vessels is nearly balanced, the predisposition may be said to have reached a point, at which only a very slight additional contraction of the former, or indeed relaxation of the latter, will disturb the equilibrium, and force the fluids inward upon the internal organs; but this will not produce the symptoms of cholera; for it occurs daily in intermittents and other febrile diseases without any such result; all, however, that is wanting to make out the malady, are the serous discharges. In chills and fever these discharges do not occur; in cholera, they do. The specific cause of cholera produces this difference.

Premonitory Diarrhoea.—This premonition we deem of the utmost importance; for unless stopped (which is readily accomplished by the sugar of lead and opium with perfect quietude,) cholera is sure to follow. As stated, we do not consider it a part of the disease.

August 16th, 1854.

Art. V.—Cheiloplastic Operation. By Mark Stephenson, M.D., Surgeon to the New York Ophthalmic Hospital.—[With two Engravings.]

Plastic operations appear to have been first practiced upon the nose by the priests of India, in the early part of the 15th century; and what is a little remarkable, the process then devised and adopted, is the one (with various modifications) practiced at the present day, and is recognized by modern surgeons as the Indian method; which consists in obtaining the flap from some contiguous part, as the forehead, or the cheek.

About the middle of the same century, Tagliacotius, an Italian Surgeon, introduced another method of operating,
which consisted in procuring integument, for repairing the breach from some distant part as the front of the arm or the back of the hand, and was then, as it still is, designated the Tagliacotian or Italian method.

We have thus seen that Rhinoplasty is of very ancient origin. Cheiloplasty, however, is of more modern date.

The two methods referred to, are applicable either to Rhinoplastic or Cheiloplastic operations.

The Indian method, is the one now more generally approved of, with various modifications; these are:—1. Twisting the flap upon its pedicle, and then dividing it, when the ingrafted surfaces are united. 2. Rotating the flap without dividing the pedicle. 3. Sliding and stretching the flap without either twisting or rotating it,—the latter is the favorite mode with French Surgeons, and has received the appellation of the "French process." Other modifications are occasionally practiced for the purpose of closing fissures in the hard palate;—or fistulous openings; the former by reflecting the flap, the latter by rolling it upon its cutaneous surfaces in such a manner as to answer the purpose of a plug, applicable to fistula after the operation of tracheotomy—the closure of an artificial anus, or the radical cure of hernia after an operation.

In the case about to be described, I adopted the sliding or French process:

B. A., 16 years of age, perfectly healthy, and with the exception of a deformity in the upper lip, a very interesting looking girl.—(Vide drawing No. 1. taken by an excellent artist before the operation.) Accidentally meeting with her at the house of a patient where I was visiting, I was struck with her distorted features, which gave her in some respects an appearance like a dog in the act of snarling.

I asked her if she would allow me to examine her lip; she willingly assented—after carefully exploring the cicatrix, I told her I thought the deformity in her face might be removed by an operation, if she would submit to it. Being just at that peculiar age when young ladies think much of their
personal appearance, she immediately said she would willingly suffer the pain of an operation, if the deformity in her lip could be removed—would consult her parents, and if they gave their consent it should be done.

Accordingly in a few days, herself and father called at my office, and after some deliberate conversation upon the subject, they decided upon having it performed even at the risk of a failure, which I informed them might be the case, but in such an event the deformity would not be likely to be increased. In the history of the case, I learned that when a child, she had typhus fever in a very malignant form, and was very much prostrated with that disease; her lip spha- cilated, and left her with this peculiar state of the parts. Whether mercurials had any agency in affecting it, I was unable to learn.

Operation.—In the month of April, 1850, with the aid and council of my esteemed friend, Dr. Alexander E. Hosack, I proceeded with the operation in the presence of Dr. Richard S. Seaman, of this city, the late and lamented Kingsley,
Messrs. Tackaberry & Law—all at that time, students of medicine.

Before commencing the operation I traced the course of the incisions, to be made by dotted lines on the face.

The patient was now seated upon a chair of suitable elevation, with her head supported by Dr. H., who also compressed the facial arteries as they pass over the base of the jaw. The first step in the operation was to remove the old cicatrix, which left a large opening in the lip resembling in some measure an inverted V.

With a small scalpel, I next proceeded to make a new lip after the method of Mons. Serre, of Paris, in the following manner:

The first incision extended from the ala of the nose in a straight line to near the extremity of the lobe of the ear. Another one was made by commencing the incision at the labial commissure, and extending it to the same length, being parallel with the former.

The integument between the two incisions was then dissected up its entire length, using the greatest caution not to wound the duct of steno. This being done the long narrow flap, owing to its elasticity, admitted of its being drawn forward to the mesian line in the lip, where it was attached by two twisted sutures, one of which was near the vermilion border of the lip, the other near the root of the septum narium. Stitches were also put at the junction of the ala of the nose and flap; also at the angle of the mouth, and at four additional points along the line of incisions at suitable distances. Between these a long strip of adhesive plaster was applied extending from ear to ear, and over these layers of lint with a narrow roller over the whole. Directed an anodyne for the night, with wet lint over the dressings to keep them from becoming hard and stiff. Torsion was requisite to some of the divided arteries for the purpose of arresting the hæmorrhage.

Progress of Union.—The patient suffered some pain during the first twenty-four hours with constitutional disturbance;
was feverish and restless; but, owing to her vigorous and, healthy constitution the wounds healed by the first intention.

On the 4th day I was enabled to take out two of the stitches nearest the ear, on the succeeding day two more, and so on day after day, until all were removed.

_Drawing No 2_, gives a very good idea of her appearance a few weeks after the parts had united and the wounds healed.

It also gives a correct delineation of the course of the incisions; and the black dots the points where the sutures were made.

The only difficulty which I had to contend with, was the constant tendency there was to adhesion between the flap and the gums. And notwithstanding I took the precaution to introduce pledgets of lint between the raw surface and the gums; yet I was not entirely successful in preventing their union. In other respects it exceeded my expectations and was truly gratifying to the patient and her friends.

Here again I must record my testimony in favor of the use of chloroform, which was given to her while in the erect
position, being much more dangerous than that of the horizontal, the latter being impracticable in this case owing to the danger of strangulating the patient from the flow of blood into the mouth—it, however, was administered with great care and a due admixture of atmospheric air.

167 East 14th street, N. Y.

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**ART. VI.—On the Employment of Sulphate of Quinine in Croup.**

By E. Macfarlan, M.D., of Williamsburg, New York.

It may appear to some impossible that quinine can subdue inflammation of the larynx and trachea, but the following, cases which were successfully treated by this remedy, must at least make us pause and investigate, before pronouncing against such a valuable agent.

Case 1.—About six months ago a medical friend, (Dr. Krackowitzer, of Williamsburg), asked me to assist him in the operation of tracheotomy. He stated that his patient, a little boy four years of age, was in the last stage of croup. He had exhausted medical treatment, including the local application of the nitrate of silver. I proposed, before operating, to try quinine, to which he assented. I would here remark that at this time I had not used this remedy in croup, but had determined to do so from observing its effects in other inflammations of the respiratory organs. Here, then, was a case, and a hopeless one. I called with my friend to see the child, and found the little sufferer just able to breathe, and every attempt to do so seemed as if it would be the last. We prescribed quiniaæ grs. ij. every two hours. After the second dose, the mother told us, subsequently, that there was a manifest improvement, the skin became moist and cool; and after the third dose, the patient breathed better, and fell into a sleep, in which he remained for several hours, the child not having slept scarcely any for several nights previous.

I saw the patient next day, and it was exceedingly gratifying to find him breathing easy, and sitting up in bed, and disposed to be playful. On the fourth day I saw him flying
a kite about the room. About one week from his recovery he had a second attack, which I think was occasioned by some imprudence on the part of his parents. Dr. K. again tried the quinine for a short time, but the symptoms of suffocation were so alarming that he resolved to abandon medicine, and resort to tracheotomy. The operation was skilfully performed by Dr. K., and the child lived about one month. Dr. K. made a post-mortem examination, and found at the internal orifice of the opening in the trachea a fungous body firmly attached, and large enough to interfere with respiration.

This case gave me great confidence in quinine, and although it was not so much affected by the quinine in the secondary attack, yet there was to my mind sufficient evidence of its power in croup shown on its first administration to warrant a second trial. I accordingly promised myself to use it in the next case that should present itself.

Case 2.—On the 19th day of Sept. last, I was called in haste to see a sick child. On my arrival at the house, I found a little girl, aged about five years, sitting on her mother's knee; her face was red, skin burning hot, pulse full and bounding, loud sharp cough, respiration quick and difficult, and at every inspiration, the peculiar rasping sound so well known in croup could be distinctly heard; the child spoke in a hoarse whisper. The mother stated that the child had had an attack of croup about three years previously, and was very near dying. I gave the child immediately a full dose of ipecac which produced free emesis, but had not the slightest effect in allaying the symptoms. Notwithstanding the high fever, I resolved to try quinine. I ordered a grain every hour, but the mother misunderstood me and gave it every half-hour, and a good mistake it proved to be, for on visiting the child about three hours and a half afterwards, I found a decided change for the better; the fever had very much abated; the skin was moist, and in fact the child was perspiring freely; the respiration had much improved, the child could also speak louder. I continued the medicine in
grain doses every hour. I saw the patient again on the next morning about 9 o'clock, and found her sitting up, sewing baby rags. This was a marked case of inflammatory croup; there could be no mistake in the diagnosis; every symptom of the first stage was obvious, the loud cough, the pain in the throat, the hoarse voice, difficult and quick respiration, and the inflamed faucæ and tonsils. After the 4th day I discontinued my visits.

Case 3.—On the 27th of October, I was called to attend a child, aged about eight months. I found a hot and dry skin, respiration quick and difficult, and heard the unmistakable rasping sound in the child's throat; cough frequent and ringing, faucæ and tonsils red. I kept the child a whole day on ipecac, which caused free and frequent emesis, not the least impression was made on the disease—on the contrary, the child was rapidly getting worse. I resolved again to use quinine. I prescribed gr. $\frac{1}{2}$ every half-hour. I visited the patient about 3 hours after the first dose, and discovered a great improvement. Saw the child next morning, and was delighted to find the respiration easy, cough slight, skin cool, and the child playful. The mother stated that the child slept well during the night, and perspired freely. The patient has continued well up to the present time.

In all my cases I use the quinine in solution, and, it will be observed, in full doses; by so doing, a quick and decided impression is made on the disease. I do not urge this mode of treatment as a hobby, but simply desire the profession to receive the statements herein made as facts; and I ask all to try the remedy, feeling (if given according to the method proposed) confident of its success.

Case 4.—On Feb. 25, 1854, I was called to attend a boy, aged three years. His symptoms were as follows:—Hot and dry skin, full frequent pulse, quick and difficult respiration, loud sharp cough, and hoarseness of voice—so great, that the child was unable to speak above a whisper. The mother had vomited the child freely the night previous, but the child grew worse every hour, and on the morning fol-
lowing she became alarmed and sent for me. I at once pre-
scribed quinine, gr. j. every half-hour. I saw the child
three hours afterward, and found a slight improvement; saw
him again four hours later, and found a very marked improve-
ment, the skin was moist and the fever slight; the child
was sleeping, and the mother stated that he had not slept so
much for two days. On visiting the patient next morning,
I found but little cough, skin cold, and respiration good; he
was sitting up in bed playing with his toys. The boy has
continued well from that time. I would here remark, that
on the second day I continued the quinine every two hours,
and on the third day every three hours, thus keeping up the
influence of the quinine. After this I discontinued its use.

Remarks.—I know that many believe the nitrate of silver
to be our sheet-anchor in croup; there are also many who
consider large doses of calomel as almost a specific; but I
would ask the advocates of each of these modes of treat-
ment, how many consecutive cases they can show in their
record-books of complete success? I will not presume to
assert that quinine will always cure; nor will those who
believe in nitrate of silver and calomel; but of the three
modes of treatment I would rather take my chance with
quinine. My objections to the nitrate of silver, are the
extreme difficulty we meet with in getting children to open
the mouth, and after we have succeeded in this, the strug-
gles of the child are so great as to prevent the thorough
application of the nitrate to the diseased part; and it is par-
ticularly difficult to pass the sponge through the rima gloti-
dis. My objections to large doses of calomel are, that hyper-
catharsis may be induced, and, consequently, erethism of
the mucous membrane of both small and large intestines—and,
again, the useless and unpleasant results of ptyalism. But
some will reply, large doses do not produce constitutional
effects. I have met in the course of my practice a number
of cases in which a single dose of ten grains have caused
profuse ptyalism and ulceration of the mucous membrane of
the mouth and fauces.

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Now, quinine is a tonic, and in large doses, in inflammation, where there is much vascular excitement, (so far as my observation goes,) acts as a sedative. I conceive that this medicine acts primarily on the nervous system; it is thence reflected upon the vascular; the heart's action is diminished, and the febrile excitement subdued. If we make a tonic impression on the nervous system, then we have gained much, because the nerves of the capillaries being stimulated, act powerfully in inducing contractions of their walls; thereby the capillaries are enabled to contract upon their contents, and thus they are relieved of their distention.

In all the cases of croup I have had or seen under treatment, I have observed a strumous tendency. The first case mentioned in this report was well marked. I am of the opinion that in nine cases out of ten this peculiar condition of the system will be found. This, I believe, is another reason why quinine is beneficial in croup.

Art. VII.—Report on the Progress of Epidemic Cholera, made to the Society of Statistical Medicine, New York, October, 1854.

By Stephen Smith, M.D.

Early in the last year, it was announced that cholera had again sprung up in the East, and had begun its westward march, following very nearly the same route as in its two previous travels over the civilized world, and marking its pathway with the same remorseless and remitiless destruction of human life. Judging from its past history, it was very naturally and correctly predicted that it would successively invade the states of Europe, commencing from the East, overrun Great Britain, and extend to the United States. Within a twelvemonth this prediction was fulfilled, and we now witness the close of a wide-spread epidemic of this much-dreaded pestilence.

In tracing the progress of the epidemic from its eastern origin to the western countries, it will be sufficient merely to indicate the date of its appearance at some of the principal
cities, and such facts as may be gathered in regard to it in the different countries where it has prevailed. These facts are gleaned from medical periodicals, and therefore, while generally correct, they have not the authenticity of official reports.

The epidemic cholera of 1854 first appeared at Basorah, a town situated on the Tigris, and at the head of the Persian Gulf, in 1851. From this point it followed the course of the Tigris, and arrived at Bagdad early in 1852. Traversing Kurdistan, it spread over Azenbijan. The mortality at Tauris, the capital, was very great, it being estimated that 1000 persons perished daily. The epidemic continued to spread, and reached Tehran early in 1853, a city of 150,000 souls, of whom more than 15,000 died of this disease.

While the disease was thus invading successively the western cities and countries of Asia, it seems to have broken out in the heart of Europe, in Bohemia, where, during the year 1851, there were 58,121 cases and 23,225 deaths. From this province it traveled to Breslau, which suffered severely from August, 1851, to January, 1852. During the winter months the disease seems to have made little progress; but occasional outbreaks in the western provinces of Asia, and some of the eastern cities of Europe, proved too clearly that its march, though retarded by an unfavorable temperature, was still westward.

Early in the spring of 1852, on the 24th of May, while it was still spreading westward in Asia, the disease suddenly made its appearance in Poland, in the government of Warsaw, and district of Leeradz. It spread in every direction from this point, but without any order or apparent law of progress. In the government of Warsaw, there were 45,323 cases, and 20,906 deaths up to September 5th, 1852. In June, 1852, Kalisch, a town on the Prussian frontier, became a focus from which the disease spread to other Prussian towns, as Ostruvo, Pleschen, and Breslau, which had but just recovered from its previous attack. The disease now favored by the hot weather of summer, spread rapidly over Prussia.
It reached Dantzig, on the Baltic, Aug. 20th, and Nov. 12th, 1853; there had been 953 cases, and 611 deaths. It raged severely in some of the neighboring towns, as at Jungfer where one-eighteenth of the inhabitants were victims. In the government of Posen there were 19,612 cases, and 11,292 deaths. St. Petersburg was visited by the epidemic Oct. 1st, 1852, and to Dec. 1853; there had been 13,861 cases, and 5,609 deaths.

During the following winter, there was again a pause in the progress of cholera, but not an extinction of the disease. On the approach of the hot weather of the succeeding summer, it again commenced its westward march. It spread throughout many of the provinces of Russia, appearing as far north as Archangel, on the White Sea.

It reached Moscow on the south, in Aug. 1853, and traveling westward along the northern shore of the Gulf of Finland, it caused great mortality in the seaport towns.

At Helsingfors (population 19,000) 1,325 cases had occurred up to Aug. 31st, 1853, and 606 deaths. At Abo, still westward, (population 13,500) on Aug. 27th, 1853, there had been 1,027 cases, and 462 deaths; in the neighboring territory, there had been 226 cases, and 109 deaths.

Still farther westward, we find Copenhagen was attacked in July, giving on Sept. 20th, as the total of cases 7,515, and deaths 4,074, (population 125,000.) The principal cities of Sweden and Norway were visited soon after. It was officially announced at Stockholm about the middle of August; and vessels arriving from many of the Russian and Prussian ports were quarantined. The mortality in this city to Sept. 20th (population 90,000) was 1,995 in 3,378 cases. At Carlserona, (population 12,000) there were 1,859 cases, and 1,006 deaths. Christiana, the capital of Norway, (population 21,000) lost 1,269 in 2,005 cases to the 10th Sept., when it ceased. It appeared at Hamburg on the 25th of July; at Rotterdam on the 23d of August, which had 617 deaths in 1,111 cases. It appeared at Antwerp, Sept. 12th, in a sailor, from Rotterdam, and prevailed to the end of October. At
Brussels, the first case occurred Sept. 14th, and one day later, Sept. 15th, it appeared at Havre, and attacked principally German emigrants from Rotterdam. Amsterdam suffered from the epidemic in November; on the 11th of the same month, it appeared in Paris, where it prevailed mildly during the remainder of the year.

The epidemic made its appearance in England about the 22d of August, 1853, at Liverpool, among German emigrants, just arrived from Hamburg. On the 31st of August, it broke out at Newcastle, and raged with great violence; during twenty-five days there was a mortality of 1,187 (population 65,000). The towns in the immediate neighborhood suffered attacks soon after, and the larger cities, as Manchester, Liverpool, and Sunderland, began to report the presence and progress of the epidemic. Towards the last of September, cases were reported in London, but the disease continued very mild till the 10th of October, when it began to put on more of an epidemic form. The epidemic appeared at Glasgow, Scotland, about the middle of December, and the number of deaths to the 24th of March, was 1,306; it did not prevail very generally, but many of the smaller towns suffered severely. An emigrant ship from Liverpool, bound to New Orleans, put into a port on the island of Nevis, West Indies, Nov. 23d, having cholera on board. The disease soon after spread over the island, causing great mortality.

In November, cholera was reported in this country, at New Orleans. This city had just passed through a most terrible epidemic of yellow fever, which destroyed 15,085 of its inhabitants, and was now doomed to lose 607 more by cholera.

With the approach of winter, cholera began to decline in all parts of Europe, and as early as Nov. 1st it had ceased to exist in many parts where it had prevailed with great fatality. In Russia, Sweden, Norway, Denmark, France, and England, the reports exhibited a most favorable change at this date, and by the close of the year it had entirely ceased to prevail.
as an epidemic. This was the close of the third year's progress of epidemic cholera en route to this country.

Although the disease had ceased to prevail as an epidemic, yet, as in the preceding winter, it manifested itself sufficiently frequent to prove that its cessation was rather a hybernation than an extinction. It was very evident that it still lingered in most of the states of Europe; and it was feared, judging from its previous history, that in the summer of 1854 it would be prevalent over the whole continent, and extend to countries yet unvisited. This expectation was fully realized.

Early in the spring of 1854, rumors of the general appearance of cholera in the different cities where it had previously prevailed began to reach us. The cities of Persia suffered severely from this new invasion, Teheran alone losing 11,000 inhabitants. In most of the cities and countries of Europe through which we have traced its progress, it again prevailed, causing a greatly increased mortality. It also spread into new territories, visiting this time many of the cities of Spain and states of Italy previously exempt, and even the Eternal City, where, from its novelty, medical men went about with oiled silk gloves on, so as not to touch the plague stricken. It visited most of the cities on the Mediterranean, the states of Germany, and the countries about the Baltic, assuming in general its most malignant form. In France it spread to most of the provinces and cities during the summer, and up to the present time the total mortality for that country is estimated at 88,626. It is now again on the decline. In Great Britain the epidemic prevailed very generally in the large towns of England, Ireland, and Scotland, during the summer months; but London seems to have escaped a severe visitation until August, when the disease broke out with great severity. It reached its maximum during the last of September, when the number of fatal cases was as high as 1287 per week.

It is impossible at this early period, while the disease is yet on the decline, and few authentic reports of its history in various countries have been published, to give even an
approximate estimate of the general mortality. We shall, therefore, proceed to trace the progress of the epidemic as it appeared in this country.

The introduction of cholera to this country was undoubtedly through the medium of emigrant vessels. The ports at which these ships arrive in the largest numbers would necessarily be the first to exhibit the presence of the disease, and the points of departure in its invasion of the country. Accordingly we find that New Orleans, New York, and Quebec, the ports towards which emigration principally tends, the first to announce in their respective sections of the country the presence of epidemic cholera.

We have already noticed the prevalence of the epidemic at New Orleans during the latter months of 1853. The disease did not entirely subside during the following winter, although many of the cases which occurred were imported. In the spring it gradually spread up the Mississippi, visiting the different cities on this river and its tributaries, and extending widely into the adjacent country. Cases occurred at Memphis, Tenn., among boatmen, about the middle of April, and occasional cases continued to be reported, but the disease did not at any time assume a very severe epidemic form. In the early part of May, cases were admitted to the hospitals of Cincinnati, occurring among boatmen on the river; the disease did not, however, prevail in the city until the last of the month, nor as an epidemic until the middle of June. During this latter month, it prevailed quite generally in Kentucky and Tennessee. About the first of June it appeared at St. Louis, Mo., and towards the latter part of the month assumed a severe epidemic form. This city suffered more than any other in the West from the epidemic, the deaths amounting at one time to upwards of 280 in the week. Richmond, Va., was visited by cholera about the middle of June, and other towns in the South and West having much intercourse with the cities already mentioned as being infected with the disease, reported its prevalence.

Without attempting to define accurately the course and
progress of the epidemic—a thing impossible while relying only upon current literature—such may be considered, in a general way the history of its invasion of this country from the South.

It was previously noticed that cholera was introduced into one of the West India islands, in the latter part of 1853, by an emigrant vessel, on which deaths from cholera had occurred. About the middle of May of the present year, we have accounts of the outbreak of the epidemic at Barbadoes—being imported from Jamaica, and causing a frightful mortality. In the parish of St. Michael, there was a monthly mortality equal to seven and a half per cent. of the population, the total mortality being over 6,000. It also appeared in Mexico, and at the capital of the latter was very fatal, the deaths amounting to 100 per day.

The second point from which to trace the progress of cholera in this country is the city of New York.

During the latter part of the year 1853, in the month of November, no less than twenty-eight vessels came to this port freighted with emigrants, among whom cholera made its appearance during the passage, causing a mortality of 1,141. Although deaths by cholera were reported in this city for every month of the last half of the year 1853, including June, still it did not at any time assume an epidemic form, and these cases could hardly be considered anything else than the disease exhibited sporadically. The largest number of deaths for one month, was for December, when 12 deaths by cholera were reported.

During the winter months of 1854, emigrant ships continued to arrive at this port in great numbers, many of which suffered severely from cholera. It usually made its appearance two or three days after the vessel had left the foreign harbor, and disappeared as soon as it reached the soundings off this coast; cases were received from these vessels at quarantine which was seldom free for any length of time from emigrants sick of cholera. The monthly report of deaths by this disease in this city, which in December, 1853, reached
12, fell in January, 1854, to 2; in February and March to 1 for each month, while April was entirely exempt. This period corresponded with its decline over all Europe; and cholera might be said to have ceased to exist as an epidemic.

While the report for April exhibited no deaths from cholera in New York, for May, 1 death was again reported, and for June, 206. This large increase in the cholera statistics was due to the arrival in the city of immigrants from vessels on which the disease appeared at sea, and their being subsequently attacked. The inception of the epidemic may be dated about the 1st of June; it reached its maximum about the 1st of August, when there was for the week ending August 5th, 302 deaths. From this date it steadily declined, and for the week ending October 21st, there are reported but 22 deaths by cholera. During this period it prevailed in Brooklyn and neighboring cities with considerable severity.

In Philadelphia, cholera first appeared about the 17th of June, and reached its maximum during the week ending August 5th, the number of deaths for that week by cholera being 88. About the same time, the disease appeared in Boston, where it prevailed mildly up to the 1st of October. In most of the larger seaport towns the disease was reported to be present at different periods subsequently to the middle of June, and many inland cities were also visited by the epidemic at this time. Along all the great routes of travel it appeared during the summer months, but without any very definite law of progression, being governed apparently by the temperature of the weather, the course of emigrants, and the condition of towns where they took up their residence. It was reported at Newark, N. J., Baltimore, Washington, and many intermediate places, in the south; at New Haven, Ct., Providence, R. I., Portland, Me., &c., east; Albany, Troy, Syracuse, Buffalo, &c., west.

In pursuing its course westward, it followed the great routes of emigration, and we are not surprised, considering the rapidity of travel by railroad, to find some of the most
western cities, where emigrants, especially rendezvous, reporting the presence of cholera at as early a date as the Atlantic cities where they first landed. Thus, cases occurred in Chicago among the recently-arrived emigrants as early as the latter part of April, but did not, as in other places, extend to the citizens before the 1st of June, nor become seriously epidemic until July, after which it prevailed with considerable intensity until August, when it began to decline. The first case reported at Detroit was on the 19th of May, but it did not assume an epidemic form until June, when it broke out among recent emigrants, especially those from Holland, who also suffered severely from typhus fever. For the three months, June, July, and August, during which it prevailed as an epidemic, it is estimated that about 1000 died. At Buffalo the first case occurred June 22d, and isolated cases were reported during that month. In July, it became more general, and for August 223 cases were reported; from this time it declined to the end of September, when it disappeared. Other cities previously exempt were attacked after it had subsided in most parts, as Columbia and Pittsburg, Penn., Rochester, N. Y., Fall River, Mass., St. John, N. B., &c., and in many instances it was of a more malignant type than where it appeared early in the season. From these larger cities located upon the great thoroughfares, the epidemic spread widely in every direction, but it principally followed in the train of emigration, and thus reached the most remote settlements of the West.

The third point from which to trace the progress of Cholera is Quebec. During the last year, the number of emigrants arriving by the way of this city, has been greatly increased. The first case of cholera reported, occurred on the 21st of June, among the passengers on board of two emigrant vessels. From this time it prevailed with considerable severity during the summer. The disease was conveyed to Montreal by passengers of the same vessels, as first infected Quebec, and the first case occurred at the former place, soon after its appearance at the latter. It is estimated
that no less than 1300 persons perished at Montreal. From these cities it spread to neighboring towns, and most of the larger places in the Canadas suffered more or less severe attacks during the summer.

As a summary of the prevalence of the cholera in this country, it may be stated that during the spring months it was introduced into all the larger towns by emigrants; that during the summer months it very generally assumed an epidemic form, and with the approach of autumn began to decline in all parts; and by the 1st of October, had ceased to exist as an epidemic, and from most localities had entirely disappeared.

In reviewing briefly the progress of the epidemic cholera of 1854, as above imperfectly sketched, we may notice:

1. That it took its rise, in 1851, in the Southern provinces of Asia, where it is endemic, as in its previous conquests of the world.

2. That it traveled westward, along the great thoroughfares of commerce and emigration, being conveyed from place to place through one of these means. Thus it was conveyed from Bohemia to Breslau; Rotterdam to Antwerp and Havre; Hamburg to Liverpool; Liverpool to the West Indies, New Orleans, New York, and Quebec; and from these latter to every portion of this country.

3. That its actual progress is almost entirely confined to the hot summer months. In the summer of 1851, it spread in Western Asia, and made its appearance in Europe; in 1852, it spread over all Eastern Europe, and wintered in the eastern and southern Baltic provinces; during the hot season of 1853, it reached the western limits of Europe, and made its appearance temporarily in this country; and during the first summer months of 1854, it invaded this country from many points, and spread to the most distant settlements, thus completing its conquest of the civilized world.
Art. VIII.—Cases reported to the Society of Statistical Medicine, New York.—(Selected for publication by Committee.)

Two Cases of Bleeding Ulcer, at the Bend of the Elbow, following Venesection—Cured by forcible Extension and Confinement of the Arm in a straight position. By C. R. Agnew, M.D. Resident Surgeon at the New York City Hospital.

Case 1.—The first case was that of an unmarried female from the country, aged 19, admitted to the Hospital, March 25th, 1853, under the care of Dr. Cheeseman. While in good health, ten months previously, she had been assaulted by a ruffian, and soon after the shock had been bled from the arm. The incision had never healed and the ulcer had bled since, on the average, an ounce or less daily; its edges had become pouting and elevated, and it had been treated by styptics, escharotics and compression. She had menstruated but once since the injury, and had become anaemic and had occasional hysterical attacks. On admission she was placed upon chalybeates with alcetic purgatives. Shortly after entering the Hospital, upon consultation, an operation for her relief was determined upon, and, accordingly, a crucial incision was made by Dr. Cheeseman, and, after considerable dissection without finding any artero-venous communication or particular bleeding vessel, the arm was extended to the straight position by splints, cold water dressings were applied, and the wound was left to heal by granulation. Subsequent inflammation and unhealthy appearance were relieved by poultices, which were followed by the application of balsam Peru and adhesive strips. Menstruation was soon regularly re-established; the ulcer gradually narrowed to a small point, so as to be nearly healed; and in two months after admission she was discharged.

Two weeks later, part of the cicatrizd portion re-ulcerated; the arm became greatly contracted and flexed, and upon a rather forcible effort to extend it the whole cicatrix was torn across.

She was re-admitted to the Hospital, July 31st, 1853, with the arm rigid, and flexed nearly to the shoulder, with the ulcer two inches in length, extending transversely, partly in fissures, nearly around to the olecranon, with no bleeding, but having pouting, indurated edges, considerable swelling, and a puffy unhealthy appearance accompanied by severe paroxysms of pain. It was treated with cold water dressings for nearly a month. The ulcer having now assumed a more healthy appearance, on the 30th of August, under the care of Dr. Watson, the patient was etherized, and the arm forcibly extended with the effect of lacerating the soft parts and extending the ulcer.
arm was retained in the straight position by splints, and with the exception of the occurrence of bleedings several times from the wound, and an attack of parotitis and facial erysipelas, which were treated by mild antiphlogistics, the patient did well, and the ulcer gradually healed. Seven weeks after the forcible extension, the patient was discharged cured, and remained well at the date of last report, three months after.

Case 2.—The second case was that of an unmarried female, aged 19, from the same locality as the preceding case; admitted to the Hospital, April 15th, 1853, under the care of Dr. Markoe. A month after venesection at the bend of the arm, by the same physician who bled the other patient, or his partner, the closed cicatrix had re-opened with an elevated ungranulating ulcer indurated at the edges, an inch long and three lines wide, usually bleeding, from a slight stain to three ounces daily, and accompanied by lancinating pains and considerable swelling. Menstruation had been regular, and except slight manifestations of hysteria, the general health had continued good. The ulcer had been treated previous to admission by styptics, escharotics, and semiflexion of the arm.

A week after admission, the operation of dissecting away the ulcer and hardened tissues by an elliptical incision was performed; cold water dressings were applied, and the wound was left to granulate, with the arm supported by splints in the straight position. With only a couple of slight attacks of hæmorrhage, the wound gradually healed. Six weeks after the operation, the patient was discharged, and continued well by report three months afterwards.

The President of the Society, Dr. Watson, having had charge of the first case, remarked that the bleeding was from no particular vessel, but seemed to ooze from the capillaries. On the second admission, the ulcer was so extensive, unhealthy, and painful as to raise the question as to whether it was not malignant; and it was only after the secretion of pus, and a more healthy appearance, that he ventured to operate by laceration and extension.

Linear ulcers of the elbow or groin were apt to be very obstinate, and healed best by paring the edges and giving absolute rest. This last was effected in the above cases by the extension. He believed both depended upon a scorbutic tendency of constitution.

It was well-known that in some parts of the country the diet consisted largely of salted meats, bread, and tea. Cases of scurvy were not uncommon. He called to mind several instances of scorbutic bleeding-uleers on patients from the country. Some years since, a
man from Rockland county had a bleeding ulcer on each arm success-
vively, which was mistaken for Fungus Hæmatodes by a city surgeon, 
and removed by deep dissection. The mistake was afterwards discov-
ered, and he recovered under the proper treatment for scurvy.

A middle-aged man from the country was admitted to the New York 
Hospital in 1837, with a bleeding scorbutive ulcer upon the arm, over 
the biceps muscle. The difficulty recurred twice after superficial dis-
sections, and the patient fell into private hands.

In going the rounds, he was, at last, treated by Dr. A. H. Stevens, 
with whom Dr. W. was then associated. By a thorough dissection of 
the cellular tissue and fascia down to the fibres of the muscle, and 
other suitable treatment, he soon permanently recovered.

Dr. Detmold thought the circumstance of both patients residing in 
the same locality, worthy of remark. He had noticed lately, in one 
of the journals, that in a certain district in Germany, the operation of 
circumcision among the Jews had been followed by unhealthy ulcer-
tion, which was at last discovered to be syphilitic. Were there any 
suspicious circumstances about these cases in the N. Y. Hospital?

Dr. Agnew, in reply, stated, that in answer to a note of enquiry, 
the physician, in whose practice the cases had occurred, stated that 
the lancet used was new and clean.

Dr. Peaslee remembered an otherwise healthy man, 70 years of age, 
formerly under his care, with an obstinate, bleeding ulcer over the 
scapula, which was at last cured by dissecting the fungous, unhealthy 
portion completely away, and confining the arm so as to give the parts 
perfect rest.

Case of Dementia in a Child subject to Epileptic Seizures. By 
J. G. Sewall, M.D., Visiting Physician to the North-western Dis-
pensary.

This boy, æt. 10, from his mother's account, for the first six months 
of his life appeared endowed with all that usually belongs to children of 
that age. He was then attacked with diarrhoea, the dejections being of a 
greenish hue and accompanied with much pain. For this he was 
treated, as his mother reports, with large and repeated doses of calom-
el. As he was recovering from this affection, after a lapse of 4 or 5 
weeks, he was seized with a succession of spasms occurring nearly 
every day for three months, presenting the characteristics of epilepsy, 
rigidity of the muscles, rolling up of the eyes, &c. At these times 
he would often put his hands to his head and beat upon it, toss his 
head back and strike upon the back of his neck with his fists. From
this time forth he seemed to have nothing left to guide him but an inferior kind of instinct. The convulsions occurred more or less frequently up to the age of two years, since which he has had none. Occasionally, however, he has a spasmodic closure of the jaw, with some muscular rigidity, of momentary duration. While an infant, he would be seized at times, with uncontrollable fits of crying, lasting sometimes 12 hours, and would also have immoderate laughter; attacks presenting the characteristics of hysteria.

Since he was six months old, he has never appeared to be possessed of reason, judgment, memory, or any perceptive or reflective faculty. He has never spoken an intelligent word, but moans and cries at times unmeaningly. He has never been known to fix his attention upon any thing, but has a passion for seizing whatever comes within his reach, which when once attained, he throws regardless away without noticing or caring for it. His eyes are ever wandering restlessly about, and never fix themselves upon any thing. At times he would seem to exhibit affection for his mother, but quite as often would he be indifferent to her. As for food, he exhibited a fondness for tea and meats, but was possessed of a morbid wanton appetite, cramming into his mouth such things as it would admit, without noticing what they were. In this way he devoured sticks, grass, paper, ashes, coal, &c. Oftentimes he would tear off the wall paper and thrust it down his throat. He needed constant oversight, being as likely to run into the water as anywhere. He avoided, however, the fire, appearing to have some notion of its hurtful properties. He was never paralytic, though, like all idiots, his movements were singularly awkward.

During an epidemic of dysentery, he fell a victim to the prevailing disease. He had been sick about a week when I first saw him on the 10th of September. His evacuations were always past standing. Much trouble was experienced in treating him, as he was in a state of constant agitation, and seemed averse to taking medicine. It required the undivided attention of one person to keep him in bed. He died on the 13th of September very much emaciated, his discharges for some time previous having become quite natural and much less frequent.

Autopsy 22 hours after death.—Brain.—No alteration in structure or substance could anywhere be detected. It was, however, very much firmer than natural, amounting almost, in some parts, to the consistence of softish liver. There was considerable congestion noticeable, and the whole brain was a shade darker color than is natural. There was considerable fluid within the arachnoid membrane, but very
little was found in the ventricles. No unusual amount of fluid in the chord. Lungs and heart, kidneys and stomach, were healthy.

The large intestines contained about the cæcum much fecal matter. The mucous membrane of the first half of colon was dark-red, thickened and softened. It abounded in ragged, shreddy masses, which seemed to depend from it. In last half the redness was greater and more uniformly dark. The slightest touch here separated the mucous from the muscular coat, which everywhere seemed healthy. The mucous membrane of last half of colon was reduced to a red pulpy matter, and was everywhere so much disorganized, that it seemed to be rather a secretion of the intestine than one of its coats. No where could strips of it be raised of more than a line in length. There were no distinct ulcerations anywhere. The small intestines were not examined.

Case of Ascites from Metro-peritonitis, in which there occurred a Spontaneous opening of the Abdominal Parietes, and a free and long-continued Discharge of the Dropsical Effusion. By Elisha Harris, M. H. Physician to the N. Y. Dispensary.

Mrs. F., æt. 40, aborted at the sixth month of her first pregnancy; and, being of a good constitution and in full health, after the third day, she resumed her usual laborious avocation of a laundress, and was thereby often exposed to dampness and the alternations of temperature incident to such labors. About two weeks subsequent to the abortion she began to suffer some pain in the pelvic region; but never had she suffered any pain in that region previously. She soon became obstinately constipated, and suffered much from anorexia, nausea, and general malaise; but she did not desist from her labors and exposures. During the fifth week after abortion she first observed that her abdomen was becoming enlarged, but at this time and subsequently she did not suffer any pain. At the beginning of the seventh week she first sought medical advice at the N. Y. Dispensary. Her abdomen was largely distended with fluid, the pulse was feeble, extremities unnaturally cold, the skin pale, urine scanty; her thirst was insatiable, and the appetite capricious and feeble. The uterus and ovaries were greatly enlarged, but not sensitive to the touch or to pressure. The ovaries seemed to be as large as medium-sized lemons, and were hard.

The diagnosis being that there existed metro-peritonitis, the patient was put upon appropriate specific treatment and tonics. Still the effusion increased very rapidly, so much so, that on the sixth week
after commencing treatment, I advised her to submit to the operation of paracentesis. She objected. About this period I observed a hernia forming at the umbilicus, which, in the course of ten days, increased to the size of a large orange. A small cutaneous abscess now formed on one side the hernial sack, and on the day it matured the hernial tumor burst, and the fluid flowed very rapidly from the peritoneal cavity, until more than twenty-eight (28) quarts were discharged, twenty-four (24) of which were actually saved in pans for my examination. I was immediately called, and when I arrived, it being nearly two hours after the event, this fluid was found to be coagulated, and was of the consistence of a thin jelly.

The dropsical effusion was nearly all evacuated, and I completed the process by means of a canula and the double roller. The patient was put upon a highly nutritious diet, and allowed the use of quinia and wine thrice daily. The compression was continued, and the opening at the umbilicus continuing patulous, there was discharged daily about a teacupful of lymphy scrun. No new symptoms occurred, but the patient gradually sank, and died on the fifth week after the opening and discharge had been established.

No autopsy could be secured, but it is believed that the rapid enlargement of the ovaries and the uterus was not dependent upon carcinomatous disease, but upon simple hypertrophic inflammation. It is a remarkable fact that, even to the last, when the patient was excessively prostrated, the peritoneal effusion continued to be of a highly fibrinous character—so much so, that it coagulated when exposed to the air.

After this spontaneous evacuation of the dropsical fluid had occurred, and a free opening for continued drainage, as well as for the ingress of air, happily established at the umbilicus, the patient manifestly enjoyed all the facilities for recovery that any artificial provisions of the kind could afford; but, in this case, these provisions certainly proved unavailing, though every effort was made to abate the primary disease and sustain the strength of the patient. It should be remarked that the treatment which afforded the greatest relief to the patient, and seemed to produce the most favorable effect upon the disease, as indicated by the amount and the nature of the discharged effusion, consisted of iodide of potassium with quinine and wine during the day, and pill hydarg. cum opii, at night. As regards the ingress of air to the peritoneal cavity, it unmistakeably excited general and grave peritoneal inflammation; and, though after the second week it was carefully guarded against, it continued to be a source of constantly re-
Corson’s Case of Diaphragmitis.

Case of Diaphragmitis, with Pleuritic Effusion. By John W. Corson, M.D. Physician to the N. Y. City Dispensary.

E. C., aged 42, lighterman, strong and muscular, was struck on the 18th of October, 1853, with the boom of a lighter over the edge of the left ribs, or from the seventh rib above and laterally, and from within two inches of the spine posteriorly, downwards and forwards over the floating ribs, and left hypochondrium, producing considerable abrasion, discoloration, and tumefaction, but no fracture of the ribs. He was senseless from the blow for several minutes, and faint and collapsed for two hours. On my reaching him, six hours after the injury, he was just beginning to rally, though the pulse was still somewhat feeble and slow. He complained of occasional severe pain in the region of the diaphragm; sometimes shooting towards the umbilicus, with considerable difficulty of breathing; respiration mainly thoracic. The distress was increased by pressure from the abdomen upwards. Ordered 12 leeches and an anodyne poultice over the bruised ribs; and, to relieve the bowels, previously torpid, and abdominal pain, a brisk purgative of compound jalap powder, ginger and ealomel; to be followed by low diet.

19th (2d day).—Mueh the same Bowels moved freely towards noon. At five o’clock in the afternoon I was suddenly re-called in great haste, and found him with the knees retracted, the head raised, panting for breath, with his face completely distorted with the sordonic grin, and screaming at every breath, with pain referred to the region of the diaphragm, accompanied with a sense of great constriction. Respirations 30, thoracic; pulse, 90, firm. He was promptly bled from the arm from a large orifice, to 24 ounces. He fainted immediately from the bleeding, and several times subsequently, so as to suppose himself dying, with the effect of relieving the terrible pain till the faintness left, when it returned. Ordered two grains of opium and five of Dovers’ powder every hour. Having taken about eight grains of opium in three hours, with little soothing effect, with stimulants near, and the finger on the pulse, then somewhat rallied, he was, in the most cautious and gradual manner, allowed to inhale, at
intervals, a mixture of equal parts of ether and chloroform, till in an hour after, the pain was lulled as by magic, and he fell asleep. Ordered soon after two grains each of opium and calomel every 4 hours.

20th (3d day).—No marked dullness over the lower part of left lung discovered on the light tapping that could be borne—loss of motion in the side, probably in part from pain. Respiratory murmur faintly heard; area of dullness enlarged over the spleen; frequent greenish slimy stools tinged with blood, with dysenteric griping; tongue with whitish fur; thirsty; pulse 90, compressible; complains of exhaustion with pain; rather severe in the left hypochondrium, sometimes shooting towards the umbilicus. Ordered to discontinue calomel, but continue the opium in two grain doses with morphia suppositories; and a very large blister over the left hypochondrium and reaching to the umbilicus; directed to use rice-water and arrowroot with beef-tea.

21st (4th day).—Blister acted "like a charm;" pain was quite gone, allowing a better examination; there was some dullness on percussing the ribs; loss of motion; absence of respiratory murmur; indicating pleuritic effusion from the margin of the ribs about four inches upwards; stools rather dysenteric but improving; the urine was reddish and charged with lithates.

22d (5th day).—Passed a couple of large evacuations mostly of dark liquid blood; spleen diminished in size; otherwise the patient was much better. The irritable bowels were quieted with powders of bismuth and opium; the moderate pleuritic effusion yielded in a few days to a succession of blisters, and five grain doses of the iodide of potassium, three times a day in a mixture, with a few drops of camphorated tincture of opium.

From this time, with broths and nourishing diet he steadily improved; and three weeks after the accident, was discharged cured.

Remarks.—Inflammation of the diaphragm is so rare an affection, that any example of it seems worthy of careful study. In this ease, to borrow a legal phrase, the evidence was only strongly circumstantial, like that of gastritis nephritis, and other affections of deep-seated organs ending in recovery. Fortunately for the patient, there was no post-mortem as a final test.

The striking early symptoms, of the presence of motion of the thorax in breathing, with its absence in the abdomen, reversing the signs of pleurisy; the existence of the respiratory murmur, on the side affected, faint indeed from pain; and the absence of dullness on percussion; the location of the injury with the diaphragm, as its centre,
and the reference of the first pain to that spot; the terrible severity of the distress exceeding that of ordinary acute pleurisy, and the curious characteristic grin of the face, the true risus sardonicus of the old authors—all pointed to the diaphragm, as the seat of the first inflammation. Some of these symptoms, it is true, were subsequently modified by the extension of inflammation upwards, and the limited pleuritic effusion. Other very frequent signs of diaphragmitis were also wanting. The probable limitation of the inflammation to the extreme left portion of the diaphragm might explain the absence of hiccup, as also the vomiting, usually present when that central portion near the stomach is involved.

Delirium, so common in the worse cases, was also wanting; yet a reference to the records of this disease shows that it is not essential. Though subsequently mentioned, it is not enumerated in the definition at the head of the very learned and complete article on the subject by Copland. Boerhaave and some of the older writers have described this variety, under the term Paraphrenitis; but Morgagni distinctly affirms in a case in which it happened to be present (Letter vii, Art. 14,) that he does not "necessarily conjoin a delirium with inflammation of the diaphragm."

The occasional absence of delirium is noticed by Renauldin in his article on Diaphragm in the Dict. des Sci. Méd. A case mentioned by Andral, in which a patient with phthisis was suddenly seized with excruciating pain beneath the left false ribs, who gradually sank without delirium, and on a post-mortem, exhibited a vast cavity, with the diaphragm beneath lined by thick false membrane, through which at last a rupture forming a slit an inch and a half long had occurred, allowing a large quantity of pus to escape into the abdomen.

The most obstinate symptom in our own example above was the excruciating pain, so severe as to resist a dozen leeches, eight grains of opium, and a large bleeding, to repeated fainting,—till at last it yielded to the protracted and very cautious inhalation of chloroform. Pain like this, as in peritonitis, has sometimes destroyed life. Such was the conclusion of Andral, in the very interesting first illustration of "Diaphragmatic Pleurisy" in his Clinique Médicale A worker in ebony, while engaged in his occupation, was seized with a shivering, followed by excruciating pain in the left hypochondrium, with rapid difficult breathing, agonizing expression, and occasional delirium and other symptoms little relieved by repeated bleedings and leechings till in a few days he sank; and, on examination after death, there were simply found adhesions between the base of the left lung and the diaphragm.
with a coating of albuminous exudation—without any more liquid effusion or extension of the disease.

One of the most curious symptoms of diaphragmitis is the sardonic grin, which happened to be present in our own case. It was wanting in all the five cases given by Andral, and, indeed, was never seen by him. We were much pleased with the exposition given of the cause of this symptom in one of the discussions of this Society, by Prof. Peaslee—on the authority we believe, of some recent investigations of Lurschka—by which the risus sardonicus is attributed to reflex action through the connections which the Phrenic nerve is found to have with nerves supplying the platysma myoides and other superficial muscles.

Were the troublesome dysenteric discharges simply the effect of the drastic purge, irritating the colon; or, was there possibly mechanical injury from the blow across the yielding abdomen?

The case illustrates the frequency with which blows, falls, and sudden shocks are causes in the few instances that occur, of inflammation of the diaphragm. An example is given by Dr. Wheelwright in the sixth volume of the Medico-Chirurgical Transactions, of a seaman who fell from the top of a coach, producing in a few hours terrible pain at the diaphragm, with vomiting of blood, in which, after death, a slit in the diaphragm was found, through which a portion of the stomach protruded. A young mother is mentioned by M. Percy, who ruptured the diaphragm in efforts to suppress labour pains.

In the Lancet for June, 1840, a case is related by Dr. Munk, of a man who fell overboard into the river, and was subsequently seized with symptoms of inflammation of the diaphragm, terminating fatally; in which it was found, after death, pressed down, with effusion covered with lymph, and the muscular substance darkened and softened.

The location of the disease in the case we have detailed, depended upon accident.

In a learned work of Dr. Mehliss, entitled "Die Krankheiten des Zwerchfells des Menschen," which we perceive, is freely quoted, diaphragmitis, is stated to occur, most frequently, on the left side.

In conclusion, we may briefly remark in reference to the treatment, that the case we have detailed, illustrates the great service chloroform and ether may render in all cases where death is threatened from pain alone. Where bleeding and opium fail to relieve, they will doubtless prove valuable in severe cases of peritonitis. The troublesome dysenteric discharges, though interfering with the exhibition of mercury, so useful in inflammation of serous membranes, yet doubtless proved powerfully revulsive, diverting thoracic irritation by abdominal, as pointed out by Dr. Stokes.
Case of a Vesical Calculus, in a Female Child, which Escaped from the Bladder through the Vagina. By Stephen Smith, M.D.

The subject of this history was a female child, of good constitution, and healthy parentage. She was brought to me about the first of July, 1852, suffering from a slight attack of diarrhea; she was then two and a half years old. In concluding the history of her case, the mother mentioned incidentally that the child had some difficulty with her water; that she passed it frequently with much pain, and occasionally the urine was tinged with blood. I prescribed for the diarrhea, and requested her to return with it when it was better of its present complaint.

In about a week she accordingly brought the child again, and I examined it in reference to the dysuria. I learned from her that the child had never been free from complaint in the passage of her water, but had always suffered more or less irritation; that the difficulty had latterly gradually increased, until she came to pass water often and in small quantities, each effort being attended with bearing-down pains, and concluded with violent scratching and tearing of the external genitals with the fingers. These occurred as often as every half-hour during the day, and generally as frequently during the night, on account of which she seldom obtained sound and undisturbed sleep for an hour. When asked where it had the most pain, it always placed its hand over the stomach. She had never exhibited any other signs or symptoms of being troubled with worms, than this irritation about the bladder. Still she had good flesh, and was quite as plump and rotund as children of that age, ate heartily, and digested her food well, and, though never away from her mother to whom she always ran when these attacks came on, she enjoyed her play with other children. Her skin, however, was pallid like anaemia, and her countenance wore a settled expression of irritability. On examination, the external genitals were found excoriated, as also the thighs, from the involuntary escape of urine; but the mucous membrane of the vagina, and the orifice of the urethra were of their natural appearance, and gave no evidence of any local irritation.

The mother was directed to give the child warm hip-baths at night, mild laxatives, and a mixture containing liq. potasse, tinct. hyosciumus, and nitrous ether. This latter was given for the purpose of correcting any preponderance of lithic acid in the urine, which, by its irritation of the neck of the bladder, might be the cause of the dysuria.

In about a week the child returned, unimproved. The same treatment was continued with the addition of infusion of buchu. This
produced a marked improvement for a short time, when it finally failed to give any relief. An effort was then made to obtain an examination of the urethra and bladder, with reference to the lodgment of a small concretion in the former, or the existence of a calculus in the latter, but the mother refused to allow any force to be used to restrain the child, or the administration of an anaesthetic. No specimen of her water could be obtained for examination, as she passed it in small quantities upon her clothing.

Upon questioning the mother more closely in reference to the presence of ascarides in the rectum, she recollected to have seen upon her night-clothing small bodies, which, from the description she gave, answered very well to these creatures. Failing in obtaining an examination of the bladder to settle the question of the presence of a calculus, in addition to the remedies already in use, the mother was directed to administer injections of lime water.

This had no effect whatever, either in dislodging any thing from the bowel or in relieving the symptoms. After this, she resorted successively to injections of turpentine, solution of common salt, assafetida, etc., at the same time keeping the bowels soluble with aperient medicines. These means were continued until each in turn had a faithful trial. The child gradually grew worse, the paroxysms became more violent and long continued, resembling in their accession labor pains, the patient placing her hands upon her sides and bearing down with all her force, and concluding with tearing the genitals violently with her fingers.

At this time an examination of the urethra, with a large probe, was obtained, which only proved that no calculus was lodged in this channel. As the child had not taken an anaesthetic, and resisted violently all efforts at restraint, no satisfactory examination of the bladder could be obtained. In consultation, the question of the existence of calculus was discussed, and considering the sex and age of the patient, the examination that had been made, and the character of the symptoms, it seemed more probable that the source of irritation was in the rectum than in the bladder. The remedies advised were again directed to the removal of worms. The last of these vermifuge medicines employed was santonine, which acted powerfully as a cathartic, but without effecting the desired object. The opinion that the cause of so much vesical irritation could be worms was now abandoned.

Nearly two months had now elapsed since the child first came under observation, and it had grown materially worse. The only treatment which now suggested itself as adapted to the case, was anodynes to
alay the irritation, and such general remedies as the system might require. But no form of anodyne, however employed, whether given internally, by injection, or applied locally, had the slightest effect in preventing the paroxysms of pain, or in diminishing their severity. Still the general health of the patient did not suffer markedly, her appetite continued good, and she did not lose flesh. It was now very evident that these paroxysms of dysuria, which did not cease to recur day or night, and by which alone the life of the little sufferer was being gradually worn out, was due to a calculus in the bladder, and as the parents refused to have any further examination attempted, my attendance was discontinued.

For a time it had no medical attendant. I saw it at intervals, and always found it worse. The mother gave it every variety of medicines that was suggested to her, the most of which were active cathartics. At one time its mouth and fauces were completely covered with aphthous sores, it vomited almost everything that it swallowed, and had a severe diarrhoea. It recovered from this condition readily with mild remedies. Still later, it had convulsions of the most violent kind, commencing with a paroxysm of pain, and terminating when it subsided. These finally ceased to recur, and were followed by a slight prolapsus of the rectum, this continued to increase until it became a very troublesome affair. At this time, about three months after it first came under observation, another physician was called in and the mother ceased to bring the child to me.

It passed in succession under the care of several physicians, in private and public practice, and was variously treated as a case of prolapsus of the rectum, masturbation, etc. The case finally terminated fatally about ten months from the date at which it was first seen, by the escape of a calculus from the posterior, wall of the bladder into the vagina, and through this passage externally. Its escape into the vagina was followed by a fetid discharge from the genital organs, and rapid sinking of the system. It was first discovered by the mother protruding between the labia, and was removed by the physician in attendance. The child sank and died the following day. No examination of the parts was made after death.

The calculus was nearly an inch in length, by half an inch in thickness, being shaped very much like an egg.

Remarks.—In connection with the history of the preceding case, it will not be uninteresting to institute an inquiry into the comparative frequency of calculous disorders in children, and the different methods by which a spontaneous cure may be effected.
The opinion is very generally prevalent that vesical calculi occur much more frequently in children than in adults. Systematic writers on the diseases of children, and of the urinary organs, almost without exception, give currency to such views. This opinion seems often to be no more than the repetition of that entertained by a preceding writer, while others give some statistics, as the basis of the assertion. West, one of the most recent and able writers on the diseases of children, remarks, "Although most diseases of the urinary organs are less common in children than in grown persons, yet calculous disorders are far more frequent in early life, than adult age." The data upon which he bases this remark is a statement by Dr. Prout that of 1,256 patients received into Bristol, Leeds, and Norwich Hospitals to be operated on for stone, 500, or nearly 40 per cent., were children under ten years of age. If the age of fifteen is the limit of childhood, physically considered, it is not probable that the number of patients included between ten and fifteen, would increase the per centage to more than fifty, or one-half.

Brodie, in his Lectures on the Diseases of the Urinary Organs, referring to the frequency of calculous disorders, says, "You know how large a proportion of hospital patients admitted are children," and favors the old notion that, among the lower classes, children are much more liable to calculus than adults. Gross does not express an opinion, but in quoting some statistics of Civiale, who maintains this view, he may be considered as endorsing it. The latter author believes that the number of children affected with calculous disorders, is greater than is usually supposed. He found that out of 1881 cases, 1126 occurred in patients under seventeen years of age. These figures give a large preponderance of children over adults.

We think, however, that they are overstated, and that a more general comparison of facts will materially modify the conclusions to which he has arrived. We do not mean to say that children are not equally as liable to be the subjects of calculous diseases as adults, or perhaps somewhat more so, but statistics prove that much depends upon locality, and less upon difference of age, in the prevalence of calculi, than authors generally teach.

The first table which we introduce is from Mr. Hutchinson who instituted a careful inquiry into the frequency of calculous diseases among seamen. His communications on this subject are contained in the Medico-Chirurg. Transactions, vol. 9 and vol. 16, and are entitled "An inquiry into the comparative infrequency of Calculous Diseases among sea-faring people."
From this table, which embraces a total of 483 cases, only 143, or less than one-third, were under fourteen. Mr. Hutchinson also incidentally remarks, that it can be shown as the result of his inquiry, that more adults are the subjects of operations for stone than children. It may, however, be objected to his tables, that they were prepared for a different object, and only such hospital records were consulted as concerned seamen.

A comparison of the reports of the civil hospitals of Europe, therefore, will obviate this objection. The accompanying table is prepared from the statistics of operations in such hospitals, and, as they embrace a wide extent of territory, they are most important, as they show clearly how much the frequency of these disorders in different ages is influenced by locality.

<table>
<thead>
<tr>
<th>Places</th>
<th>Total no. Cases</th>
<th>Under 14</th>
<th>Above 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen Infirmary</td>
<td>68</td>
<td>13</td>
<td>55</td>
</tr>
<tr>
<td>Bristol</td>
<td>33</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Dundee</td>
<td>78</td>
<td>21</td>
<td>57</td>
</tr>
<tr>
<td>Edinburgh and Leith</td>
<td>63</td>
<td>15</td>
<td>48</td>
</tr>
<tr>
<td>Glasgow and Greenock Infirmary</td>
<td>32</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Haslar Naval Hospital</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Liverpool Infirmary</td>
<td>16</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>London Hospital, London</td>
<td>41</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Newcastle-upon-Tyne Infirmary</td>
<td>31</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Norfolk and Norwich Hospital</td>
<td>117</td>
<td>43</td>
<td>74</td>
</tr>
<tr>
<td>Plymouth Naval Hospital</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>483</strong></td>
<td><strong>143</strong></td>
<td><strong>340</strong></td>
</tr>
</tbody>
</table>

Norwich, 473  227  Less than \(\frac{1}{2}\)
Naples, 660  315  \(\approx \frac{1}{2}\)
St. Petersburgh, 643  321  About \(\frac{3}{4}\)
Austria, 460  357  \(\approx \frac{3}{4}\)
Bavaria, 175  55  Less than \(\frac{3}{4}\)
Bohemia, 239  116  \(\approx \frac{1}{2}\)
Denmark, 106  28  More than \(\frac{1}{2}\)
Egypt, 145  14  Less than \(\frac{1}{2}\)
France, 2822  1347  Less than \(\frac{1}{2}\)
Lombardy, 1058  796  \(\approx \frac{3}{4}\)
Rome, 49  10  Nearly \(\frac{3}{4}\)
Sardinia, 140  97  Less than \(\frac{3}{4}\)
Ulm, 127  64  About \(\frac{1}{2}\)

**Total**, 7159  3748  More than \(\frac{1}{2}\)**
From this table it appears that out of 7159 cases, 3748 were under 15 years of age, or a very little over one-half. If we examine the report of different hospitals with a view to a critical analysis of the proportion of cases of the two classes, we find that it is only in a few, and those in peculiar localities, that the children exceed the adults.

To show the general immunity of children, from calculous affections, we may refer to the reports of Institutions devoted especially to this class of patients. Thus, during twenty-seven years, 1151 children were admitted into the Foundling Hospital, and for this period there were three cases of stone. In the Asylum at Chelsea, out of 6000 admissions, not one case occurred. At the hospital for children in Paris, where 3000 children are received annually, there were previously to 1842 only four cases on an average. At the St. Marylebone Infirmary where there has been on an average four and five hundred children annually, a case of stone has not occurred in twenty years.

An examination of the Reports of Institutions for children in this country gives similar results. The number of children upon Randall's Island for the year 1850 was 1136, and no case of calculus is reported, the number in 1853 was increased to 2241, and for this year one case of calculus was reported. The Colored Orphan Asylum which has on an average nearly two hundred inmates, reports no case of calculus, although Dr. Gross considers colored people peculiarly subject to stone.

We must conclude, therefore, that the opinion that children, as a class, especially among the poorer classes, are much more liable to calculous disorders than adults, is not well founded.

Vesical calculi effect a spontaneous cure, by escaping from the urethra. This is not infrequent in females, owing to the shortness, size, and distensibility of the urethra, and to this cause, far more than difference of habits, is due the marked exemption of this class from vesical calculus. It is astonishing how large a calculus may pass the female urethra. Dr. Mullineux reports a case in the Philosophical Transactions, vol. 17, where a female sixty years of age passed a stone by the urethra, 7\(\frac{3}{10}\) inches long, and 5\(\frac{3}{4}\) inches in diameter.

Stones of very large size may pass the male urethra, but more often they become impacted, and give rise to great local trouble. Large stones in the male bladder occasionally undergo spontaneous division, and are then passed off.

Dr. Heister relates a case in the Philosophical Transactions, vol. 37, 1731, where a man of sixty, who had long suffered from symptoms of stone, and was accustomed to feel his bladder contract strongly around
the calculus after urination, one day felt the stone break, and afterward voided upward of an hundred irregular calculi at different times, and completely recovered.

Another method of spontaneous cure is by the ulceration of the calculus through the coats of the bladder, and its escape from another outlet as in the case above related, or directly through the perineum. Deschamps, in his Treatise on Lithotomy, mentions several cases in which the calculus escaped through the vagina. A case of this kind is reported in the Medical Gazette, February 7, 1840. The patient a maiden lady, æt. fifty-six, had experienced dysuria two years, when the urine began to escape from the vagina, mixed with pus. The disease was mistaken for cancer of the womb, and the stone which finally became visible, covered with a whitish membrane, was allowed to remain just within the external organs nine months, under the belief that it was cancer. She recovered with a vesico-vaginal fistula. A case occurred recently in one of the London Hospitals.

A more remarkable method of spontaneous cure in the female is in the passage of the stone through the vagina into the rectum, and finally escaping from the anus. A case of this kind is related in Phil. Trans., vol. 41, 1740, by Mr. Macharness. A female, æt. 31, had children in rapid succession, but, after each labor, she suffered much from fever. Every child was noticed to have a dent upon the left side of the head, above the temple. Her two last children were still-born, though they were alive just previous to birth. Her symptoms at length grew more serious, she had pain in the back, loins, and bladder, obstinate costiveness, and passage of flattened feaces. These symptoms continued several months, when her urine became foetid and contained pus. The catheter detected a tumor, but not a stone, upon one side of the bladder. Finally, pus ceased to flow in the urine, but made its appearance from the vagina like leucorrhea; pain was constant and very severe. The pus finally ceased to flow from the vagina, and began to discharge from the anus. She experienced weight, pain, etc., in this region, and emaciated from her constant suffering. At length, while straining at stool, she felt a hard substance protruding from the anus. The surgeon was called, and removed a large ragged stone, weighing 8½ ounces, and being 10½ inches in circumference. She rapidly recovered.

When the stone ulcerates its way out of the bladder in females, it is more likely to pass through into the rectum than to escape from the vagina, owing to the construction of the sphincter-vaginae, and the cul-de-sac into which it falls.
When the stone escapes by ulceration in the male, it may pass from the perineum, scrotum, or even the thigh. M. Louis has related many cases of this kind, in the Mémoire Acad. Surg., vol. 3, in an article:—Sur les Pierres urinaires formées hors des voies naturelles de l’Urine.


[We feel assured that the following curious document is not without interest to the medical historian, or general reader. The following account of it we copy from a paper of Dr. W.’s, in vol. 10, Old Series, of this Journal. “The paper was handed to me by Mr. Cameron, an old gentleman residing in this place, (Greene, N. Y.—Ed.) who was at the time an Assessor of one of the towns, and engaged in getting up the statistics. It was done by the direction, and at the expense of Charles Williamson, Esq., agent of the Pultney estate, for the purpose of showing the health of the county; as a report had got abroad, that it was very unhealthy. The county of Ontario, at the date of this document, comprehended the whole of the State west of the pre-emption line, which was a line drawn from Sodus Bay, on Lake Ontario, southerly through, or nearly through Seneca Lake, about a mile east of Geneva, to Pennsylvania line, with the exception of the county of Steuben, which had been erected the year previously. Several of the towns named in the paper, do not now exist; and I have endeavored, so far as I am able, to note some of the towns which now occupy their places. I may be mistaken in some instances, but I believe I am pretty generally correct.”

The settlement of the “Genesee Country” may be said to have begun in 1791, and to have been, in a measure, completed in 1806. During this period, few of the settlers escaped “a seasoning;” and “endemic fever;” or, as it was more generally called, “Lake fever,” made sad havoc with the health, and not unfrequently with the lives, of the inhabitants. Dr. Alexander Coventry, in his annual address before the New York State Medical Society, in 1824, has given us a history of this fever—the disease which gave rise to the report of the unhealthy character of the country. The matter of the tables, Dr. Willard informs us, is copied verbatim et literatim.—Eds.]

A Register of the Free Inhabitants in the Several Towns Comprehending the County of Ontario, in the Genesee Country, estimated and certified by the Supervisors and Assessors of the respective Towns or Districts from their assessments, taken in April, 1799, together with number of Deaths in each Town, within the compass of the year 1799. Ontario County, January, 1800.
<table>
<thead>
<tr>
<th>Towns or Districts</th>
<th>Number of Inhabitants</th>
<th>No. of Deaths</th>
<th>Adults</th>
<th>Infants</th>
<th>Total</th>
<th>By Whom Certified</th>
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</thead>
<tbody>
<tr>
<td>Canandaigua</td>
<td>800</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td></td>
<td>Abner Barlow, Supervisor, Luther Cole, Hugh Jameson, Life.</td>
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<tr>
<td>Easton, [now, Hopedale and</td>
<td>304</td>
<td>1</td>
<td>1</td>
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<td>Daniel Gates, Supervisor, Elijah Murray, James Austin, Life.</td>
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<td>Gorham]</td>
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<tr>
<td>Middletown, [now Naples]</td>
<td>225</td>
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<td>Jabez Metcalfe, Supervisor of Middletown.</td>
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<td>Bloomfield</td>
<td>1836</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>John Swift, Supervisor, John Burhurt, Thomas Goldsmith, Life.</td>
</tr>
<tr>
<td>Palmyra</td>
<td>804</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>Solomon Hooey, Supervisor, William Williams, Zebulon Horton, Life.</td>
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<tr>
<td>Charleston, [now Lima]</td>
<td>600</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>Ebenezer Curtis, Supervisor of Charleston.</td>
</tr>
<tr>
<td>Genesee, [now Geneseo]</td>
<td>554</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>William Goodwin, Supervisor, Nathaniel Fisher, Life.</td>
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<tr>
<td>Bristol</td>
<td>558</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>Elisha Parish, Supervisor, Eumce Codings, Life.</td>
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<tr>
<td>Pittstown, [now Richmond</td>
<td>336</td>
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<td>Lemuel Chipman, Supervisor, Cyrus Chipman, M.D.</td>
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<td>and Honeysyc]</td>
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<td>Phelps</td>
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<td>Joel Presect, Supervisor, Philletus Swift, Life.</td>
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<tr>
<td>Northfield, [now Pittsford</td>
<td>355</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>Josiah Fish, Supervisor, Noah Norton, Life.</td>
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<tr>
<td>and Penfield, &amp;c.]</td>
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<td></td>
<td></td>
<td>Nathan Nye, Supervisor, Northfield, Alex, Dun, Life.</td>
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<tr>
<td>Augusta, [now Middlesex]</td>
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<td></td>
<td>1</td>
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<td>Northampton, [now Rochester</td>
<td>696</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>Josiah Fish, Supervisor of Northampton.</td>
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<td>and West of it]</td>
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<tr>
<td>Farmington</td>
<td>400</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>Otis Comstock, Supervisor, Asa Wilmarth, Assessor of Farmington.</td>
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<tr>
<td>Sodus</td>
<td>189</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>Charles Cameron, Supervisor, Samuel Coldwell, Life.</td>
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<tr>
<td>Jerusalem</td>
<td>1320</td>
<td>11</td>
<td>8</td>
<td>3</td>
<td></td>
<td>Ebeneleth Norris, Supervisor, Thomas Lee, Assessor of Jerusalem.</td>
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<tr>
<td>Hartford</td>
<td>450</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td></td>
<td>Ebeneleth Merry, Supervisor, Job Peine, Benj. Parsons, Life.</td>
</tr>
<tr>
<td>Sparta</td>
<td>300</td>
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<td></td>
<td></td>
<td></td>
<td>William Harris, Supervisor, John Smith, Assessor of Sparta.</td>
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<tr>
<td>Seneca</td>
<td>1246</td>
<td>9</td>
<td>2</td>
<td>7</td>
<td></td>
<td>Samuel Colt, Supervisor, Thomas Powell, Assessor of Seneca.</td>
</tr>
<tr>
<td>Total</td>
<td>12200</td>
<td>84</td>
<td>39</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ontario County, 88.

William Shepherd, being duly sworn, saith, That the persons named in the...
DISEASES.


One, aged 60, of Nephritis.

One, 70 years of age, of an Intermittent Fever. An infant with a Swelling on the Throat. An infant 10 months old, never well.

A person 40 years of age, from a Hurt in the Breast which caused an Ulceration in the Vitalis. One adult, by the fall of a tree in a storm. One of a Puerperal Fever. An infant of a Cholick.

(Diseases not mentioned.)

One person 60 years of age. A middle-aged person of Billions Fever. Three infants with diseases which are natural to infancy.

One infant burnt to death with fire. The diseases of the other not mentioned.

An adult of a Consumption. One adult from a Mortification, proceeding from old wounds. One adult of an Intermittent Fever, aged 75 years. The infants with disorders natural to infancy.

The number of adults or infants not specified, nor diseases mentioned.

70 years of age, with a consumption of 20 years.

Four of a Billions Intermittent Fever. Two of a Puerperal Fever. One with a Cancer. Two with diseases natural to infancy.

Diseases not mentioned.

Of a Billious Fever.

Two of a Puerperal Fever. One of a Hydrophobia, 55 years of age. Two, aged 75 and 60, of Consumption. One of a Putrid Fever, 65 years of age. One, aged 25 years, Remitting Fever. An infant of a Dysentery. An infant one day old. An infant of a Typhus. An adult, disease not mentioned.

Four, of a Billious Intermittent Fever. 1 of a Hydrophobia. Puerperal Fever. 1 of Pulmonary. One with the Rattles.

One, aged 17 years, of a Phthisis Pulmonalis. One, aged 67 years, of an Anascara Debilium. One child, aged 2 years, of a Schoepula. Five infants, Crup, and Convulsions.

above Register, are the Supervisors and Assessors for the several Districts in the County of Ontario.

Will.”
I consider this table, whatever others may do, as a matter of curiosity and interest also, inasmuch as it gives us the comparative mortality in the early settlement of the Genesee county, now—at least a good share of it—the most thrifty and densely-populated part of the State. Let us see—in January 1800, the whole population, exclusive of the native tribes, was 12,000, and the whole number of deaths in the compass of the year 1799 was only 84. Deducting 922, the number of inhabitants in these towns in which the number of deaths is not stated, from 12,000 and it leaves 11,278, which give us only one death to every 134-26 inhabitants, nearly—only 18 of idiopathic fever—not one in 500—making a pretty small ratio.* By the way, ten years previous to this, in 1790, there were only 1,075 inhabitants in the same territory, including also the present county of Steuben. The territory comprised in the county of Ontario, in 1800, and to which reference is had in "The Register," now consists of the following counties, viz: Ontario, Alleghany, Cattaraugus, Chatauque, Erie, Niagara, Genesee, Wyoming, Orleans, Monroe, Livingston, Yates, and about half or two-thirds of Wayne. These counties, including half of Wayne, contained, according to the United States Census, of 1850, a population of 574,234, making an average increase of 11,240 per year. The number of deaths in this territory during the year ending, June 1, 1850, were 7,277, making one death for every 73-5, nearly—a pretty long stride towards twice as many deaths for an equal number of inhabitants as 50 years previously, when the country was thought to be unhealthy.

* If the Register intends to show that there were no deaths in the three towns in which none are mentioned, and which may be possible, then the ratio will be only one to 145 inhabitants, nearly.
PART SECOND.

CRITICAL ANALYSIS.

Art. X.—The Pathology and Treatment of Stricture of the Urethra, both in the Male and Female, being the Treatise for which the Jacksonian Prize for the year 1852 was awarded by the College of Surgeons of England. By Henry Thompson, M.B. pp. 424, with plates. London: Churchill, 1854.


A Practical Treatise on Strictures of the Urethra. By Dr. F. Reybard. To which the Argenteuil prize (12,000 francs) was awarded by the Royal Academy of Medicine (Paris) in 1852.

The circumstances under which the volumes before us have been produced cannot but excite a favorable bias in the mind of the reader. The “Jacksonian” Prize Essays have been too long known to require any explanation at the present day, but the nature of the Argenteuil prize to many may not be so familiar. If we mistake not, this is the second treatise to which it has been awarded. In 1838, the Marquis d’Argenteuil left, by will, to the Royal Academy of Medicine, the sum of 30,000 francs, the accumulated revenue of which, every six years, was to be granted to the author of the most important improvement, introduced during that period in the treatment of the stricture of the urethra; or, no essay appearing upon the subject worthy the prize, it might be given to the author of the most important treatment of other diseases of the urinary organs. No less than twenty-seven competitors enlisted for the prize of 1844, and a commission, composed of M.M. Jobert, Amussat, Villeneuve, Bèrard, Lagneau, Begin, Ségalas, Civiale and Jourdan, after devoting a year to the examination of the numerous
Critical Analysis. [Nov.,

memoirs presented, adjudged the prize to Dr. Leroy D’Etiolles. The adjudicators in the present instance were M.M. Bouvier, Gerdy, Grisolle, Hugier, Larrey, Langier, Ricord, Robert, and Roux but lately deceased.

Mr. Thompson devotes forty-eight pages, and M. Reybard forty-three pages, to the anatomy and physiology of the urethra. The microscope has settled the question as to the muscularity of the urethra, and demonstrated beyond dispute that throughout its whole course it is surrounded by muscular tissue of the involuntary kind, like that which enters into the structure of the bladder, air-tubes, and intestines. Mr. Thompson gives to Kölliker, of Würzburg, the credit of first publishing the fact of their existence, though the contemporaneous microscopic investigations of Mr. Hancock, of the Charing Cross Hospital, as he himself admits, were made in total unconsciousness of those of of the German anatomist. It is a singular fact, of which we have been personally assured by Mr. Hancock, that the muscular fibres are most easily detected in the foetus, for we should naturally expect that they would be most fully developed in the adult. We have not space to dwell upon this important discovery which explains many points connected with the pathology of strictures, but cannot too warmly recommend Mr. Hancock’s small volume on “Strictures of the Urethra,” published in 1852. As we have stated, Kölliker is entitled to priority in the publication of his discoveries, and the date of Mr. Hancock’s first paper upon the subject is February, 1851. This was read before the Medical Society of London, and his Lettsomian lecture before the same body in 1852, which contains a fuller exposition of his views, was published in the “London Lancet” for February 21, 1852; and it is to be hoped, though it can by no means be regarded as probable, that the results of the investigations of Mr. Hancock and Kölliker may become known to the competitors for the Argenteuil prize of 1848! Sure we are, that we can find no trace of such knowledge in the treatise of M. Reybard. True, he infers the existence of muscularity in the urethra, from certain phenomena which occasionally occur during the introduction of a sound or catheter; but modern science rests not satisfied with inferential evidence, and in no point of view does Mr. Thompson’s description of the anatomy and physiology of the urethra exhibit its superiority more strikingly than in the faithful account which he has given of our actual knowledge upon the subject. In this respect, M. Reybard falls immeasurably behind the English surgeon.

After a full examination of the proofs of the muscularity of the urethra, Mr. Thompson concludes:
1. That the entire urethral canal; or, at all events, the membranous and spongy portions of it, may be contracted in calibre or closed by approximation of its sides through the agency of muscular structures which surround it, in obedience to an effort of the will.

2. That contraction of the urethra may be the result of a purely reflex act, uncontrollable by the will, and of a character differing from that of the voluntary contractions before described as relating to micturition.

There is no proof, says Mr. Thompson, so good as personal experience; and whoever wishes to be furnished with a striking example of the reflex contractions which are wont to occur throughout the whole canal, need but introduce a catheter into his own urethra, when he will soon become conscious, especially during its removal, of the great contractile and expansive force called into play by every portion of the canal. "It is an experiment worth the trying, and I hold that no man should attempt the passage of a catheter on the person of a patient, who has not first tried its effect upon himself." p. 33.

Chapter II. of Mr. Thompson's work is devoted to the "Classification and Pathology of Strictures of the Urethra." About forty pages are filled with the discussion of these topics. He thus expresses himself in relation to the existence of spasmodic stricture. "Examples of pure spasmodic stricture are, without doubt, very rare; still the influence of muscular action upon the urethra being very great, it is very important to recognize it in diseased conditions of the organ, since it commonly supervenes upon and complicates most of them. Indeed, neither organic nor inflammatory narrowing of the urethra can be well imagined to occur without the co-existence, at some time or another, of spasmodic action to some extent in the muscular tissues around." Under the terms organic and permanent strictures he includes all contractions of the urethra, which are the result of some appreciable organic alteration in the structure of the parts involved, excepting that which is due to, and concurrent with, an acute inflammation, capable of undergoing complete resolution, not necessarily followed by any permanent narrowing of the canal.

To those who would object to this classification, on the ground that inflammation is not admitted to rank among organic changes, he remarks: "The answer is sufficiently obvious. Our language does not furnish us with a single term embracing the co-existence of two ideas, both necessary to describe the class of lesions under consideration; the one of organic change, as contrasted with that we call functional; the other, that its especial character is permanency, i.e., in-
ability to bring about its own resolution and cure by the working of any naturally inherent power; this being the rule, beyond all question, with regard to the strictures now under consideration; it being further understood that the absolute impossibility of an exception is not affirmed."

"Acute inflammation narrows the canal for a time; but the great majority of inflammatory attacks under favorable circumstances leave the calibre of the canal as they found it. Acute inflammation, per se, is rarely a cause of permanent stricture; it is the subsequent persistence of the chronic form which is the great agent in its production. On these grounds, I should unquestionably be compelled on all occasions to use the two words, organic and permanent in combination, were it not conceived legitimate to employ either of them alone for the sake of brevity, having first stated that the other is always to be regarded as implied or understood."

The views of M. Reybard coincide with those of Mr. Thompson upon this point, and with him he excludes the inflammatory from the list of organic strictures. The latter form he defines as a permanent and progressive diminution of the diameter of the canal, produced by the gradual contraction of a morbid tissue which occupies a greater or less extent of the walls of the urethra, the immediate effect of which is more or less to obstruct the flow of the urine.

In view of the discrepancy of opinions as to the locality of stricture, after recording and analyzing "the statements of whose authority is most to be relied upon," Mr. Thompson observes: "With one exception, all the authorities quoted nearly agree in one particular; viz., that stricture is most commonly found at the junction of the bulb with the membranous portion, or within a short distance of it, in either an anterior or posterior direction. My own examination has included a very large number (not less than three hundred) of cases. . . . These observations lead me to coincide, beyond all doubt, with the opinions just quoted, which assign the first place, in relation to frequency of occurrence, to the stricture which occurs at the posterior limit of the spongy portion of the urethra."

He asserts that no case of stricture in the prostatic portion of the urethra is to be found in any of the public museums of London, Edinburgh, or Paris, and that the evidence of their existence would appear to rest solely on the observations of MM. Leroy d'Etiolles and Ricord. Its excessive rarity, to say the least, he considers as demonstrated.

M. Reybard, after referring to cases observed by Sir Everard Home,
Sir Charles Bell, Sir Astley Cooper, and Lallemand, remarks, (p. 1540) that he has himself seen a case which was caused by suppuration in the prostate, and an abscess which opened in the rectum.

Chapter III. of Mr. Thompson’s work, embraces the consideration of the symptoms and pathological effects of organic stricture. Of the fifteen pages devoted to this subject, we can only extract the following: “The earliest symptom usually noticed by the patient is a little gleet discharge, almost constantly present in greater or less quantity. Some uneasiness is felt, or it may be occasional pricking pain in some part of the course of the urethra, or a little smarting when the urine passes over it in micturition, but varying in intensity.

“The stream is somewhat altered in form, not having the full rounded character of health, but more or less flattened; it may be twisted, spirling, forked, or even divided, which conditions are caused by the current of water being insufficient in size and force to dilate and extend the lips of the meatus externus, so that the fissure-like form of that opening modifies the stream; and if its momentum be insufficient to separate each lip from the other, the urine issues above and below, so that two small streams are produced instead of one.

“Many persons, from a tumid condition of the meatus alone, habitually pass such an one, hence it must not be concluded that the existence of such a stream is, per se, a proof that stricture exists.”

We cannot dwell upon his description of the local symptoms of stricture, nor the sympathetic disorders to which this affection may give rise. We quote the following remarks in reference to neuralgic pains which sometimes co-exist with the disorder: “Pains, apparently unconnected in any way with the seat of the disorder, are occasionally found to be co-existent with stricture; thus, pain in the sole of the foot, long complained of, may be referred sometimes to this cause, and has even led to the discovery of the urethral lesion. Neuralgic affections of the thighs, and of other parts of the body, sometimes appear to have a similar connection with it. I have known such to be treated for a long period without success, until the calibre of the urethra being restored, they have simultaneously disappeared.”

Mr. Thompson’s observations, under the head of the pathological effects of stricture, are far more extensive than those of the French author, who alludes but briefly to the class of sympathetic affections to which we have just referred.

Causes.—Passing over the agency of other causes which have been accused of producing stricture, we find Mr. Thompson thus expressing himself as to the influence of gonorrhoea: “It is the prolonged exist-
ence of a sub-acute inflammation in the median and posterior parts of the canal, which, as a sequence of gonorrhoea, rather than the primary disease itself, causes the exudation of that deposit in and beneath the mucous membrane, which, by its subsequent contraction, so commonly produces stricture."

Among the traumatic causes, M. Reybard asserts, that from experiments instituted by himself, he is authorised in stating that circular divisions of the urethra, and perpendicular to its axis, invariably give rise to organic strictures, but longitudinal wounds, on the contrary, are far from producing this result. For this reason, he believes, that the button-hole incision, and other proceedings of urethrotomy, are wrongly accused of themselves leading to a contraction of the canal. We shall have occasion to refer to this matter again in speaking of Professor Syme's operation, for certain forms of stricture.

Diagnosis.—Mr. Thompson devotes more than twenty pages to the consideration of the nature of those strictures which are only of transient duration, but we must proceed to the more practical part of the subject, viz., the diagnosis and treatment of stricture. A positive diagnosis can, of course, be established only by the passage of an instrument along the urethra, and of all the various forms recommended for this purpose, Mr. Thompson gives his preference to the inflexible and solid. He is accustomed to employ a curved, solid, silver sound, or, what is much cheaper and almost equally useful, a well-polished steel one, and silver-plated, the chief advantage of the silver being that it permits slight alteration to be made in its form, for special cases, without sustaining injury. A proper curve should be given to it. Those usually found at the makers, describe, as nearly as possible, arcs of circles, varying from four to four and a half inches in diameter, and, what is worse, in some cases, the last inch of the sound is scarcely flexed at all, but forms a straight line at the end of the curve. An instrument of this shape is totally unfitted to traverse the urethra with ease and safety. "Were it necessary to construct a sound or catheter upon a priori principles, we should naturally, as it appears to me, adapt its curve to that of the least movable portion of the urethra itself. In the anatomical part of this work, this was shown to be equal to a portion of the circumferential line, equal to about three-tenths of a circle three inches and a quarter in diameter."

Mr. Thompson gives us many useful hints in reference to the construction of catheters, and illustrations are added to make his views more intelligible. But our space will not permit us to dwell upon these topics, and we proceed in the next place to consider the treatment of stricture.
Treatment.—Here we have two indications: first, to restore the natural calibre of the canal; and, secondly, to maintain this condition of the canal. The means employed may be included under the heads of dilatation, chemical agency, and incision. Dilatation is accomplished by bougies of wax, plaster, catgut, softened ivory, gum elastic, or of metal, and the latter may be either flexible or inflexible. In addition to solid cylindrical instruments, we have those of a hollow form, such as catheters, tubes made to slide one over another, like those invented by Mr. Wakley, or dilating instruments like those devised by M. Perreve, and improved by Mr. Barnard Holt, of the Westminster Hospital, London. Then, there are the flaccid tubes, which may be distended, as proposed by Mr. Arnott, with air or water. The question of force in the use of dilatation is thus disposed of by Mr. Thompson:

"First.—When any degree of force is required, it may only be made after the point of the instrument has well and fully entered the stricture, so that the operator is assured that it is in the right track. Force is never to be employed in order to make a way into it.

Secondly.—It is then to be increased very gradually, first trying one uniform rate of forcible pressure for two or three minutes before proceeding to increase it, and when it is found necessary to do so, the increase must be continued in the same manner for a similar length of time. It is not to be accomplished by pressing onwards with more and more violence until something gives way. This is never legitimate.

Thirdly.—Complete knowledge of the anatomy of the passage, some acquaintance with its diseased conditions, also, and long experience in the use of instruments in it, are the indispensable qualifications of the operator, to whom the use of force is permitted."

 Forced dilatation finds but little favor with M. Reybard. He admits, however, that it may sometimes be used with advantage, as employed by Mayor, after the obstruction has been, to a certain extent, overcome, by dilatation or urethrotomy.

Rapid dilatation has been highly eulogised by Lallemand, MM. Chrétien, Pirondi, Velpeau, and Benique. Professor Eve, of Nashville, published in the Nashville Journal of Medicine and Surgery, for June, 1853, a memoir on the treatment of stricture of the urethra, in which he warmly advocates this method. The views of Mr. Thompson may be ascertained by the following extract:

"Great mischief may very easily be done by rapid dilatation on any method, a proceeding, the exercise of which, has been sufficiently reprobated. The semi-elastic constituents of a stricture must be gradually
dilated, if an efficient result is to be attained. Inflammation of the urethra and bladder, which, in patients laboring under chronic disease of the kidneys, may readily extend to these organs and be followed by fatal consequences, has been not unfrequently induced by neglecting this rule."

Even slight lesions of the urethra may give rise to phlebitis, or purulent infection. Mr. Coulson, of St. Mary's Hospital, London, has reported in the London Lancet, 1852, vol. 1, p. 562, twelve cases in which such results were produced by laceration following the use of sounds and lithotrites. In four of these cases, dilatation was employed for the removal of organic stricture. Mr. Thompson states that he has witnessed two cases of a similar nature, and he remarks that it is an instructive fact in almost all of these examples, the effects in question have followed efforts to dilate the urethra, which have been carried to a considerable extent.

Mr. T. remarks that he should "infinitely prefer a plain sound" to the instruments recommended by M. Perreve, Mr. Barnard Holt, and Mr. Wakley, as it is manifest that in very narrow strictures they cannot be rendered available. Professor Gross, in his admirable treatise on the urinary organs, states that he is satisfied from ample experience that the very best instrument for dilating a stricture, is the common silver catheter, with a slightly conical point. Mr. Ferguson, of King's College Hospital, gives the preference to the bougie and generally employs the plated steel rod, or a silver tube. Sir Benjamin Brodie employs the common plaster bougie, as well as those made of solid silver. Sometimes he uses the gum catheter, which he allows to remain day and night. This gives rise to suppuration, after which a large sized instrument may be introduced. Mr. Syme employs a hollow instrument, made of Berlin silver, which he asserts, possesses the requisite degree of rigidity, takes a fine polish, and is not liable to rust. Mr. Guthrie prefers a pliable hollow gum elastic bougie of a medium size, perfectly smooth, and tolerably round at the point, so as to give as little uneasiness as possible. Some thirty years ago, he had a dilating instrument made by Mr. Weiss, which, in the language of Hunter, was to act "like a wedge upon inanimate matter."

At first, it consisted of three blades, which were gradually separated by the action of a screw which turned in the handle, and the same mechanism was afterwards applied to a two-bladed instrument. In his work on the Urinary Organs, Am. Ed., 1845, p. 76 he remarks: "I thought I had now obtained an instrument which could not fail of fulfilling all my expectations, and was only disappointed by finding
that it did too much. The opportunity of dilating was in general too tempting to be resisted, and the consequence was, that it produced irritation in so many cases, that I was forced to give it up, having also fully satisfied myself that dilatation, to whatever extent it might be carried, could not cure the worst kinds of stricture."

In concluding his remarks upon this subject, Mr. Thompson observes, that there are some cases of stricture in which the effects of dilatation are so temporary, that its claim to be regarded as a cure may justly be questioned. "The contraction re-appears, and that so rapidly, that in order to maintain a canal sufficiently patent for the performance of its functions, an instrument must be passed every other day, or even oftener, and thus the patient is subjected to perpetual treatment, and to the confinement and conditions of dependence consequent thereupon."

In other cases the sensitive condition of the urethra renders the introduction of sounds or bougies intolerable, and if employed, they aggravate the condition of the patient.

In reference to the employment of chemical agents in the treatment of stricture, after describing the different instruments employed for the purpose, Mr. T. concludes that these agents should never be resorted to for the sake of their escharotic or caustic powers, properly speaking. He admits that the nitrate of silver, lightly applied, exerts a salutary influence on the diseased surface of the urethra, as it does in cases of inordinate irritability, and undue vascularity of the skin and mucous membranes in other parts of the body, and it may thus become a useful adjunct to dilatation. The potassa fusa being more active, is consequently more dangerous, and, if used at all, it should be only in very minute quantities, "such as fractional parts of a grain," inasmuch as its action is with difficulty controlled. By dissolving some of the component tissues of a stricture, caustics may materially aid us in effecting dilatation. Mr. Reybard is a decided opponent of their use, asserting that they are liable to be followed by dangerous consequences, or to give rise to more dangerous contractions of the canal than those which they are intended to destroy. His experiments upon animals have led him to the conclusion that even the subsequent employment of bougies will not prevent this retractile cicatization of the canal.

Incisions.—Here we have two methods, external and internal incisions. The history of these methods is given in detail by Mr. Thompson and M. Reybard. All the various instruments employed for internal incisions, Mr. T. remarks, are liable to the strong objections that the operator has no means of seeing how far, or what he
cuts. "Hence, I feel bound, unhesitatingly to discountenance the use of all curved instruments constructed on this principle, and if it ever be necessary to apply a 'lancetted stilett' without a guide, (which I have never had occasion to do,) its employment should certainly be limited to that part of the urethra which is quite movable, and where its direction can be controlled somewhat by the assistance of the hand not employed in directing the instrument. Less dangerous is it, as we shall hereafter see, to lay open the perineum and divide the stricture from without, thus giving free vent to noxious fluids of all kinds, than to wound the urethra from within, at or behind the bulb, as we run great risk of doing, when operating at six inches distance from the external meatus, and thus only make a channel for these matters into the erectile cavities and other structures around."

M. Reybord recommends a peculiar form of urethrotome invented by himself. The blade of this instrument is large, and its point is directed towards the orifice of the urethra. With this he incises the whole thickness of the walls of the urethra, at the seat of stricture. The margins are to be separated so that they may cicatrize at a distance from each other. The intermediate cicatrix resulting, he asserts, increases the diameter of the canal, and gives to it a new and permanent calibre. A period of twenty-five or thirty days is required for the cicatrization, and during this time a dilating instrument must be daily passed.

Of this method Mr. Thompson observes: "I cannot forbear expressing a conviction that the adoption of a proposal to make such extensive intra-urethral incisions, endorsed, as it nevertheless is, by the high authority named, will not be found an improvement upon the modes of treatment which are adopted on this side the channel."

The following, according to Mr. T., are the indications for the employment of intra-urethral section. 1st. When dilatation has been sufficiently tried and does not afford relief, or that which is temporary only in its duration, (and the stricture is not of an irritable character, in which case, as we have seen, a trial of the caustic may first be made); 2d. And the stricture is known to consist of a mere fold of membrane, or, at all events, is a short one, i.e., of small extent from before backwards; 3rd. When this is situated in the anterior three or four inches of the urethra, the case is one which most probably will be successfully treated by division, according to the modes already recommended, the choice of which should be determined by rules already given.

*External Incision.*—In the chapter devoted to this subject, Mr. Thompson reviews the evidence which we now possess in favor of
Professor Syme's celebrated operation, or as it has been called "the perineal section." In a former number of this journal (January, 1852, pp. 128–29), we had occasion to comment upon the extraordinary character of the discussions to which this question had given rise. It would seem that the Edinburgh Professor has somewhat modified his views as to the non-existence of impermeable strictures which he at one time so strenuously maintained. In the Monthly Journal, for June, 1851, he writes: "As to the question of 'impermeability' I simply maintain, that if the urine passes out, instruments may always, through care and perseverance, be got in beyond the contraction. It should be observed that the ease here is quite different from that of a distended bladder requiring immediate relief. I have never maintained that in such circumstances the introduction of a catheter was always practicable." Patients, therefore, who may now wish to go from London to Edinburgh to consult the skillful Professor, will be compelled to defray their own expenses, his own liberal offer being of course no longer binding! Though he professes to have "la main d'une adresse et d'une légèreté sans égale,"* we have every reason to believe that, like the late Mr. Liston, he has at length been foiled in the introduction of the catheter, a circumstance which many have not hesitated to predict. Professor Syme makes permeability an indispensable pre-requisite to the performance of external division. How would he treat that class of which he has been so reluctant to admit the existence, viz., the impermeable strictures? But to return to the "perineal section." Mr. Thompson remarks that so far as he has been able to learn, this operation has been performed about 115 or 120 times. He then proceeds to discuss the questions, what amount of danger attends its performance, and how far is it entitled to be considered as a means of cure? The principal dangers are pyoæmia, hemorrhage, and urinary infiltration. Besides these, there are what Mr. Syme designates as "nervous" symptoms, in which he considers the danger more apparent than real. In the Monthly Journal, November, 1852, Mr. Syme employed the following language: "Having now employed the operation in nearly seventy cases without a single instance of hemorrhage or death, I feel entitled to say that the procedure is free from danger when properly executed."

Mr. Thompson states that of 113 operations of which he has the details, four proved fatal. The cause of death in all was pyoæmia. But, if hemorrhage has not yet caused death, it has occasionally been

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*Rousseau's eulogy of Frère Come, in Confessions, tome 3, 2d ed., p. 144
of an alarming character. This, however, Mr. Thompson asserts is not the necessary result of the operation, and cannot in fairness be charged to it. It may be avoided by attending to the cardinal point of the operation, viz., *to cut in the median line*.

Urinary infiltration is to be guarded against by avoiding the deep fascia, which according to Mr. Syme, is always practicable.

How far is the operation entitled to be considered as a means of cure? It must be remembered that it is principally performed in very obstinate, extensive, and irritable strictures, in which dilatation, cauterization, and internal division prove of no avail. In reference to this question, Mr. Thompson observes:

"There are three results which may arise from this operation:—It may fail to afford any relief:

"It may cure for a short period, and afterwards be followed by a relapse:

"It may effect a permanent cure."

In view of all the evidence before him, Mr. Thompson is inclined to believe that a large proportion of cases must be assigned to the third category, viz.: those for whom the proceeding has effected a permanent cure. He enters into an examination of the causes of the invariable success which has followed the operation in Mr. Syme's hands, and attributes the fatal results in the practice of other surgeons to the fact that they have not rigidly adhered to his directions. We regret that we have not the space to notice more fully the many instructive observations of Mr. Thompson in reference to this operation, but we can only refer the reader to the volume itself, assuring them, that they cannot but be profited by its perusal. We must also pass over chapters X., XI., and XII., which treat of urinary abscess and fistula; retention of urine, depending on stricture; and stricture of the female urethra. The work concludes with an appendix, which is devoted to the examination of urine for clinical purposes, chiefly in connection with the subject of difficult micturition, and a report of cases, to which reference is made in the work. There is also an appendix to M. Reybord's volume, containing the reports of some 36 cases; illustrating the views and practice of the author, as inculcated in the text. Woodcuts have been added to each of the volumes before us, whenever it seemed necessary to render the description of any particular form of instrument more intelligible, and no efforts have been spared by either the French or English author to produce a work worthy of the prize, for which they were competitors. Were we to decide upon the merits of the work, according to the amount of the awards adjudicated, that
of Mr. Reybard would stand first upon the list, but we feel satisfied that such will not be the opinions of those, who impartially examine them. Indeed, we know of no volume that can be compared with the very elaborate treatise of Mr. Thompson; containing, as we think it does, all that is at present known upon the subject. It will doubtless be re-published in our country.

**G. C. B.**

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**ART. XI.—Pneumonia: Its supposed Connection, Pathological, and Etiological, with Autumnal Fevers; Including an Inquiry into the Existence and Morbid Agency of Malaria.** By R. La Roche, M.D. Member of the American Philosophical Society; of the American Medical Association; Fellow of the College of Physicians, etc., etc. Philadelphia: Blanchard and Lea, 1854. 8vo. pp. 502.

It is well known that by many intelligent physicians in our southern and western states, pneumonia and all catarrhal affections are believed to be dependent upon the same specific cause which induces malarious fever. This etiological identity in these apparently distinct classes of disease, it is contended may not only be logically inferred, but actually demonstrated. A very large class of physicians practicing in the south and west, believe with the lamented Forry, that in a large proportion of the pneumonias occurring in the malarious districts, there appears to be, at least, a close alliance, if not a common origin, with intermittents; and recently there have appeared some very positive assertions of their entire etiological identity.

Prof. A. P. Merrill, of Memphis, in a recent essay on pneumonia, boldly maintains this view, and brings forward an array of facts, which to some minds may seem ample demonstration of the theory in question. Dr. H. A. Ramsey, of Geo., has also advanced similar views, in an essay on pneumonia, published in 1851. But all who are familiar with the medical literature of the last century must have remarked the very frequent recurrence of the same theory in the history of medical opinion. Cleghorn, Sydenham, Huxham, and Bailly clearly taught this doctrine of the widely-acting effects of malaria; and our own Rush, in his hypothesis of the unity of disease, practically taught the same doctrine. Macculloeh, Copland and many other writers of note, have also very distinctly asserted the etiological identity of the forms of disease under consideration; and so popular has this theory become in some sections of this country, that the specific treatment for malarious affections has too often been a fatal treatment of inflamma-
tion of the lungs. To check the progress of a loose medical philosophy, which has already manifested some dangerous tendencies, and for the equally laudible purpose of presenting to the profession a résumé of medical facts and opinions relating to the origin, nature, and effects of malaria, the accomplished author of the volume before us, has undertaken and completed a task for which medical men in all parts of the world may be grateful. Dr. La Roche, in this work, has fully established his long-accredited reputation as an accomplished scholar, of vast erudition in the general literature of our profession, and as a man of discriminating and logical judgment. Whatever some persons may think of the opinions of our author, it certainly is no small merit of his book that the vast collection of facts that it contains, are so arranged and stated that they cannot possibly mislead the reader or be made to teach a false philosophy.

The first 300 pages of the work are devoted to the consideration of what may be termed the natural history of malaria. Chapter 1st., however, is occupied with the statement of facts arranged under the following heads:—1. Belief in the connection of pneumonia with autumnal fevers long entertained. 2. Pneumonia common where fevers seldom or never are seen. 3. Pneumonia not necessarily prevalent where fevers are common. 4. The two diseases prevail in different seasons. 5. They appear under the influence of opposite winds. 6. Pneumonia is of yearly occurrence—not always so fevers. 7. Their altitudinal range is not the same. 8. Fevers influenced by nature of soil—not so pneumonia. 9. Fevers arrested by frost—not so pneumonia.

In the last 3 chapters of the work, the author enters upon a careful and extended comparison of the etiological, anatomical, symptomatic, and pathological facts and events, which are respectively characteristic of the diseases in question.

The retrospect of medical opinions embodied in the first chapter, is exceedingly interesting, and it certainly serves as a sufficient apology for the goodly volume, to which it has given origin. After a very full and fair statement of the opinions of those who believe in the etiological identity of pneumonia and malarious fevers. Dr. La Roche, remarks:

"The reader will easily perceive that, before the advocates of the identity of the two diseases can successfully sustain the position they have assumed, it will be necessary for them to show that autumnal fevers and pneumonia are produced by the same causes; that they prevail in the same places, and during the same seasons of the year; that their existence and diffusion are promoted by the same agencies; that
they are arrested by similar means; that they exercise their effects on the same classes of individuals; that they present similar or kindred symptoms; that they affect the same organs, and produce the same or analogous changes in the fluids and solids; that they are governed by the same laws; and that they present other points of approximation invariably found to be possessed by diseases, between which there exists the close connection claimed in the instance before us. Unless they can succeed in attaining these objects, their opinion must fall, and the independence of those diseases be admitted. It becomes necessary, therefore, to take up each of these subjects separately, and to ascertain how far they may be appealed to in respect to the question at issue.

As we have seen, it is admitted that pneumonia is sometimes an idiopathic affection, caused, of course, in such cases, by atmospheric vicissitudes, or other kindred morbid influences, and unconnected with any complaint except ordinary phlegmasia. But, while admitting that much, it is contended that, in the majority of instances, the disease must be referred to a different origin, and viewed as simply symptomatic; that is, a mere form of another complaint, and would not, it may be presumed, exist if the causes of the latter, whatever they may be, did not exercise their baneful influence. It is suggested that the combination of phenomena, which impressed the common observer, that he beheld a special and independent complaint, was fallacious—really nothing more than a cloak, serving to disguise a disease which in its natural state, assumes a different dress; and that, while with infantile simplicity, we fancied we had before us a disease of well known pathological character; it turns out that we were dealing with one of a totally different kind, in which the affection of the lungs constituted an accidental and unessential element.

All this may prove acceptable in certain quarters; it may be regarded as plausible by some, or even as well founded and perfectly unanswerable. But so far as I am concerned, I have no hesitation in stating, as the result of my personal observations, aided by extensive inquiry and close reflection, that pneumonia is not sometimes, but always an idiopathic disease, whether it occurs sporadically or epidemically; and that it is due to causes perfectly distinct from those to which such fevers (malarious) owe their origin. I believe this; and believe besides, that even were pneumonia produced at times by the legitimate causes of fevers, such cases would not be any more symptomatic than those that are due to the ordinary causes of the disease; for these do not act directly and primarily on the lungs any more than others would do, supposing them capable of giving rise to the effect in question."

Dr. La Roche, thus very clearly announces his opinions concerning the etiological and pathological distinctness of pneumonia, etc., from the autumnal fevers with which it is so often unhappily associated in malarious districts. To those physicians who have seen pneumonia only as it occurs in our Northern States, our author's conclusions on this subject may appear very natural, as well as practically safe; but
among those who have had experience in treating the pneumonias of our Southwestern States, there are many and highly respectable practitioners who will dissent from the positions taken by Dr. La Roche. But our author has proved himself fully qualified for the discussion of his subject, and being no partizan, and manifestly having no other object in view, than the elucidation of highly important and practical pathological principles, all of his statements of fact are characterized by a completeness and fairness that is most gratifying; while the careful and logical arrangement of his argument is such as to carry conviction to the minds of most of his readers.

We have already mentioned the heads of the argument included in the first chapter, which embodies a remarkably complete bibliography of ancient as well as modern literature relating to the points under discussion. Of authors quoted and works referred to under these heads, are nearly three hundred names of the highest authority; and, if in this chapter it is not clearly demonstrated that "pneumonia is always an idiopathic disease," it is, at least, satisfactorily proven that if under any circumstances inflammatory affections of the lungs may be of zymotic origin, they necessarily depend upon some other climatic or meteoric agencies than those which are concerned in the production of periodic fevers.

Dr. La Roche is a firm believer in the doctrine of a specific miasma as the cause of all climatorial fevers; and to set at rest, so far as may be, all doubt upon this vexed question, he enters upon an extended and extremely thorough examination of the subject of the Existence and Morbid Agency of Malaria. The various theories which have recently been proposed, such as high dew-point, vicissitudes of temperature, terrestrial radiation, modifications of the normal electrical conditions of the atmosphere, etc., he has very properly declined to discuss except in an incidental way. After reading Dr. La Roche's treatise we are more fully satisfied than ever before, that neither one, nor all of the hypotheses just mentioned can sufficiently satisfy the conditions, etiological and pathological, of the periodic fevers, to be permitted to take the place of the old and firmly established theory of a special miasma. This theory though now venerable with age, must, we think, continue to take the precedence of all others on this subject, until further researches in organic and iatro chemistry shall reveal to us the exact nature of this now mysterious zymotic agency or atmospheric condition, which is everywhere admitted to be the proximate cause of intermittents. And the hope that such a discovery may ere long be made is certainly not preposterous. Already the discovery of the principle
of allotropism, and especially of that allotropic state of oxygen, discovered by Schönbein, and by him denominated ozone, indicates the direction in which such iatro-chemical investigations may be most hopefully directed. We have already remarked that Dr. La Roche has entered upon a very full and satisfactory investigation, and account of the natural history of malaria. It would be impossible in this place to give any thing like a complete analysis of these deeply interesting chapters of his book. It is perhaps sufficient to say that they embody a far greater amount of facts on this topic, than can be found elsewhere in any ten other treatises on the subjects in question; and besides, the merit and value of the work are immeasurably enhanced by the very logical arrangement and classification of this vast aggregation of widely-gleaned facts.

Those facts which relate to the existence, nature and morbid agency of malaria are arranged under fifty-seven separate heads, and those which relate to points of comparison between the etiology of pneumonia and miasmatic fevers are included under nearly half that number of classes, and constitute the last three chapters of the volume.

We will make a few quotations from several of these classes, in which some points of great practical importance are happily elucidated:

Fever not due to the action of any known gases:

* * * Few, also, who have reflected seriously on the subject will feel disposed to lend a willing ear to the theory which teaches that the cause of fever must be sought in the admixture, in minute or larger proportion, of sundry gases, with or without addition of other substances—carbonated hydrogen, carbonic acid gas, ammoniacal gas, hydro-sulphuric acid gas, phosphuretted hydrogen, etc.; for were it true that these gases have been, or may be detected in the atmosphere of sickly localities it would not follow that we must ascribe fever to their agency, seeing that though often unpleasant to the smell and sometimes injurious or even fatal in their tendencies, they do not produce phenomena analogous to those of the diseases in question, even when absorbed in large quantities, while those they do occasion present always a widely different garb, and that, as they do not produce the symptoms of true pyrexial complaints when absorbed in large quantities, they are not likely to produce them when received in such small proportion as to elude detection.”

After examining the various doctrines and statements to which the hypothesis in question has given rise, our author concludes that “there is not the most distant probability that malaria will ever be found to owe its morbid agency to, or consist in any extraneous gas floating in the atmosphere, or, that fevers are due to an excess or deficiency of one or more of the known constituents of the latter.

Nature and condition of fever localities lead to the opinion of the existence of Malaria.
The danger of an attack of fever increased in proportion to proximity to such localities.

If we approach to, or remain some length of time—occasionally only a few hours or moments—in those localities, or in their immediate vicinity, we are stricken down with fever; if we avoid them, we escape. The South Carolinian gives up his plantation residence in summer, removes to Charleston, or to the mountains, where he is safe from the country fever. Let him visit his estate before the advent of frost, and especially, let him sleep there, and he runs great risk of an attack. In yellow fever seasons, strangers must leave, or abstain from entering the city; if they venture into it, they will in all probability have the disease. With us, in Philadelphia—as with the residents of other cities of the middle and neighboring States, and of some parts of Europe—where infected districts are of limited extent, the disease is restricted to individuals who venture within the bounds of these. At a very few paces from the sickly spot to which they penetrated, and where they doubtless imbibed the seeds of the fever; people move about, business is transacted with perfect impunity, and everything often looks precisely as if the city were not the seat of an epidemic.

These effects are not due to heat alone.

Under this head, Dr. La Roche adduces an array of the most interesting facts, and most successfully controverts the doctrine taught by Tommasini and Hosack. In this connection, honorable mention is made of the very valuable and philosophical report made to the Smithsonian Institute last year, by Lorin Blodget, Esq.; and first published in this journal (N. Y. Jour. Med. vol. xi. p. 313). The following are the conclusions of Dr. La Roche upon this subject:—

Heat may be, and is, to a certain extent, requisite to promote the formation of other agencies; it is doubtless, essential to further the evolution of the poison which gives rise to the disease, as everything connected with the latter proves—its production in hot weather, its absence in cold, and its disappearance on the accession of frost. Heat may act besides, as an exciting cause, but alone, it cannot occasion the peculiar form of fever under consideration. It requires materials to act upon, and from which, aided by other influences, it may extricate an efficient cause."

A very lengthy chapter is devoted to the detail of facts which have been observed in the medical topography of malarious districts in our own and other countries, and the argument derived therefrom, is as complete as could be desired. Apart from the relevancy of these carefully compiled facts to the author's argument, they constitute in their present condensed and convenient arrangement, a very valuable addition to this branch of our professional literature.

In the closing sections of the fourth chapter, Dr. La Roche undertakes, and, we think, very successfully, to answer the principal objec-
tions which have been urged against the theory of a special miasma. Admitting, and, indirectly, very satisfactorily demonstrating, the doctrine proposed by Prof. Dickson, of the blending of the types of fever, and the not less important doctrine taught by Prof. J. M. Smith, of this city, after Lancisi, Littré, and Twining,—of the diversity, composition, and permutation of miasms, the leading objections to the doctrine of a special malarious cause of periodic fevers are fully disposed of; and no physician who has attentively studied the history of fevers in the United States, will dispute the positions assumed by the learned professors, whose names we have mentioned above.

In concluding his argument on the subject of malaria, Dr. La Roche remarks as follows:—

Now, as has been said before, when we find the cause of fever requiring for its development the action of the very agencies which are necessary to insure the development of the gaseous products of decomposition; when we find that without these agencies, applied in certain proportions, neither those gaseous products, nor the efficient cause of fever will manifest themselves; that in all instances in which the latter is produced, as shown by the occurrence of fever, materials capable, when acted upon by the agencies in question, of giving rise to the evolvement of the gaseous products of decomposition—organic matter in various conditions and states of modification—exists; that total absence of those materials, whatsoever be the degree of heat, and of terrestrial and atmospheric moisture, carries along with it an equal absence of fever; and that, when once formed, the gaseous products of decomposition, as well as the fibrific cause, are cut short by frost or intense heat, and the process by which they were generated, arrested;—when, I repeat, all these circumstances are borne in mind, we can have no reason to doubt the propriety of admitting that the febrile cause presents a close analogy to the above-mentioned gaseous products; and that if in regard to the latter, heat, humidity, and other agencies acting in given proportions, and in concert on dead organic matter, give rise to certain products which assume the gaseous form; and if the process of the generation of these, and their existence in the atmosphere is destroyed by frost, or intense heat, the febrile poison which requires for its generation the action of the same agencies, as also, the existence of a kindred matter, and is besides arrested in its formation, and destroyed, when formed in the way mentioned, must necessarily consist of some modification of a similar kind of gaseous substance; in other words, that autumnal fevers must be the offspring of a malarial morbid poison, and not the effect of modifications in the sensible qualities of the atmosphere.

This is certainly a very logical and safe conclusion, yet it is by no means necessary that we should assert that the miasmata actually consist of new and separate gaseous substances, for we conceive it perfectly profitable, and, for many reasons, highly probable, that the or-
ganic gases of decomposition, to which our author here refers, may in conjunction with the causes which induced the decomposition and the gaseous emanation, induce in one or more of the elements of the atmosphere of such malarious locality, or in some of the elements of the living body; a condition analogous to the allotropism of which many of the elementary constituents of matter are known to be susceptible. And if future researches in physiological chemistry should demonstrate such a doctrine, it would certainly answer all the conditions and all actual characteristics accredited to a special and substantive miasma; but until more can be known on this subject we are content to believe in the doctrine so ably defended and elucidated by the learned author of the treatise before us.

We come now to the points of comparison in the etiological, symptomatic, and pathological history of the two classes of disease under consideration. Dr. LaRoche here fortifies his positions with impregnable facts: It is clearly proven that the proximate causes of the two classes of disease are widely different; that autumnal fevers are localized in certain places; not so pneumonia; that the diseases differ widely in symptoms and anatomical characters, and that their distinctive symptoms and pathological characteristics are still more widely at variance; that they differ widely as regards their respective modes and periods of incubation; that the susceptibility to pneumonia is never exhausted by repeated attacks; that the power of acclimatization does not extend to pneumonia; that pneumonia autumnal fevers are not convertible diseases; and by many collateral evidences, it is demonstrated that these diseases are and must be essentially and under all circumstances dependent upon entirely distinct proximate causes, however indirectly certain pneumonias may depend upon the malarious poison. In his closing chapter our author takes up the consideration of those combinations of autumnal fevers and pneumonia which are so common in malarious districts, and shows that such cases must not be considered as pecuiliar forms of either.

But we have already exceeded the limits proscribed for the examination of this excellent treatise; we cannot however forbear making the following quotation from the author's closing remarks:—He says, "Those who raise such an outcry about the necessity of facts, and reprove the most authoritative writers and teachers for a supposed adherence to preconceived notions, and a neglect of the true principles of the inductive philosophy, should first satisfy the profession, not only that they are less liable to error than their opponents, in drawing deductions from the facts that may happen to collect, but that these facts have been examined in a way calculated to secure advantageous
results. They should remember that, great as the number of useless
theories may be, it sinks into insignificance when compared with the
amount of incomplete facts which float around us. To observe accu-
rrately—to seize the important and useful points in the case examined
—to discover its true bearing to other cases, its exact analogy to, or
dissimilarity from those—to ascertain its dependence or independence
of surrounding influences—to point out accurately the morbid agencies
which have produced it, and to ascend by an analysis of its symptoms
and anatomical characters, to its pathological nature and therapeutical
indications, require a degree of skill, a tact, a habit of close observa-
tion that are not easily acquired, as well as opportunities for investiga-
tion that do not fall to the lot of every one.

We have finished our reading of Dr. La Roche’s treatise with feel-
ings of sincere gratitude to its learned author for the lasting benefit
he has conferred upon our profession in thus collecting and arranging a
vast and connected series of medical facts which never before have been
so thoroughly analyzed or so perfectly classified—a labor which few
medical men have the means or the ability of doing for themselves;
and we think that all lovers of medical science must unanimously ex-
press their earnest desire that from the same rich storehouse and the
same graceful pen which have given us this goodly volume, other works
of equal value should speedily be issued, as we feel assured they may,
without exhausting the accomplished author’s resources.  

E. H.

ART. XII.—Annual Report of the City Inspector of the City of New

The large amount of important matter which this Report and its ta-
bles contain, and the perspicuity and conciseness of arrangement, reflect
creditably on the industry and fidelity of the City Inspector, and this
annual document, a few years since almost valueless, is now highly in-
teresting and instructive to those interested in vital statistics.

The total number of interments during the past year, was 22,702;
of these 1,576 were stillborn, and 355 born prematurely; 97 died of
malformation, and 175 of old age; 12,230 were males, leaving 10,472
females. The monthly mortality was greatest in August, next in July,
and least in April, May, and November.

The number of foreigners who died during the year, 7,104; or over
31 per cent of the total mortality. Of these 4,217 were Irish, 1,576
Germans, and 538 English.
Critical Analysis.

The diseases which proved most fatal during the year, were as follows:

<table>
<thead>
<tr>
<th>Disease</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>2739</td>
</tr>
<tr>
<td>Cholera Infantum</td>
<td>922</td>
</tr>
<tr>
<td>Marasmus</td>
<td>1156</td>
</tr>
<tr>
<td>Dropsy in head</td>
<td>903</td>
</tr>
<tr>
<td>Inflammation of Lungs</td>
<td>1067</td>
</tr>
<tr>
<td>Dysentery</td>
<td>763</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>689</td>
</tr>
<tr>
<td>Croup</td>
<td>673</td>
</tr>
<tr>
<td>Small Pox</td>
<td>656</td>
</tr>
</tbody>
</table>

The following table gives the monthly mortality from these diseases:

<table>
<thead>
<tr>
<th></th>
<th>Jan.</th>
<th>Feb.</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consump.</td>
<td>247</td>
<td>220</td>
<td>248</td>
<td>228</td>
<td>217</td>
<td>209</td>
</tr>
<tr>
<td>Marasmus</td>
<td>45</td>
<td>43</td>
<td>57</td>
<td>62</td>
<td>55</td>
<td>70</td>
</tr>
<tr>
<td>Inflammation of Lungs</td>
<td>109</td>
<td>94</td>
<td>140</td>
<td>113</td>
<td>81</td>
<td>86</td>
</tr>
<tr>
<td>Cholera Infantum</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>117</td>
</tr>
<tr>
<td>Dropsy in Head</td>
<td>57</td>
<td>90</td>
<td>90</td>
<td>65</td>
<td>54</td>
<td>29</td>
</tr>
<tr>
<td>Dysentery</td>
<td>18</td>
<td>21</td>
<td>19</td>
<td>19</td>
<td>20</td>
<td>54</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>12</td>
<td>16</td>
<td>8</td>
<td>18</td>
<td>18</td>
<td>68</td>
</tr>
<tr>
<td>Croup</td>
<td>63</td>
<td>58</td>
<td>70</td>
<td>55</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>Small Pox</td>
<td>53</td>
<td>57</td>
<td>49</td>
<td>46</td>
<td>60</td>
<td>36</td>
</tr>
</tbody>
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</tr>
</thead>
<tbody>
<tr>
<td>Consump.</td>
<td>203</td>
<td>230</td>
<td>224</td>
<td>261</td>
<td>214</td>
<td>238</td>
</tr>
<tr>
<td>Marasmus</td>
<td>152</td>
<td>203</td>
<td>151</td>
<td>100</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Inflammation of Lungs</td>
<td>53</td>
<td>47</td>
<td>46</td>
<td>67</td>
<td>105</td>
<td>116</td>
</tr>
<tr>
<td>Cholera Infantum</td>
<td>308</td>
<td>316</td>
<td>115</td>
<td>37</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Dropsy in Head</td>
<td>90</td>
<td>116</td>
<td>61</td>
<td>70</td>
<td>53</td>
<td>78</td>
</tr>
<tr>
<td>Dysentery</td>
<td>146</td>
<td>182</td>
<td>135</td>
<td>87</td>
<td>41</td>
<td>21</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>152</td>
<td>160</td>
<td>119</td>
<td>42</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>Croup</td>
<td>28</td>
<td>32</td>
<td>36</td>
<td>81</td>
<td>70</td>
<td>89</td>
</tr>
<tr>
<td>Small Pox</td>
<td>21</td>
<td>28</td>
<td>26</td>
<td>58</td>
<td>90</td>
<td>132</td>
</tr>
</tbody>
</table>

This table furnishes us several interesting facts. We see consumption presenting a nearly uniform mortality in the different months, contrary to the popular belief. Marasmus was more fatal in warm than cold weather, and the bowel complaint most severe in August, which was also the month of the highest average temperature.

It will be recollected that coup de soleil or sun stroke, caused an unusually large number of deaths last summer (260). Twenty-five of these occurred in June, one in July, two hundred and twenty-four in August, nine in September, and one in October. The Inspector adds, that most of these cases were unacclimated foreigners; 204 were males, leaving 56 females. In no previous year, has there been reported a larger number than 36 deaths from this cause. According to an interesting article on the sanitary condition of the summer of '53, published in the Journal a year ago, it would seem that the humidity of the atmosphere as well as the high temperature produced these cases.
BIBLIOGRAPHICAL NOTICES.


The appearance of the present edition of Dr. Carpenter's work on Comparative Physiology has long been impatiently anticipated by advanced students in physiological and natural science. The delay, however, in its publication in this country, arose from circumstances which reflect creditably upon the American publishers, and add materially to its value. It has been their purpose to bring out the volume in a condition not at all inferior to the foreign edition as regards illustrations, and to accomplish this required time and preparation.

The first edition of this work appeared in 1839, the second in 1841, and the third in 1851. Neither of these editions was republished in this country, but by an arrangement between the English and American publishers, the third edition was printed on joint account, and thus it appeared in this country. Its reception was such as to induce the latter to reprint the next English edition, in order to have it range with their reprint of the same author's work on Human Physiology.

The author states that this is not altogether a new edition of the original work on the "Principles of General and Comparative Physiology," for the success of the previous edition of that work induced him to change the plan, whereby he has been able to add much new matter, and bring each subject completely up to the present time. This edition appears, therefore, as a treatise on Comparative Physiology, and it is the author's design to follow it with the General Physiology of the former edition as a companion volume. Thus by a division of subjects, he is enabled to render each part as perfect as the advancing Science of Physiology will admit of, under any circumstances.

The importance of a thoroughly scientific and comprehensive work on Comparative Physiology cannot be over-estimated. This science commends itself to the attention of the student not less by its inherent attractiveness, than by its necessary connection with a proper understanding of Human Physiology. It is but recently, it is true, that physiology has been recognized as part of a prescribed course of medical study, yet within that short time it has come to be considered, not merely as essential to a complete medical education, but as absolutely indispensable to a knowledge of the first principles of the science of medicine. Physiology has attained its true position, and now ranks next to anatomy in the course of study laid down by our best medical institutions. As a natural result of the importance which our schools have latterly given to physiological studies, a class of earnest and successful cultivators of this science have risen, who are doing more perhaps than any other, to give us a national reputation in the medical world.
We hail, therefore, the appearance of a work like this, which will tend far more powerfully than its predecessors to stimulate the growth and extension of physiological science in this country. It contains within the compass of a fair-sized volume a complete survey of the animal kingdom in its physiological relations, and presents us with the most recent opinions and latest researches of the best authorities. It is written in the pure, classical, and perspicuous style for which Dr. Carpenter has been so justly celebrated, and while, therefore, it is adapted to the comprehension of the beginner, and may serve him as a text book, its completeness will render it a work of reference to the most advanced student in this department of natural science. A most valuable addition to this edition is a full bibliographical index. Of the execution of the work we cannot speak too highly. The illustrations are numerous, original, and in the very best style; the typography clear, and the general appearance of the volume is neat and elegant.


Prof. Kolliker very justly remarks in the preface to this work that "Medicine has reached a point at which Microscopical Anatomy appears to constitute its foundation, quite as much as the anatomy of the organs and systems; and when a profound study of Physiology and Pathological Anatomy is impossible, without an accurate acquaintance, also, with the most minute structural conditions." He considers it the duty, therefore, of the cultivators of this branch of science to communicate the results of their researches to all who are devoted to the study of Man, and to render them easily available by students and practitioners. With this view he has prepared this manual, omitting all polemical disquisition, and leaving the history of the science in the back ground. For further information he refers to his "Microscopical Anatomy," in which the data for all that is here only briefly expressed, will be found.

The value of this work is to be estimated not only by the intrinsic importance of the subject-matter which the author has modestly asserted, but also by the high authority which the sanction of his own investigations attaches to them. Prof. Kolliker now ranks as the first living Histologist. Although undoubtedly anticipated in the discovery of some of the principal facts in histological science by Martin Barry, he has, nevertheless, the great merit of having cultivated every portion of this fertile field, and reduced these isolated facts to order, and therefore developed a beautiful and symmetrical science.

The work before us is a reprint of the Sydenham Society Edition, which was translated by Mr. Busk, and Mr. Huxley, names highly distinguished in microscopical science in Great Britain. They seem,
however, to have been anticipated in the actual commencement of the translation of the work by our countryman, Dr. Da Leosta, who, impressed with the absence from our medical literature of a systematic treatise on Microscopic Anatomy in its connection with Physiology and Pathology, had already formed the design of translating Prof. Kolliker's Manual, and was progressing with the work when he learned the intention of the Sydenham Society. As the time and labor requisite for an original translation would have prolonged the publication of the work far beyond the appearance of the English edition, he resolved to adopt the translation of this Society, and merely append such notes as he intended to have added to his own edition.

In the execution of this plan, he has noted all the more recent contributions to Histology, and incorporated into the text many paragraphs from the author's larger work. He has also communicated recently with the author, and learned his present opinions on subjects which have been more thoroughly investigated since the publication of his work. All slight deviations from previously expressed opinions have thus been carefully noticed. The American edition is also furnished with an index, in which all other editions are deficient. To complete the summary of the improvements made by the American editor and publishers, we must add that the wood-cuts are those used in the original German edition.

It will be seen that this edition is superior to the English in the completeness of the subjects and the accuracy of the investigations, and in the beauty and fidelity of its illustrations. It is also much more convenient in having a copious index, and in being published in a single volume.

ART. XV. The Principles of Animal and Vegetable Physiology: A Popular Treatise on the Functions and Phenomena of Organic Life. To which is prefixed a general view of the great departments of Human Knowledge. By J. STEVENSON BUSHNAN, M.D., Physician to the Metropolitan Free Hospital, etc., etc. With one hundred and two Illustrations on Wood. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 234.

The Principal Forms of the Skeleton and of the Teeth. By Professor R. OWEN, F.R.S., etc., Lecturer on Comparative Anatomy, etc., etc. Philadelphia: Blanchard & Lea, 1854. 8vo., pp. 329.

These two small volumes, we are informed in the Publisher's preface, belong to a series of works which are being published in London under the title of Orr's Circle of the Sciences. The editor of the series is Dr. Bushnan, the author of the first volume above announced. The design of this series is to furnish a class of works upon the most important and useful branches of natural science, suited to popular reading, and which may serve as guides to the student in the pursuit of knowledge in any department of which they treat.

No one who reads this interesting volume will fail to derive from it a good degree of practical instruction. If there was wanting evidence of the diversity of opinion, on a point of medical practice, we feel assured that a perusal of this monograph will fasten the conviction that it did not exist on the point of bloodletting in mental disorders.

The object of Dr. P. in preparing this work has been to answer the following question, viz. :—To what extent, in regard to both frequency and quantity, is the abstraction of blood required in the treatment of Insanity? The final answer to this question is summed up in the following conclusions :

1. Insanity, in any form, is not, of itself, an indication for bloodletting.

2. On the contrary, its existence is, of itself, a contra-indication. Hence, the person who is insane should, other things being equal, be bled less than one who is not insane.

3. The usual condition of the brain, in mania, is not that of active inflammation, but of a species of excitement, irritability, or irritation, perhaps more frequently resulting from or accompanied by anemia, debility, or abnormal preponderance of the nerves over the circulatory functions, than in connection with plethora and enduring vital power.

4. The excitement, both mental and physical, produced by this irritation, can, in most cases, be permanently subdued, and its radical source removed by other means, more readily than by bleeding.

5. Yet insanity may be coexistent with conditions,—such as positive plethora, a tendency to apoplexy or paralysis, and sometimes sthenic congestion or inflammation, which call for the abstraction of blood. Therefore,

6. Venesection in mental disorders should not be absolutely abandoned, although the cases requiring it are very rare.

7. As a general rule, topical is preferable to general bleeding.

8. In many cases where the indication for direct depletion is not urgent, but where bloodletting, particularly if local, might be practised without injury, it is safer and better to treat by other means, equalizing the circulation and promoting the secretions and excretions.

9. The physical conditions requiring blood-letting more frequently exist in mania than in any other of the ordinary forms of mental alienation.

10. Insanity following parturition, other things being equal, is to be treated by bleeding less frequently than that which has its origin in other causes.

11. If the mental disorder be the direct result of injury to the head, the treatment must be directed to the wound, or its physical effects, not specially to the psychic condition.

12. In many cases where insanity is accompanied by typhous symptoms, and in some where the aspect is that of acute phrenitis, active stimulants alone can save the patient, and direct depletion from the circulation is almost certainly fatal.
PART THIRD.

FOREIGN MEDICAL RETROSPECT.

PRACTICAL MEDICINE.

Scarlatina Complicated with Acute Rheumatism. By Dr. Henry Kennedy.—Pains of a rheumatic character, in connection with scarlatina, present themselves to our notice under three very different aspects, which it is necessary to bear in mind. In the first, they usher in the attack; in the second, they appear whilst the eruption is still out on the patient—the disease being at its height; and in the third they come on just after the attack is over, and form then what may be called a sequela of the disease. Of the first it will not be necessary to speak at any length; they are exceedingly common at this period, and are, in fact, exactly analogous to those pains which are so well known as ushering in nearly all the forms of acute disease. It is also worthy of remark, that precisely the same character will be noticed in connection with them as may be observed in our ordinary fevers; that is, that at certain periods these pains are very much more prominent symptoms than at others; in fact, they may be so severe as to constitute the leading cause of complaint. In my own experience, they are more common in adults affected with scarlatina than in children; and this we might presuppose, inasmuch as rheumatism is a more frequent disease in adult than in early life. The pains I now speak of are usually described as passing through all the limbs, though I have seen them often confined strictly to the joints—such as the knees and wrists,—and even in some cases a certain amount of swelling may be observed; this, though, is the exception to the general rule. These pains may be classed amongst the premonitory symptoms of the first stage of scarlatina; that is, when they are present; for numerous cases occur where they will be scarcely noticed. Pains of precisely the same character generally usher in an attack of rheumatic fever. In the majority of cases these pains subside after two or three days, and so leave the scarlatina to pursue its own course. In other instances they go a stage further; and then we have the joints swollen, the attendant redness, and every sign of well-marked rheumatic fever, excepting that there may not be such profuse sweating as commonly attends that disease when existing per se. I am now speaking of a period when the rash is fully developed, and at the same time the joints severely affected with acute rheumatism; a point which I believe to be of some importance, and which, in January, 1853, came under my notice in a very marked way, in a family of five brothers and sisters, in each of whom
rheumatism of the joints was the leading feature of the attack. In two only, however, were the joints swollen precisely as in acute rheumatism, while the rash was still visible, and the throat of each very sore. To a brief notice of these two cases I shall beg to call attention.

Case I.—A lady, aged 23, unmarried, was attacked with the usual premonitory signs of scarlatina four days previous to my seeing her in consultation. She suffered at first from severe headache, sore throat, and general pains through the body; these signs were shortly followed by a well-marked rash, without, however, any improvement in the pains, which, on the contrary, seemed rather to increase in intensity, and at the same time to localize themselves about the lower joints, which shortly became swollen. It was in this state that I first saw her. Her pulse was 116, full and bounding, but compressible; her tongue and throat morbidly red and dry, particularly the latter, which presented an angry, glazed appearance, attended with much swelling of the internal fauces; the rash was still visible in patches; the skin was morbidly hot, even though it gave a feeling of trivial moisture; the heart’s action was regular, and there was no souffle; the distress was very great, and entirely referred to the swollen joints; the knees, ankles, wrists being all engaged, and beside these the nape of the neck.

Case II.—A sister of this patient, aged 17, lay in the same room. She had some symptoms identical with the first case, but with her the rash was still fully out; her joints were also affected with acute rheumatism, though not so many as in the former case; her pulse was 140, and very weak; and her throat was much engaged. It was, however, owing to most distressing and alarming fits of violent dyspnœa that I was asked to see this patient; and on the most minute examination I could not detect any thing wrong with either the lungs or heart, though it was possible the latter might have been engaged, and more especially since the pulse was so rapid; there was no external swelling of the neck, such as I have often seen attend severe dyspnœa, nor such a state of the internal fauces as would account for it. I should have stated, that this girl’s distress was referred to the larynx, and chiefly to the left side. Under these circumstances I came to the conclusion that the fits of dyspnœa must be nervous, and on the treatment I shall presently make a few remarks. These two cases were good examples of the combination of acute rheumatism with scarlatina; and it may be remarked, that the remaining three members of the same family had all severe pains in their joints, though no swelling was visible.

The third and last way in which rheumatism may complicate scarlatina is by coming on as a sequela of the attack; that is, after the rash has declined, and the patient may have made some approach to convalescence. Of this occurrence I have now seen several well-marked examples. The following may be given as bearing on this point:—

Case IV.—A boy, aged four years, was convalescent from scarlatina about one week, when he was again attacked with very high fever, attended by swelling of the parotid region, which was soon followed by signs of effusion into all the larger joints. The first day I saw the case, the mother had sent for me on account of the swelling of the
neck, which had caused a state of wry-neck, and as no other part was then affected, I set down the case to be one of those swellings of the neck which it was so common, at that time, to meet, in connection with this exanthem. The next day I found the child was suffering severely from pains in the ankles and wrists, while the neck was still more painful than the day before. The child had been raving and screaming all night, the fever was at the highest pitch, and the skin was absolutely burning: the affected joints were red and swollen. The following day I found the ankles quite free from swelling and pain, while the knees had been attacked with both. It is enough for my present purpose to add, that this child got well in some days. The cases which have been given are sufficient to establish the fact that acute rheumatism may exist with scarlatina, or may occur as a sequela of that disease; it was, however, for another purpose than the mere announcement of this fact that they have been brought forward now. I wish to speak of them in reference to the question of diagnosis, for in this point of view there is really more difficulty than might at first sight appear. Acute rheumatism may be thought an affection, about the diagnosis of which there could be little or no doubt. Under the circumstances, however, that I am now speaking of the disease, it is a very different matter, and cases, I am aware, will occur where the greatest doubts will exist as to the nature of the attack. The disease with which acute rheumatism may be confounded is, of course, the well-known one where purulent effusion takes place in the joints or elsewhere,—an affection by no means uncommon in scarlatina, and about as fatal as can be met with. In the last case I gave, that of the boy of four years old, I had first set down the disease as one of purulent effusion; it had really every symptom of that formidable affection. The way in which the attack commenced, by the swelling of the parotid region, was little likely to lead to a correct diagnosis, and it was only the day following this, when four of the larger joints were attacked, that the question arose as to what was the nature of the disease; at this time there was a something about the case which struck me as strange. I observed, that though there was swelling of the neck, still it had not increased from the day before; now this fact, coupled with an intense degree of fever (supposing the case to be one of purulent effusion), had never before occurred in my experience, for twenty-four hours had always proved sufficient time to have caused a material increase in the swelling; here, however, it will be observed, there was none. But, again, as far as I had seen, no case had ever come under my notice amongst children, where pus was poured into four of the larger joints simultaneously, as appeared to have taken place here: it was usual to find but one joint affected at a time, and if more were attacked, it was in succession. For these reasons, then, I was kept in a state of suspense, which the following day cleared up, as already detailed. This case, which was also seen by my friend, Dr. Croker King, now of Galway, was to me one of great interest, being the first instance I had seen where a distinct rheumatic attack, and of a very severe nature, set in after scarlatina.

On the subject of treatment one or two remarks will suffice. In
the first case given, where acute rheumatism coexisted with scarlatina, after paying attention to the state of the bowels, she was, ordered the decoction of bark in full doses, together with a good opiate, in the form of morphia, at night; subsequently the bark was given in the effervescent form, and this case made a very good recovery as regards the rheumatism, though a long period elapsed before she enjoyed her usual health. In the second case, where, with rheumatism and scarlatina, there were also fits of urgent dyspnea, an emetic was administered with very marked advantage; subsequently she took lemon juice with good effect, and her recovery was a very quick one. Of the treatment of rheumatism complicated with scarlatina, I have had comparatively little experience. But I believe some plan, like that just given, and of course suited to the demands of each particular case, holds out the best prospect of a rapid recovery. Bark in full doses is certainly useful, nor does a furred tongue, and other signs of fever, deter me from its use. On the other hand, there are cases where it does not agree, and these I am unable to describe particularly. I recollect well, in a conversation with the late Mr. Colles, his stating the very same thing in reference to the ordinary acute rheumatism, viz.: 'that in many cases of the disease, bark was the proper remedy, whilst in others again it disagreed.—Dublin Quar. Jour.

Opiate Inhalations and Fumigations. By Dr. Lombard, of Geneva.—I am aware that the attempt has often been made to introduce opium in the nasal fossa, chiefly for the abortive treatment of coryza, either by means of injections of water and laudanum, or by making the patient sniff up a powder of sugar and morphine mixed. But the end I wish to attain is very different; the greater tenuity of the smoke, not less than its warmth, allows it to penetrate, without pain as without difficulty, into the crevices of the nasal fossa; a result which cannot be obtained by a liquid, still less by a powder, however impalpable. The method that I am about to submit to your notice, after two years and a-half of clinical observation, seems to me very different from those of which I have just spoken, and I can affirm, without the least fear that experience will contradict my assertion, that the inhalation of opium smoke into the nasal fossae is a most useful therapeutic resource. I shall first mention some of the cases in which it has prospered admirably in my hands. You have, no doubt, met with, in your practice, cases of coryza, accompanied with lancinating pain in the frontal sinus; pain which sometimes becomes very intense. In such cases it is, that I have seen the opium fumigations produce truly marvellous results; pain has ceased as if by enchantment, and an almost intolerable state has been succeeded promptly by remarkable relief.

In a case of this kind that was under my care some eighteen months ago, the pain was so intense as to make the patient cry out, and induce him to believe, although of a firm and by no means pusillanimous disposition, that he was suffering from a dangerous cerebral affection. These pains came on in the course of a catarrh, accompanied by intense coryza, produced by a cold blast playing all night on the face of the
patient. Two or three fumigations were sufficient to remove the pain. Some slight return of the same suffering yielded promptly to the same remedy, to the exclusion of all other treatment. A cure so prompt and easy gave me confidence in a remedy that I then merely experimented with, especially when my memory recalled a great number of cases in which other methods of treatment had failed, and the frontal pain had continued, in spite of the most varied medication.

The opiate fumigations are of use not only in the continued neuralgic pain, as in the patient already alluded to, but also in the periodic form of that disease; for this circumstance does not prevent the success of the inhalation of opium. In fact, in the majority of cases I have had to treat, the frontal, temporal, or zigomatic pain accompanying catarrhal coryza is met with under the periodic form; nevertheless, this method is quite sufficient to cure the malady, without the assistance of any other medicament. Two patients, on whom I tried the effect of opiate fumigation in February, 1852, were both attacked with coryza, complicated with periodic pain. In one of them the access returned regularly at eight o’clock in the morning, and lasted till four o’clock in the afternoon; whilst, in the other, the afternoon was the time at which the return of the periodic frontal pain took place; in both cases the opiate fumigations, without any other treatment, brought about a prompt recovery. It is not only in the cephalalgia connected with coryza, that I have thus employed opium, but also in certain cases where the neuralgic pain was symptomatic of some other morbid affection, or idiopathic. After making mention of a variety of other cases in which Dr. Lombard had adopted this mode of treatment, so as either to cure or considerably relieve his patients, he proceeds to consider the doses of the drug, and the manner in which it should be used.

I commenced with five centigrammes (about one grain) of pulverised opium, mixed with as much sugar, and sometimes an equal part of gum benzoïn; later I ordered ten or fifteen centigrammes in each fumigation; but the intermediate doses of ten centigrammes seemed to answer all the indications, and produce the desired effect. I have repeated the fumigations two or three times a day, but sometimes having had recourse to them oftener, I did not regret it, having witnessed no bad effect from it.

As regards the mode of administration, it is as simple as possible:— I heat in the fire a thin plate of iron, as a shovel for example, and I direct the patient to take the powder in small pinches and throw it on the hot iron, taking care to hold the head over it, so as to breathe the fumes freely not only through the nostrils but also through the mouth. I have often employed the smoke of opium, obtained by another method, which consisted in mixing a solution of opium with agaric prepared and properly dried. By soaking a certain quantity of amadou in a known quantity of this tincture, we can administer a dose as exact as of the powder itself. The amadou so prepared is lit and burnt under the nose of the patient. In fine, I do not hesitate to advise the employment of opiate fumigations in all cases of neuralgia occupying the frontal, temporal, or zigomatic regions, either of a con-
Epigastric Neuralgia. By Dr. Lees.—William Swan, aetat. 38, stout, healthy-looking man, of temperate habits, and in good employment in Mr. Roe's distillery, was admitted, under my care, to the Meath Hospital, complaining of tenderness and intense pain on the slightest pressure in the epigastric region, over a space about the size of a five-shilling piece, immediately under the ensiform cartilage. On the slightest touch of the hand his face assumes an expression of great agony, and is bedewed with cold perspiration. He says that he never experiences pain in the stomach, but that, after eating, he has been often obliged to lift his shirt from contact with the epigastrium, as the tenderness caused by even its opposition was intolerable, although it was not aggravated by increasing the pressure. The state of his general health and appetite is good; functions natural; tongue clean; bowels regular; no thirst; nausea, or vomiting. He does not suffer from flatulence, has no headache, but is very low spirited. The circulation is languid; pulse 56; heart's action feeble, but regular, and without any murmur; the abdominal muscles are in a state of constant tension, hard and rigid; there is no evidence of any tumor, nor abnormal pulsation in the epigastric region; neither pain nor tenderness in the back, nor in the course of the intercostal nerves. His easiest posture is on his left side, with the right leg drawn up. When he lies on his back, with the right leg extended, the spine is arched, so that the hand can be passed freely under it, but it becomes quite flat in contact with the bed, on the leg being flexed. The urine is of a natural appearance, sp. gr., and reaction; no visible sediment, but on microscopic examination there are seen numerous very minute crystals of oxalate of lime aggregated in long masses.

He could not assign any cause for his complaint, except that he has been constantly employed in a very dusty meal-room, but he has neither suffered from cough, nor from any difficulty of respiration.

Tincture of aconite was applied over the tender part, but without any relief. I then ordered:—

A Infusi Valerianae,
Cinchone, a a 3ij.
Sumat 3i. ter in die; a small blister over the part, and to be dressed with Acetate of Morphia ointment, gr. i ad 3i.

He was allowed meat every day, and advised to walk about and amuse himself. Under this treatment he rapidly improved, and was nearly quite free from his complaint when I resigned him to the care of Dr. Stokes. He, however, unfortunately relapsed, but was cured eventually by continuing the same medicine, and by the repeated application of leeches over the part. If the subject of the above case had been an unmarried female, I should have had little hesitation in regarding it as one of those anomalous forms of hysterical affection occurring in that class of persons; but I confess that, at first, I felt in doubt as to
the cause of this man's sufferings. The superficial seat and character of the pain evidently showed that it was not gastralgia, while the absence of thirst and of fever satisfied me that there was no inflammatory action in the mucous membrane of the stomach. There was no evidence of inflammation in or under the skin, nor in the sheath of the rectus muscle, as occurred in a case under the care of Dr. Neligan, and which presented nearly similar symptoms. My case was examined carefully for aneurism of the abdominal aorta, for disease of the spine, and for psoas abscess, as the peculiar arching of the spine in the horizontal position led us to suspect that there was some change of structure in these parts which might account for this occurrence; but the most careful investigation by Dr. Stokes and myself could not detect any evidence of disease there, nor in the circulatory or respiratory apparatus. I, therefore, came to the conclusion that it was a form of neuralgia, and the result of my treatment satisfied me that I was right.—

_Dub. Hosp. Gaz._

_Chloroform in Fever._ Dr. Gordon, of the Hardwicke Fever Hospital, resorts to the use of chloroform to subdue the nervous irritation in fever, and obtain sleep. He remarks:—

To the different means which have been made use of for this purpose, I would now add the internal administration of chloroform. I have used it with the happiest results when all other means had failed, and I can speak with confidence of its certain and speedy action. The following ease affords a good example of its effects, and the mode of its administration:—

Patrick Dempsey, aged 25, was sent from Santry to the Hardwicke Hospital, on the 8th of December; he had been eleven days ill of fever; his body was covered with dark-colored macula; his pulse was 110, and very weak, his speech muttering and indistinct; he has subsultus in both upper and lower extremities. His head was shaved, he was ordered the bark mixture of the hospital, and half a pint of wine. Late in the evening he began to rave violently, and could not be induced to remain in bed; he was ordered large doses of hyoscyamus, and the back of his head was blistered; he was so violent as to require the use of a strait waistcoat all night. December 9.—Has not slept since admission. Pulse 132; very weak. He continues constantly muttering and raving. Tongue dry and brown; eyes slightly suffused; head not very hot; respiration short, frequent, and irregular. He still requires the strait waistcoat to keep him in bed. He was now ordered twenty-five minims of chloroform in a draught, to be repeated in an hour. After the second draught his agitation and restlessness ceased, and the waistcoat was removed. He dozed a little through the day, but only for a few minutes at a time. Towards night he again became restless and delirious; the same quantity of chloroform was again administered, and repeated in an hour, when he fell into a sound sleep, which continued for nine hours. He awoke perfectly sensible; the subsultus had ceased, and his pulse had fallen to 100. He continued to improve, and in a few days was convalescent.

In this, and other similar cases, chloroform acted by producing

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anaesthesia of the sensory nerves, and exerting a paralyzing influence on the muscular fibre; and this it appears to effect without depressing or deranging the nervous force, as is the case with sedatives in general, while it is altogether free from the objection of causing depression of the action of the heart, as is the case with some special sedatives. My colleague, Dr. Corrigan, has just treated a somewhat similar case by the internal administration of chloroform. I had an opportunity of daily witnessing the progress of the case; and, by his permission, I here append it.

Denis Behan, act. 20, a porter from High street, was admitted into the Hardwicke Hospital, January 4, 1854, the fifth day of his illness. On the sixth day he was thickly covered with bright maceule. His tongue was loaded, but moist; his pulse 112; respiration 22; no abnormal sound in the lungs; no tenderness of abdomen. He is reported not to have slept for two nights. His eyes are red and injected, and his head hot. His head was shaved and cold lotion applied. Seventh day.—Pulse 116; respiration 28; slept but little. Eighth day.—Pulse 120; very feeble; respiration 32. Ordered bark and wine. Ninth day.—Pulse 126; very feeble; respiration 32; head hot; constantly raving, and getting out of bed; no sleep; subsultus of hands; tongue dry; great difficulty of utterance. Vesicatorium nucæ; eight ounces of wine. Tenth day.—Pulse 130; weak; raving continually; difficult to restrain; requiring the strait waistcoat; constant talking; no sleep; tongue brown and dry in the centre; thirsty; eyes very congested; pupils dilated. Chloroform was now administered by inhalation, without any other effect than the pulse being slightly reduced in number. The patient was in no way quieted by it. Four leeches were now applied to the temples without any good effect. At 5 p.m. he took ᵃₛ ss. chloroform by the mouth, and continued it every second hour till 11 p.m., when, as he did not sleep, and the delirium continued, he took a similar dose of chloroform every hour through the night. At 3 a.m. he was somewhat quieter, but the same dose was continued every hour till 8 a.m. Eleventh day, 10 a.m.—Much quieter, but has not slept. Pulse 110; pupils natural size; subsultus nearly gone; tongue brown all over; sordes on teeth; bowels free; urine high colored, sp. gr. 1.030. Another dose of chloroform in the same quantity was again administered; about twenty minutes after its exhibition he fell into a quiet sleep, which lasted two hours. Shortly after waking, he took another half drachm of chloroform, when he almost immediately fell asleep, and awoke after several hours much refreshed and quite collected. His return to health was further indicated by the immense quantity of nitrate of urea, which an excess of nitric acid deposited from the urine.

In the above case the chloroform was longer in producing the effects than in any instance in which I have yet used it. We learn from it, however, that we are not to be discouraged by the apparent failure of the first dose or two in procuring sleep, for, as in the present case, although actual sleep may not be at once procured, we may expect that a state of calm and quietness will be induced, which would soon be followed by "Nature's sweet restorer, balmy sleep." We learn also
from this case, that the inhalation of chloroform is, to say the least, useless in procuring sleep in cases of cerebral excitement in fever. I had, on one occasion before, in the Hardwicke Hospital, fully tried this mode of administering it; its inhalation was followed by general convulsive movements, very similar to an epileptic seizure, and I have not since administered it by inhalation in any similar case. Dr. Corrigan carefully tried the effect of inhalation three times in the above case; each time without any good effect.—Dub. Hosp. Gaz.

_Treatment of Delirium Tremens._ Dr. Peddie (Monthly Journal) deprecates the employment of opium and stimulants in the treatment of delirium tremens and gives a decided preference to antimony:—The treatment recommended by Dr. Graves, to which I have already referred, is advocated on the ground that opium is highly dangerous in the early part of the paroxysm. His rule of practice is to begin with tartar emetic alone, with the view of combating vascular excitement, then to add a little opium, and gradually to increase the quantity, keeping its action carefully guarded and controlled by the antimony, until at last, when engorgement of the cerebral vessels is no longer to be apprehended, to use opium alone. If opium is to be given at all in delirium tremens, this is certainly the safest mode of prescription. For some time I tried it, but from considerable previous experience of the beneficial effects of antimony in this disease, I soon became convinced that it was from that agent solely, especially its effects in the first stage, that ultimate benefit was derived; that the relative quantity of opium employed at first is too small to counteract the power of the antimony, or to produce any notable effect whatever; that in ordinary cases, the time arrives for increasing much the amount of the opium, the affection has run, or nearly so, its natural course, and the period for the salutary sleep commencing is at hand; and that when a greatly-increased dose is given before this much wished-for change has arrived, there is a proportionate increase of excitement and consequent delay of its occurrence.

From these considerations, I resumed the use of the antimony alone; and, during the last ten years, I have treated upwards of eighty cases of the genuine disease, many of them very severe ones, with uniform success,—not only in regard to the rapidity of the immediate recovery, but the comparatively thorough restoration to a healthy condition of body and mind;—as much so at least, as could possibly be expected in individuals, many of whom had been, and were likely soon again to become, habitual drinkers. The dose which I have been accustomed to give has ranged from one quarter to one-half of a grain, in simple solution, every two hours, sometimes at shorter intervals, according to the degree of excitement and irritability. The action of the antimony appears to be chiefly sedative. Its direct influence is to reduce the vascular excitement of the brain, soothe the nervous system, and diminish muscular power; and its more indirect action is exerted on the functions of the skin, kidneys, and intestinal canal. In two or three instances only have I found it necessary to suspend its employment, in consequence of diarrhea and hemorrhagic discharge from the bowels;
and in these cases I substituted digitalis and ipecacuan with marked benefit; and I do not recollect of ever seeing it produce continued vomiting, although occasionally I have found the first or second dose eject from the stomach a quantity of bile. It is for the sake of its emetic effect that, in Germany and America it has been prescribed in large oft-repeated doses, even from four to seven grains every hour, and that, too, according to report, with benefit. But although there is, doubtless, extraordinary tolerance of this agent in delirium tremens, I do not think that the use of such, or any other very heroic means, are warranted. -Bleedings, large opiates, or large doses of tartar emetic, are all, although certainly not equally, unsafe, and therefore to be deprecated. An antimonial course of treatment in moderation and with the design I have indicated, gently diminishes excited action, induces weariness of muscle, general nervous exhaustion, and mental languor. It thus removes all hindrances to the occurrence of the salutary sleep. It prepares the way for it, not by forcing, but by favoring it; and when the individual, exhausted, seeks his eough, and finds repose, that goes on, not as a drugged sleep, but as a purely natural and profound repose, from which he awakes with restored reason and muscular control.

Success of different methods of treating Cholera. By John Crawford, M.D., Physician to the Glasgow Cholera Hospital.—The different modes of treatment employed in the various forms of choleraic disease, with their respective results, are exhibited in the following table:

Table showing the Results of Five different Modes of Treatment.

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In reference to this table, the following explanations may be necessary. In the first place, in all, or mostly all cases, counter-irritation to the epigastrium and abdomen, by means generally of sinapisms—occasionally of turpentine and ammoniacal epithems, and in many cases by blistering—was used. It must, therefore, be understood, that the cases in the first column shared the benefit of this practice, though "salines alone" were administered as medicines. The "adjuncts" of the second column were almost exclusively opiate enemata and stimulants—wine, brandy, and ammonia; the opiate enemata
being generally given in cases of cholera; and the stimulants—though cautiously—in collapse, or cases of cholera verging on that state. In choleraic diarrhoea, catechu and opium by the mouth were also occasionally used as adjuncts. The “salines” employed were the following:—1st. The combination of salts proposed by Dr. Stephens, viz., chlorid. sod., 3i.; bicarb. sod., 5ss.; chlorat. potass., gr. vii. These quantities dissolved in water were given every half hour, every hour, or every two hours. 2nd. The saline emula of the same writer; a table spoonful of chlorid of sodium dissolved in warm water—employed only in collapse. And here, to avoid recurring to the subject again, I may mention that, although in several cases benefit appeared to be derived from its use, the advantage was only temporary, even when every precaution was taken to administer it properly. 3rd. The bicarbonate of soda, used as afterwards described. 4th. The same followed by acidulated draughts, as afterwards explained. And, lastly (chiefly in cases of choleraic disease, with irritability of the stomach), the ordinary effervescent soda-powders.

Calomel was given in various doses in different cases—grs. x.—3i. and upwards, to produce in the first instance a sedative effect on the patient (a result which it generally failed to accomplish); in smaller doses, gr. i.—v., at intervals varying from a quarter of an hour to three hours; and in some cases in doses of gr. i. every five minutes. Upwards of 110 grs. have been continuously exhibited in this way.

Under the head of stimulants, I have also included—somewhat strangely, it may appear—the cases in which creasote and hydrocyanic acid were given to allay vomiting; but in almost all these cases, alco-

holic stimulants were also given. That both creasote and hydrocyanic acid are useful in checking the vomiting in cholera (a combination of the two, 3 drops of the former and 2 of the latter, probably answers best) is undoubted; but in this respect they are far inferior to the bicarbonate of soda, and the creasote seems frequently to be very naus- eous to the patient.

As to the effect of stimulants, the fourth column tells its own tale. It is however, to be noted, that a number of cases—hopelessly advanced in collapse, and even moribund—were admitted, in which nothing could be done beyond endeavoring to keep up the heat and adminis-
tering stimulants. These cases, hopeless under any treatment, no doubt swell the mortality under this head; but as a general rule, alike in choleraic diarrhoea, cholera, and collapse, the exhibition of alcoholic stimulants, except in a limited number of cases, and then in small quantities, has not, so far as I have seen, been productive of benefit. They are not even agreeable to the patient. Even in the prostration of collapse, the habitual drunkard will be found to turn with loathing from the proffered wine or spirits, and beg for cold water instead.

The astringents referred to in the fifth column, as conjoined with opium, were principally catechu, aromatic sulphuric acid, and acetate of lead—combinations found principally useful in choleraic diarrhoea and the milder forms of cholera. On the whole, I am inclined to prefer the acetate of lead and opium in pill (diaacetat. plumb. gr. ii.—iii., op. gr. i.) This was also found very useful in the diarrhoea which
occasionally recurs after a smart attack of cholera. In collapse, beyond an opiate emesis, if the purging still continued, I would have nothing to do with the opium.—*Glasg. Med. Jour.*

**Use of Subnitrate of Bismuth in Lavements.—By M. Trouseau.**

(St. Dublin Hospital, Gazette.)—There has been remarked of late, in France, a great amount of "diarrhoeic flux," i.e. of intestinal catarrh, with the production of glairy and bloody evacuations. Two infants, in La Salle St. Bernard, were cured in a very simple way:—They were still at the breast; one had had cholera, marked by vomiting, diarrhoea, coldness, and well marked emaciation. Opium, nitrate of silver, and other remedies were given, by which the sickness was arrested, but the diarrhoea continued. The other child had not had vomiting, but there was a glairy diarrhoea, showing that the disease was limited to the large intestine. M. Trouseau prescribed a lavement according to the following formula:—Subnitrate of bismuth, two scruples; thick linseed-tea sufficient; the mixture to have the consistency of soup. The diarrhoea ceased immediately upon the administration of the lavement. It is known that M. Monneret gives, in similar cases, to infants as much as two or three ounces (?) of the subnitrate of bismuth daily. M. Trouseau rarely goes beyond four scrupul,—very often he is content with half that quantity, administered in water, or in the form of pastilles. Dr. Lassegue, chief of the clinique of the Hôtel-Dieu, first entertained the idea of employing it as a lavement in cases of inflammation of the colon, from having witnessed its beneficial effects in certain diseases of the skin, in which some of the subnitrate, mixed with albumen or thick linseed-tea, spread upon a poultice, and rendered humid by the application of glycerine, was brought into contact with the affected parts. M. Lassegue was thus led to its employment in affections of the large intestine, and obtained results which deserve to be recorded, the more so, as the remedy being harmless, may be applied without fear in all similar cases.—*Jour. de Méd. et Chir. Prat.*

**Surgery.**

*Advantages of operating in certain cases of Hare-lip at a very early age.*—By Henry Smith, Esq.—It is obvious in the first place, that an infant with hare-lip cannot so readily take in that nourishment which is offered by nature. If, however, the deformity be remedied, the child will be placed by the aid of surgery in a much more favorable condition to receive the nutriment afforded by the mother's breast. It is plain, too, that the deformity excites most unpleasing and painful sensations in the mind of the mother and those around her; and, if the source of this anxiety can be removed at once, it is of great importance that it should be accomplished.

A third argument in favor of very early operation for hare-lip consists in the circumstance, that as the growth of the child is very rapid in the first period of life, the lip, with other structures of the body at this time, becomes more fully and fully developed, and thus,
after an operation has been successfully performed, there will be a much less chance of subsequent deformity in the part. But it is in those instances where the hare-lip is complicated with a more or less extensive fissure in the palate that an early operation for the cure of the former is so imperatively demanded, and is attended with some beneficial results; and it is to this point especially I wish to draw attention, because, although in some recent works of surgery an operation at an early period after birth is recommended, (and I may especially allude to the Practical Surgery of Professor Ferguson, and to the Surgeon’s Vade Mecum, by Dr. Druitt,) the most important reason for such a proceeding is not alluded to. And I now refer to the effect which is produced upon the fissure in the hard palate by the approximation of the edges of the lip. As long as the hare-lip remains in its primitive state, there can be no pressure upon the hard tissues underneath; but, if it be united by the surgeon, a considerable amount of pressure is exerted upon the edges of the cleft in the palate; and, in a child aged only a few days or weeks, the bones are so soft and compressible, that they are to a great extent influenced by the pressure which constantly obtains, and in the course of time the fissure becomes either entirely closed or diminished in size to one-third or one-fourth of its original extent.

I have had various opportunities of noticing this effect in instances where a very early operation has been performed for hare-lip, complicated with more or less extensive fissure in the hard palate; and so convinced am I of the importance of performing the operation as soon after birth as possible, that I invariably recommend it. And it has fallen to my lot to be called upon to perform the operation very soon after birth, where there has been, at the same time with the hare-lip, considerable malformation of the palate; and I have been able to notice the result some length of time afterwards. More than three years ago I operated upon an infant only four days old; here there was an extensive fissure extending through the hard palate into the nostril. I had an opportunity of seeing this child only a few days since, and the opening in the front portion of the palate was closed up. In this case the soft palate was extensively cleft, and that still remains open; but the parts altogether are in such a condition that, some years hence, they may be completely closed by staphyloraphy. A few weeks since, a little patient was brought to me, on whom I operated at a very early age, two years ago. In this instance there was a fissure in the hard palate, and great deformity of the jaw, a portion of which I removed at the time. There is now an admirably developed upper lip, and complete closure of the opening which existed in the palate. In another instance, where I operated at an early period, there was an immense chasm running through both soft and hard palate into the nostril. I had an opportunity of seeing this patient a few days since, and found that the anterior portion of the cleft was much diminished in size. The operation was done more than a year ago.

Mr. Bateman, of Islington, who pays great attention to this matter, operated, three years since, upon an infant only four hours after birth. In this case there was an extensive fissure in the palate. This gentle-
man kindly showed me this case, and, in reply to my inquiry regarding the effect which the operation had had upon the palate, he wrote word the other day that the child had died of hooping-cough last winter, but that its mother remarked that before death the fissure, which had at birth been 'so large that she could put her thumb into it, had contracted so much that it would scarcely admit the edge of a sheet of writing paper.' About a month since I operated upon an infant only six days old, with perfect success. In this case I was partly induced to perform the operation at this early period because there was a fissure in the hard palate, extending into the nostril. I have little doubt that, in time, if the child lives, the fissure will be completely closed.—

Med. Times & Gaz.

Treatment of Articular Diseases by Actual Cautery.—By James Syme, Esq.—Case I.—Omalgia; Application of the Actual Cautery; Cure.—Margaret Ashton, act. 25, admitted October 25, 1853; a servant; has generally enjoyed health, and has a very robust appearance. Four months ago, after exposure to wet and cold in washing, she had a severe fit of shivering, and was seized a few days after with pain in the right shoulder, just below the acromion, so severe that she could scarcely lift the arm; this lasted about twelve hours, and was followed in the course of the next day by intense pain in the left shoulder, below the back part of the acromion. From that day till her admission she was unable to raise the arm; the pain was for the first two months extreme, keeping her as if "in the fire all night," and banishing sleep almost entirely. During the last two months she has rested from work, and has suffered less. On admission she complained of constant gnawing pain in the left shoulder, and extending down the limb as far as the elbow, and sometimes to the fingers; when in the sitting posture she held the affected limb with the other hand, to ease the pain; the arm was also affected with a feeling of numbness and weakness; and although the shoulder was not very tender on pressure, and very gentle passive motion of the arm could be performed, through a considerable angle, without pain, yet any attempts on her own part to move it, produced great aggravation of her sufferings. As a result, no doubt, of habitual disuse, the muscles about the shoulder were much atrophied, and this caused a remarkable apparent prominence of the bony points, viz.: the spine of the scapula, the acromion, the anterior border of the outer part of the clavicle, and the head of the humerus. The shoulder had an appearance that suggested at first sight the idea of dislocation.

On the 3d November, the patient being under the influence of chloroform, Mr. Syme cauterized thoroughly the skin over the anterior and posterior aspects of the joint, rubbing a red-hot cautery iron freely backwards and forwards four or five times over each part. It had the effect of raising and rubbing off the cuticle, but did not char the skin. An hour afterwards the patient was suffering but little pain. Nov. 4.—Said, with a smiling countenance, that she slept well last night, the first time for four months, and feels now no pain save that of the burns. Nov. 5.—A poultice was applied yesterday; the pain
of the burn is now gone, and she feels no pain at all. Says that she has not only lost all pain, but also that the feeling of numbness is gone from the limb, and that she seems to have more power in it. The burned parts present a white sloughy appearance. The poultries was continued till the sloughs separated, when simple cerate was substituted for it, with the view of retarding, rather than promoting cicatrization. Nov. 12.—To-day she has been trying to lift the arm, and felt none of the old pain in the attempt.

Jan. 31, 1854.—She has to-day left the Infirmary. She has for some time past been gradually acquiring more and more power in the limb; she can move the arm backwards and forwards for a considerable extent, and even raise it slightly. The movements of the forearm are free; there is no tenderness whatever about the shoulder. The return of the use of the limb has been accompanied with a restoration of the fulness of the muscles, so that there is now no difference between the contour of the two shoulders. She continues quite free from spontaneous pain. I saw her again towards the end of May. She was still quite free from pain, and there remained only some stiffness about the joint that prevented her from raising the arm to the full extent.

Case II.—Disease of Shoulder Joint; Actual Cautery; Cure.—Lily Kay, aet. 50, admitted March 23, 1854. Has generally enjoyed good health, except that for the last twelve years she has suffered inconvenience from what she supposed to be rheumatism in the right shoulder, characterized by shooting pain, occurring more especially when she attempted to lift any thing. In January last the limb became completely disabled from increase of the pain, which now assumed a gnawing as well as a shooting character, and also began to be felt in the elbow joint, and in the arm, forearm, and hand. At this time she first observed the existence of swelling about the shoulder joint.

The pain continued to increase till the time of her admission into the Infirmary, when it was exceedingly severe; not constant, but frequently keeping her awake at night. She was unable to raise the arm from the side, and had a sense of weakness in the limb, and some stiffness of the hand. There was considerable swelling about the shoulder joint, which was tender on pressure, particularly at the anterior and posterior aspects. On the day of admission Mr. Syme applied the actual cautery freclly over the anterior and posterior parts of the joint, the patient being under chloroform. From this time she lost the old pain entirely, or at least was uncertain whether that which she still felt was not altogether that of the burn; and though the pain of the burn was considerable till the sloughs separated, yet it was much less distressing than the old pain, for which it was substituted, so that she slept much better than before the application of the cautery. The sloughs came away on the 1st April, on which day she had a slight return of the old pain near the wrist, but it has not occurred again, and she is now (4th April) quite easy. The swelling about the shoulder has almost entirely disappeared, and there is little, if any, tenderness; the sores are granulating healthily. April 14.—Continues quite easy. She was discharged on the 27th April; I saw her about a month after, and she still continued free from pain.
CASE III.—Disease of Wrist Joint; Actual Cautery; Cure.—Janet Archibald, aet. 32, admitted November 2, 1853. Rather a weakly subject. In October last she "took a shivering," without any particular exposure to cold, and a prickling pain came on in the left wrist, which increased for a time, and was accompanied with swelling. She applied poultices medicated with acetate of lead, and under their use a great improvement had taken place at the end of five weeks, when she got fresh cold in it, as she says, and it became excessively painful; the pain continued ever after till her admission, and although its extreme severity was then somewhat mitigated, yet it kept her awake a good deal at night; it was partly dull and heavy, and partly of a shooting character, and extended down through the hand and fingers. There was also an occasional tingling sensation in the fingers, and a sense of unnatural weight in the limb. A great degree of swelling existed about the wrist-joint, particularly on the dorsal aspect, and this part when manipulated gave a feeling very like that of fluctuation, so that her medical attendant had been desirous to open what he had supposed a collection of matter there.

Mr. Syme regarded the condition of the wrist as almost hopeless, but as he thought suppuration had not yet occurred, he determined to give the limb a chance with the actual cautery, which he accordingly applied on the dorsal aspect in two lines, crossing one another over the articulation. The pain and swelling both diminished greatly during the first four weeks after the cauteration; some aggravation of the symptoms then occurred for a time, but as the sore was still open, Mr. Syme thought it unnecessary to interfere further, and a gradual improvement afterwards took place, till at the time of her leaving the Infirmary (Feb. 14, 1854) there was scarcely any swelling and a very little pain. I saw her again on the 10th of June, there was then no swelling whatever about the wrist, and no uneasiness except a painful feeling of weakness when she exerted it much.—Monthly Journal.

Water Strapping as a Surgical Appliance.—By C. Holthouse, Esq.—The object of the author of this paper was to direct the attention of the profession to the superiority of wet-strapping over ordinary diachylon plaster, in the treatment of ulcers and certain cutaneous affections of the extremities, as advocated by Mr. Chapman, and to recommend its adoption in injuries and diseases of the joints, and in dressing stumps after amputation. The advantages of this application over plaster are:—1. Its innocuousness, being entirely free from the irritating effects of the latter, and never producing inflammation of the skin, or the eruption of pustules, or vesicles. 2. The comfort the patient experiences from its application. 3. Its cleanliness. 4. The ease and quickness with which it is removed, from its not adhering to the hairs of the part. 5. Its cheapness. 6. It may be made the vehicle for the application of remedies.

The material made use of may consist of linen or calico, bleached, or unbleached; and the older it is, provided it be not rotten, the better it answers the purpose. It must be cut, or torn into strips of
varying length and breadth, according to the part to which it has to be applied; the strips must be then immersed in water till thoroughly saturated, when they are fit for use. If the disease to be treated be an ulcer of the leg, the strips should be about two inches in breadth, and of a length exceeding somewhat the circumference of the limb; they should then be applied exactly in the same manner as plaster, each piece overlapping a portion of the one immediately below it; in fact, the directions given by Mr. Baynton for strapping the limb, may be strictly followed in the application of the water-strapping, save and except that his directions to remove the hair from the part may be dispensed with; a roller must afterwards be applied in the ordinary manner.

Four cases, in illustration of this method of treatment, and of its beneficial results, were then given; one being an ulcer of the leg of fourteen years' standing, that had resisted repeated attempts to heal at other hospitals; another, a case of eczema impetiginodes, affecting both lower extremeties, and of three years and a half duration; a third was a case of a crushed thumb, followed by gangrene and subsequent amputation; and the fourth was an amputation of the thigh, for extensive disease of the knee-joint and upper third of the leg.—*Lancet.*

*Un-united Fractures treated by Ivory Pegs.*—Mr. Stanley concludes his lecture by citing two cases in his practice by the ivory pegs: one very successful, the other now in St. Bartholomew's, not so encouraging; but where it would appear that the process of reparation was prevented by a cushion of the crureus muscle getting between the ends of the bone, as shown by the leg after amputation, performed last month (June 1854), a large quantity of bony matter thrown out round the pegs.

**Case I.**—Among his notes Mr. Stanley finds the following case:—About four years ago a man was brought into St. Bartholomew's (Bentley's ward): he had been working on the railway, and sustained a very severe injury, fracture of a compound character of both tibia and fibula, if we say he was lying on his back eight months; and at the end of this period, though the external wound was healed up, yet the union of the bones was not complete; it is quite sufficient to indicate his condition and the very tedious nature of the case; in a word, it seemed one of those cases which, to Pathological Society-men, would seemed doomed never to get well. The man at length got about on crutches, but it was with most dreadful pain and torture of the limb, so that he at length gave up, wishing his leg to be cut off. It was decided, however, in consultation, to do something for the cure of un-united fracture. The first plan tried was a succession of blisters for a month with no equivalent benefit; the limb was then encased in strong leather, stiff, and about as immovable as the limb of an Egyptian mummy; but this plan did not prove either very successful. After ten or twelve weeks the question came up really of amputation, but this time with the rather fanciful alternative of ivory pegs, as suggested by Dieffenbach. The ivory pegs succeeded perfectly; and Mr. Stanley has the pleasure of seeing the man constantly brought to new life.
and activity by four of these rather incongruous remedies borrowed from a cribbage-board! Four were inserted, one in each bone, at each end of the fracture: small holes drilled with a common drill, respectively, in tibia and fibula, then the pegs tapped well in with something like an auctioneer's hammer. And here Mr. Stanley said, perhaps, the most curious part of the matter worth observing, is in a physiological point of view, observed also in a similar case at Leeds, one peg was entirely absorbed, the other appeared eaten away like curious pieces of human bone! When withdrawn, the small head of the ivory peg left out of the bone through the integuments was not changed at all: the successful issue of the case (after a whole year's unsatisfying ordeal in hospital) was most grateful, and the man left town quite well. In the second case, marked by all Mr. Stanley's kind attention and care, the result has not been so satisfactory: it has been a case brought into hospital of long standing, of un-united fracture, high up in the shaft of the femur, both ends freely moveable and grating together. He first tried pad and splints, next enclosed the limb in stiff leather case twenty months. After injury the question of amputation or ivory pegs, as in the former case, was again considered: the pegs were tried, but the quantity of bone thrown out was of no use, and amputation, as a last resource, was performed. — Dublin Med. Press.

DISEASES OF FEMALES.

Instrumental Treatment of Uterine Displacement.—[This subject was recently brought before the Academy of Medicine, Paris, by the report of two fatal cases from the use of the Uterine Catheter, one by Dr. Broca, and the other M. Cruveilhier. The subject created great interest and a committee was appointed to report upon it; the report was drawn up by M. Depaul. We copy a condensed statement of it from the Edinburgh Monthly Journal.] In commencing his report, M. Depaul undertakes to prove: 1. That uterine affections, usually attributed to displacement, have an entirely different origin. 2. That in most of the alleged cases, another more frequent pathological condition, which produces uterine symptoms and even sometimes causes displacement, has been overlooked. 3. That science possesses a simple and rational treatment for displacements, as efficacious, or more so, than intra-uterine pessaries. 4. That the facts adduced in favor of the treatment by these instruments, only show their entire inefficiency; and 5. That we must take into serious consideration the numerous facts which prove that the most formidable affections and even death itself, may be the consequence of these manoeuvres, which are besides, on their first aspect, repugnant to common sense! (repugnant à la raison.)

Instruments.—Before proceeding to these points, the reporter specifies the instruments used in the treatment of uterine displacements, to which allusion is made. These are of two kinds (sufficiently well known in this country): 1. The Uterine Sound, of Simpson and Kiwich (Recamier and Amussat had previously used a similar in-
This instrument, which is of undoubted service in diagnosis, is also used to restore the displaced uterus to the normal position; but it is never left permanently in the uterus. 2. The pessaries, of different kinds which are used for the replacement and permanent support of the uterus, remaining for a considerable time in its cavity. These are known as Simpson and Kiwisch's, although the original idea of the invention is claimed for Anussat and Velppeau. They are—
1. The wire pessary, or pubie pessary, having a stalk to support the interior of the uterus, in connection with an apparatus resting on the pubis. 2. The spring pessary. 3. The ball pessary, with the stalk for introducing it. 4. The galvanic pessary, made of zinc and copper. 5. The dilating pessaries, used in obstructive dysmenorrhcea, sterility, etc. The three last instruments consist of a metallic stalk which is passed into the cavity of the womb, and is fixed on an oval disc or ball. Although the use of the uterine sound is not without danger, it is principally against the intra-uterine pessaries that the criticisms of M. Depaul are directed.

Pathology, etc.—The reporter then enters on the first division of his subject: viz., the Pathology of Uterine Displacements. What is the normal direction of the uterus? What are its displacements? Do these displacements produce the symptoms which have been ascribed to them? M. Depaul does not agree without reserve with Cruveilhier, and others who maintain that the uterus has no certain direction; and he rejects the opinion of Boulard and Verneuil, that ante-flexion is the normal position of the womb. He maintains that however liable to vary from accidental causes, the uterus is placed normally in the direction of the axis of the brim of the pelvis. When the axis of the uterus is more inclined in any one direction, we have either ante, retro, or latero-versions. When the whole uterus is pushed from its position, we have total displacement (refoulement), which may also take place forwards, backwards, or laterally. When the uterus is bent on itself, ante, retro, or latero-flexions, are produced. There are also, more rarely, flexions of the neck on the body of the uterus; and inflections of the uterus, where it is curved once, or twice like the letter S italics. Another condition which may exist alone, or combined with the preceding, is the descent of the uterus (abaissement), generally the inferior extremity, but sometimes the middle, or possibly even the upper part of the uterus passing low down into the pelvic cavity. These displacements by descent appear to have been overlooked in France by those who used the "instrumental treatment" ("traitement mécanique").

These different displacements are so common, that more than half probably of the female sex are subjects of them, and would require treatment, if these conditions were really diseases. But such is not the case; their influence has been greatly exaggerated, and it may be shown that the symptoms attributed to these deviations belong to some other pathological condition. In a critical analysis of M. Valleix's cases of displacement, treated by the intra-uterine pessaries, eonemittant disease of the uterus, as hypertrophy and engorgement, or granulations and ulcerations of the cervix, leucorrhea, etc., are found to
have existed in the largest number; in a few, the uterine deviation discovered only after death, had produced no symptoms during life; and in some the morbid symptoms remained after the uterine displacement had been corrected. The cases of M. Gaussail analyzed in the same way, are similarly complicated. The symptoms of all the patients were much alike—viz., uneasiness in walking, pains in the loins, white or sanguineous discharges, constipation, and difficult micturition, and disorder of digestion. Yet all these affections are ascribed by M. Valleix and Gaussail exclusively to the displacement, taking no account of the hypertrophy, ulceration, or other diseased state of the uterus, which existed at the same time. The facts of M. Piachaud (pupil of M. Valleix) are of the same inconclusive stamp as the preceding; but he adds that he has witnessed dangerous (graves) haemorrhages, and in two cases perforation of the uterus in consequence of the use of the pessaries!

If in these cases, complicated with other lesions, the symptoms cannot be with certainty referred to the deviation exclusive of the lesions, still less is there evidence to show that the deviations alone give rise to serious symptoms. MM. Dubois and Lisfranc declared that displacements were innocuous, unless attended with pathological lesion or chronic inflammation. In a number of cases of displacements of all kinds observed by M. Gosselin, at the Lourcine, none of the women had any uterine complaint whatever; in a number of other cases, where uterine pains existed, there was no displacement, and the pains were owing either to inflammation or neuralgia; and in a third set of cases, where both uterine pains and displacement co-existed, the pains ceased after repose, and the use of antiphlogistics, narcotics, etc., although the displacement persisted. In 27 cases of simple deviation, observed by M. Depaul, only two had any uterine symptoms whatever; the one (anteflexion) had more frequent micturition, and a sense of weight after long walks; the other (descent of uterus) had pains in the inside of the thighs, and a feeling of weight in the pelvis, and that only, after fatiguing exertion. Moreover, in diseased states of the uterus, if the morbid condition of the organ is cured, the painful symptoms entirely disappear; and every day’s experience proves that all the uterine symptoms may be produced by lesions of the organ, unattended by any displacement whatever, to which they could possibly be ascribed. For the truth of the latter statements, the reporter appeals to his own and to the general experience of the profession.

With regard to the influence of the dilating pessaries on sterility, M. Depaul has similar objections, viz.: that in the facts observed no adequate account has been taken of eoneomitant pathological conditions; and he maintains that displacements and flexions could only cause sterility when of very old standing, where the uterus is almost always atrophied, and dilatation consequently useless.

Admitting, however, that in a very small number of cases the mere displacement of the uterus may disorder the health, or may have an injurious influence on co-existing diseased conditions, M. Depaul believes that there exist numerous efficacious methods of treatment which do not compromise the health or life of patients. Of these
means, he enumerates, rest, fixation of the uterus (immobiliser l’utérus), taking off the weight of the intestines, avoiding tight-lacing, using hypogastic belts, and lastly, the different pessaries (not intra-uterine) particularly that of M. Garriel, composed of caoutchouc distended by air; also stuffing the rectum in cases of retro-version, as practiced by M. Huguier. He also mentions the pessaries in whalebone of Dr. Mayer, and that of caoutchouc of M. Joret. He discounts the use of cautерizations to produce adhesions for the purpose of replacing the uterus.

Cases.—The most interesting inquiry in a practical point, however, is an examination of the statistics of the treatment by intra-uterine pessaries. The number of cases published amounts to about 180, and of these, according to M. Valleix, 129 were cured. A result, at first sight so strongly in favor of the treatment, is, however, completely reversed by the history of the cases themselves. The reporter here gives a short analysis of M. Valleix’s cases, twenty in number, of five cases by M. Gaussail, and three by M. Piachaud. With regard to Dr. Simpson’s practice he was unable to give the results, as that gentleman, when applied to, had, he said, communicated only assertions without proofs; he could only, therefore, give an idea of his success from the information received from indirect sources. It would be tedious to give the whole of these cases; we subjoin a few to show the method of analysis, and how inconclusive the cases are or rather how they are turned into evidence against the treatment they were published to recommend.

Valleix’s cases.—Fifth case. C., æt. 31, some years after accouchement suffering from hysteria, leucorrhœa, fatigue in walking, and weight in the pelvis, for which she was treated by repeated leeching. Coming under M. V.’s care in 1851, she was pale and anæmic; the uterus was voluminous, not painful, lying tranversely forward. On the anterior lip, which was red and voluminous, there was a prominence of a deeper color, presenting in the middle a little white point. The neck was cautérised on three successive occasions with the acid of nitrate of mercury. Afterwards, catheterism was practised six times, leaving three or four days interval. At the end of a month the uterus was replaced in its normal situation. The cautérisation was then resumed and repeated thirteen times during nearly two months. There was no accident, and the cervix was cured. That cure, ascribed to the uterine sound, ought plainly to be attributed to the cautérisations. Several of the other cases are very similar to this.

Ninth case. Anteflexion with hypertrophy, the uterus being heavy, with little mobility, the sound penetrating seven centimetres. The intra-uterine pessary (redresseur) having occasioned dangerous symptoms, an energetic antiphlogistic treatment was employed, in consequence of which the patient was cured.

Thirteenth case. Retroversion, and chronic metritis with ulcerations and numerous red granulations. The intra-uterine pessary was applied once, and left in for a fortnight; long after this the patient underwent treatment for anæmia, neuralgia, and for a fissure of the anus which had been overlooked at first. The cervix was cautérised for several months.
In others of his cases there appears insufficient evidence of the state of the uterus, or even of the cure which is reported to have ensued. M. Gaussail's cases are generally complicated with metritis, and such varied and prolonged methods of treatment were used, that it is difficult to ascribe the cure to any one in particular. His fifth case he concludes by admitting that "the treatment (by intra-uterine pessaries) had produced no amelioration,—the patient felt more fatigued in walking, standing, or by simple movement of the arms. The modifications in the position of the uterus were hardly recognizable. The patient and the medical man were convinced that this treatment could no longer be endured." M. Piachaud's cases have already been alluded to. In addition, two cases are quoted, observed by M. Gaube, in which all the morbid symptoms were cured, although the use of the pessary failed to replace the uterus.

The last case given is one of anteversion, where the patient, dismissed cured from hospital by M. Valleix, returned next day in as bad a condition as ever. Scanzoni, in Canstatt's Jahresarbeiten, states that in twenty cases of displacement, where he tried the mechanical treatment, he did not once obtain a permanent cure. It appears, moreover, that M. Valleix has been continually improving the intra-uterine pessary, by diminishing the length of the uterine stalk, till at last he has given it up altogether, and uses only the temporary introduction of the uterine sound, but always, he assures us, with the same successful results.

Having examined the statements of the principal partizans of this mechanical treatment in France, viz.: M.M. Valleix and Gaussail, etc., M. Depaul proceeds to show that this treatment has no greater favor or success in other countries, particularly Great Britain. In regard to Dr. Simpson's practice, he quotes from an eye-witness, that although in many cases the relief is immediate, and in a few instances the instrument can be worn with impunity for months or even years, yet in the great majority of females some morbid state of the uterus or its appendages, etc., comes on; hæmorrhages, rectal fissures, ulcerations of the rectum, metritis, metro-peritonitis, pelvic abscesses, were pretty frequent consequences, and more than once death was the final result. Drs. Churchill, Ashwell, and Gream's statements are quoted as to the dangers of the treatment, together with Dr. Robert Lee's case, where the pessary, or, as he calls it, the impaling machine, was extracted from the uterus. Two fatal cases of peritonitis caused by the pessaries, described by Dr. Oldham; his strongly expressed opinions against the practice; the similar views of Montgomery of Dublin, and Matthews Duncan of Edinburgh, are adduced as strong evidence of the unfavorable estimation in which the practice is held by a large number of eminent obstetricians.

The same objections which have been made to the pessaries are also applicable to the uterine sound or catheter (hysteromètre), especially when used to replace the uterus in position. According to Depaul, in the vast majority of cases, it is unnecessary even for diagnosis; it may even lead into error, and its use is not exempt from serious dangers. Guéneau de Musay has recorded a case of fatal peritonitis in conse-
quence of passing the uterine sound; three cases of abortion in the early stage of pregnancy, and one case of abortion and death has occurred in the practice of Huguier, Nonat, and Valleix. M. Depaul then passes under a final review the cases of Valleix, Gaussail, Piachaud, Huguier, Nonat, etc., and finds in nearly every one some of the following results from the use of the intra-uterine instruments: hemorrhages nearly in every case, and sometimes of dangerous amount; uterine and abdominal pains; rigors and fever; syncope and phlegmonous inflammation around the uterus, or in the iliac fossa; metro-peritonitis. A case of enormous phlegmon in the neighborhood of the uterus is given in detail from M. Cazeaux; one of metro-peritonitis from M. Gaube; six cases (one fatal) from M. Nonat, in none of which was the displacement benefited by the treatment, which gave rise to the dangerous complications, pelvic abscesses, metro-peritonitis, etc.; and this enumeration is summed up by the fatal cases of MM. Broca and Cuvellier, which originated the inquiry before the academy; followed by four fatal cases from the practice of MM. Valliex, Nelaton, and Aran, and the testimony of M. Maisonneuve that similar accidents have occurred in his hands.

Conclusion.—In the majority of females, uterine displacements do not injure the health, and constitute a mere deformity without importance. Where displacements co-exist with inflammation or neuralgia, when the latter affections are cured, the former disappear, or if they persist, are quite innocuous. The small number of simple displacements which occasion inconvenience are easily and safely treated by simple methods without incurring the dangers of the intra-uterine instruments, which, even when they momentarily replace the uterus, fail to fix it in the normal position. The facts adduced to show the efficacy of the mechanical treatment have been wrongly interpreted, and the cures ascribed to it have been owing to other means employed at the same time. The fatal cases observed both in France and England are numerous enough to show the perils of this treatment, and to warn its boldest partisans. In addition to the mortality, the other dangers are of the most alarming kind; pains—sometimes agonizing, hemorrhages, anaemia and nervous disorders, rigors, fever, syncope, peritonitis, pelvic abscesses, metro-peritonitis, etc., not to mention the cases where the treatment could not be endured. The uterine sound, of great advantage in the diagnosis of certain affections, is very often of no service, and from the great risks attending its use, should be reserved for the exceptional cases which require it; and, finally, that the different intra-uterine pessaries ought to be proscribed, because they are useless, and impotent to produce the good effects expected from them, and they subject the patients to the most serious dangers.

THERAPEUTICS.

Metallic Mercury in Ileus and Obstinate Constipation.—Franceschini has collected 13 cases in which this substance was used in doses varying from 50 to 300 grammes, and concludes:—1. That the internal use of metallic mercury in constipation and ileus has produced good results in overcoming the intestinal obstruction. 2. That the most
obstinate vomiting has always been arrested. 3. That it has never produced local injury of the bowels. 4. That it has never proved injurious to the system, either immediately or remotely.

Lactate of Iron with Antispasmodics in some Neuroses.—Dr. Marchandi has found the following formula very useful in neurosis, dependent upon onanism, gastralgia, epilepsy, etc. \( R = \) Valerianate of zinc 3ij; lactate of iron, 5iss; ext. belladonna, 5ss; ext. valerian q.s.lb. make 60 pills; patient takes two for the first two days, and afterwards gradually increases the dose.

Cubels in Incontinence of Urine in Infants.—Dr. Drinners believes that nocturnal incontinence of urine in children is due to atony of the neck of the bladder, in which no remedy has greater power than cubecs. As relapses are frequent, this remedy should be continued several weeks, giving it two or three times daily in large doses, but suited to the age of the patient.

Collodion in Orchitis.—Prof. Costes relates cases of this disease in which, after covering the serotum with a mixture of 20 parts of collodion and 6 of ol. ricini, the swelling and pain were quickly relieved, and a rapid and complete cure was obtained.

Gutta Percha.—M. Ellefsen recommends a solution of this substance in swelled testicle and fresh wounds, on account of its adhesive-ness and making an air-tight covering. He dissolves the gutta percha in bisulphuret of carbon, and spreads the substance over the part affected. It immediately becomes dry and stiff, and forms a thin, tight, and adhesive covering, which loosens at the edges after three or four days, when it must be repeated.

Turpentine Bath.—Dr. Moreau speaks highly of a bath in turpentine vapor, in catarrhal affections, rheumatism and severe neuralgias. The patient is shut in a room into which the vapor is introduced from without—varying in temperature from 45 to 102 degrees. It produces copious perspiration, which greatly diminishes the temperature of the body.

Creosote in Intermittent Fever.—Zwetkoff was induced to make a trial of creosote in intermittent fever, (1) On account of its specific influence over the abdominal ganglia of nerves, especially the solar plexus, and (2) On account of its good effects in periodical vomiting. He gave it in doses of from 9 to 15 drops, three times per day in mucilage.

Acne.—Cazenave has recently recommended ammoniacal lotions, which form with the fatty matter of the follicles a soluble soap with an ammoniacal base; the hydrochlorate or acetate of ammonia answers equally well.

Chronic Papular Eruptions.—Dr. Burgess considers them to consist of disorders of the cutaneous nerves, and prescribes, in severe cases of prurigo, strychnia and phosphorus; he has found phosphorated ether, preceded by repeated doses of hyoscyamus for a day or two, succeed in allaying obstinate prurities, given internally.

Nitric Acid in Hooping-Cough.—Dr. Gibb, in a recent work on this disease, recommends very highly nitric acid given as follows: R. acid nitric. dilut. (Lond. Phar.) 3xij; tinct. cardam. co. 3ij; syrup simplex, 3ijss; aqua, 3ij. m; dose, a dessert spoonful every hour or two to a child two years old.
PART FOURTH.

AMERICAN MEDICAL RETROSPECT.

PRACTICAL MEDICINE.

Powerful Effects from small Quantities of Opium and certain of its Preparations.—Dr. Morland relates a case (Am. Jour. Med. Sci.) of poisoning by five grains of opium, and adds the following remarks:
—Although the quantity of opium absolutely requisite to suspend vital action must always vary with circumstances, and often, especially, by the habits of the individual, even the quantity taken in this case might well enough have been fatal, under the existing conditions. Christison has recorded a case in which four and a half grains, combined with nine grains of camphor, were fatal in nine hours. Under other circumstances, doubtless, five grains would hardly have caused such very marked effects as have been above related. The prolonged effect of so little, comparatively—the excessive resistance to purgative agents and the long-continued after influences (not certainly very usual after recovery from the immediate effects), may seem of sufficient importance to warrant a report of the case.

Dr. Christison opportunely draws attention to the importance of knowing, approximately, the smallest fatal dose; for, says he, "in consequence of the dread entertained by many unprofessional persons of this drug, it is currently believed to be much more active than it is in reality, and instances of natural death have been consequently imputed to medicinal doses, taken fortuitously, a short time before (op. cit. p. 657). The recording of such powerful effects as are occasionally observed from small quantities even, of opium and its preparations, may also be of service by inducing greater caution in the use thereof, without medical advice and prescription; it may tend to prevent the keeping of such potent remedies in places where mistakes are liable to be made, and where reckless use of the drug is possible.

Grisolle states that "he saw narcotism induced in a lady by the ingestion of three centigrammes of opium;" the centigramme being about one-sixth of a grain, this would give only half a grain for the quantity taken. The same author adds that twenty centigrammes (grs. 3) have sometimes killed adults, and that one or two drops of laudanum may cause the death of a new-born infant. (Path. Int.
American Medical Retrospect. [Nov.,

vol. i. p. 827). Laudanum has been said to become stronger by being long kept; Dr. Bigelow, Sen., declares this to be incorrect, at least when dropped without shaking;—if the sediment be stirred, a very slight increase of power is possible. Orfila (Dict. de Médecine, p. 261) says: "I have seen all the symptoms of an extremely severe (pénible) narcotism experienced by two young ladies, after the application of opium plaster to the temples." He does not state the proportion of opium used in preparing the plaster; certainly the amount absorbed must be, comparatively, very small. Taylor (Medical Jurisprudence) gives a case as occurring in 1838, of a man, aged 45 years, who died from the effects of ten grains of solid opium which he had swallowed. Also, another instance, in which eight grains proved fatal to a woman, 38 years of age; the quantity, moreover, was taken in two doses. Interval not given.

Many authors refer to the fact of very powerful and alarming effects upon young children by exceedingly small doses. Orfila cites the statement of Sundeling, "that the smallest doses (les moindres doses) act with activity in infants; the works of medical authors abound (sont remplis) with facts which support this opinion." (Dict. de Médecine, en 30 vols. p. 259). Members of this Society have, in former years, reported very marked instances. Dr. Hale related the production of narcotism in a child one month old, by one-twentieth of a grain of acetate of morphia. The same gentleman also stated the occurrence of "alarming" narcotism in a child, from taking one drop of laudanum; and said, moreover, that he had witnessed in another child the same symptoms, after the use of "cough mixtures" containing minute quantities of opium, in some form; and again, by "cough lozenges." Dr. II., from observation of many such instances, concluded that opiates have a greater effect upon children, in proportion to the quantity taken, than does any other medicine. (Vide Records of Society, 1843). With a view of presenting the results of several cases of poisoning by preparations of opium, so many as it is possible to collect by search of the volumes of past records, will be grouped in a tabular form below; among them are other examples of strong narcotic action from minute doses, and especially in infantile cases. In consequence of the loss of one volume of the Society's Records, any cases therein cannot be cited; one or two are not tabulated, from want of precise data. It is believed that all but two or three are given.

While referring to cases observed in children, one published by Dr. Edward Smith, of London, in the April number of the Association Medical Journal (London), may be mentioned. In this instance, one-twentieth of a grain of opium proved fatal to an infant six days old, in eighteen hours after the administration of the dose. Syrup of opium, of the French Pharmacopeia, was the preparation; three-fourths of a grain of crude opium to the ounce of fluid. Artificial respiration was most efficient towards keeping up the action of the heart, which latter was quickened or slackened, according to the use of this means. The usual symptoms of poisoning by opium were induced in about half an hour, coma closing the scene.

In 1838, at a meeting of the Society, Dr. G. C. Shattuck, Jr.,
while referring to the liability of children to be even killed by very small quantities of opium, remarked that, in adults, the habit of drinking ardent spirits may have some effect in diminishing the susceptibility to the action of opium. Dr. S. at that time asked Dr. Bigelow, Sen., what he would consider the minimum fatal dose of opium or laudanum?

Dr. Bigelow replied that, according to the Edinburgh Dispensatory, it is about four grains of opium, or one hundred to one hundred and twenty drops of laudanum. He added, that he had previously stated to the Society the occurrence of several cases in which an ounce of laudanum had been taken with impunity. (Records, 1838).

An important question, in all cases, is the quality of the preparation, and as laudanum is perhaps most commonly used for suicidal purposes, we observe, oftener, variations in the effects of large and of small doses; idiosyncrasy in individuals is a more rare, but doubtless not an infrequent element in the wide difference of the action of the drug.

A case was some years since reported to the Society by Dr. Charles E. Ware, in which $\frac{3}{4}$ of laudanum were taken by an adult female, entire recovery ensuing; she was not in the least narcotised, but, on the contrary, was highly excited; there was spontaneous vomiting. She bought the tincture at two different druggists. It is very possible that an inferior quality of laudanum was dispensed; indeed, with a superior kind, her escape would have been extraordinary.

In the case which forms the basis of this paper, attention may be directed to the profuse diaphoresis. This is remarked by Christison in a fatal case examined by him. "The sheets," he says, "were completely soaked, to a considerable distance around the body." This effect of opium has been lately referred to in the Society, when it was administered, in the ordinary doses, frequently repeated, in inflammatory affections; diaphoresis being often obtained very readily, although some have supposed its use would tend, constantly, to constrict the skin.

On the Use of Quinine in the Treatment of Cholera Infantum. By Delaskie Miller, M.D., Chicago, Ill.

The almost uniformly intermittent character of the symptoms is a circumstance of practical importance, which affords indications of treatment in other diseases. And although this feature in the symptoms of cholera infantum has been noticed and desribed by almost all writers upon the subject, still it does not seem to have had any part in furnishing the indications of treatment in this. We would naturally have expected, that when the important symptoms so uniformly correspond with those of other intermittent diseases, that the efficient anti-periodic remedy would at least have had a trial.

Besides, the intermittent character of the symptoms, there are other and important considerations, which indicate the use of quinine in this disease. It will be borne in mind that in the hasty review which we have just concluded, reference was made to the derangements of the liver and its function. This is what we should expect, when malaria has produced its peculiar influence upon the system. Headland has
advanced the doctrine that in all cases where quinine is indicated, there is a failure in the secretion of healthy bile, and in all cases where there is this failure in the secretion of the bile, quinine is indicated. So there appears to be some connection between these conditions and the effects of quinine.

The bile is formed from the blood, the principal constituents of which are reabsorbed from the surface of the intestines, little more than the coloring matter being excreted from the system. One of these constituents, and a very important one is Taurine. M. Leibig has pointed out an important similarity between taurine and the vegetable alkaloids. Of these, caffeine, the peculiar principle of coffee, is nearly analogous. From the analysis of these two substances, this author has adduced the following formula: Taurine, C₄H₁₁NO₁₀. Caffeine, C₈H₁₁NO₄.

He then shows that one atom of caffeine, if added to nine of water and nine of oxygen, will form two atoms of taurine; and it is not at all unreasonable to assume that such a change may, and usually does take place in the system; and thus form a necessary element to the blood in health. This gives us the rationale of the effects of a strong decoction of coffee in the treatment of cholera infantum, as first recommended by Dewees, whose favorable opinion of its beneficial effects all experience sustains.

Taurine is soluble in water, and crystalizable, is chemically analogous to the tonic bitter principles, and contains the same four elements as quinine. If necessary, this similarity could be exchanged for identity, and quinine could be changed into taurine in the blood. If there is one physiological process which is performed with greater facility in the system than any other, it is the process of oxidation; oxygen produces its effects through the external surface, it is admitted largely through the lungs, and it is received into the system with the ingesta. Now the formula for quinine is, C₂₀H₁₂₂NO₄. Adding to this 45 atoms of oxygen, makes one atom of taurine, 16 of carbonic acid and 3 of water. This process it will be seen supplies an important material to the blood, and supports animal heat by giving off carbonic acid, exactly what is necessary in the treatment of cholera infantum.

From what has been said it will be seen that we regard cholera infantum as a Pyrtic disease, as do the highest authorities upon the subject. We assume that it partakes of its intermittent type, in consequence of the influence of malaria upon the system. That, then, there is serious derangement of the hepatic function. That in some cases there is simple congestion of the mucous membrane of the stomach and bowels, such as frequently occurs in remittent fever. These circumstances force us to the conclusion that quinine is indicated in the treatment of this disease, and not merely for its tonic influence, but for its anti-periodic effect.

The proper period for administering quinine in the treatment of this disease, is a point of the greatest importance. Of course we could not expect to arrest the diseased action and remove the organic lesion which occur in the advanced stage by the use of quinine, if given even in a full anti-periodic dose. But to secure the full benefit of this
remedy, it should be administered early in the disease, and it will be best tolerated if given during a remission, as in the case with this remedy in remittents generally. The amount necessary to be administered must of course vary with the age of the patient, and to some extent with the violence of the attack. When given, a sufficient quantity should be administered in as short time as possible, in order to promptly arrest the periodicity, and it will be of importance to remember that quinine is best borne, when given in solution, and largely diluted. Should it not be retained in the stomach, we may secure quite as prompt and certain effects by using it endermically, or by enema. When administered in the latter mode, three times the quantity will be required that we would give by the mouth.—Peninsular Journal

_Catarrhal Fever of Infants._ By Edward B. Stevens, M.D.—In different sections of this country, and at various times, a form of disease has appeared, which has been treated of with considerable niceness of detail, under the title of "Epidemic Meningitis." In many respects the affection under consideration bears a striking resemblance to the Epidemic Meningitis, so described. A large proportion, or most of the children I have seen, prove fatal cases of _Catarrhal Fever_, have evidently been hydrocephalic towards that termination. In the progress of the case, there have been convulsions, incessant rocking of the head, peculiar dark-green-paint stools, and stupor,—giving evidence of a certain degree of meningeal inflammation, but none of them have been purely or chiefly of that character.

Other features of these cases constitute, almost essentially, simply bronchitis. Thus, running through some portion, or perhaps the greater part of the progress of the case, we shall have cough, mucous rattle, pain, the pulse quick and sharp—often up to 150—and yet the case is not bronchitis, simply nor chiefly, for in many respects it is different. Infantile bronchitis is very happily presented in the Treatise on Children, by Dr. Condie; and, indeed, I have not seen any recent work which gives such clear and satisfactory details of the nature and treatment of this, and many other infantile diseases. In nothing, however, do I find what seems to me to be a satisfactory view of _catarrhal fever_, treated as a unit.

Catarrhal disease is supposed to result from some peculiar atmospheric influence: in a simple attack, generally passing under the indefinite name of a "bad cold," sometimes epidemic in a whole neighborhood or country, and often very peculiar in its appearance or type. When the especial cause of catarrh, however, attacks the delicate linings of the nostrils and frontal sinus, there is produced what we call _coryza_. If it passes towards the brain, we have some form of _meningeal disease_, with fever of a low grade, and stupor or convulsions, perhaps. If it passes along the throat and invades the lungs, or makes its first invasion there, we have _bronchitis_ or _pneumonia_; or, should it, as it sometimes does, affect the mucous coating of the bowels, it may produce a _catarrhal diarrhoea_. Now, these are all forms of catarrhal disease, well understood by the profession, easily
recognized, and, for the most part, the therapeutic indications are manifest enough.

I am well satisfied, however, that there is a more complex form of catarrh, wherein all these important regions become invaded, apparently at the same time, or nearly so, and the vital forces give way with a predestined sureness and rapidity. From an anxious observation of many of these cases, I suppose there is oftentimes a simultaneous attack upon brain membranes, nasal linings, bronchial passages, mucous coatings of the bowels, and the cutaneous surface, and the whole group of consequent symptoms, constituting proper "catarrhal fever."

I do not forget that it may be urged with good reason, that whenever disease so impairs the function of respiration as to deteriorate the quality of the blood, the brain, at once, gives apparent evidence of disease, owing to a want of its accustomed nutriment, and the presence of excessive carbon; hence, stupor and convulsions, without any primary attack upon the brain or its membranes. And yet, we know very well that an aggravated pneumonia or bronchitis may exist in a child or adult, and no such sympathetic condition of the brain appear; so that, while this active sympathy may, and often doubtless does exist, it is not a necessary condition. I do not, therefore, regard this as any forcible contradiction of the view I have taken of the real nature of catarrhal fever.

The history of one of these little cases is something like this. If called early to see the patient, we will doubtless be told by the mother, that "her child has a bad cold." Upon examination of the case, there is some cough, slight febrile condition of the skin, and increased frequency of the pulse; but if these symptoms are not promptly controlled, or, what is often the case, if attention is not called to them in this state, symptoms of a much more aggravated character come up; there is stupor—frequently convulsions—hot dry skin—and pulse from 140 to 160—cough and mucous rattle, with a labored panting respiration; there is generally evidence of pain, but, with patients so young there is difficulty in ascertaining its extent or character. Other cases present these worse features from the onset of the attack, and leave no evidence of any primary point of the invasion. I have found such cases, I think particularly, portend, for the most part, a fatal issue. Sometimes, after a few days, the mucous rattle would seem to give way, and a pleasant character of easy expectoration follow—the expression of the countenance becoming more intelligent and bright—with a pulse reduced from 160 to 120; and with such a condition of things lead friends and physicians to anticipate a speedy convalescence; but how deceptive these flattering indications prove! for other times, in less than twenty-four hours, and with no apparent cause, stupor and convulsions return—pulse becomes perfectly wild—skin dry and glistening, and death speedily relieves its little suffering victim. In the treatment of these cases, I have sought to secure a healthy state of the secretions, among the first and most important points.

Calomel and Ipecac, in small doses, has often had a satisfactory
effect, acting at once as an alterant and diaphoretic; but owing to an obstinate degree of torpidity of the bowels, very often, perhaps usually present in these cases, I have found it seemingly impossible to make any impression upon the liver, or secure stools of a healthy appearance. With the cathartic I usually direct the warm bath and full counter-irritant applications. Musk, given in the solution directed in U. S. Dispensatory, I have found to exert a good controlling influence on the tendency to convulsion; cold to the head; sinapisms and blisters to stomach, extremities, and back of the neck; torpid bathing, and sponging the surface; stimulants and diaphoretics—all seem so variously called for, that no brief paper would suffice to point out the details of their indication.—Western Lancet.

Use of Refrigerants in Dysentery. By J. P. Mettauer, M.D.—I think the fears entertained against the use of refrigerants in dysentery by some of my brethren are groundless, judging from my own trials of them in numerous instances; and I again commend them to the profession, not only as valuable, but safe auxiliary therapeutical means in treating that painful and dangerous disease, notwithstanding the condemnatory dissent of Dr. Upshur, in his paper "Hospital Practice," published in the 14th number of the Virginia Med. and Surg. Jour.

Surely a large majority of upwards of 300 cases of dysentery treated by myself, in which ice and cold drinks were freely used without injury, is a strong argument against their pernicious operation in that disease as a general effect.

In the first case of dysentery reported in this paper, although considerably advanced when the pounded ice and cold drinks were used, nothing unfavorable to the condition of the patient resulted. On the contrary, he was relieved of a most distressing and alarming symptom by them, to wit: internal burning heat, and in other respects was greatly comforted and benefited; and this was a case in which refrigerants would be most likely to operate prejudicially, because of the debility of the patient when they were commenced with.

In the early or inflammatory stage, before the energies of the system have become exhausted, refrigerants would not be likely to depress the vital powers to a dangerous extent, and they would also act beneficially in combating inflammation and its attendant fever—while in the latter or depressing stage, they might increase the depression, and in that way endanger, which is the only mode by which they could possibly produce injurious effects in any disease.

In the second and third cases, refrigerants were used in the early stage, while the symptoms were decidedly acute, and with the effect of appeasing thirst, but without, in the least degree, increasing the torments. These attacks were promptly relieved by free purging, and only one cathartic was required in each case.

With the fourth case refrigerants were employed also, and without the slightest increase of the torments, or any other untoward effect following, although the patient had become greatly prostrated, and strong threatenings of mortification had manifested themselves.

The recovery of this patient was mainly due to revellents and the
prompt induction of ptyalism. It is true, great relief was experi-
enced from the laudanum and starch injections, as well as from the
narcotic astringent pills and carbon. But, from the first appearance of
the salivation, the amelioration of the symptoms was most strikingly
displayed. The carbon should never be omitted in the treatment of
dysentery, especially when the dejections are fetid. Besides its power
of correcting the fetor of the contents of the bowels, it also exerts
restraining and secering effects. It is often the case that free and
comparatively feculent dejections make their appearance after several
doses of carbon have been taken.—Stethoscope.

MISCELLANEA.

FLUID EXTRACTS OF MESSRS TILDEN & CO.—We have had recently
submitted to us for inspection and use, samples of fluid extracts of
Buchu, Rhei, Senna, Cinchona, etc., which, after trial in practice, we
have no hesitation in pronouncing reliable and exceedingly worthy of
the attention of the profession. The advantages of fluid extracts
when properly prepared, does not admit of question; their freedom,
more or less, from Alcohol, the smallness of the dose, and the abso-
lute certainty of the medicine, renders them justly deserving of the
attention of the profession and of the favor of the public.

OBITUARY.

DEATH OF DR. W. I. BURNETT.—The death of this distinguished
physician and naturalist, was noticed in our last. At a meeting of the
Boston Society of Natural History, July 19, Dr. Wymans, in accord-
ance with a vote passed at a previous meeting, read a notice of the life
and writings of Dr. Burnett, who had been a prominent and efficient
member of this Society. From this notice which was subsequently
published in the American Journal of Science and Arts, we glean the
following facts:—

Waldo Irving Burnett, was born in the town of Southboro', Mass.,
July 12, 1828. His father was a physician, and passionately fond of
natural science. His love of nature he transmitted to his son, who
early began to study natural science and especially insect life, and so
absorbed did he become in these pursuits, that his father was obliged
to exercise some restraint. He was induced to forego the advantages
of a collegiate education, owing to his father's restricted means, but
nevertheless by unaided efforts he became proficient in mathematical
studies, and mastered the French, Spanish, and German languages, and
had made some progress in Swedish. He commenced the study of
medicine at the age of sixteen; and his father dying soon after, he was
left to maintain himself by personal exertion. He spent most of his
studentship with Dr. Joseph Sargent, of Worcester, devoting much
attention to entomological pursuits, and graduated in 1849, at the age
of 21. He had already distinguished himself as a successful student
in the Tremont Medical School, and the Mass. General Hospital, and
by being twice the successful competitor for the Boylston prize essay.
Soon after graduation, he visited Europe, but owing to the appearance
of symptoms of phthisis, he was compelled to return after an absence of only four months. He now visited the Southern States, where he afterwards passed each successive winter either in Carolina, Georgia, or Florida. To mitigate the progress of his disease he was now forced to travel from place to place, having no permanent home. But while thus unsettled he seems to have accomplished an incredible amount of labor; he was incessantly occupied with his microscope, and his mind was ever on the alert.

In the winter of 1851, he delivered at the Medical College, Ga., a course of lectures on microscopical anatomy. In the summer of 1852, he prepared the principal work of his life, the essay which received the prize of the American Medical Association. He became an active member of the Boston Society of Natural History while a student, and in 1851, he was elected a member of the American Academy of Arts and Sciences,—one of the youngest members ever admitted into that body. His contributions to different scientific bodies and journals were very numerous, and on a great variety of subjects. He became one of the associate editors of the American Journal of Science and Art, and was accustomed to contribute reviews and records in Anatomy and physiology, consisting of a critical analysis of the periodical literature of these subjects. While actively engaged in these various pursuits, Dr. Burnett found time to undertake the translation of Siebold and Stannius' Comparative Anatomy, the first volume of which has but recently appeared, and bears internal evidence in the compendious notes of its editor, of great labor and research. He was engaged upon the second volume at the time of his death, and was anxious to see its completion.

The final close of Dr. Burnett's life is thus drawn by his biographer:

"He had been long accustomed to look upon death and to talk about it as an event that he must meet at an early period. But death, if not imminent, is something that all look forward to calmly and without emotion, and when we speak of it we are not sure that we give utterance to our most solemn feelings and convictions. But there is one moment when, if ever on earth, the heart, if it opens itself, does so without disguise—if it give utterance, does so without reserve: it is that dread moment when death approaches so near that there is no alternative but to look upon earthly life as finished, its account made up; and when all that remains for the mind to dwell upon is the dissolution of the body and the realization of another life. A few days before he died, our late associate returned after a winter's absence, to the home of his family, his bodily health exhausted, his energies prostrate. At first he entertained the hope that as before, rest and quiet might restore him partially at least to his usual health, and that he might have yet another opportunity of continuing those labors which he so fondly cherished; but his fast declining strength, the anxiety of those around him, the announcement of his physician and his own quick perceptions, soon told that life was drawing to a close, and that for him the great moment was near. In all this he was calm and serene, conversed on the approaching separation without faltering, gave
utterance to expressions of deep affection to those who were bound to
him by the ties of kin, uttered his prayer for forgiveness, and expressed
the solemn conviction, which now rose paramount to every other, that if
there yet remained much for him to live for, there was yet far more to
die for. On Saturday morning, July 1st, a few days before the com-
pletion of his twenty-sixth year, he died.”

DEATH OF PROF. JAMES WEBSTER, M. D.—Dr. Webster died in the
City of Louisville, Ky., July 19th, 1854, of disease of the heart, in
the 51st year of his age. From a biographical sketch in the Boston
Med. and Surg. Journal we learn that he was born at Washington,
Lancashire, Eng., on the 26th of Dec., 1803. At an early age he
emigrated to this country with his parents, and settled in Philadel-
phia, where his father became an eminent bookseller and publisher,
and established the Medical Recorder, of which his son became after-
wards one of the editors. Dr. Webster was originally destined for
the bar, but his inclination soon led him to the study of medicine, in
which anatomy soon became his favorite pursuit. He pursued his
studies in Baltimore and Philadelphia, and after attending three full
courses of lectures, two of which were in the University of Pensylva-
nia, he graduated at the latter in March, 1824, at the age of 20 years.
Dr. W. was a private student of the late Dr. John D. Godman and
succeeded him, on his removal to New York, as private teacher of
anatomy.

As a successful teacher of anatomy, Dr. Webster had few if any
superiors in this country. He was clear, precise, and accurate, and
always enjoyed a high degree of popularity with his students. His
private classes in Philadelphia were crowded, and he succeeded in
imparting to his students the same enthusiasm which he himself felt in
the study of his favorite science.

About the year 1835 or, 36, he removed to the city of New York,
where he soon acquired considerable reputation as an operative sur-
geon, and especially in the treatment of diseases of the eye and ear.
In 1842 he was appointed Professor of Anatomy in Geneva Medical
College, and took up his residence in the city of Rochester—where, in
a short time, he became one of the most prominent surgeons in western
New-York. In 1849 he was elected to the Chair of Anatomy in the
University of Buffalo, where he continued to lecture until 1852, when
he resigned from ill health.

Dr. Webster was a man of superior native abilities, and of extensive
acquirements in anatomical science. He was exceedingly fluent and
animated as a teacher, and never failed to command the whole atten-
tion of his class. His mode of teaching was that pursued by the late
Dr. Godman, viz., to perform all the dissections before the class, demon-
strating all the parts as he went along. Such was his great skill and
facility in dissecting, that he usually went over more ground in a single
lecture, than when the parts are previously dissected. The advantages
attending this mode of teaching are sufficiently obvious.

As a surgeon, Dr. Webster was cautious, though bold and prompt
enough when the occasion demanded. He was a neat operator, gentle
and kind in his department to his patients, and remarkably successful. As a lithotomist and an oculist, he was one of the most skillful operators in western New York, and performed a vast number of operations of every kind.

Dr. W. was a man of fine social qualities, open, frank, and gentlemanly in his manners, and generally conciliating in his deportment. He was generous to a fault, and with some failings, possessed equally great virtues. The thousands of medical men who have enjoyed the benefit of his teachings will hear of his death with regret.

Death of Samuel W. Moore, M.D.—Died in this city, on the 26th day of August, Dr. S. W. Moore, aged 68 years. The following biography is from the pen of Prof. C. R. Gilman, and is copied from the Medical Times for October:—Samuel W. Moore was born in New York city, 11th October, 1786, the son of Dr. William Moore, long one of our most highly-esteemed and successful practitioners. From early childhood his constitution was frail, and the delicacy of his bodily organization was equaled by the gentleness of his temper, and the kindliness of his feelings.

Dr. Moore received his early intellectual training from Mr. Samuel Rudd, and entered Columbia College at the age of sixteen years, in 1802. His connection with Columbia College was probably rendered more pleasant and profitable by the fact that his uncle, Benjamin Moore, D.D., Bishop of New York, was then president of the institution. Several of his classmates still survive among us, and we noticed two of them among the sorrowing friends who assembled at his funeral. He graduated in regular course in 1806, and immediately commenced the study of medicine, under the guidance of his father, attending lectures in the medical department of Columbia College; in which Dr. Wright Post then taught Anatomy, Dr. Richard Bailey, Surgery, Dr. Hammersley, Theory and Practice of Physic, Dr. J. R. B. Rodgers, Midwifery, and Dr. David Hosack, Botany. From those distinguished teachers he received, in 1810, the degree of Doctor of Medicine, and immediately entered into full practice, taking a share of the large business of his father. This arrangement continued until 1824, when the elder Dr. Moore died, having practised physic forty-four years. His son now took his place among the prominent physicians of New York, with a large circle of patients, and a still larger one of friends; for such was the unaffected kindness of his heart, and such the graceful amenity of his manners, that few became his patients without remaining ever his attached friends. In 1824 he was appointed one of the physicians of the New-York Hospital; for this situation he had moral qualifications which are more important, and alas! more rare, than professional skill. His conscientiousness insured to the poorest and most degraded of his pauper patients a full measure of his attention; while his amiability and benevolence made him the friend of poor and rich alike. In 1828, he was compelled, by failing health, to retire from a position which he was so well fitted to adorn.

In 1823, Dr. Moore was appointed Trustee of the College of Physicians and Surgeons, and continued, from that period to the end of his life to take an earnest interest in the prosperity of that institution.
At the time of his death, he was the senior member of the board. In 1849, on the reappearance of the cholera, Dr. Moore, in conjunction with his friends Dr. Joseph M. Smith and Dr. John B. Beck, was appointed medical counsellors to the Committee of the Sanitary Board of Health. To the duties of this position, made more onerous by the fact that his associate Dr. Beck was soon, by the state of his health, disabled from taking his share of them, Dr. Moore devoted all his energies; and the Report published by the Committee affords most satisfactory evidence of the ability and faithfulness with which this important public duty was performed. For several years, the health of Dr. Moore, never very robust, had been gradually declining, and he felt himself obliged to contract the sphere of his professional labor. Still he was unwilling entirely to give up the practice of his profession, and very many of his old friends were still more unwilling to be given up. In March last he met with an accident, which, though not immediately followed by grave symptoms, caused, as afterwards appeared, effusion of blood into the cavity of the arachnoid. He continued to visit a few friends, and his venerable form was still seen at church, till in July, paralysis very gradually supervened, and then

"Gently as an infant to his sleep,  
Went he to death."

DEATH OF PROF. J. A. SWETT.—Died in this city, Sept. 18th, John Appleton Swett, A.M., M.D., Professor of the Practice of Medicine in the Medical Department of the University of the city of New York, aged 46 years, of Bright's disease. "Dr. Swett was born in Boston, Mass., in December 1808. He received his academical education at the University of Cambridge, Mass., having entered that institution in 1824, after a thorough classical training at the Latin School of Boston, and graduated with honor in 1828. He then at once commenced the study of medicine in the office of Dr. Jacob Bigelow, of Boston, and at the end of three years, received the degree of Doctor of Medicine. In the selection of a place for the practice of his profession, he visited New York in the fall of 1831, and soon decided to make this city the scene of his future labors. In this decision he was not sustained by the wishes of his parents, then residing in Boston, which made the early years of his professional life a period of struggle and of no little anxiety. His zeal for study soon led him to seek other means of improvement than those afforded by the slow growth of private practice, and he attached himself to the New York Dispensary, the oldest and most extensive of the charities of our city. Years of toil and industrious application in this great field for the study of disease in all its forms, afforded by the large number of patients at the institution, yielded rich returns, and probably both gave a direction to his future course, and laid the foundation for the reputation and success with which he was afterwards rewarded. He then commenced especial examination of the subject of diseases of the heart and lungs, a department with which his name soon became associated, and upon which his labors threw so much light. In the winter of 1833–34, he was one of a small number who united to form an association for professional improvement at the New York
Dispensary, which, after some changes, assumed the form and name of the society now known as the New York Medical and Surgical Society. With this association, his feelings and sympathies were always closely identified, and he contributed much to the pleasure and profit of its meetings. The members of the society, now numbering between twenty and thirty, all actively engaged in professional duties, attended as mourners at his funeral.

In 1834, he superintended the publication in this city of "Hall on Diagnosis," a second edition of which, with notes, he published in 1839. In July, 1835, he visited Europe for professional improvement, and diligently availed himself of the advantages afforded by a residence in Paris, returning home after an absence of eighteen months, and entering with renewed zeal upon his course of study and practice.

In the Spring of 1838, he commenced his career as a lecturer, at the Broome Street School of Medicine, an association formed by a few of the junior members of the profession, for the purpose of giving instruction on special branches of medicine and surgery, selecting for his department his favorite subject of diseases of the heart and lungs, with which his reputation became afterwards so intimately connected. He subsequently lectured on the same subject, with great increase of favor, in the Spring course of lectures at the College of Physicians and surgeons, in Crosby street. The report of his lectures in the New York Lancet at that time, did much to extend his fame as a teacher and a lecturer, beyond the limits of the city as well as at home.

In 1839, he and Dr. John Watson were associated as editors of the New York Journal of Med. and Surg., which was conducted by them jointly, with ability, for two years, when the enterprise was abandoned, after the publication of four valuable volumes.

In the year 1842, Dr. Swett was elected one of the Physicians of the New York Hospital, with a unanimity highly flattering to him, and with a hearty response on the part of the profession, as to his peculiar fitness for the station. This was the scene of his subsequent and of his latest professional labors, and he rendered it attractive to students, as well as to practitioners, by his accurate pathological demonstrations, and his clear and judicious clinical instruction. His devotion to his duties in connection with that institution, and especially during the last spring, when exhausted by the labors of the winter, doubtless tended to hasten the event which we are now called upon to mourn.

In 1852 Dr. Swett published a revised and extended edition of the course of Lectures delivered in 1838, in a separate volume under the title of "A Treatise on the Diseases of the Chest," an octavo volume of 585 pages, with two plates on steel. It is upon this work that his reputation as an author will rest for years to come.

"In the summer of 1853, Dr. S. was chosen Professor of the Institutes and Practice of Medicine in the Medical department of the University of this city, and lectured during the past season in that institution with great acceptance. This appointment enabled him to realize the hopes in which he had long indulged, and rendered available for the benefit of others the valuable acquirements of long years of devoted study.
The post-mortem examination confirmed the diagnosis of his disease made during life. Both kidneys were found in an advanced state of Bright's disease, and the liver in the second stage of cirrhosis. All the other organs were sound.

In the death of Dr. Swett, we feel that the profession has sustained no ordinary loss. An honorable man, and an accomplished physician, he had secured the confidence and commanded the respect of his brethren to a degree rarely met with, and it is no disparagement to those whom he has left behind, to say that as a teacher and clinical lecturer, he had no superior among us.—Medical Times.

Resolutions of the Medical Faculty of the University of New-York.

At a meeting of the Medical Faculty of the University of the City of New-York, held Sept. 19, 1854, the death of Professor Swett having been announced by the President, the following preamble and resolutions were adopted.

Whereas, It has pleased Almighty God to remove from among us our late Colleague Professor John A. Swett:

Resolved, That the members of the Faculty have heard, with profound regret, of the decease of their late Associate.

Resolved, That, in view of the accurate and extensive scientific acquirements, the professional sagacity and skill, the aptitude to teach and the gentlemanly and honorable deportment of the deceased, and the pleasant relations which have uniformly subsisted between him and his Colleagues, the members of the Faculty regard his death as a severe loss to the University, the Profession, and the Community.

Resolved, That, in honor of his memory, the members of the Faculty will wear cringe on the left arm for 30 days.

Resolved, That the members of the Faculty will attend the funeral of their late Colleague.

Resolved, That the exercises at the University Medical College be suspended until after the funeral of the deceased.

Resolved, That a copy of the foregoing preamble and resolutions be sent to his Widow, with the sincere condolence of the Medical Faculty.

Resolutions of the New York Medical and Surgical Society.

At a special meeting of the New York Medical and Surgical Society, held on the evening of Sept. 19th, 1854, the following resolutions, offered by Dr. E. L. Beadle, were unanimously adopted:

Resolved, That we are deeply affected by the dispensation of Divine Providence which has, by death, removed from our companionship John A. Swett M.D., one of the founders of this Society; a member who was not only distinguished for his clearness of perception, soundness of judgment, devotion to, and eminent attainments in, his profession, but was endeared to us all by his urbanity of manner, honorable deportment, truthful character, and ardent friendship.

Resolved, That as an expression of our feelings, we will, as a body, attend his funeral, and will wear the usual badge of mourning on the occasion.

Resolved, That we tender to his bereaved wife and friends our heartfelt sympathies.

Resolved, That a copy of these resolutions be sent to the widow of the deceased.

Chas. M. Allen, M.D.,
Secretary.

Alfred C. Post, M.D.,
President.

Death of Valentine Mott, Jr. M.D.—Died in New-Orleans on the 20th of September, of yellow fever, Dr. Valentine Mott, Jr. aged 33 years. The deceased was son of Prof. Mott of this city.
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ERRATA.

Page 18, lines 3, read tulares for 'lulares' “ 4, read tule for 'lule'
Page 20, line 7, read tulares for 'lulares' “ 23, " 17, " “ “ “
Page 33, “ 21, read inference for ‘influence’
Page 34, “ 8, from bottom for “amply” read simply
Page 39, “ 5, for “53” read 52
Page 179, “ 8, from bottom for “assist” read arrest.
Page 309, under head of total mortality, for Aug. 26, for “827” read 832, and for the “total 8166” read 8171.
Page 341, line 3, for “meloploplasty” read metopoplasty.
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Annex