A TRULY VIRTUOUS WILL IS ALMOST OMNIPOTENT.

EDITED BY

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The Use of the Double Inclined Plane in Fractures of the Lower Extremities.* By J. C. Nott, M. D., Mobile.

"Teach me what you know, and not what you believe," is a maxim full of wisdom, and should always be borne in mind by medical writers. I do not pretend to be infallible, and may be as easily blinded as others, but in the present instance I feel a deep conviction, that I am writing what I know to be true, and shall bring forward credible and competent witnesses to vouch for the facts stated.

I am not so wedded to my own opinions or inventions, as to believe that the apparatus I propose is perfect, (for my object has been to contrive the simplest one possible which would fulfil the indications,) but I assert boldly that all the fractures of

* I sent an article on this subject to Philadelphia to be published in the American Journal of Medical Sciences—it appeared in the Nov. No. 1838, but in a mutilated form, probably from want of space. The present paper is in substance a part of what should have appeared in the one alluded to, and should be read with it,—neither being complete by itself. A part of what I say here will probably not be fully understood without reference to the plates in the Philadelphia Journal.
On the Use of the Double Inclined Plane. [May,

the thigh and leg can be treated with more comfort to the patient, and less risk of deformity by some apparatus acting on the same principles. Mine has answered perfectly so far, and I therefore recommend it.

I have perused attentively every thing I can find in French or English on the subject, whether in favor of or against it, and my conviction of the utility of the double inclined plane has become stronger at every step of the investigation.

I lay very little claim to originality, for almost every idea I utter, (some of which I once thought peculiar to myself,) I find scattered here and there through different authors, but have taken some pains to collect and embody them into a more tangible form. My only desire is to direct the attention of the profession to a mode of treating fractures, which much reflection and experience have taught me is vastly superior to those usually adopted.

Sir Astley Cooper, Dupuytren, Travers, Charles Bell, Amesbury, Key, White of Manchester, McIntyre, Liston, and other surgeons of high repute in Europe, have recommended different modifications of the double inclined plane in certain cases of fracture. In the United States it is barely alluded to as a matter of history, is never exhibited in our medical schools, and scarcely a trace of it is to be found in our writings.

Why this discrepancy? It is because the different double inclined planes recommended, are on the one hand very defective, or on the other (like that of Amesbury,) too complicated and difficult to make, or too expensive—and because long established usage and authority have wedded our surgeons to other modes of treatment.

The apparatus generally employed in this country for fractures of the femur, are modifications of those of Desault, Boyer, Prof.

* I have not until recently seen the apparatus of Dr. Smith, of Baltimore; but I take great pleasure in saying that it is one of the most perfect I have seen, and admirably calculated to meet the indications. Though not very complicated, I fear it will be considered too much so to be extensively adopted, for surgeons dislike trouble as much as any other class of men—I have not had an opportunity of trying it, but have no doubt of its great comfort and utility in all fractures between the middle of the thigh and the ankle. I think it permits too much motion for fractures near the trochanter.
Gibson's modification of Hagedorn, and the single inclined plane.

All these I have seen applied either in this country or in Europe, under the direction of distinguished surgeons, and the same objections have struck me every where—viz: excoriation of the foot and perineum—fatigue both of body and limb, produced by the extended position—pain and stiffness in the knee—inapplicability in fractures near the neck of the bone or near the condyles—constant tendency of the limb to shorten from stretching of the extending and counterextending bands—inconvenience of stooling—permanent shortening, which often occurs, &c.  

Now if all these objections occur, amongst surgeons of high repute and extended experience, how much more forcible are they, when these apparatus are in the hands of young surgeons or country practitioners, whose surgical cases are "few and far between." I should much prefer Prof. Gibson's modification of Hagedorn to any of those named; it is not so liable to excoriation and shortening, but all the inconveniences of the extended position and other objections hold good against it.

Every surgeon will recollect the embarrassment he felt, during the first years of his practice, in making and fitting the different apparatus recommended for the different fractures of the thigh and leg. A double inclined plane properly constructed would save all this complication, and if any surgeon would practise its application on a sound limb for a very short time, he would avoid a great deal of trouble for the remainder of his life. An apparatus of the dimensions I have given can be made to fit the limb of almost any adult, and with the addition of a few junks and short splints or binders boards, a dressing would

* Prof. Gibson says—"So far as my own experience goes, (which amounts to upwards of 12 years, during the greater part of which time I had the chief control of the surgical cases of a large hospital and almshouse, together with an extensive private practice,) I am ready to declare, that I have never met with a single instance of oblique fracture of the thigh bone, in which I used the apparatus of Desault, (and until the last six months I have never used any other,) that more or less ulceration of the perineum or foot, and shortening of the limb were not the consequence."—Phil. Jour. of Med. and Phys. Sciences, Vol. 3.
always be ready for any fracture of the thigh or leg.* I have been using one for 6 years, and have never had a shortened or deformed limb, or seen the excoriations, or inconveniences of other apparatus in a single instance. Several of my medical friends have also used it, and invariably with the same success.

Objections made against the Double Inclined Plane.

I have searched for objections with all the impartiality I possess, and expected to find them more numerous and strong than I have. I give all I can meet with, and as truth is my object, I should be much obliged to any gentleman who will point out others. I hold myself open to conviction, and will cheerfully abandon every position I have taken if they can be proven to be false.

It has been objected, that when the double inclined plane is used, there is a difficulty in fixing the pelvis, and that its motions are communicated to the point of fracture. This is the strongest and almost only objection that can be urged, and is true to a certain extent when the fracture is high up in the thigh, but I think I have answered this satisfactorily in another place. Admitting this objection, however, (which I am not disposed to do,) it does not hold good in the slightest degree, where the fracture is below the middle of the thigh or in the leg; and it must at the same time be recollected, that a fracture in or near the neck of the femur, cannot be treated in the extended position, without shortening.

It is objected, that when the knee joint is implicated, and there is danger of ankylosis, the straight position is better than the flexed, a straight limb being better than a bent one. This I

* If the surgeon should have to treat a patient very much over or under the size of an ordinary adult, a coarse double inclined plane can very soon be constructed; and as one unaccustomed to it might be at a loss for proportions, I will give the following very simple rule. Take a piece of board of proper width and long enough to extend from the tuberosity of the ischium 4 inches below the heel; saw it in two exactly opposite the knee joint, and you have two pieces of proper length for the thigh and leg—the horizontal piece which rests on the bed, should be of the same width and about as long as the other two together.

The construction may take a little more time than the apparatus of Desault or Hagedorns apparatus, but much time will be saved in the treatment, as it requires very little readjustment when the limb is once dressed.
deny, because a limb a little bent, gives much less fatigue in walking than a perfectly straight one.

Mr. Liston says, that fractures just below the tuberosity of the tibia, are to be treated in the straight position, for when the knee is bent, the upper fragment is made to project, by the extensor muscles of the thigh, acting on it through the ligamentum patellæ. I have not treated a fracture of this kind with the double inclined plane, and this objection may have more weight than I suppose. It will be seen by examining the apparatus I propose, that one of the straps is made to buckle across the upper part of the tibia, which I should think, with the assistance of a compress, would counteract this tendency—Mr. Amesbury's experience confirms my opinion.

I now come to the objections of Prof. Gibson, published in the third volume of the Philadelphia Journal of Med. and Phys. Sciences. They are the fullest I have met with, and in order that the subject may be as fairly stated as possible, I extract what he has said on this point.

"The patient laid on his back, has the limb placed over the inclined boards, at an angle corresponding with an easy and relaxed flexion. Cushions are placed beneath to obviate undue pressure, and splints secured to the limb to afford lateral pressure. The weight of the body hanging by and operating upon the superior fragment, naturally draws this from the inferior fragment, and thereby effects counter extension, while the inferior fragment, supported and fixed by the angle of union of the inclined boards which operate upon the ham of the patient, maintains permanent extension. There can be no doubt that many of the objections to the semi-flexed position, as practised by Pott, and followed by the majority of the English practitioners, are obviated by this simple and ingenious contrivance; and were I disposed to select that position as more favorable than the extended one, I should certainly, to this form of apparatus, give a very decided preference; but there are objections even to this I apprehend, ingenious as it is, which will prevent it from ever coming into general use."

"Let any one for the sake of experiment, place beneath his own sound thigh and leg the machine of James or Bell, so as to have the leg secured on one side, the thigh on the other, and the body suspended and supported by the thigh—he will then find, be
the cushions ever so soft, that the position is by no means so comfortable, as one might be led to imagine; that the calf of the leg must be firmly and painfully pressed against the flat surface of the boards, that the ham sustains not only the whole weight of the thigh, but that portion of the body elevated above the plane on which it would naturally rest, and under circumstances too, most disadvantageous—being fixed upon a sharp angle, formed by the union of the inclined boards, and leaving a surface too inconsiderable to form any other than the most painful support."

"That extension and counter-extension can be produced by this apparatus, there cannot be the slightest doubt. But it is extremely doubtful, whether the patient can sustain the torture necessary to carry the operation into full effect. Cannot a moderate degree of extension and counter-extension, it may be asked, be kept up? To this it may be answered. take off from the ham the degree of pressure necessary to relieve the patient, the body sinks and is supported by the bed, counter-extension is therefore removed, extension destroyed, and how then does your method differ from that of Mr. Pott, except in the patient being placed on his back, and a partial support being given to his limb? But granting these objections to be unfounded, would the weight of the body be always sufficient to effect counter-extension, and prevent the bones from over-lapping? On the other hand, would it not sometimes happen in large and heavy men, that from too much force being exerted on the superior fragment by the weight of the body, inordinate irritation would ensue? Again, how are we to prevent the rotation of the pelvis, when one limb is suspended on a frame, and the other extended and left at liberty? But in answer to all this it may perhaps be said, that the twenty years experience of Mr. Cooper, and the authority of Mr. Bell, are sufficient to justify the practice." &c.

It so happens that I have never seen the apparatus of James or Bell, alluded to, but if they create one half the ills which Prof. Gibson attributes to them, they should be ranked amongst instruments of torture, and not surgical apparatus. The one I propose certainly acts upon very different principles. He says "the extension is made by the angle of the inclined boards acting on the ham, and that the body is suspended by this point in order to effect counter-extension, by its weight on the superior
fragment." If the two boards were put together at a right or more acute angle, the ham certainly would suffer; but it will be seen by examining the drawing given of my apparatus, that it is placed at a very obtuse angle, and the ham scarcely touches at all—the only pressure being (as in the use of any other apparatus) on the calf of the leg, well protected by a hair or chaff bag.

Prof. Gibson too would lead us to suppose, that even the weight of the body, when suspended by the thigh, was not sufficient to keep up counter-extension! I must confess that I was very much surprised to see such a position advanced by one of his deservedly high reputation. Certainly neither the apparatus of Desault or Boyer, exert a force any thing like equivalent to that of the weight of the body!—no tissue of the human frame could sustain it, and it is a well established principle, that a small force constantly acting, will overcome any muscular resistance we are called upon to counteract.

In the double inclined plane I propose, the extension is effected (in fractures of the thigh bone,) principally by the weight of the leg, resting on the calf and whole under surface down to the heel—the leg acts as a lever on the lower fragment of the thigh bone, and when the straps are buckled across, and the foot bound to the foot board, this lever cannot fail to perform its office perfectly. The lower fragment is thus held firm, while the pelvis is resting comfortably on the bed, and it will be seen at once, that if the proper extension be made, and the limb be placed over a double inclined plane, which has the thigh piece as long as the sound thigh, shortening cannot possibly occur—the weight of the body makes a passive counter-extension, (without being hung up) whilst the extension is effected as before stated.

Several of my medical friends have not only seen me do it, but have treated cases in this way themselves, and are satisfied that the double inclined plane I use is free from the objections urged.

I have thus fully stated and replied to the objections of Prof. Gibson, because I have the highest respect for his opinions—because I am satisfied he is in search of truth, and open to conviction—because he has had no experience with a double inclined plane properly constructed, and because he occupies a station which enables him to do much towards suppressing or propagat-
ing whatever is prejudicial or useful to those whom misfortune may place under the surgeon’s care.

For plates, proportions, construction, application of double inclined plane, advantages over other apparatus, &c., the reader is referred to the November No. 1838, of the American Journal of Medical Sciences, published in Philadelphia.

It will be seen that the second plate in that Journal is very inaccurately done, the knee not being opposite the angle of the planes.

By a misprint, too, I am made to say that the cases reported did not occur in my own practice. They did occur in my practice, but were selected because they had been witnessed by other surgeons.

Since those cases were reported, my friend, Dr. Fearn, and myself, have treated others in the same way, and with the same satisfactory results. One of these cases was a very interesting one. The patient was a boy of four years old, who had his thigh bone crushed near the trochanter, by the wheels of a carriage passing over it—the limb was placed over a double inclined plane, and at the end of thirty five days perfect union had taken place, without the slightest shortening or deformity. The little fellow was cheerful all the time, and never complained of the apparatus.

The apparatus was constructed in the simplest manner. We procured two pieces of white pine board, five inches wide, and long enough when placed under the limb, to reach from the tuberosity of the ischium three inches below the sole of the foot. One of the boards was then sawed in two, exactly opposite the knee joint. We thus had at once, a thigh piece, a leg piece, and a horizontal piece to rest on the bed and support the other two—the thigh and leg pieces were then hinged together with leather and tacks—and the thigh piece was fixed to the horizontal board in the same way—a foot piece was next fixed on—the limb was then secured to it with pads and splints, and pieces of bandage, instead of leather straps and buckles, &c. (For mode of construction, see Philad. Med. Journal.)

Dr. Fearn, who has very uncommon mechanical ingenuity, made an improvement in this case which is very important—he nailed to the outer edge of the horizontal board, at its upper end, a narrow splint which extended along the body of the arm pit—
Fracture of the Lower Extremity.
By H.V. M. Miller, M. D.

Having, myself, been a sufferer from the above injury, I have looked with no small degree of interest, to the various methods which have been proposed for its treatment.

The apparatus of Desault, I can say from personal experience, is inconvenient beyond measure. The species of pulley or suspended weight proposed by Dr. Antony, has not answered the expectations I was induced to form of it from his recommendation. The double inclined plane I have never used, but it is liable to the same objection as the others, namely, that it confines the patient for weeks to his back, a position which becomes insupportably irksome long before the period of his release has arrived.

It was with pleasure, therefore, and anxiety for the result, that I witnessed the treatment of the first fracture of the leg at La Charité, by M. Velpeau, upon a totally different principle from any which I had seen practised. I allude of course, to the immovable apparatus, first proposed, I believe, by a surgeon of Brussels, and possibly familiar to most of the readers of the Journal.

But as all of them may not have seen or employed it, I will detail three cases which I have treated by means of it, with manifest advantage.
The first was a little boy, a servant, five or six years old, belonging to Maj. Dawson, of Cassville. He fractured both bones of his left leg, by a fall from his feet while skating on the ice, the last week of November, 1838. I saw him almost immediately, and without difficulty effected the reduction. The apparatus was applied in the usual way, that is to say, a common roller bandage is passed from the toe to a prudent distance above the seat of the fracture, over some light compresses with which the limb has been previously enveloped—these are then well moistened with paste or starch, and another bandage applied, passing in a reversed direction from the first, which is also wet with the paste. Four pieces of stout paste-board, cut of a proper shape, are then wet with the paste, moulded to the limb and confined firmly to it by two other bandages, passing the first upwards, the last downwards, which finishes the dressing. After a few days, three or four, the whole apparatus becomes perfectly dry and affords so strong and firm a support to the limb, that the patient may get at once upon his crutches and move about at his pleasure. In consideration of the youth of my patient, and the probability that he would attempt some movement which would displace the dressing before it became hardened, I confined a splint or small piece of white pine board to each side of the limb, by an additional roller, which was removed on the fourth day after the fracture.

My patient had no bad symptom beyond the restlessness common to his period of life. During the week, I thought it safest to confine him to his couch. The seventh day after the injury, he was permitted to get up, and although too small to walk surely with crutches, he contrived to locomote by means of the sound limb and his hands, much to his own comfort and greatly to the relief of his attendants.

On the first of January the apparatus was removed, and the limb found to be perfectly straight, of equal length with the other, and firmly united.

The second is a case in which speculative opinion would have deterred me from the application of the Immovable Apparatus, if I had not previously have seen similar ones successfully treated with it, and every theoretical objection triumphanty refuted by a practical fact. It was a compound comminuted fracture, produced by the falling in of stones and earth in one of the deep
excavations on the Western and Atlantic Rail Road. Some delay ensued before the sufferer was extricated from the rubbish amongst which he was wedged, and much more before I could visit him at the shanty of his employer, Mr. Y., a distance of fifteen miles.

The patient was an athletic young man, and had suffered miserably from spasmodic muscular contraction before I reached him. The superior fractured extremity of the tibia was projecting slightly from the external wound, but was easily made to resume its proper position. Three small fragments of bone were found wholly detached and removed, and the fractured portion as properly adjusted as the very considerable tumefaction which had ensued would permit, and the bandages or apparatus applied as in the above case, omitting the pine splints and dressing the wound of the integuments with a little cerate and plaster. The bandage relieved the spasmodic contraction of the muscles almost as soon as applied, and a strictly antiphlogistic regimen quite reduced the swelling in four days, when another roller had to be strongly drawn over the whole dressing to make it adapt itself to the diminished size of the limb. This intention it answered completely; the better for the envelope having been again remoistened with the paste before its application.

When it had acquired sufficient firmness, on the sixth day after the injury, the patient mounted his crutches and continued to move about as he pleased until the fortieth, when the apparatus was removed, and the external wound discovered to be entirely healed. No deformity of the limb could be perceived, nor is there any halt in the gait of the individual subsequently. The pus discharged from the wound, which had occupied the interstices between the limb and bandage, had become indurated and produced no inconvenience during the cure.

The tumefaction, and especially the supposed necessity for dressing the external wound, would in this case, at the first blush, appear decidedly to contra-indicate a contrivance like to that described above, but experience in this as in many other instances, shows that the employment of the additional roller obviates the first of these difficulties; and the exclusion of the atmosphere from the discharged pus, so deprives it of its virulent properties, that the necessity to remove it no longer exists.
The third case is of quite recent occurrence. On the morning of the 25th of February, the patient, a negro boy 16 years old, belonging to Mrs. O'Neal, of Monroe county, Ga., was engaged in felling trees, and one of them fell upon his left leg and fractured, or rather mashed, both bones of it without any injury to the integuments.

I saw the patient, and arranged the bandage very soon after the accident, before it had produced much pain or swelling. On the 28th, the dressing had become sufficiently hard and strong to allow of his leaving his bed and walking upon crutches without injury. He still uses them, (14th March,) but has had no accident or unfavorable circumstance, and doubtless will be entirely well when a sufficiency of time has elapsed to justify his liberation.

These cases bear no sort of proportion to the large volume of evidence in support of this method of treating those injuries which has been hitherto furnished by other individuals, but if they induce a few Physicians to practise it, and rescue their patients from a horrible four or six weeks confinement, the utmost extent of my hopes will be realized.

Cassville, 14th March, 1839.

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Case of Expulsion of a Fœtus, after the death of the Mother.

By J. C. Nott, M. D. of Mobile.

This patient was a negro woman, aged about 35, belonging to Robert Purvis, merchant of Mobile. She had menstruated irregularly for twelve months before conception, and during this time, her health was not good. I was called first to see her about the middle period of pregnancy—she was then complaining of pains in the uterus, which became more troublesome as gestation advanced. During the last month, the pains were almost incessant, and often so violent that I thought her actually in labor. She had a good deal of fever, and her strength failed so as to alarm me, and I determined, if possible, to hasten the deli-
very. On examination per vaginam, during a strong pain I found the os tincoë dilated to the size of a dollar, but when the finger was placed against the membranes, no contraction of the longitudinal fibres could be felt—the action appeared to be confined entirely to the circular fibres. When the pain went off the mouth of the uterus was fully relaxed. Repeated examinations gave the same result.

I ruptured the membranes with the hope of inducing a different action, but was disappointed. I gave ergot, but without effect. The case finally became so urgent that I determined to open the head, which, with the assistance of Dr. Fearn, I did. All of the bones of the head were removed, and the child still did not advance. The uterus was in a very unfavorable condition for an operation of this kind, and the patient suffered so much, and was so much exhausted, that we thought it most prudent to desist for the present; and after removing the head, we left her at midnight—about day light she died—and when I went to see her about seven o'clock in the morning, I found her laid out in her burial clothes. About mid-day I received a message that the child was born, and a request to visit her immediately. I did so, and found that a full grown foetus had been expelled about six hours after death. She had become distended to fully twice her natural size with gas—not only the abdomen and thorax, but the head, neck, and extremities. I have no doubt that the child was forced out by this extrication of gas.
Part II.—REVIEWS AND EXTRACTS.


This "description of a modification of the Double Inclined Plane," is from the pen and the experience of one of our most valuable southern practitioners, but has been so curtailed in publication in the November number of the American Journal, as to cause the author to feel himself under the necessity of farther exposition of the subject. We insert, in the first part of the present number of this Journal, Dr. Nott's last remarks on this interesting subject, in which reference is made to the article at present under consideration. In order, therefore, to bring Dr. N's. views and experience as fairly as possible before the readers of this Journal, we have thought proper to notice, in this place, the former publication in such a manner, that its contents may be brought near to that which it is its purpose to elucidate. Meanwhile, we enter our protest against the plan of Journalists curtailing the statements of writers, in such a manner as to alter or render unperspicuous their meaning. This is often done, without intention of that effect, because it is not always the case that the author's views are as clearly and impressively received by the editor as they are entertained by himself; and if they were, there is something of idiom in the expression of most writers, as there is in different languages, which must suffer by elimination, or new verbiage, with almost the same certainty as the ideas written in one language do by being translated into another. No part of an essay or communication calculated to bear, in the least, on the subject treated, can generally be omitted with propriety. We recollect to have had the cause of truth suffer in one instance, and of truth and humanity in another, by such mutilations of our remarks. In the former instance, which was a description of a case wherein about one half of the right lung was disorganized, and sections of the fifth and sixth ribs taken from the same side; in which we were made to give the understanding, that the patient finally recovered; whereas he finally died. In the other, we attempted to illustrate the utility of that invaluable chemical medicine, known by the name of Hydrocyanic, or Prussic Acid, by the minutes of some twenty of the first cases in which we prescribed it, taken in the order of our experience, from our notes kept of the cases, in many of which its sedative powers were eminently valuable; whilst in a few others, they
were less conspicuously so. At the same time, on account of the great power of this article, and, consequently, the absolute necessity of its uniformity of strength, we annexed the process by which the acid used in the cases detailed, was made. The reader will be able to realize our surprise when he learns, that in the publication only a few of the most discouraging and unfavorable cures, such as confirmed tubercular phthisis in the last stage, &c. were inserted, whilst the weight of evidence of the important virtues, and the safety in the administration of Prussic Acid, were omitted, in company with the process by which the specimens used were made.

There has been much complaint of the exercise of this kind of curtailing by Journalists; the effects of which have not only been to suppress and to distort the truth on subjects of the greatest importance, but it has so operated on the feelings of practitioners as to prevent, in very many instances, the communication to the public, of opinions and facts of great value.

The apparatus of which Dr. Nott speaks, "consists of four pieces; a thigh piece, a leg piece, a moveable foot board, and a horizontal board resting flat on the bed. The thigh piece is fifteen inches long, eight wide at the upper, and seven at the lower end, and one inch and a quarter thick. The upper piece is hollowed out a little, and brought to a thin edge above, to fit it well under the nates; and the corners are rounded off, as otherwise, they would be in the way in passing pieces." This thigh piece has three openings on each side, two inches from the edge, for the passage of leathern straps—the lower being as near the knee as possible, the upper one near the groin, and the third, intermediate. The leather straps, with buckles attached, are long enough to pass around the limb after the pads and splints are applied, and buckle firmly across; in order to which two and a half feet are required. The leg piece is two feet long, seven inches wide at the upper, and six at the lower end. It has a slit at the lower end, seven inches long and one and a half wide, for the purpose of receiving the tongue or tenon of the foot-board, allowing it to be moved up or down, according to the length of the limb. There are four openings near each side of this board for receiving leather straps, as in the thigh piece. One of them is as near the knee as possible, one near the ankle, and the other two at intermediate points. Small holes are bored horizontally through that part of the leg piece through which the mortice is made, for the purpose of fixing the foot board at any desired point.

"The foot board, is twelve inches long, and four wide, with a tongue one and a half inch wide, so as to fit closely in the long slit, where it is firmly held by the wire. In order to hold it more steady, it has a small block nailed on the lower back part on a level with the commencement of the tongue; this block prevents the foot from pushing it forwards.
The horizontal board which rests on the bed, is notched at its lower extremity; in these notches the leg piece is supported, and by means of them the angle may be varied when necessary—it is three feet long and eight inches wide at each end—it is fastened to the thigh piece two inches from the upper extremity of the latter by two hinges—the thigh piece fits better under the nates for projecting over in this way—these hinges may be of iron or leather.

The joint between the thigh and leg piece, is formed like a carpenter’s rule—the two pieces being fastened together by a piece of strong wire—iron or leather hinges would answer here also—the angle formed here should be rounded off to prevent injury of the ham.

In the thigh and leg piece, half an inch from the edges on each side there is a row of holes, half an inch in diameter, to receive wooden pegs six inches long which stand perpendicularly on each side of the limb, these may be inserted at any points the surgeon thinks advisable, to give additional firmness to the fixtures—thus giving all the advantages of a fracture box without its inconveniences.

Extension, in fractures of the thigh, is effected, in this apparatus, principally by the weight of the leg resting on the calf and whole under surface down to the heel, by the straps buckled across to keep it stationary and where necessary by an extending band or gaiter (on which there is very little stress) which fixes the foot to the foot board. The lower fragment is thus held firm while the body is resting comfortably on the bed. It will be seen at once that if the fragments are properly adjusted and the limb placed over the inclined boards (the thigh board being of the proper length) shortening cannot possibly occur; the weight of the body makes a passive counter-extension, without being hung up by the ham, while extension is effected as before stated.

Manner of applying the Double Inclined Plane.—The surgeon may be guided by his own judgment with regard to the propriety of applying a roller or many tailed bandage to the limb; in the great majority of cases it may be dispensed with.

1. In Fractures below the Knee.—In the first place a narrow bag of the width and length of the two inclined planes, about half filled with bran, chaff; or what is much better curled hair, must be spread over the apparatus for the limb to repose on; it should then be placed under the sound limb so as to get every part of it properly adjusted, foot board &c.; then raise the fractured limb, adjust the fragments, place the apparatus under it and lay it gently down on the cushion, taking care to arrange the latter so that it will press equally from knee to heel. It is frequently necessary to stuff cotton or tow under the part of the pad between the calf and heel. Next apply two narrow junk or pads prepared in the same way as the one under the limb, on the outside and inside of the leg and long enough to extend from the knee to the sole of the foot; over these two splints, of the same length and three inches wide, if necessary, a pad and split may be placed on the anterior surface of the leg also and the four straps should then be buckled firmly across. Before all this is done, however, the foot should be bound by a bandage to the foot board; if the fracture is oblique it may require a gaiter.

If preferred, wet binder’s boards may be placed next to the leg and the junk on the outside. One or two straps should also be buckled across the thigh to keep it still. A few pegs should also be inserted along each side to keep the whole more steady.

This dressing answers for all the fractures of the leg, oblique or transverse, simple or compound, and displacement is impossible.

2. In Fractures in the middle or Lower third of Femur.—The application is equally simple here and should be commenced in the same way, by spreading over the apparatus a stuffed bag for the limb to repose upon, and adjusting it properly on the sound limb first so as to be sure that every thing
will fit snugly. Three junks and the same number of splints long enough to extend from the pelvis to the knee on the outside, inside, and anterior surface; these are properly placed and the thigh straps buckled across. The foot must be bound to the foot board and the leg straps buckled to keep the leg quiet.

A very important point in fractures of the thigh is to have the thigh piece of the proper length, and this may be determined by applying it first to the sound limb. If the thigh piece of the apparatus is too long for the patient, place a folded blanket under the pelvis, which will be equivalent to the shortening the thigh piece as it brings the pelvis nearer the angle of the inclined planes. If the thigh piece is too short for the patient, place a board under the horizontal board of the apparatus and this will be equivalent to lengthening the thigh piece.

3. In Fractures of the Femur in or near the Neck.—In these cases the apparatus of Desault, Boyer, or Hagedorn, and in short all other than the doubled inclined plane, are confessedly inadequate to a cure, without deformity.

There are difficulties to be surmounted even with the double inclined plane, but I do not think them very great, and it must be recollected that we have no choice. The indications in those cases are:

1st. To keep the limb of its natural length.
2d. To flex the thigh upon the body and the leg upon the thigh so as to relax all the muscles which have a tendency to produce displacement.
3d. To raise the body by placing under the back an inclined board or bed chair, in order still further to relax the iliacus internus and psoas muscles.
4th. To keep the foot firmly fixed in the upright position.
5th. To keep the trochanter a little raised by putting under it a wedge shaped pad, where the fracture is in the neck—thus preventing one end of the bone from falling below the level of the other.
6th. To keep the fractured surfaces in close apposition.
7th. To prevent the motions of fragments.
8th. To fix the pelvis.

Now I repeat, that the indications, all of which are important, cannot be met, by any other apparatus than the double inclined plane.

The manner of dressing these fractures is precisely the same as that described for fractures in the middle and low third, except that the splint on the outside of the limb should be long enough to reach beyond the hip joint and in addition to the straps be secured at the upper end by a bandage passed around the pelvis. This assists much in controlling the motions of the pelvis.

In these it is all important that the pelvis should be fixed, as motion from side to side would necessarily produce derangement. When the patient is restless the effectual plan which has occurred to me is that (which I adopted in Case 1st) of placing a double inclined plane under the sound, as well as the broken limb—the two being pressed up, on the same level, under the nates, will of course prevent any twisting motion and keep the pelvis in its position. In order to keep the relative positions of the two double inclined planes the same, lay a narrow board across the foot of the bed in contact with the bed posts—let the lower ends of the horizontal boards of the two apparatus rest on the cross board, and fasten them together by boring a hole through each and inserting moveable pegs. The apparatus for the sound limb may be of the simplest kind—no junks, splints or straps are required—there is nothing wanting but to let the limb rest on the inclined planes—it can be taken away when feeces are evacuated and replaced without the least trouble. See Case 1 for a practical illustration.

These cases are comparatively rare, fractures of the femur generally occurring near or below the m.
The advantages of the double inclined plane over other apparatus for fractures of the lower extremity, are the following:

1st. The double inclined plane costs but little, is so simple in its construction that it can be made by any one; is easy of application, and when applied difficult to derange; the angle, too, in most cases can be varied occasionally, which gives great relief to the patient.

2d. Extension and counter-extension are steadily preserved, the fragments are better guarded against motion, while, at the same time, the patient can be moved with much less risk, removed from one part of the bed to another.

3d. It is constructed in such a manner, that it can be adjusted so as to fit limbs of different lengths—is equally applicable to all the fractures of the thigh and leg, whether simple or compound; and therefore, with a few shingles for splints, and junks, a dressing will always be in readiness for a fracture of the lower limb; one apparatus of this kind will last a surgeon for life.

4th. The foot is so well secured that no retraction or lateral motion can occur to derange the fragments.

5th. If there should be a wound in the soft parts, swelling or inflammation, the limb may be simply laid over the inclined planes, the foot bound to the foot board and two or three straps buckled across to keep it steady—extension and counter-extension are thus kept up (which is all that is necessary until callus begins to form) and there is no impediment to any local treatment which may be deemed requisite—or even after the limb is fully dressed you may, at any time during the cure, open the dressings to examine the limb without the possibility of harm.

6th. The flexed position relaxes the muscles, (thereby counteracting the cause of shortening) is much more comfortable than the straight position, and obviates in a great degree that painful stiffness which often follows the latter.

7th. The flexed position is greatly preferable to the extended, where the fracture is near the trochanters, or near the condyles. In the former case, the iliaceus internus and psoas muscles, draw up the fragment, and in the latter, the gastrocnemii and popliteus draw the lower fragment down, so that the proper line and apposition of the bones is not preserved, and shortening or angular derangement or both are the consequences. This must be admitted by every one.

8th. The weight of the leg on one of the inclined planes, keeps up extension on the lower fragment (in fractures of the thigh), the extension being made principally on the calf; while counter-extension is effected by the weight of the pelvis, which holds the upper fragment in its place—there are no bands to produce excoriation—an extending band in some cases of oblique fracture may be necessary to keep the foot in its place, but the stress upon this is trifling—generally speaking, the foot only requires to be lightly bound to the foot board to keep it upright—the heel, instep and perineum, are thus saved from excoriation.

9th. The facility of passing faeces, too, is another great advantage—the patient has only to raise the sound limb, and a bed pan can be slipped under him without inconvenience.

10th. When the fracture is in the upper part of the femur, the patient must be kept always in a half sitting posture, but when in the middle or lower third, he can assume at pleasure any posture from the recumbent to the sitting, and may thus amuse himself with reading, writing, chess, cards, &c.

11th. The apparatus of Desault, Boyer, and Hagedorn, do not permit of access to injuries of the soft parts, when situated under the lateral splints.

The apparatus above described, is illustrated in the American
Journal by two good cuts; one exhibiting plainly the apparatus, and the other, its application. The four following cases are given by Dr. Nott, at the end of the description of his modification of the double inclined plane, in further illustration of its application and utility.

The four following cases illustrate the efficacy of the double inclined plane I employ. I have selected these, because they occurred not in my own practice, but in that of other surgeons.

Case I. Fracture of the Thigh.—The subject of this case, G. R., about nineteen years of age, from Charleston, while a student in the South-Carolina College, became involved in a difficulty which resulted in a duel on the 29th May, 1833. I was at this time living in Columbia and the case came under my charge. His antagonist was shot through the abdomen and survived but twenty eight hours, and R. was shot through the thigh fracturing the femur—the ball entered the right thigh on the outside, four inches below the trochanter and passing through the bone came out at the opposite point two inches below the groin so exactly over the track of the femoral artery that it must have been struck, though not with sufficient force to cut it, the bone having protected it.—The ball passed through a large plexus of blood vessels and nerves, and the hemorrhage was considerable though not alarming—the thigh swelled immediately to double size from extravasation of blood. I had him carried to town that night, fifteen miles.

This case according to all authority was one which demanded immediate amputation, and was exceedingly interesting in many particulars, but I shall omit every thing but what relates to the subject before me.

I did not attempt to set the limb before the 11th of June (13th day) because I was afraid of sloughing in the track of the ball and that the motion required in setting it might produce a rupture of the artery and fatal hemorrhage. There being wounds on the outside and inside of the thigh which required constant attention, the ordinary apparatus was inapplicable, and this fact as well as the situation of the fracture (being very high up) determined me to select the double inclined plane which I had never seen applied. The limb was accordingly dressed in the manner already described, on the 11th of June, thirteen days after the accident. From my notebook I take the following extract which I think important.

“June 16th. Patient has a great deal of pain in the wound, is very restless and cannot be confined in any position which will prevent him from twisting the pelvis to the opposite side and thus distorting the limb. The bones form a salient angle externally and the lower fragment rides the upper—the limb is shortened and the patient so restless that I fear an artificial joint. I have therefore ordered another double inclined plane for the sound limb, with the view of confining it and keeping the pelvis square, in hopes by this means, of preventing the motion which produces the derangement of the fragments.”

23d. On the 18th the other double inclined plane was placed under the sound limb exactly on a line with the other, and the two acting like wedges under the nates, of course kept the two sides of the pelvis on the same level—they were fixed by pegs (as before stated) to a transverse board to guard them against motion. No bandages, splints or any dressing was applied to the sound limb except a pad for it to repose on. The foot of the broken limb was well secured to the foot board, a compress laid over the pro-projecting extremity of the lower fragment and a strap buckled over it so as to draw this fragment inwards and counteract the angular derangement—the other dressings as already described.) This arrangement succeeded
Dr. Nott on the Double Inclined Plane. [May,

even beyond my expectations—the limb is now straight and of its natural length."

In the early part of July the patient had a severe attack of intermittent fever for about a week, for which he took quinine and the usual remedies. On the 31st he was up walking about on crutches, and on the 18th of August he left town in a stage coach, perfectly well and without deformity.

During its progress this case was seen repeatedly by Dr. Wells and Dr. Gibbes who will vouch for the principal facts stated.

This young gentleman was one of high respectability, but misfortune seemed to have marked him for her own. He afterwards had the same thigh again fractured by a fall, three or four inches below the original fracture, and after recovering from this went on to Philadelphia (as a medical student) where he died with an attack of fever.

Case II. Fracture of the Thigh. In the month of October last (1837) a young negro man belonging to Mr. Alexander Pope of Mobile, fell through a trap door in the second floor of a warehouse, drawing along with him a large box of goods, which fell upon his thigh and fractured it in two places, about four inches above the knee and also about four inches below the groin—the middle fragment too, felt as if it was crushed into several pieces.

Dr. R. Lee Fearn and myself attended the patient together. We placed the limb over the doubled inclined plane (as described)—bound the foot to the foot board, and without any bandaging, placed pads, and on the top of these splints, on the outside, inside and anterior surface of the thigh—the thigh straps were then buckled firmly across, and also the straps across the leg. He was the most unmanageable patient I ever saw and appeared to be perfectly regardless of consequences. He would unbuckle the straps and take off all the dressing—but the limb still remained on the inclined planes and the foot, bound to the foot board in the upright position—he was unable to move the limb, and extension and counter-extension were thus maintained in spite of him. At the end of five or six days, finding him so unmanageable, Dr. Fearn thought he could be confined better by Desault’s apparatus; and accordingly the limb was taken off the inclined planes and Dr. Physick’s modification of Desault applied. The next day we found every bandage untied and the limb shortened—it was again applied and again every thing was torn loose. We once more applied the double inclined plane which kept up extension and counter-extension, although he would unbuckle the transverse straps when he pleased. Under these circumstances, unfavorable as they were, the case did well—the bones united and on the forty-second day the man was up walking on crutches—about the termination of the third month he walked to our office without crutches, and when stripped and standing before us, the eye could not distinguish the fractured limb from the other—there was no shortening and no deformity.

But one double inclined plane was used in this case: the second is very rarely required.

Case III. Fracture of the Leg. Mr. J. C. D., a connection of mine, was thrown from his horse during the last summer and fractured both bones of the leg about two inches above the ankle—the malleolus internus was fractured also. I applied the straight splints and other dressings ordinarily employed, which were continued for a week. He complained so much of pain in the knee and the point of fracture that I determined to put the limb on the double inclined plane, thinking that the more perfect support to the limb, and the relaxation of the muscles might afford him relief. I first laid down on the leg piece (the apparatus being first protected by a hair pad) the bandage of Scultetus and then placed the limb upon it. I next applied wet binder's boards on the outer and inner part of the leg from the knee to the sole of the
foot—the strips were then drawn across—junks on each side and the leather straps buckled firmly over the whole—the foot also was secured in an upright position by being bound to the foot board. The relief from pain was immediate and I heard no complaint afterwards—the cure marched steadily and rapidly on.

In this case, junks next the skin and wooden splints or binder’s boards on the outside would have answered all the purposes of binder’s boards and bandage of Scultetus.

Case IV. Fracture of the Leg. This was a patient in the Mobile Hospital under the charge of Dr. Renwood, through whose politeness I was allowed to apply the double inclined plane. All the circumstances connected with this case (with the exception of the fracture being a few inches higher up) resemble so closely case third, that I deem it unnecessary to give a detailed account of it. He was rendered much more comfortable by the inclined plane and was speedily cured.

We shall be pleased to find Dr. Nott’s modification of the double inclined plane, prove adequate to the liberation of the patient from the bed in cases of fracture of the lower extremities. If it will effect this, and at the same time preserve good adjustment, it must meet the desire of every practitioner of surgery; for the bed has become the chief source of distress in these cases; all other troubles, being met by the various modern improvements in surgery. We do not, however, see why it may be expected to prove more serviceable than Amesbury’s apparatus, to which it is, in its principles, very analagous.

We are of the opinion that the high price at which Amesbury’s apparatus has been held, rather than its falling short of the purposes for which it was designed, has been the cause of its want of more general adoption. The apparatus of Dr. Nott can be speedily constructed by any practitioner of tolerable mechanical ingenuity, or may be procured of the mechanic, we presume, for five or ten dollars. We treated, during the last summer, a compound fracture of both bones of the leg, of an old man, with double inclined planes of temporary construction, preserving extension with a moderate weight hung at the foot, with very satisfactory results; but we confined the patient to the lying position for several weeks, before we allowed him to be up at all. In the use of Amesbury’s apparatus in recent, and indeed in all cases, we have found such a tension of the dressing demanded, in order to the prompt preservation of adjustment, which was incompatible with the comfort of the patient, and which we have thought more distressing than the irksomeness of lying, without that tightness of the dressing. One case occurs to our recollection, wherein the muscular powers of the lower extremity were destroyed for many months by the tension of the dressing which the surgeon thought necessary to use. In this case, the whole limb remained shrunk considerably below its natural size; and we doubt whether its powers and development have yet returned, although the accident occurred some seven or eight years
ago. We do not know what pressure was used, as the case was not under our care until after the apparatus was dispensed with. The practitioner who had the management of the case, was, however, not without experience and judgment.

Scarlatina. The following observations are from the pen of Joseph Reynolds, of Gloucester, Mass. We extract them from the Boston Medical and Surgical Journal, of 27th March last:

I have been pleased to observe that you have several times, of late, called the attention of the faculty to the subject of scarlet fever. I hope you will continue your calls, until their attention shall be thoroughly aroused. I address you at this time to make two or three inquiries; and I do this for the purpose of directing attention to a point which I fear has not received sufficient attention in this country. Several European writers have noticed the combination to which my inquiries refer, but I am not aware that much observation has been directed to it in this country.

Before propounding my inquiries, I will remark that I have never observed those inconveniences resulting from the use of tartarized antimony, in this disease, which have induced Professor Cross to condemn it in such decided terms. On the other hand I have used it freely, and should my success continue as great as it has hitherto done, I shall certainly continue its use. Seven years ago I attended, in one autumn and winter, seventy-six cases, and only one of them terminated fatally. My treatment consisted chiefly in the free use of calomel, small doses of ant. tart., with occasionally emetics of the same, and opiums as they were required. Such small doses of opiums are useful in allaying the irritation of the system, will be sufficient, in most cases, to counteract the tendency of the antimony to run off by the bowels. This fact seems to have been overlooked by the professor.

The inquiries which I wish to propose, are the following. Does cyananche maligna run into c. trachealis? In other words, does the inflammation extend from the tonsils and fauces to the larynx, trachea, and even to the bronchial tubes? If it does, in what proportion of the fatal cases does the inflammation thus extend? Does c. maligna often prove fatal, in the acute stage, without exhibiting decided symptoms of c. trachealis? Does the tendency of this extension of the inflammation depend upon any appreciable circumstance, as the state of the atmosphere, season of the year, local causes, &c.? If it should be decided by observation that the inflammation does frequently extend to the trachea and its branches, and especially that this is true in a large proportion of the fatal cases, will this lead to my modification of the treatment of cyananche maligna?

Should these inquiries turn the attention of observers to this point, and especially should they lead those who have made observations relative to it, to communicate them, my purpose will be answered.

In addition to the standing wants of the profession, on the subjects of its cause, true pathology, and best treatment, Scarlatina has again, in consequence of its epidemic prevalence and severity in several places, and the appearance of fatal sporadic cases in others, become a subject of great interest. Much has been recently published on the subject, from the pens of Professors Chapman and Cross; from neither of whom, however, do we receive any thing of practical value in addition to the old stock of
knowledge. The cause, whether a specific contagion, operating according to the regular laws of contagion, or according to special laws of its own peculiar kind, or peculiarity of atmospheric, or sol-lunar influence, or derived from some strange and rare peculiarity in the constitution of diet, is not yet fully determined. Nor has the disease been satisfactorily described by writers whose observations have been circumscribed by a small geographical extent: consequently, owing to these circumstances, little improvement has been made in the prophylastic and therapeutic departments, calculated to afford uniformity of success. The disease, therefore, remains a very formidable scourge of humanity, and one, concerning which, much has yet to be drawn from the secret recesses of nature. The truth is, the disease differs materially with season, location, individual constitution, intensity of cause, the mere general differences of its character, in its epidemical appearances, at various times of its prevalence as an epidemic, &c. And with regard to prevention and treatment, there never can be more than sheer empiricism until its true causation and true pathology are better understood. We look with great hope and anxiety, to the revolution now progressing in the profession for the banishment of ultra "solidism," for directing the enquiries of the medical mind, more than heretofore of late years, to the condition of the fluids, and thereby diffusing more light on the subject.

Whatever may be the fact, relative to its contagious nature elsewhere, we hesitate not, one instant, to assert the non-contagiousness of Scarlatina, in the circle of our observation. We have all the evidence we can consider necessary, to place this fact beyond even plausible controversy. Such as, its occurrence in a very large proportion of cases, without the least possible communication with previous cases—its non-appearance in a like proportion under the circumstance of the most free communication—its appearance in individual cases, at all periods, from a few hours only, to weeks or months after communication, &c. And to these, we add that we verily believe that our own case of this disease appeared but partially, at different, remote periods, before the disease was completed; for in 1811, we suffered with many others in whom the disease appeared at that time, the eruption only, and in its latter prevalence, a few years ago, in the United States, we suffered the peculiar typhoid, constitutional, and the quinzy distresses, which, taken together, make up the general and complete characteristics of Scarlatina. Excluding then as we do, explicitly, at least for our region, specific contagion as a cause, we have now only to look to atmospheric and dietetic influences. Continuing our excluding plan of etiological research, we find much reason to put dietetic influence also hors de combat: leaving atmospheric influence the
Scarlatina.

only field for research. Whether this epidemical constitution of the atmosphere be derived from some peculiarity of temperature, locality, uranic influence, &c., as pre-remote causes, we do not pretend to determine on the present occasion; but in passing, we will remark, that a uniform sequence of events or phenomena, amounts to a declaration of cause-and-effect relation; and we think that few unbiased persons can look over the facts which Noah Webster collected many years ago, relative to the appearance of great and remarkable physical phenomena of the universe, and the appearance of epidemics in different parts of the earth;* and bring together like events which have transpired since the time of his publication on this subject, without observing, at least, a remarkable uniformity in the sequences of their phenomena.

But it is of little importance, in a practical point of view, whence this pre-remote influence is derived, or what its nature and name in the catalogue of things. The great questions are, how does it primarily affect the human system? Whether the solids or fluids, or both? And is it of a nature susceptible of neutralization in or out of the system, or of elimination after being introduced?

We must look upon the morbid actions, which make up the sum of the phenomena of Scarlatina, as the effects of its cause, received into and retained within the system, in sufficient power to develope such phenomena. It is no gratuity, but an axiomatic truth, that, otherwise, the cause, whatever it be, or from whatever source, could not act at all. But peculiar morbid action is produced; it is therefore, unavoidable to conclude, that the cause is introduced into, and retained within the system, in sufficient power for the production of the morbid phenomena. Now is it reasonable to expect, under such circumstances, that the best efforts for the correction of these actions, directly, and these alone, without due regard to the abiding presence of the cause, can be looked to for the final extermination of the disease? or shall we expect, as we should in all other matters for the final prevention or destruction of subsequent phenomena, to be obliged to remove, or render inert in its place, the cause?

Abundant attention to the action produced, alone, has been the rage during the reign of solidism, and banishment of humoralism, which has strangely existed for the last twenty or thirty years. This then has been fully brought to the touch-stone of experience, and has, on fair observation, been found wanting; and consequently the cry for a remedy has never been louder than at present. The success which has attended this practice, appears to us to be about this: that the morbid kind and inequal-

*See Webster on Pestilence.
ities of action have been, in some instances, so equalized and regulated, as to prevent local destruction of parts and functions, until the constitutional energies of the system have restored the secretions which have finally effected the elimination of the cause, and the patients have recovered. So also, very light cases have occurred, which, not having power to destroy organs, or derange functions to any considerable extent, have recovered without remedy. As to this practice, then, we say, it is insufficient, and therefore unsatisfactory. This excludes all the inquiries, except those relative to the elimination, or intra-correction of the cause. We are then, on finding that the cause is introduced into and retained in the system, brought to the necessity of determining its location, and its chemical nature.

Just in proportion as the false glare of an exclusive nervous pathology passes from our eyes, will be the ratio of increase of our perception of the physical cause of the morbid phenomena being in the circulating fluids. If here abiding, we have all the knowledge and control of it, which we have of fever, and we are brought to look to the secreting and excreting functions for its eradication. So far then as the emunctories can be brought to act on this cause, by medicinal powers, &c. which are at our command, will the disease be found under our control; whilst insuperable organic lesion or destruction of parts or powers, must be looked to, in many instances, as having transcended the extent of our remedial means; and this is the end of professional purpose in the case.

But in this view, we would not exclude the attention from the due consideration and employment of those means which are rationally calculated to act on the solids. The state of general excitement or local mischief, need at the same time, when these effects are set up in such a degree as to exist independently, their peculiar and appropriate corrections. The only remaining enquiries are—What is the chemical nature of this cause, if indeed it have a chemical nature? And what would be its incompatibles, whereby we might expect to neutralize its energies? This, if ever, will be determined by careful observation of the phenomena resulting, and a posteriori reasoning.

We consider the great error in the treatment of this disease, has been in the exclusive and immediate treatment of the morbid actions of the system, to the neglect of the causes of those actions. But we have greatly transcended the limits we assigned ourself, when we took up the pen, and shall here leave the subject for the consideration of other and more able minds.
Prophylactic and Curative Powers of Tobacco. On this subject, we extract entire, in the first place, the following article from the editorial head of the Boston Medical and Surgical Journal, for March last:

Impaired voice, in Clergymen. Within less than twenty years a new disease has been developed in this country, which is almost exclusively confined to parish ministers. It is a loss of tone in the vocal organs, attended by a sense of fatigue in the muscular apparatus of the throat, and accompanied by a peculiar dryness and rigidity, apparently, of the lining membrane of the larynx. All these finally incapacitate very many excellent men from discharging their pastoral duties. A multitude of divines are actually more or less affected with this malady of the throat, at this moment, and very many have been absolutely obliged to ask dismission from their people, in consequence of a total inability to read their discourses in public, or conduct the ordinary services at the desk. Many have placed themselves under medical care, with an expectation that rest, together with the administration of a gentle course of tonic remedies, would eventually overcome the difficulty, and enable the vocal cords to vibrate with their original energy.—

In other words, the sufferer has generally supposed that the original sonorous intensity and power of articulation, which by some unexplained combination of causes has been partially destroyed, might be restored by the operation of external or internal applications. But the success in treatment has by no means answered the expectations of those who prescribe, or those who take the intended remedies. The disease, instead of diminishing, though neither infectious or contagious, increases in a ratio corresponding with the multiplication of the clergy. What can be the cause? Let it be premised that the clergy of olden times, both in and out of New England, performed quite as much clerical service as those of modern times—and yet their vocal organs were the last to fail.

A few evenings since, in the course of conversation with Dr. Mauzan, a distinguished physician of Providence, R. I., this topic was under discussion, and he remarked that he could not ascertain, either in his own circle of acquaintance, or by inquiry among professional gentlemen residing in different sections of the country; that those clergymen who use tobacco, had ever suffered from the minister's ail, with one single exception. The inference, therefore, was, that smoking or chewing kept up a secretion in the neighborhood of the glottis, favorable to the good condition and healthy action of the vocal box.

Since the great temperance reformation commenced, tobacco has been anathematized, and it is now extremely rare to find any of the new comers into the ministry, who would tolerate tobacco; and all who are distinguished for their devotion to the great moral revolution which is going on, abandoned tobacco, if they had ever been addicted to its use. Now it is almost susceptible of positive demonstration that the clergy of olden times smoked and chewed very universally. The lawyers speak hours together, and when leisure permits, many of them smoke; and, as a general rule, the leading advocates are very great smokers—and yet, who ever heard of a lawyer who had lost his voice?

It may appear behind the present age of reformation to advocate, at this time, the use of an article, so contrary to good manners—one supposed to be so foreign from the catalogue of our necessaries for his—and one on which the prevailing spirit of reformation has seized with the hand of extermination. But we use opium in the service of humanity—an article which, for
the correction of its abuses, calls into requisition a nation's power. And we would use alcohol itself, in any of its formulae, from the distilled to the merely formented—than which there is no article on which we look with more perfect hatred—nay, despise with a vengeance which would make us, if possible, thrust into Lethe's dark, sinking, hellish torrent, the last formulae for its preparation, and know that the world would be greatly improved by suffering its privation for the prevention of its injuries—this article, we say, we would use for the saving of life, when other things would not do it. In like manner, we feel it a duty to advocate the use of tobacco, both as prophylactic and curative in certain cases. We are pleased to see the intimations given by the editor of the Boston Journal, not only on account of the fact that they may lead to true etiology, without the knowledge of which, neither prophylaxis nor cure may be expected with any degree of uniformity.

We acknowledge that the suggestions relative to the prophylactic virtues of tobacco, in regard to the cases alluded to, are new to us; for we have been in the habit of looking to the chilling walls at the back of pulpits, against which clergymen often rest the upper part of the back, immediately after the exercise of preaching, as a cause of this disease. But as the "minister's ail," as it is called, is but of very limited extent in the South, we have had but little observation in such cases. We have, however, had some observation on the effects of the abandonment of the habitual use of tobacco, in causing a cessation of an habitual secretion from the mouth, and thereby greatly impairing the perfection of guttural articulation, and in the production of coughs incurable by ordinary means: as well as the curative powers it exercises on resuming its use.

We had once the care of a case, in which the free chewing of tobacco was, with a view to the reformation of a bad habit, abandoned. In a short time the voice of the patient was sensibly impaired, both of its ease in exercise, and its fine perfection of sound. As the case progressed, a cough, increasingly troublesome and obstinate, made its appearance, which soon became most violent and convulsive. Many ordinary remedies were used, for the first six months, without the least beneficial result. At the end of this period, our attention was directed to the case, and no ground was left unoccupied which had been hitherto found beneficial in the treatment of coughs in such a state of the general system. A consultation was held, but all to no good purpose, and the patient succumbed before the expiration of twelve months.

Not long after this observation, we became perfectly familiar with another case of impairment of voice, and subsequent cough, which progressed by the same gradations as that just described,
from the first of January, the time at which the chewing of tobacco was suddenly abandoned, until the first of July. Observations on this case, proved it to be very peculiarly like the fatal case just given. We had observed closely the progress of this difficulty from the time the tobacco was discontinued. At the end of six months the cough was quite as far advanced as in the former case; not allowing the patient twenty minutes sleep at any one time, and attended by a remarkable impairment of the vocal powers, and those of deglutition. This patient resumed the free use of tobacco, by chewing; but in order to avoid as far as possible, the injurious stimulating and narcotic effects, the very weakest was selected, instead of that strong tobacco which is sold at the highest prices. By the Christmas following, the soreness of the thorax and the cough, were measurably but not entirely subdued; the voice and deglutition both improved, but were not perfectly corrected. It is now some eight or nine years since this case occurred, and there is still a tendency to frequent but not severe cough, and there is still an evident deficiency of the power of propelling downwards from the upper part of the pharynx, so that all things pass on without further effort for deglutition.

We could give numerous cases in which, with the strongest marked predisposition to phthisis pulmonalis, persons have, under the free use of tobacco, contrary to all reasonable expectation, grown old, in perfect exemption from its ravages.

We will only further remark at present, that the impairment of voice amongst clergymen, is of very rare occurrence in this section, whilst the practice of using tobacco, either in chewing or smoking, and most commonly the former, is almost universal. We have at present in mind, one clergyman, remarkable for the length of time, and the quantity of his labor in the ministry for the time, in addition to the labors of school teaching, through a long life, who is never awake, we believe, without having a remarkable quantity of tobacco in his mouth, except when eating; nor is he less remarkable for the quantity of saliva which he accumulates almost immediately around him. This man has out-lived the youth of his youngest children; he came, early in life, to the ministry, and the wife of his youth died at the age of sixty, some ten or twelve years since. No man of his age retains the voice of his early life, in greater perfection. He is yet as pleasant in the pulpit as ever, and modulates his voice with great pleasure to the softest melodies of his old recollection, in which he greatly delights.

We hope observations will be made by practitioners on this subject, and promptly reported to the profession.
On the Immovable Fracture-Bandage. By Dr. Fricke.—Dr. Fricke has given reports of sixteen cases of fracture successfully treated by means of Seutin's starch-bandage. He applies it by first rolling the limb with a common broad bandage, over which a layer of starch is placed. On this, two pasteboard splints, the length and shape of the fractured limb, and nearly encircling it, are applied wet; then a layer of starch, and over this a roller, after each turn of which the starch is applied; the whole being covered with paper, to prevent its sticking. Fricke has usually found the application of this bandage successful.

The following are some of the advantages attending the use of this bandage:—1. The materials are readily procurable. 2. The apparatus lies close to the inequalities of the extremity. 3. Any part of it can be renewed without disturbing the other parts. 4. It is light, and does not prevent the use of the extremity. 5. The limb is so firmly supported, that in two days the patient can leave his bed and walk about.

If the lower limb be fractured, it should be supported by means of a sling round the neck. In applying this bandage, Fricke recommends the surgeon to wait for the subsidence of swelling and inflammation. He does not think, with Seutin and Velpeau, that the patient might even undertake a journey immediately after the injury when the bandage is dry.—_Ib. from Hamburg Zeitschrift f. d. g. Med. April, 1839._

We feel unwilling to allow some of the late improvements in surgery, for improvements we do consider them, to pass on with their high and unlimited claims, to the full, unsuspecting embrace of the profession, without throwing out a beacon to guard hidden cliffs which lie in the course of this fair sailing. It is true that “all is well, that ends well”; but extremes are dangerous, and in the moment of bright prosperity, when the delights of success absorb all thought and feeling, there is, we conceive, great propriety in calling out for circumspection—a close looking to all the apparatus and the circumstances—the causes and effects, in successive train, their physical powers, proportions, &c. &c. We allude particularly to the improvements in the treatment of fractures by _immovable dressing_, the double inclined plane, and Amesbury's apparatus. These are all thrown before us with the charms of steam-power expedition. Every pleasure has its alloy, and if it appear without it, we should do well to inspect well the ground over which the march of intellect is progressing. This is necessary to give safety to that march. A thousand schemes in life are admirable—they would amount to the heart's perfect content, but for the _ifs_ which are to be guarded against or suffered in the way. These alloy the charm of steam-travelling; and but for these, the balloon would afford us more expedition, and combine more of the charm of novelty, and the beauty of prospect, sublimity of light, velocity, &c. and all this, by the bare touch of the finger of science—no matter how hard the wind should blow, _if_ it were not a tornado—_if_ it would drive to the desired goal, and land safely—_if_ no explosion, or combustion, or other disaster, should occur in the aerial voyage. These, however, are amply met by the parachute. _If_ it will with certainty so operate as to arrest the rapid-
ly accelerating progress downward, &c. We should, therefore, look well to all the circumstances and possibilities, and take care lest we risk out of proportion to the premium. In the use of the apparatus to which we allude, we are promised rather more than most patients are willing to accept—far more than they should reasonably expect. The bone of the thigh, or those of the leg, or all of them are broken—perhaps comminuted or complicated with external wound. The limb is dressed with the immovable bandage, or the double inclined plane, or the older apparatus of Amesbury, which is nothing more nor less than a double inclined plane, fixed for travelling, and the patient may go about his ordinary business on his crutches, or go on a journey in the mail coach.

Now it is not our purpose to say one word which should lessen the true value of these improvements, to suffering humanity, or the convenience of the practitioner, or the honor of the several inventors and improvers of them; but rather to call attention to some dangers which lie in the way to success, which should be duly guarded against, in order that safety, and the best success consistent therewith may be had. The mere convenience, or even the comfort of the patient, does not justify much, if any risk of fatal accident, rather than to suffer some inconvenience and discomfort, for securing absolute safety.

There are two important accidents which we have had occasion to observe, and which lie in the way of the use of the immovable bandage, and the double inclined plane, and Amesbury's dressing—

1st. The danger of a fixed degree of tension of the dressing, which is to remain unaltered. No one can determine absolutely the extent of swelling which may occur in the wound. It depends on circumstances which cannot always be foreknown or regulated, notwithstanding the prudent caution of Fricke, "to wait for the subsidence or swelling and inflammation." Nor is this caution, (though one of prudence relative to the use of the immovable bandages,) founded on sound reasoning. What we ask, is the cause of the swelling and inflammation, and of their perpetuation, but the wound itself, with all the causes of irritation which its nature and condition afford; and amongst the greatest, at least of the perpetuation of their effects, the irritation afforded by the unadjusted extremities of the fragments of bone, and their movements against the irritable parts with which they are in contact? Is it then reasonable to await the subsidence of these capital, dangerous effects, before the dressing, which is to remove and perpetually prevent the cause of their perpetuation, and all this, in order to apply a dressing which will afford the patient exemption from the irksomeness of the surgeon's bed? Certainly, the dressing is necessary as early
as possible, for withholding the irritating causes, which must perpetuate swelling, pain and inflammation, very injuriously, if allowed to remain. It is true, that good apposition of bones for several days, differing with the age of the patient, is sufficient for all the purpose of the union of the fragments alone, but this convenience, as it may be considered, and really is, should be used properly—not as a dispensation to leave the bony fragments in situations calculated to exert one atom of injury on the adjoining soft parts, which the good adjustment would prevent, but only to afford us the consolation of knowing, that the little accidents, calculated to displace for a moment the fragments, in the early days of confinement, do not amount to a re-fracture of the part, as union had not commenced; and the only injury in such cases is the irritation which the momentary displacement is calculated to afford. How important then it is, that the bones be adjusted as early as possible, and retained so! That apparatus then, which will best answer these purposes at first, is best at first. The question then arises, is it prudent, at a subsequent time, when, under these proper circumstances, the swelling and inflammation shall have been reduced, to remove the first dressing, which has proved its efficacy by its effects in preventing displacement, and irritation, for the purpose of applying one calculated to afford the patient the comfort of leaving his bed two or three weeks earlier than he otherwise would?—a liberty, the propriety of which, we doubt under any circumstances, on account of the accidents to which it subjects him. The change itself, just at such a time, when the union is beginning, or begun, affords a material danger of retarding the cure.

But with the temptations this dressing throws before the common practitioner, however different the case might be in the hands of Suitin, Fricke, and Velpeau, there is this danger to be apprehended—a danger which would certainly sometimes occur; that however prudently the immovable dressing is at first adjusted, a little swelling, beyond what can be safely borne, will afford a new cause of obstruction, irritation, inflammation, and sphacelus, unless the dressing is removed, and the absorbents and other vessels of the part liberated. We have had the mortification of being obliged to amputate the arm of an interesting young girl, of eleven years of age, near the shoulder, in consequence of a bandage, applied with moderate tension, for fracture of both bones of the fore-arm, near the wrist. This dressing was applied by a surgeon of excellent tact, and ordered to remain, as he left it, for a certain number of days. The girl was of thin habit and phlegmatic temperament; nor was there much prospect of swelling in the part. The reigns of Bacchus, however, guided the surgeon in another direction, and the siren song
of this, his God, led him to forget his patient, until, by the swelling which occurred, the circulation became completely obstructed, and mortification to the upper extremity of the bandage ensued.

2nd. The double inclined plane, with the modifications of Amesbury and Nott, for the purpose of enabling the patient to enjoy relief from the bed at an early period, are exempt from the danger just referred to, as attending the immovable bandage. The tension of this dressing can be altered at pleasure, so as to be easily applied, and subsequently, to be safely regulated according to the necessities of the part. The only dangers of these different apparatus, are trivial and avoidable:

1st. These require, for ordinary preservation of adjustment alone, more pressure on the limb than some others.

2nd. That tension of the dressing necessary to retain adjustment under the various movements of the body, the liberty of which it is their great purpose to secure to the patient, is calculated to injure, more or less permanently, the subsequent use of the limb. Surely this would not be the case with surgeons of habitual experience, and who are in the habit of observing closely, and reasoning well on their observations. But how few, alas, do these things! When we set forth an improvement of this kind, it is for all who may need its use; and should be accompanied by a knowledge of its dangers. Most surgeons, like most other people, go, to the letter, according to the instructions given in the book, neither adding to, nor "extenuating aught"; nor do they think once of the inherent independence which intellect is calculated to confer on man. Such will blunder and do mischief, if not guarded and dictated to at every step. We are, therefore, of the opinion, that even under the use of these apparatus, the tension should not be such as to enable the patient to leave his bed, except perhaps, in those cases wherein union has been, by any means, prevented for a long time, and the chronic case is so protracted as to have lost the irritability of a recent wound. They are, doubtless, the best apparatus known for the correction of an artificial joint.

Without any pride in the matter, as we honestly believe; for as the original discovery was not our own, we are still decidedly inclined to the use of the treatment of fractures of the os femoris, which we had the pleasure of recommending to the public on a former occasion,* by weight and fulcrum. The only distress or hazard attending this apparatus, is the absolute confinement to the bed for three or four weeks. There is no distress or danger whatever from the dressing.

We continue to be uniformly pleased with its effects, and trust that, for the good of humanity, it will not be lost sight of by the profession, without fair trial.

*See Southern Medical and Surgical Journal, vol. 1, page 251.
Treatment of Carcinoma of the Mamma.—We commend to the attention of our readers the following remarks on the treatment of carcinoma of the mamma, by John Macfarlane, M. D., the distinguished senior surgeon of the Glasgow Royal Infirmary. His estimate of the value of escharotics and compression appears to us to be entirely just; and, though many surgeons of high authority repose great confidence in extirpation early resorted to, we fear that a careful examination of the results of the operation will show that there are too good grounds for the distrust in its utility expressed by Dr. Macfarlane. It is certain that, in a large majority of cases in which this measure has been restored to, the cure has not been permanent; and also that, in a large majority of cases in which the disease did not recur after the use of the knife, the tumour removed was not genuine cancer.—The facts adduced, therefore, by Dr. Macfarlane of the unsuccss of extirpation should be fairly weighed, and carefully compared with the results obtained by others, for it is only by a comparison of a large number of well observed cases that the proper estimate of the value of extirpation for the cure of cancer can be ascertained.

"In regard to the treatment of carcinoma of the mamma, I shall consider," says Dr. Macfarlane, "shortly, the three different surgical methods at present in use, for the purpose of attempting to estimate their value, and of ascertaining how far they have proved successful in eradicating or palliating the disease.

"I. By Escharotics.—This mode of treatment has been long known, and its history has been diversified by the employment of a great variety of caustic remedies. Among the profession it has in a great measure fallen into disuse, having been found very painful and uncertain; but it has been, and continues to be, extensively employed by empirics. Within the last four or five years, however, the attention of the profession, both in this country and in France, has been again directed to this mode of treatment; and attempts have been made to convince us that it is less painful and more certain in eradicating the disease than extirpation.

"Dr. Canquin and Riofrey have published memoirs showing the great advantage obtained from, and the numerous cures effected by, the use of the chloride of zinc, when employed in the form of paste. In illustration of its efficacy, they relate cases in which the whole mamma, and all the tissues between the breast and the arm-pit, with the diseased glands in the axilla, were destroyed, exposing the muscles and laying bare the blood-vessels, not only with impurity but with success. After a careful examination of the histories and progress of several of these cases, I am not prepared to view them as having been all decidedly cancerous; and in some of the others, where the malignant nature of the disease is less equivocal, I doubt much if the apparent cures proved permanent. From what I have experienced, and I shall afterwards mention, of the great want of success in removing the disease by the knife, when the diseased parts are more immediately under observation, and can be followed out and more certainly extirpated, I am satisfied that, in other hands, the sanguine anticipations of the advocates of this new caustic treatment will not be realized.

"During my late attendance at the Infirmary, and since that time in private practice, I have employed this paste in four cases of scirrhous mamma; in two cases where the disease had returned after ablation, and in several cases of cancer of the lip, and in cutaneous cancer of old people. In the latter affections, which are almost uniformly local, I have succeeded; but not in the former. On the contrary, although I have destroyed large portions of the mamma, and obtained for a time firm and healthy looking granulations, yet new tumors uniformly sprung up in the old site or its vicinity, and the general progress of the disease was always accelerated. The application, which had to be frequently repeated, produced great pain, and was not without its injurious effects on the constitution. In two of the cases, in which
the mammary tumors were large, the febrile excitement was excessive, of
more than two week's duration, and complicated with a violent gastro-enteri-
rite, which I attributed to the action of the medicine; and in patients of a can-
cerous diathesis this constitutional excitement unquestionably hastened the
progress of the internal disease.

2 By Compression.—This method of treatment has also had its periods
of popularity and neglect. Young, in this country, and Recamier in France,
have been its most powerful advocates. The former commenced this prac-
tice in 1800, and employed, for the attainment of his object, adhesive strips,
sheet lead, tin plates, compress, and bandages. He gives a few successful
cases where the mamma only was affected, and also in which there were
diseased glands in the axilla; and he alludes to others in which the practice
was unsuccessful.*

Recamier, as one of the physicians of the Hôtel-Dieu, of Paris, has en-
joyed ample opportunities of witnessing this disease, and testing the efficacy
of continued, and methodical pressure, which he employs by means of com-
presses of agaric, bandages, &c.† Of 100 patients treated by him, 30
were completely cured by compression alone (but he does not state in how-
many of these the disease was seated in the mamma;) 21 were benefi-
ted by it; 13 submitted to ablation, after compression had failed; 6 were
cured by compression and cautery; and the remaining 28
were either incurable, or not benefited by any of the means employed.‡ On
the other hand, this practice has been fairly tried by others, but without suc-
cess. In the year 1816, Sir Charles Bell had recourse to it in 16 cases of occult
and open cancer, in the Middlesex Hospital, without any apparent benefit.²
My own experience of it has not been great. I have tried it, however, in
several cases, and seen it practised by others, but without any decided ad-
vantage. It appeared to render the tumour harder and more compact, cau-
sing absorption, not of the diseased structure, but of the interstitial fluids,
and surrounding adipose substance. It is, besides, a tedious and irksome
process, to which few would willingly submit, if the slight chances of the
benefit were explained to them. Were it, however, to prove as successful
in the hands of others as it appears to have done in those of Recamier, it
would certainly be a milder and more efficient plan than any of the others
we employ. The good effects of steady and well-regulated pressure in dis-
persing indolent swelling have been well known to the profession. When
these indurations are chronic, and not of a specific character, the advantages
of compression in promoting absorption and suppressing arterial action are
undoubted; but I cannot bring myself to believe that in genuine cancer of
the mamma this practice will be entitled to the commendation it now re-
ceives. In an immense majority, if not in every case, scirrhus of the
breast is of constitutional origin, and therefore not capable of being perma-

* Cases of Cancer, &c., London, 1816.

† In estimating Recamier's success, it may be well to recollect, that the
French physicians and surgeons are accustomed to apply the term scir-
rhus to every hard and indolent tumour, whether malignant or not, many of
which would yield to proper local treatment. Were the disease to be en-
tirely and permanently removed by compression, I would feel satisfied that
it was not malignant, for I cannot believe that pressure, however carefully
and methodically applied, can possibly subdue the specific action of the dis-

case.

‡ Recherches sur le Traitement de Cancer, tom. i. p. 550.

§ Surgical Observations, vol. i.
nently eradicated by local means. Besides, it is not possible, even should we succeed in dispersing by compression a carcinomatous tumour of the breast, that we shall, instead of insuring the patient's recovery, accelerate her fate. The specific and malignant matter of cancer must be carried into the circulation by the absorbents, so that we are only exchanging an external for an internal disease.

"3. By Extirpation.—This has long constituted our chief plan of treatment, and continues to be employed both as a means of cure and as a palliative.

"In a curative point of view, the operation of ablation of the mamma continues to be extensively practised; and of all local means we possess, it certainly holds out the best hopes of a permanent cure. If undertaken at an early period, when the constitution is but little impaired, and the countenance is unchanged—when the tumour is small, isolated, and indolent, and the axillary glands are sound, we are told that it seldom fails in eradicating the disease, provided all the morbid structure be removed. I admit, so far as the external disease is concerned, that its return to the same locality is often to be attributed to an imperfect operation, too much of the integuments or surrounding soft parts being left behind; but, at the same time, I have never, seen a case, even of the most favourable description, in which the disease did not return, although every precaution was adopted to render the operation successful. We generally find that the disease is more extensive than we anticipated, and that, although we go far beyond its apparent boundaries, we seldom, if ever, succeed in preventing its reproduction. There may be points of disease in the absorbents, lymphatic glands, or surrounding adipose substance, so minute as to elude detection, or, as happened to Professor Camper and Sir A. Cooper, the absorbent vessels may carry the disease from the mamma to the glands under the sternum, where it could be neither discovered nor reached.

"The peculiar state of the system upon which the disease seems to depend, presents another and still more serious obstacle to the success of our operations. There are, unfortunately, too many cases on record, and of daily occurrence in practice, in which scirrhou of the mamma is shown to be, in its origin, not local. All the cases I have detailed point out the co-existence of mammary and internal scirrhous, or the rapid and fatal supervision of the latter form of the disease. I have frequently seen cancer of both breasts and of the uterus and breast, occur at the same time, and oftener still, the external cancer is complicated with disease of the lungs, liver, &c., in which organs its progress may be so obscure and insidious that we cannot fix its locality, or assign to it precise limits. We are therefore not authorised in promising success, even from the earliest ablation of the mamma, since we cannot assure ourselves or our patients that the tumour we extirpate is the only part that has undergone this morbid change.

"But the best of all tests for determining the efficacy of this operation is its success. It has been adopted for so long a period, and so generally, that were medical men to acknowledge candidly, and record faithfully, the results of their observation, we could have no difficulty in estimating the chances of ultimate success. Unfortunately, diversity of opinion prevails as to its advantages; and whilst a considerable number of the profession acknowledge the liability of the disease to return, they are not less decided in recommending and performing the operation.

"Mr. Hill, of Dumfries, who published, in 1772, on the results of operations in this disease, seems, at first sight, to have met with greater and more permanent success than has fallen to the lot of any surgeon before or since his time. He operated upon 83 cases of all descriptions, and only one in seven of these had a return of the disease. But, on examining the details more minutely, we find that in five of the cases only was the mamma extirpated; that
in two of these the wound did not heal; in another, the disease returned; and the remaining two continued well at the date of publication. a

"Sir E. Home has asserted that this disease is of local origin, and that it is capable of being safely and effectually extirpated," Richerand, while he acknowledges that the disease returns in about four cases out of five, either in the original situation or in some distant part, states at the same time that the proportion of permanent cures is such as to justify the operation.*

"Sir A. Cooper states, 'that a large proportion of cases return; but fewer than formerly, if the patient, immediately after recovering from the operation, undergoes an alterative course of medicine'†. This implies that there is something wrong in the constitution, and that by rectifying this morbid condition, the return of the local disease is often prevented. It is acknowledging in fact, though not in direct terms, the constitutional origin of cancer of the mamma, and at the same time assigning to constitutional treatment more efficacy than I have ever seen result from it. I acknowledge the utility, in such cases, of attending to the uterine and alimentary functions; and I believe that if we shall ever succeed in controlling this formidable disease, it will be by acting on the general system; but as yet we certainly do not possess any constitutional means of either warding it off or preventing its recurrence. Mr. S. Cooper states, 'that modern experience has given ample encouragement to the early performance of an operation, and even to making an attempt to cut away the disease, in every instance, both of the occult and ulcerated kind, when such a measure can be so executed as not to leave a particle of the cancerous mischief behind.'‡

"Professor Syme has met with 'repeated instances in which, though other circumstances were by no means favourable, the tuberculated kind of carcinoma was extirpated with the happiest result.'§

"Mr. Travers states, that 'the poison of cancer does not act upon the system during the integrity of the tubercles, since persons generally recover, and finally, in whom the disease is freely removed in this early stage. On the contrary, if the tubercle be softened, and undergoing ulceration or absorption, the disease recurs, however freely the parts be removed.'‖ It does not accord with my experience, as I have already stated, that free operations in the early stage of the disease are generally followed by absolute recovery; nor can I subscribe to the opinion, that the system does not become contaminated until softening or ulceration of the tubercle occurs. I admit that absorption goes on more rapidly during the soft or ulcerated stage, but at the same time I have seen many cases in which the disease has been conveyed to the axillary and the subclavicular glands, and into the system, while the primary disease of the breast retained its original hardness and density.

"The utility of the operation has also been denied by many high authorities, both of ancient and modern times. Hippocrates," Celsus," Galen, and others of the older writers, are decidedly opposed to it. Dr. Alexander Monro had the candour to announce his great want of success, which seems

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a Cases in Surgery.
* Nosographie Chirurgicale, 3e. edit., tom. iv., p. 424.
† Lectures, by Tyrrell, vol. ii., p. 198.
‡ Surgical Dictionary, article "Cancer."
§ Principles of Surgery, p. 392.
* Hippocrates, xxxviii., Sect vi.
** De re Medica, Lib. V., cap. xxiii.
to have discouraged, for a long time, many surgeons from having recourse to it. He only met with four cases out of sixty, in which the disease did not return within two years after the operation.†† In 100 cases operated upon by Boyer,** where the disease was seated in the breast or other parts of the body, not more than four or five were radically cured, in consequence of which he declares, and the same opinion seems to have been entertained by several eminent French surgeons of his day, that an operation ought never to be undertaken when the disease had been ascertained to be genuine cancer. Delpech also acknowledges that the operation is rarely if ever successful,†† and the same opinion is entertained by a number of other authorities whom I need not mention. Believing that amid such discordant opinions we can only arrive at a just and satisfactory conclusion by an appeal to facts, and an accumulation of individual experience, I feel myself bound to contribute the results of my limited observations towards the fulfilment of so desirable an object. The momentous question must be finally settled by the combined experience of the profession, and not by a reference to the records of our hospitals and infirmaries, where we find the cases dismissed as cured as soon as the operation wound has healed.

†† Of thirty-two cases operated upon by myself, in which the carcinomatous nature of the disease was distinctly ascertained, the cure was not permanent in a single instance. The ages of these patients varied from 42 to 59 years; 23 were married and had children, and nine were unmarried. In eighteen cases the right breast was the seat of the disease; and in fourteen, the left. In twenty, the glands in the axilla were more or less affected, but not extensively; they were all removed, and in the remaining twelve no disease in the axilla could be detected. In ten the disease was in the form of tubercle; and in twenty-two the whole gland was affected. In nine cases the disease returned in the integuments of the chest, or in the axilla, within a period varying from six weeks to three months after the operation; in thirteen cases, from three to nine months; in four, from nine to twelve months; in three, within two years; and in one, nearly three years elapsed before its return was discovered. Two of the operations proved fatal; one from pleurisy, and the other from erysipelas. In many of these cases, symptoms of pulmonary and hepatic affections were well marked, and seemed to have occasioned death; in others the symptoms were too obscure to lead to accurate diagnosis. The lungs appeared to be most frequently implicated, but the proportion cannot be accurately stated, as in several of the cases no post-mortem examination could be obtained.

†‡ Besides these cases which have occurred to myself, I have, on inquiry of a few of my medical friends, who have had opportunities of witnessing this disease, ascertained the results of 86 additional cases, in which the mamma was extirpated for well-marked carcinoma, and in not one of these was the cure permanent. Without going into details, I may shortly state, that in a majority the operations were performed at an early period, and under the most favourable circumstances; the affected parts were freely and extensively removed, and in many there was no distinct indication of constitutional deterioration; yet in all, the disease returned, both externally, and internally, and proved fatal. It was also observed, that in robust women of a sanguineous temperament, the reappearance of the disease after the operation, and its subsequent progress, were more rapid than in those of a nervous or lymphatic temperament, and that the internal organs were sooner affected.

†‡ Sur les Maladies Chirurgicales, tome iii.
"It sometimes happens, especially when the disease occurs in very old persons, that it may remain for many years in a quiescent state, without much pain or tendency to shorten life. The anxiety of mind arising from a knowledge of the nature of the disease, sometimes induces such patients to forego the comparative tranquillity they enjoy, and attempt to free themselves of the disease by an operation. I could induce several patients who had laboured under the malignant disease, for ten, fifteen, and twenty years, and who were cut off in three or four months by an operation.

"Ablation of the mamma is also recommended and practised as a palliative, in cases where there is no prospect of a radical cure. It is had recourse to chiefly in the ulcerated stage of the disease, to rid the patient of pain and annoyance arising from the presence of an open ulcer, and the fatal discharge proceeding from it. Seeing that we have other and milder means of soothing the distressing symptoms, and mitigating the patient's suffering, I must confess that this painful and dangerous procedure, and for effects so partial and inefficacious, appears to me cruel and unjustifiable; and I am satisfied from what I have seen, that by it the progress of the disease is painfully accelerated, the knife appearing to rouse it into fatal activity.

"Of late years it would appear that in the hands of some surgeons the knife has frequently succeeded, and there seems to be rather an increasing confidence in its efficacy, and a disposition to employ it, under the belief that it will cure the disease. There are certainly on record a good many cases in which no relapse took place; and we find at the present moment women alive upon whom the operation was performed years ago. But after the unfortunate results I have detailed, the question naturally occurs. 'Were these cases of genuine cancer?' We often meet with tumours in the female breast of a benign character, which so greatly resemble scirrhous even in their structure, as to render it difficult for us to classify them. Indeed, in the majority of mammary tumours which present themselves to our notice, the disease is not malignant at all, but consists, of an indolent enlargement of the gland, of an adipose tumour, a deep-seated chronic abscess, of strumous tubercle, or of a hydatid cyst. In some of these cases even the most experienced may be deceived, and be led, from the disease not having returned, to assign more value and importance to the operation, than it is justly entitled to, and thus to take credit for cures which were never performed. When these mistakes, which are by no means uncommon, originate in ignorance, they may be pardoned, as we are all liable to them; but when the real nature of the disease is designedly concealed, and they are held out as cases of cancer cured by operation, we cannot but lament that there should be found in the profession an individual or individuals so devoid of honesty and candour as to attempt to mislead, in a matter of such serious importance.

"It may appear to some that I have taken too unfaVourable and gloomy a view of the results of operations for the cure of this formidable disease. If I have done so, it has not been done hurriedly or unadvisedly. The painful truth has been slowly and reluctantly forced upon me, by an uninterupted series of unsuccessful cases, and I feel myself bound to state as my decided and conscientious opinion, that in no stage or form of the disease is an operation to be depended upon, either as a means of permanent cure, or as a palliative. On the contrary, I believe that while it never arrests, it almost uniformly accelerates the progress of the disease. Why should we, therefore, continue to recommend and practise it? Why subject our patients to the torture and risk of an operation which we believe to be not only useless but injurious? It would be better for our patients, and more creditable to surgery, were the operation altogether abolished; and the melancholy fact at once acknowledged by the profession, and made known to the public, that we cannot eradicate the disease by the knife; but that still much may be
Connexion of Diseases with the different seasons of the year, with different ages, &c. We have received the Annual Report of the Interments of the City and County of New York, for the year 1838, from which, interesting remarks may be drawn, relative to the proportionate frequency of certain diseases in different seasons, in persons of different colors, the natives of different countries, the proportion of deaths to the population, age, &c. &c. We shall not, however, on the present occasion, go further than to throw before our readers, the proportionate frequency of certain diseases, which may be reasonably considered as having some connexion with the particular seasons of the year, age, sex, and color; and a few remarks in connexion therewith. It will be remarked, that the termination of most chronic diseases, do not seem particularly connected with any one season; whilst with acute diseases it is different.

The extensive and minute table, occupying nineteen pages, large duodecimo, commences with

DISEASES OF THE BRAIN AND NERVOUS SYSTEM.

Of Inflammation and Congestion of the Brain, the total number of deaths was 155; of which 83 were white males, 62 white females, 3 black males, and 7 black females. Of these the greatest number was in August, which was 20; the other months varying from 9 to 17. Within the 1st year 38; 2nd year 21; 3rd, 4th and 5th, together 26, &c.

Of Dropsy of the Brain—total 368. Greatest numbers, in July 48, and August 46. In other months, from 18 to 39. All of these except six were under ten years of age.
Of Apoplexy—total 164. There were 70 in July. January, February, March, and November had, each, 13; the other months varied from 3 to 11. All these, except 15, (and one unknown,) were between 20 and 70, and the greatest proportion between 40 and 50.

Asphyxia. Of this there were 20. January and September were exempt. In the other months they varied from 1 to 4.

Palsy—total 48. Varied through the different months from 1 to 6.

Convulsions—total 638. Of these, the males had the largest proportion, both in white and black. White males 313; white females 275—black males 30, black females 20. The chief disproportion of these was not in relation to season, but to age. August had 71, the greatest number, and October and November 39, each, being the smallest number of any of the months. But of these 501 occurred in the 1st year, 64 in the 2nd, and 37 in the next three years, &c.

Epilepsy—total 14. No month exceeded two.

Hydrophobia—total two—both of which occurred in August.

Insanity—total 24. Two months only, January and June, had four each; all these, but five, occurred between 20 and 50; all but three, between 20 and 70.

Lock Jaw—total 13. All these occurred from April to September, inclusive—the six warm weeks.

Neuralgia, or Nerve Ache. Only one death from this, which was in June. This name is too indefinite.

Diseases of the Respiratory System.

Croup—total 182. White males 100; white females 70—black males and females, each six.

It is interesting to give the whole number in each month, and remark the difference between the months of January, February, March, October, November, and December, and the intermediate six months, or the six cold and six warm months:

January, 22; February, 20; March, 20; October, 19; November, 22; December, 27.

April, 8; May, 9; June, 8; July, 10; August, 7; September, 9.

All of these, except 16, were under five; and of these 16, 13 were between five and ten.

Hooping Cough—total 219. White males 90; white females 117—black males five; black females seven. It would appear by the smaller proportion of males, both white and black, that the male constitution has better powers for surmounting this obstinate disease. Of these, August, September, and October had far the greatest proportions: August, 47; September, 56; October, 32. The other months had three to sixteen; of which November had 15; December, 16; and June, 3. All of
these, but eight, were within the first five; and those eight, bet-
tween five and ten years.

Hemoptysis—total 29; of which nineteen were white males, and five white females—one black male, and four black females. No month had less than one, and none over six; and this was November. Only two of them occurred under twenty years of age.

Inflammation or Congestion of Lungs or Membranes—total 542. White males 274; white females 210—black males 32; black females 23. Remark the greater proportion of males of both colors. These are important diseases, both in practice and insurance; we shall, therefore, give the whole of the months:

January, 53; February, 72; March, 85; April, 65; May, 36; June, 31; July, 26; August, 18; September, 23; Octo-
ber, 20; November, 43; December, 50.

Here remark the difference between the colder and the warmer months. Of these, 183 died within the first year; 78 in the second year; 62 within the next three, or between two and five; 18 between five and ten; and eleven between ten and twenty; 40 between 20 and 30; 52 between 30 and 40; 39 between 40 and 50; 20 between 50 and 60 and so on, decreasing.

Gangrene of Lungs. Of these only two cases occurred, which were in April and May.

Pulmonary Consumption—total 1225. We remark that in this disease, as well as hemoptysis, the white males and colored females exceed the opposite sexes of each. White males 622; white females 475—black males 61; black females 67. The mortality of the eight coldest months greatly predominated, whilst the extremes of June, July, August, and September, were 71 (in September) and 89 (in July). The order of mortality was as follows, beginning with the greatest: December, November, April, February, October, March, May, January, July, June, August, September. It is worthy of remark, that 546, besides ten unknown, were foreigners; and of these 395 were natives of Ireland; 89 of Great Britain; 34 of Germany; and 13 of France.

Asthma—total eight. All these deaths occurred in the first three months, and between the ages of forty and eighty.

Inflammation of the Chest*—total fifty five. They occurred almost entirely in the first and last four months; there being but four cases in the middle four months. Nearly half occurred within the first year; and all but nine, within the first five years.

Dropsy of the Chest—total fifty one. July, August, Septem-

* This is an indefinite name. We know not what it is intended to mean; but suppose it alludes to some acute inflammatory affection of some of the respiratory apparatus.
ber and October, were decidedly more exempt than the other months. The greatest number of these were between five and ten, and between thirty and forty years.

Abscess of Chest—total four. These occurred in April, May, and October; and all but one between fifty and eighty.

Inflammation of the Throat—total 28. These were most abundant in the first half of the year. Eighteen were under five years.

DISEASES OF THE DIGESTIVE SYSTEM.

Inflammation of the Stomach—total 62. The greatest number in any one month was sixteen, and these occurred in July. The other cases were distributed through the other months; there being no more than five nor less than one in any other. They occurred principally between twenty and fifty years.

Inflammation of the Bowels—total 156. These occurred chiefly in March, July, August, September, and October; there being but sixty three in all the other months.

Cholera Morbus—total 25. These occurred chiefly in July, August, and September; there being but six in the other months; and mostly about middle age.

Cholera Infantum—total 437. Of these, January had two; March, four; June, four; July, 102; August, 174; September, 114; October, thirty one; November, five; and December, one. All these occurred under five years: 264 within the first year, and 148 in the second year.

Diarrhoea—total 121. These were most numerous in August, which had twenty one; next in September and October, which were equal; then July, which had seventeen; April had two: the smallest number. They occurred at all ages; but the first year had forty two; the second, twenty; the three next years, eighteen, &c.

Dysentery—total 150. These were most numerous in males of all colors. They occurred almost exclusively in July, August, September, and October; only twenty two occurring in all the other months; of which February and March were exempt. September had forty three; August thirty three: October, thirty one; July, sixteen. Thirty cases occurred in the first year; twenty four in the second; twenty seven in the next three years—these decreased with the advance of life, to two between eighty and ninety.

Marasmus, or Emaciation—total 470. Under this head is included a great amount of mortality to be characterized merely by the name of one of the symptoms, or effects of disease. It is an indefinite name, as applied to point out the disease itself; and is, therefore, a bad one. We shall, therefore, as the disease is not definitely pointed out to us, consider it only as a symptom or effect of disease, followed by death. It was followed by death in 232 white males; 200 white females; twenty black
males; and eighteen black females; therefore, rather more frequent with males, supposing the males and females about equal; but we believe the females are most numerous, if so, the ratio of frequency in males is increased. It was pretty equally distributed throughout the whole of the months; twenty six being the smallest number of deaths in any month, and these occurred in January. The next smallest were May and December, each of which had twenty eight. The greatest mortality was in August, in which it amounted to sixty nine; the next greatest was September, which was sixty six; and the next, October, which was fifty one; then July, which was forty five, &c. 209 occurred in the first year; 110 in the second; forty five in the next three; and so on to one between eighty and ninety.

**Teething**—total 146. Of these, nearly half (sixty nine) occurred in August and September. The other months having from two to seventeen. The first year had eighty; the second, sixty three; and the next, three; the balance, of only three.

**Worms**—total 23. We doubt the correctness of this item in the report, and think many cases of worms are included under other names. However, May and December were exempt; the other months varied from one to five; March and August had five in each. Two occurred during the first year; eleven during the second; seven in the next three; and three between five and ten.

**Inflammation of Liver**—total 48. The greatest number in one month was in September: being eight. The other months varied from one to five. They occurred chiefly between thirty and fifty; and just about the time that what is called "genteel wine drinking," works out this kind of death.

**DISEASES OF THE CIRCULATORY SYSTEM.**

Under this head we find

**Fever** (type not named). Total fifty six. These fevers occurred pretty equally, from two to six, in the month. The greatest proportion of deaths occurred in the first year, and in the latter half of life—thirty to sixty years.

**Intermittent Fever**—total only nine; a small number for such an immense population; however, it is a disease which should scarcely ever kill. Six occurred in October; two in September; and one in January. One death the first year; four the second; and the other four between twenty and sixty.

**Remittent Billious Fever**—total 103. White males forty nine; white females forty six—black males five; black females three. These were most considerable in August and September; but were from three to seven through the other months. Eight died the first year; eight the second year; and fifteen du-
ring the next three. The greatest number in ten years, after
this, was eighteen, between twenty and thirty.

Typhus Fever—total 104. The mortality was nearly in the
same proportion in the different sexes, both black and white.
White males forty five; white females forty four—black males
seven; black females eight. The disease appeared in every
month, varying from six to fourteen. The greatest mortality
was in November (fourteen), but was nearly equalled by De-
cember (twelve). The greatest mortality was between thirty
and forty.

Spotted Fever—total two. One in a male, and one in a fe-
males. Both occurred in June.

Eruptive FEVERS.
Under this head are included some of the most important dis-
cases; as

Scarlet Fever—total 257. White males 136; white females
113—black males two; black females six. The first seven
months had 205 deaths, leaving a balance of fifty one, to be pre-
ty equally distributed through the other months. All these, ex-
cept seventeen, and two unknown, were within the first ten
years: not one occurring after fifty.

Measles—total 79. These cases were distributed through
the whole year—no month having less than two, and none more
than eleven. The mortality of this disease was confined to the
eyears; there being thirteen in the first year; twenty one
in the second; thirty seven in the next three years; six be-
tween five and ten; and two between ten and twenty.

Small Pox—total ninety one. The greatest mortality from
small pox was in the three first months of the year; the pro-
portions of which were twenty three, thirteen, and thirteen. No
other month exceeded six; and July and August, only one, each.
In the first year, twenty two died; in the second, seventeen.
Only two died after forty, and these were between sixty and
seventy. As to the occurrence of this and the former disease,
measles, they depend on specific contagions as their cause.
There is nothing, therefore, in season, favorable to its produc-
tion; and this is only calculated to influence their mortality,
when produced.

Chicken Pox. There were only two of these cases which
proved fatal, and these occurred during the first year of age,
and in the months of January and May.

Erysipelas—total thirty three. These cases spared no month
in the year. July and November had one each; and January,
August, and September each, four. Seventeen of them occur-
red during the first year; the others are scattered through the
range of life, from the first to the seventieth year; and one be-
tween ninety and a hundred years.
Aphthe or Sprue—total twenty nine. They principally occurred in July, August, September, and October. All died during the first year, except four; which were in the course of the next four years.

Strophulus, or Red Gum. Only one case of death from this disease, and that was in the first year.

Bleeding (parts not named)—total thirteen. Nine of these occurred in white and black males, and four in white females. All these occurred in the first seven months in the year, but one in October, and one in November. All except three occurred between twenty and sixty.

Dropsy (seat not named)—total 131. Greatest mortality in December, which was seventeen. March and September had each fourteen; August had only five: the smallest number. Forty six occurred between the thirtieth and fiftieth years.

Purpura Hæmorrhagica, or Purple. Only one case of death occurred from this disease, or rather followed this symptom. It was in September, and between the ages of ten and twenty.

DISEASES OF THE URINARY AND GENITAL ORGANS.

Of this class we shall only notice a few diseases, merely for assisting in diagnosis.

Cancer and Scirrhus of Womb—total seven. The earliest case of death from this cause, was between thirty and forty.

Rupture of Womb. Only one case of this occurred, which was between forty and fifty. We have never known a case of this earlier.

Childbed.*—total twenty. No month exceeded two, nor was there any under one, except November.

Puerperal Fever or Peritonitis—total seventeen. Distributed through all the months pretty equally, except July and August, which had none. All were between 20 and 40.

Puerperal Convulsions—Only three; and those occurred in February, June, and December.

Cruritis, or Milk Leg—only one; and in October; and somewhere between twenty and thirty years of age.

Cancer of Breast—total six. One between thirty and forty; one between forty and fifty; two between fifty and sixty; and two between sixty and eighty. And possibly, that between 30 and 10 was not genuine cancer, as it seldom occurs so early. Facts on this point are extremely important, as they may tend to put down a custom too prevalent, of calling a breast cancerous, and operating for it, before it is so.

Cancer—total eighteen. Here we have cancer again, without naming the location. Six were in males, and twelve in females. All except one was between thirty and one hundred

*We do not know what diseases, under this title, destroyed life; as the most formidable diseases of child-bed are mentioned in the report separately.
years; and this one is put between twenty and thirty. There were seven between fifty and sixty, three between sixty and seventy, and two between thirty and forty.

Gout. Only two cases of death, which were in July, and between forty and fifty—the most usual time for habitual wine drinking to begin its fatal operations by this disease.

Rheumatism—total thirteen. One in January; three in March; one in April; three in June; one in July; two in August; and one in December. All but three were between thirty and seventy.

Scurvy—total four. All these deaths were between thirty and seventy.

Carbuncle—only one. It was in July; and between sixty and seventy.

Dry Gangrene—total four. All occurred between sixty and eighty.

Mortification—total twenty eight. Six were in January; the rest distributed through the other months, except June, which had none. The deaths occurred at all ages under 80.

DISEASES OF THE BONEY SYSTEM.

We shall notice but few of these, as they have no connexion with season, as to the time of death.

Morbus Coxarius—total five; of which, four occurred in February, March, April and May: the other in August. Four deaths between five and twenty; and the other between fifty and sixty.

White Swelling. One case, between twenty and thirty.

Lues Venera—total fifteen. Four occurred in the first year. All the rest between thirty and sixty except one, which was between seventy and eighty.

DISEASES OF INTEMPERANCE.

The nomenclature adopted in the report is by no means clear; indeed Intemperance is not given as a class, but occupies the place of the name of a disease. For the cause of truth and humanity, as well as temperance, which it is the duty of all physicians to sustain and promote, as far as facts enable them, it would certainly have been more correct and advantageous to have given intemperance a generic rank, and arranged under it the deaths from all accidents and circumstances, whereof this could have been fairly considered cause: such as delirium tremens, some apoplexies, palsies, suicides, marasmus, dyspepsia. &c. However, we shall notice them as contained in the report:

Intemperance—total thirty three. Five was the greatest
number in any one month, but no month was exempt but September. They all occurred between twenty and sixty.

_Delirium Tremens_—total 64. Of these, twelve occurred in August alone. No month was exempt from deaths from delirium tremens; but March and November had but two in each. Of these, fifty two occurred in white males, and eleven in white females! Only one amongst black males, and none in black females. Perhaps to the poverty of the colored, they were indebted for their happy exemption from this horrible disease. Of these deaths, fourteen occurred between twenty and thirty; twenty six between thirty and forty; and seventeen between forty and fifty. Only seven occurred after fifty: as few who are disposed to that turn of intemperance, live in that indulgence which causes it, to a later period.

_Unknown Causes_—total 159. Many of these were, doubtless, results of intemperance. July had twenty two, and August eighteen. Eight, the smallest number in any one month, and this month was November. Twenty nine of these occurred in children during the first year. But the most fatal periods were from twenty to thirty, 10; thirty to forty, 31; from forty to fifty, 36; and from fifty to sixty, 15; making in the period from twenty to sixty, a proportion to the whole number, of ninety four. Of these we suspect many to have arisen from intemperance.

_Suicide._ Forty three cases of death occurred from this cause. Of these, twenty (nearly half) occurred in July, August, and September. Eighteen between twenty and thirty; and eleven between thirty and forty. All occurred between twenty and seventy. Doubtless, intemperance was that, without which, this number would have been considerably less.

_Casualties_—total ninety one. These were distributed through all the months, and all periods of life; but thirty five of them occurred between twenty and forty. Some of them were, doubtless, the results of intemperance.

_Burns or Scalds_—total 50. Of these, thirty three occurred within the first five years.

_Drowning_—total 93. Some occurred in every month, but the four warmest months alone had sixty eight: showing probably the connexion of the proportion with bathing. Seventeen were white males; five white females; and thirteen black males.

_Drinking Cold Water_—total 22. These all occurred in June, July, and August; and all but five, between twenty and forty.

_Old Age_—total 114. All but eight occurred between ninety and 105. No month was exempt, but August had the greatest number, which was eighteen.

At the end of the table we are told that pleurisy, peripneumonia, bronchitis, colds, catarrh, influenza, and pneumoniatyphoides.
are included among the deaths from inflammation of the lungs and membranes. Also, that deaths from decay, debility, tabes myorcentera, and atrophy, are included with deaths from marasmus.

The full total of deaths amounted to

7,533

To which, if we add the still-born

520

We make the total of interments

8,053

The following table will show the proportion of white and black males and females, who died at the different periods of life.

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Under 1 year</th>
<th>1 to 3 years</th>
<th>3 to 5 years</th>
<th>5 to 10 years</th>
<th>10 to 20 years</th>
<th>20 to 40 years</th>
<th>40 to 50 years</th>
<th>50 to 60 years</th>
<th>60 to 70 years</th>
<th>70 to 80 years</th>
<th>80 to 90 years</th>
<th>90 to 100 years</th>
<th>Unknown</th>
</tr>
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<tbody>
<tr>
<td>White Males</td>
<td>1052</td>
<td>467</td>
<td>232</td>
<td>165</td>
<td>122</td>
<td>340</td>
<td>472</td>
<td>322</td>
<td>197</td>
<td>126</td>
<td>59</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>White Females</td>
<td>811</td>
<td>465</td>
<td>370</td>
<td>140</td>
<td>140</td>
<td>233</td>
<td>296</td>
<td>182</td>
<td>101</td>
<td>93</td>
<td>72</td>
<td>26</td>
<td>12</td>
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<tr>
<td>Black Males</td>
<td>84</td>
<td>28</td>
<td>20</td>
<td>10</td>
<td>12</td>
<td>34</td>
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<td>32</td>
<td>16</td>
<td>13</td>
<td>4</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Black Females</td>
<td>74</td>
<td>23</td>
<td>20</td>
<td>10</td>
<td>13</td>
<td>49</td>
<td>47</td>
<td>27</td>
<td>11</td>
<td>14</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

The following table shows the rate per cent. of deaths of each class, between certain ages:

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Under 1 year</th>
<th>1 to 3 years</th>
<th>3 to 5 years</th>
<th>5 to 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>White males</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>under 5 yrs.</td>
<td>25.22</td>
<td>2.19</td>
<td>1.75</td>
<td>4.51</td>
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<tr>
<td>White females</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>under 5 yrs.</td>
<td>32.34</td>
<td>1.85</td>
<td>1.85</td>
<td>4.38</td>
</tr>
<tr>
<td>Black males</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.75</td>
<td>.13</td>
<td>.45</td>
<td>.45</td>
</tr>
<tr>
<td>Black females</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.68</td>
<td>.13</td>
<td>.19</td>
<td>.65</td>
</tr>
</tbody>
</table>

Per cent. total,

50.91 4.31 3.96 10.1 11.41 7.47 4.35 3.46 1.83

We subjoin a few of the most important remarks made by the City Inspector, at the close of the tables—

By this report it will be seen that the deaths in 1836 were 679 less than in 1837. Precisely the increase of 1837 over 1836.

It may be well, for the gratification of those who have not the time or taste to enter into the investigation, to subjoin a running commentary upon some of the details herein presented.

There are several interesting results to be gleaned from the precise and peculiar mode of arranging these tables, and which could not be shown by any other method.

Leaving others to account for the causes, while the facts are simply placed before them, I will premise that, while the total of deaths has been 679 less, the variation in prevalency of different diseases has been immense; from a decreased mortality of 1854 upon some, to an increase of others of 1209.

The decrease has been chiefly upon the following diseases, viz.: of Scarlet Fever, 322; Typhus, 234; Consumption, 233; Measles 159; Small Pox, 79; Fever, 74; Teething, 93; Inflammation of the Chest, 40; Diarrhea, 30; Drunkenness and Delirium Tremens, 31; Child bed, and Puerperal Fever, 24; Dropsy, 19; Bleeding, 12; Mortification, 10; Old Age, 8; and Epilepsy, 5; and 28 less were drowned.

Of the Diseases that have increased, the following stand most conspicuous: of Cholera Infantum, 184. More deaths of this disease occurred this year than ever before, with the single exception of the cholera year, 1834, when it was only 38 greater. In the year 1832, it was 105 less than in this. The increase of Marasmus is 178; Hooping cough, 153; Unknown 102.
Apoplexy, 53; Croup, 31; Remittent Fever, 23; drinking cold water, 20; Malformation, 31; Organic disease of Heart, 18; Bleeding from Lungs, 13; Dropsy of Chest, 13; Scrofula, 12; while of casualties, 12 more occurred, and 8 more were killed or murdered.

The increase of apoplexy, Unknown, and drinking cold water, occurred chiefly during the extremely warm part of last summer.

The number of Still Born and Premature is precisely the same as last year. There is a curious circumstance connected with this casualty that deserves a remark; that is, the great disproportion of white females, and which does not take place between the sexes of the blacks.

The greater fatality of male life in the white race commences before birth, continues throughout the first year of existence. This year almost 51 out of every 100 died before reaching 5 years of existence, of whom over 25 were white males, and 22 females,—the rest blacks. This inequality does not continue so great after passing the year; there being no trifling variation (although the males exceed,) between 1 and 2—2 and 5—5 and 10, until between 10 and 20, females predominate; between 20 and 30 they are nearly the same; but, between 30 and 50, even to 60, the males are almost double in number to females. Between 60 and 70, they vary a trifle; between 70 and 80, the females outnumber the males, but from 80 upwards, they are equal.

Throughout the whole series there is a total excess of male deaths, of nearly 10 per cent., and this cannot arise from exposure or casualty alone. There is not a disease of childhood, except Whooping Cough and Measles, in which the male deaths do not preponderate. The same thing occurs, with few exceptions, at the other periods of life, excluding the peculiar diseases of females, and old age. Of casualties of all kinds, the males exceed females only 148.

According to the last census, the female population was not 5 per cent. greater than the male. This constant loss of male population (which, taking the whole series embraced in my last year’s report, of 32 years past, has been still greater, having been nearly 12 per cent.) is in some way or another supplied, or, inevitably, the male race would eventually become extinct. It is for the purpose of ascertaining the facts, that a register of births is desirable.

It is singular, in regard to the deaths of the colored population, that the males and females differ so little; the colored females exceed the males only one.

Of those diseases so fatal under the year some of them are fatal within a few days of birth. Of Convulsions 636 died—501 of them under the year; but 159 of them were not 7 days old; between that and 21 days, 177 died; between that and 2 months, 79; and 25 between that and 3 months, leaving but 118 to divide between the remaining three fourths of the year. Of Malformation and Premature, 77 died under 20 days.

**Tartar Emetic in Pneumonia.** We look with great pleasure on the beginning practical improvements of the present age. Ridiculous and nonsensical, not to say mischievous ultraisms have, to a great extent, beset the profession for the last twenty or thirty years in a practical as well as theoretical point of view. Whilst expectant practitioners, on the one hand, have urged upon the profession abstinence from the use of almost every medicinal agent of valuable powers, and Hahnemann has perfected these views, by urging the propriety, or rather the almost
infallible—the inconceivable powers and efficacy of infinitesimal doses, which are fully equivalent to no doses at all, other practitioners have vibrated in the other direction to an extent almost as ridiculous—perhaps much more actively injurious in the administration of Herculean doses. This has been eminently the case in the southern and western parts of the United States, so far as regards the use of calomel, and in Italy and France in the use of tartar emetic. Perhaps these errors were founded on Hahnemann’s opinion, that the smaller the dose, the greater its power, &c. for it has been contended and declared by these ultra heroic practitioners, that the greater the dose the less energetically it operates. The only difference then between these practitioners and Hahnemann is, that they take different ends of the same doctrine, if it may be so called; and whilst the latter used infinitesimal doses for the most powerful, the former used Herculean ones for lighter effects.

But the redeeming spirit of the age, is daily approximating the entire extermination of this doctrine, by bringing us back to the primary truths of observation—observation, not alone of the fatal depredations of the disease, but of the truths which they afford during their progress; and with rigid reasoning is exterminating one error after another. The vibrating pendulum of truth which has left its line of direction to vibrate to extremes on either side, is now being settled in its proper position, and the wild errors of fancy are becoming things that were.

As the tide of popular theoretical error rolls away, we observe that antimonials are assuming their proper rank in the posological table, and will, doubtless, be soon permanently located as a nauseant and an emetic, and an aperient or cathartic in certain circumstances, and secondarily, a diaphoretic. This will fix the doses at that which will just produce their several effects in the desired degree, and through these, exercise their valuable powers of correcting morbid action. Modern humoralism has not yet progressed so far as to give a proper weight to its diaphoretic virtues, for action alone still dazzles the professional eye too much for the clear perception of the importance of the purity of the great circulating fluid—the blood, in the production and maintenance of health in the animal economy. Blood is, in health, a perfect and uniform composition, consisting of various elements or constituents, in well adjusted proportions, and even organization, to some extent, and is sui generis. So long as this condition of it is preserved, perfect health, as to general action, prevails. This perfection, in all respects, is generally preserved by the perfect regularity and due operation of, the eliminating or depurating functions—the various secretions. It is true that extraneous and deleterious influences are often derived from ingesta, in unusual quantities and qualities; but these again are, in an otherwise healthy condition of the functions, generally provi-
ded for by the eliminators, and speedily expelled. But the instant these depurators are in the least disordered in their functions, the wanderings from perfect health begin, however small the degree. It may be barely in a rational, but not sensible degree, or it may be insensible, but not incommoding degree, or a certain degree of variation from perfect health which has been called disorder. But when these functions are disordered for a long time, or in a great degree, whether by excess or deficiency, but most commonly the latter, the regular constitution of the blood is changed, and, consequently, its influence in the economy proportionately altered. If such be the case, and that it is, is constantly declared by the construction and arrangement of the various functionaries, the different composition of the blood in the various morbid and healthy conditions, the manner of operation of noxious causes, the regular succession of proportionate effects to them, the constant observation of the efficacy of the operations of nature or of art, in the restoration and the preservation of health, &c.—if, we say, it be the case that all degrees of change of the depurating functions are calculated to disorder the economy, how important it is to hygiene to preserve the most perfect integrity of their functions; and to the restoration of health or the removal of disease when produced, to restore those actions which have been thus disordered! We would not, however, hold forth the idea that this is, in every case, all that is to be done; but this, distinctly, that without these purposes being effected by nature or art, the other efforts, however indispensable themselves, must prove unavailing. We are pleased to see, as we think we do, in the observations of M. Chomel, of the Hôtel Dieu, an approximation to truth and soundness in this respect. We give the remarks of La Lancette Francaise, through the Med. Chi. Rev. and Eclect. Jour. on M. Chomel's use of tartar emetic, and his opinions of its medicinal powers, founded on this extensive, accurate, and independent observations.

M. Chomel on Tartar Emetic in Pneumonia. This eminently practical physician of the Hôtel-Dieu has not, it seems, so high an opinion of the tartar emetic practice in controlling thoracic inflammation, as many of his professional brethren in Paris. He frequently uses it; but only as a subsidary remedy, after a decided impression has been made on the disease by blood-letting. With respect to its having any directly antiphlogistic or contra-stimulant properties, independently of the depression induced by nausea and by evacuation, M. Chomel professes himself to be very sceptical; and hence, of late years, he has discontinued the common usage of combining opium with it, for the purpose of inducing a tolerance of the antimonial. According to his views, its action is to be referred to an energetic revulsion upon the alimentary tube, and to the powerful compression of the lungs, during the efforts of vomiting, aided by the nausea which precedes and follows these efforts.

The antimonial will always be found of most efficacy, when the first violence of the inflammatory attack is arrested, and when the disease indicates a tendency to remission or abatement.
Alluding to the excellent effects of intestinal derivation upon all thoracic inflammations, M. Chomel takes the opportunity of strongly recommending castor oil as the safest and one of the most effectual purgatives, which can be used for this purpose.

Remarks on, with Case of, Pneumo-Thorax.—The following case lately occurred in the practice of M. Chomel, at the Hôtel Dieu.

A man, affected with pulmonary tubercles in a state of softening, was suddenly seized with a violent pleuritic pain or stitch, which caused extreme difficulty in breathing, and considerable febrile action in the whole system.

On examining the chest, it was observed to be altogether fuller and more capacious than it had been, and at the same time, to be much more resonant on percussion, while the respiratory murmur had become much more indistinct.

When lecturing upon this case, M. Chomel took occasion to state that, in his opinion, the disease of pneumo-thorax is never idiopathic,—or, in other words, that air is never secreted from the pleural surfaces—but is always the result of a communication between the air cells of the lungs and the bag of the pleura. Such a communication may take place in one of two ways: either by the ulceration of a vomica outwards, as in the present case, or in consequence of a purulent effusion in the pleural cavity being followed by an ulceration at some point of the lungs.

He stated, at the same time, that he took the same view of tympanites abdominalis—the effusion of air being, according to him, always the result of an intestinal perforation.

Such a perforation may have taken place either from within outwards, as is occasionally the case in some cases of typhus fever, or from without inwards, as now and then happens in consequence of a purulent collection in the abdominal cavity. An instance of this sort occurred very recently in M. Chomel's clinique, in a woman, who died from an immense abscess in the pelvis: ulceration had taken place at one point of the large intestine, and had penetrated through all its coats, except the mucous one.

It is necessary to distinguish the peritoneal tympanites, which we do not frequently meet with in dissection, when there is certainly no perforation of the intestines, from that alleged or presumed form of the disease, which has been attributed to the secretion of air during life: it is entirely owing to the incipient cadaveric decomposition. M. Chomel mentioned a very remarkable instance of this cadaveric tympanites, which he recently met with. A restaurateur in Paris, who was immensely fat, but seemed to be in very good health, was most unexpectedly found dead in his bed. The body was examined thirty hours after death. The season was summer. No sooner were the abdominal parietes divided, than a loud explosion, which M. Chomel compares to that produced by the discharge of an air-gun, was heard; so violent was the rush of the confined air from the aperture which had been made into the cavity of the abdomen.

But now to return to our case of pneumo-thorax.

On the following day, after the presumed rupture of the vomica, and the communication between the air cells of the lungs and the pleural cavity had taken place, the expansion and also the resonance of the thoracic parietes were found to have considerably increased.

In proportion, as the pneumo-thorax was more decided, the auscultatory signs became more and more distinct and decisive. At the lower part of the chest, a sound, analogous to the amphoric bruit, was perceptible; and more externally, a distinct metallic tinkling was to be heard. Over the scapular region, a bruit de secousse, such as is caused by striking a drum with the finger, was audible when the patient spoke.

Along with these symptoms, there was extreme anxiety and difficulty of
breathing, amounting to orthopnoea, &c., and, as we have mentioned above, the chest was remarkably resonant on percussion.

The treatment which M. Chomel adopts in almost all cases of internal perforation, whether of the thoracic or of the abdominal viscera, consists in the exhibition of opiates, until they produce a decided narcotism of the system. The object is not only to quiet the pain which is almost always present, but, also to bring on a state of inertia of the whole system, so as to permit nature to exercise her own medicative and reparatory efforts.

From the results of several cases of presumed intestinal perforation, this treatment certainly seems to be by far the most advisable.—*Med. Chirur. Rev. for January, from Lançette Française.*


**Part III. MONTHLY PERISCOPE.**

*Professional Charges. Autopsy for Legal Purposes. Letters of Consultation.*

At its last session, the Medical Society of Augusta passed, with unanimous vote, a resolution, that autopsic examinations, for legal purposes, are proper subjects of charge, and that the price for each and every such examination should be from twenty five to one hundred dollars.

The principal arguments on which this resolution was based were, 1st. That the County is always able to pay, as well for professional labor and service for its own purposes, as for any other commodity. 2nd. That a man's professional qualifications, whereby he is rendered competent to the discharge of this service, are his capital, or his stock in trade, in a pecuniary point of view, and neither the public, nor any individual, has a right to their use, without a satisfactory return for the same, any more than the public, or any individual, has to take, without due remuneration, the labor or property of any other man; and 3rd. That these anatomical investigations demand for themselves an ability, which is found only in ample scientific attainments—that they require much time for their proper performance, and much more in attendance on the legal investigations to which they lead, and to which they are all-important. To these we may add, a peculiar weight of responsibility; because on medical, more than any other testimony in such cases, a correct decision depends, in which human life is concerned. By the slightest error, or delinquency in the discharge of this duty, the guilty may be allowed to escape the just inflictions of the law,
or the innocent caused to suffer the punishment due only to the guilty.

It may be an enquiry in the mind of some, whether such a resolution as that alluded to in the beginning of this lecture is, or ever would be, called for—whether any counter-sentiment on the subject exists, to call forth this action of the medical community? To this enquiry we reply, that a case is now pending in the Superior Court of this County, in consequence of the refusal, on the part of the County, to afford to the anatomist in such a case, a satisfactory remuneration for his services. In this movement the members of the Society feel themselves sustained by the laws of the land, as fairly as they would be under an attempt, on the part of the general government to force them to the gratuitous discharge of the duties of an army surgeon.

The task is, as we have said, a most disagreeable one; and one which it is the desire of most practitioners to avoid. In case of refusal to discharge those duties according to the demands of justice, the law may and should exercise compulsory powers; but not without ample remuneration.

Another subject of charge for professional services, than which there is none more proper, but which has been overlooked alike by the profession and the community in this section, is consultation by letter. It is a frequent occurrence for a physician to receive a letter from some other practitioner, or a patient at a distance, making a large demand on his time, attention and labor—no fee inclosed, nor even the postage paid. It would seem, from such communications, that the writer of such letter presumed on the sufficiency of the compliment thus paid to a physician, for paying the debts of the latter, or bearing the current expenses of his family, and paying the postage to boot. Truly, honor is pleasant enough to most men, but he who has learned that, to live honestly and honorably, the necessary expenses of life and of the profession must be met with promptness, will say, "honor to the dogs," in such a case.

It is worse than useless to open accounts with persons at a distance of 100 or more miles; as the collection would cost more than it would profit. It is, therefore, indispensable, that a fee fully sufficient to reward the physician for his labor in the premises should accompany the letter, or application otherwise made, or a certificate of the disability of the patient to reward the adviser; for, otherwise, a prompt return (if return at all) cannot be reasonably expected. Physicians who are most frequently consulted in this way, have generally enjoyed the honor of high confidence before, and for a length of time—therefore, a mere expression of confidence is no reward. Such persons are, moreover, not "gentlemen of leisure," but are busy men, replete with important engagements; such as are not, are rarely worthy of such consultations; for it is by their habitual professional
engagement and studious habits, that they obtain that worth in
the profession which causes their advice to be thus sought. To
men thus engaged, time is more precious than gold. Time, and
mental and corporeal labor are their capital, and it is not more
just and reasonable, to expect such men to take these, their capi-
tal, from a profitable employment, and bestow them gratuitous-
ly, than it would be to expect or ask a monied institution, to draw
its capital from those employments by which it returns, with in-
terest, and give it to an individual whom it is never expected
will be heard of again. No. If advice sought in this way be
necessary and proper at all, it is only on the present state of the
case described. The advice must, therefore, in order to be pro-
ductive of good, be prompt. Nothing, therefore, can generally
secure this promptness, but a competent fee in hand, or a clear
and fair claim on the charity of the physician; which latter, to
the honor of the profession, is seldom slighted.

It is not a very uncommon thing for some persons to think
more about the business of others than they should do; but we
are of the opinion, that this is an instance in which there is a de-
ficiency of thought of the business and interest of others. Would
it not be well that the community at large, as well as physicians,
should be reminded of the fact, that consulting physicians, as
well as other people, are obliged to secure a competent income
by their means, and that they are even as much entitled to the ac-
cumulation of a fortune by their time and well-directed acquire-
ments? And, therefore, when a benefit is asked, that a quid pro
quo is necessary to secure it? We remember an old anecdote
which frequently occurs to our mind on these occasions. A
gentleman being about to sail to a foreign country, received or-
ders for the purchase of many articles for A. B. C. D. E. and F.
On his return, A. B. and C. received promptly all the articles
for which they had sent, perfectly to their satisfaction; but D.
E. and F. not receiving any of those, the procuring of which
they had requested, inquired anxiously into the cause: whereon,
the gentleman informed them that, one day during his voyage,
he had spread before him the whole of the orders he had receiv-
ed, to see what articles he had to procure, placing the money,
accompanying some of the orders, on them. Whilst engaged in
looking over them, a sudden breeze came and carried overboard
all the bills which were not weighed down by the money; and
as he could not recover them from the sea, he was unable to as-
certain the articles named in these orders, which happened to be
theirs; but all the orders which were thus saved by the pressure
of the money, he had been able promptly to fulfil. So it is with
letters of consultation. Were they made subjects of pecuniary
interest to the consulting physician, they would be kept carefu-
ly in hand until duly attended to, and not be allowed to accu-
mulate around his desk, or in his pocket, by the necessity which
otherwise exists, for their awaiting an hour of disengagement from other business of value.

Allusion is not here made to those applications on behalf of patients who are proper subjects of charity: the character of our profession should be ample protection against a charge of unwillingness to afford to the poor our assistance, as far as consistent with other obligations; for it is a well known truth, that (considering the time, talents, labor, &c. of physicians, their capital.) they bestow on the indigent and afflicted, a greater amount of charity than all other classes of the community together. But there is no more justice in claiming a physician's services for the sick, without reward, than in claiming the undertaker's for his coffin; and who thinks of finding a mechanic who may be called from his other business to make a coffin, or a merchant to afford the habiliments of death gratuitously? Each may give if he please, and we are happy to know that the physician always gives in such cases, as far as he can, in justice to his other business, which, in point of humanity, is not less obligatory than the afflictions of the indigent.

**New Diuretic.** Some time since, we noticed that Dr. Holloway, of Warrenton, had found the pith of old corn stalks a popular remedy for some of the most troublesome disorders of the urinary organs, with some experiments of his own with the article. In his last letter Dr. H. writes thus on the subject:

"Since I last had the pleasure to hear from you, I have had another opportunity of trying the pith of old corn stalks in dysuria and hematuria, in which it was found promptly efficient. What are its virtues, and why does it act so very promptly?"

**New Theory and Treatment of Erysipelas.** By M. Blandin, Surgeon to the Hôtel Dieu, Paris.—Erysipelas may be divided into two varieties, according to the causes which give rise to it. These may be either external or internal; as a wound or injury, or a disordered state of the constitution generally; and the disease will vary considerably in its characters as the one or the other cause may occasion it. According to M. Blandin's theory, that variety which is excited by external injury is at first a local affection, and afterwards tends to diffuse itself generally; the fluids, which are altered by the diseased actions, going on in the part, having a concentric course, and thus spread themselves through the whole system and excite violent reaction.—Erysipelas, on the contrary, arising from an internal cause, is at first generally diffused, and has a tendency to become localized; nature making an effort to determine the disturbing influence towards a single point.

With regard to the anatomiical nature or proximate cause of erysipelas, M. B. considers that it consists in acute inflammation of the minute lymphatic vessels of the skin, which are first affected, and inflammation of the substance of the skin itself afterwards follows. [This idea of the absorbents being inflamed in erysipelas is not new, though M. B. is the first who has extensively applied it, in numerous cases, both to pathology and therapeutics; this same theory has been entertained by several authors; among
Vaccination as a Preservative against Small Pox. The following conclusions, close a long communication from Doctor Schaeffer, in Rust's Magazin fur die ges. Heilkunde, on the contagion of the Variola, during 1836, in Haischberg, in Germany. So far as these conclusions go to impair confidence in the preservative efficacy of vaccination, we are compelled to attach the blame, not to the vaccine disease, but to the imperfection of that disease, either from fault of the virus used, or the condition of the system when that which is genuine is used, or some other cause of a want of its wonted and proper action. We are rather surprised when we consider the various circumstances calculated to modify morbid actions of any kind, that under the circumstances which have attended the use of vaccination, it has not every where so degenerated as to have lost its character as a preventive power. Under all the circumstances, however, and particularly with vaccination in the hands of the common people throughout the country, who are neither judges of the characters of genuine vaccine disease, nor of the good conditions of the system for its best effects, it is found every where in this country, so far as we have been able to ascertain, as preservative as variola itself.

We find that small pox cannot progress in those communities in which care has been taken to keep up genuine vaccination. We know of many individual instances wherein persons have had the vaccine in the lightest manner, having had no
eruption but the pustule made by vaccination, in whom the protective power has been amply and repeatedly tested by exposure to small-pox contagion and even contact. Indeed it will be found, at least in the circle of our observation, that not one case in fifty is attended with pustules elsewhere than the point punctured in vaccination; and it is a rare circumstance for re-vaccination to afford a perfect pustule at this point, and when it does, it appears to be a good evidence that the former vaccination was, in some way, imperfect. The conclusions of Doctor Schaeffer, on this subject, are calculated to impress us with the importance of such regulations or management, as shall secure good judgment and faithful attention to the use of this invaluable preservative. A medical staff should be organised, on salaries sufficient to secure the best attention and judgment, and every case duly prepared, and observed in its progress; in addition to which, re-vaccination should be practised at least once in every individual, with different virus, not for the purpose of renewing former impressions, which the revolution of a few years have effaced—a mere notion which some people have, but for supplying any imperfections which may have attended the former course of the disease.

1. Vaccination, as a preservative against the small-pox, has appeared to be in a direct relation with the number of scars visible on the arms of the individuals. Thus in 43 vaccinated persons, who have caught the small-pox, there were, in all, only 126 scars; whereas in other 38 persons, who have escaped, although they had been repeatedly exposed to infection, there were 211 scars counted.

2. Vaccination is far from having the same preservative influence on all persons. In some a single cicatrix seems to prove a sufficient security against the small-pox; while others, whose arms have exhibited half-a-dozen of genuine scars, have been seized with the disease.

3. It is very difficult, if not quite impossible, to pronounce any characteristic signs of true genuine cicatrices.

Of 43 vaccinated persons, who have taken the small-pox, 14 exhibited cicatrices perfectly normal; in 25 they were more or less abnormal, or irregular; in 4 none at all could be discovered.

On the other hand out of 38 vaccinated persons, who had resisted the infection, 24 presented normal cicatrices; in 4 they were more or less indistinct, and in the remaining one no traces were visible.

4. The majority of vaccinated persons, who have been attacked with small-pox, have been from 20 to 30 years of age. The severity of the disease has been almost always in a direct ratio with the length of the interval elapsed since vaccination had been performed. In general the disease was more severe in the more aged than in the youthful. In one case the smallpox declared itself in an adult immediately after a normal vaccination; and in another case it showed itself, in a slight degree, on the eighth day after vaccination—the progress of which however was not interrupted.

5. A great number of persons have been submitted to re-vaccination; and of these not one has been attacked with small-pox. Moreover all those also, in whom re-vaccination has not produced any effect, have escaped, although
many of them have been much exposed to the contagion—a strong argument in favour of the opinion, that when re-vaccination does not take, the liability to catch the small-pox is extinguished.


Researches on Menstruation. M. Petrequin, one of the most intelligent contributors to Bulletin Medical Belge, published lately a small work in which he has recorded the result of his enquiries on the above subject.

The first question he proposes for consideration is, at what age does the menstrual flux usually appear in our climate (France)? Two hundred and seventy-two cases have served him to draw up the following table, from which it appears that the earliest age is about ten years, and the latest about twenty-two years:—4 at 10 years of age; 10 at 11; 15 at 12; 33 at 13; 39 at 14; 45 at 15; 48 at 16; 32 at 17; 27 at 18; 12 at 19; 7 at 20; 5 at 21; 1 at 22.

M. Petrequin, therefore, fixes upon the period between 13 and 15 years of age, as that at which puberty generally occurs in France.

From his researches it appears, that the first appearance of menstruation is the more apt to be irregular and disordered afterwards.

The next question, which our author endeavors to solve, is, at what period of life does the cessation of the catamenia usually take place? He fixes it at between the 35th and 55th years. It is well known that, in some females, it is prolonged considerably beyond the latter period, Thus Desormeaux has known it to continue to the 63th, Richerand to the 70th, and Gardien to the 75th year of life.* Occasionally the flow returns, after it has ceased for several years.

From the comparison of 60 cases, M. Petrequin states, that menstruation ceases between 35 and 40 years of age, in about one-eighth; between 40 and 45 years in one-quarter; between 45 and 50 in one-half; and between 50 and 55 in one-eighth of the whole.

We shall now briefly consider, whether the common notion that the epoch of life, at which the function of menstruation usually ceases, is really a very critical one to women, in reference to mortality.

M. Petrequin has not been able to satisfy himself on this topic from personal researches; he appeals, therefore, to the statements of preceding authors.

According to Muret, the period from the 40th to the 50th year of life is not more critical to women than the period from the 10th to the 20th year. M. Lupecq found that of 1,478 deaths in persons between 20 and 50 years of age there were 718 females and 760 males; and M. Benoist states that, from the result of his enquiries, it appears that the period of life between 40 and 50 years of age is in truth more critical for men than for women.

M. Lachaise has come to the same conclusion in his Medical Topography of Paris.

M. Finlayson states as the result of his numerous researches that, after the period of infancy, the life of women is, on the average, considerably more lengthened than that of men.

It is not to be denied that at the period of life, when the catamenia cease, there is a tendency in some women to the development of certain diseased actions; but then be it remembered at the same time that in others—as in those who have long suffered from excessive or irregular menstruation—there is a very marked improvement of the general health; the one set of cases may therefore be said to be counterbalanced by the other set.

A few hygienic precautions, such as the use of cooling aperient medicines;

* The Belgian Journals, a short time ago, mentioned the case of a woman giving birth to a child in her 70th year.
the use of light food, the abstinence from venereal pleasures (which are apt, according to Desormeaux, to induce cancerous disease,) and the occasional loss of a little blood, will lead most women safely through this often-dreaded period of life.

We may notice, en passant, that blindness from amaurosis is of frequent occurrence, when the catamenia cease to return.

With respect to the quantity of the catamenial secretion, we may probably state it at about from three to five ounces. It is usually more copious in Spring than in other seasons of the year; and there is reason to believe that the sexual passions, and also the aptitude to conceive, are greatest in this former season. M. Villerme has deduced, from the comparison of 13,908 cases of labour, that most conceptions take place in the months of April, May, and June.

The quantity of the catamenial discharge is very generally greater in women of a voluptuous than in those of a cold and less susceptible constitution.

It is an idle waste of time to endeavor to find out the cause of the monthly return of the catamenia. All that we can say is that it is a law of the system in the human female; just as the period of nine months is that of utero-gestation, or as certain plants flower in certain months and not in others.

The why of these phenomena is beyond our research; and he, who attempts to discover it, will only subject himself to the satire of another Molière: Opium facit dormire, quia est in illo virtus dormitiva.—Bulletin Médical Belge.—Ibid.

_Musk and Gum Ammoniac in Tympanitis._—Dr. Tradini recommends highly a combination of moschus et gum. ammoniac. in tympanitis in the following proportion:

Mosch. gr. iii.

Gum. ammon. gr. xii.

M. Fiant pilulæ tres. D. P. Take one pill morning, noon, and evening. The remedy is most proper where there is much weakness and debility, which generally accompany the above disease. (Il filiatre sebazio.)

_Moxae and caustics applied on the head in hydrocephalus acutus in children._

Against the above disease, Dr. Constant, in Paris, (Bulletin de Thérapeutique, Med. et. Chir.,) recommends, particularly, moxæ applied on the head, on each side of the sutura sagittalis, and assures us, that he has by this treatment been able to save several children. Dr. Durr, in Hall, in Wurtemburg, who has lately written on this disease, has derived great benefit from the use of caustics in this disease. (Prorieps Notiz., No. 1021, Feb., 1836.) He shaves the head, where the sutura sagittalis and lambdoidea come together, and put on a small emplastrum, about as large as an American dollar, (silver dollar,) spread thinly with the following unguent:

Ungu. acris Autenriethi 3 j.

Tartar. emetic. Ungu. canthar. _ad_ 5 ss.

After four or six hours the skin is raised without there having been any considerable pain. The plaster is spread again, and when, after six or twelve hours, he observes water, he makes an incision, lets the water run out, and applies, every twelve hours, an ointment made up from Ungu. basilic. Emplast. de mino _ad_.

After twenty-four hours, you will have produced an artificial, good looking ulcer. In cases where the suppuration is not great, or seems to cease, Dr. Durr applies a combination of both the above ointments.—Bibliothec. for Lagers, Copenhagen.
Therapeutic Influence of Compression of the Large Blood Vessels in Neuralgia, &c. M. Dezheimeris, the author of the memoir from which the following observations are drawn, appears to be much more deeply read in British medical literature than any of this countrymen, with the exception of two or three, such as MM. Rayer, Velpeau, &c.

He points to the late Dr. Parry of Bath, as being the first who ascertain ed and announced the curative effects of compression of the carotid arteries in various cephalic diseases, as severe headache, epilepsy, convulsions, &c.

M. Dezheimeris's observations apply chiefly to the efficacy of such compression in neuralgic affections of the face and head. The following two cases appear to us to be very interesting.

Case I.—Madame C., 34 years of age, and of a rather feeble constitution, determined, after the loss of her parents in 1814, to retire to a convent. There she spent five years in fasting and various penances; the effect of which was to impair her health very greatly.

It is now about six years ago since she experienced the first attack of neuralgia, which came on after deep and protracted chagrin. The paroxysm of pain was quotidain, returning almost regularly between three and five o'clock in the morning. The use of the sulphate of quinine effectually cured it.

Three years subsequently, and again after severe mental distress, Madame C. was seized with gastralgia, accompanied with bulimia. These symptoms yielded to the use of pills composed of opium, magnesia and subnitrate of bismuth.

In the Spring of 1836 she had a return of facial neuralgia, which was confined to one spot, being sometimes supra-orbital, and at other times infra-orbital or maxillary, or seated in the ear. It very rarely exhibited any regularly intermittent type; and hence resisted the quinine. Various narcotic remedies, employed endemically as well as internally, were tried, but with only temporary and partial success; and the disease did not fairly cease, until a suppurative eruption made its appearance on the ear.

The last attack of the disease was in the Autumn of the same year—This time it occupied almost the whole right side of the face, and although not so severe as on the former occasions, it resisted every means that where employed.

The physician in attendance having inadvertently spoken to M. Dezheimeris respecting this case, he, (the latter) suggested to him to try the effects of compression of the carotids. At this time the pains were so excruciating as to force the patient to scream out, and the integuments of the affected part were red, swollen, and shining. Upon firm pressure being made over the right carotid artery for two or three minutes, the facial congestion rapidly subsided, the pain became almost entirely assuaged, and the patient felt a soothing drowsiness creep over her.

When the compression was removed, the pain returned, but in a less aggravated degree; and again it was checked by re-applying the finger. For the following three or four days the sufferings of the patient were much less than they had been for a length of time, recurring at intervals only and with diminished severity. At length an eruption broke out in the right side of the face; and since then there has been no renewal of the pain.

Case 2nd was communicated to the author by M. Rayer.

A young female, of a highly nervous temperament, had been subject, for several years, to attack of excruciating neuralgic pain in the right side of the face.

During the paroxysms, the suffering was so intense that she was scarcely conscious what she was about. All classes of medicines had been tried, but without any decided benefit.

M. Rayer, at the suggestion of M. Dezheimeris, tried compression of the corresponding carotid artery. After being continued for about twenty min-
utes, the pain was very greatly relieved. On the threatened approach of the next attack—for the paroxysm was usually preceded by a feeling of stiffness in the left temple—compression with the fingers over the left carotid, until the circulation through the corresponding temporal artery was sensibly diminished, was at once resorted to; and with the effect of preventing the accession of the fit. Since that period the return of the fits has not indeed been delayed or prevented; but, adds M. Rayer, the pain, which was formerly excruciating, has become so supportable that I may say that the paroxysm miscarries each time.

M. Dezeimeris then alludes to the curative effects of compression of the carotid arteries in some cases of convulsions and epilepsy; and narrates, without however approving of the practice, the three cases in which Mr. Preston tied the common carotid artery to relieve certain cephalic affections.

—(Trans. of Med. and Phys. Society of Calcutta.)

He mentions also some of the observations of Dr. Cooke (History and Treatment of Epilepsy, London, 1523), to prove the benefit of compression of the carotids in many cases of this disease. We shall close these remarks with the short notice of a case of Coma Vigil, in which M. Rayer employed compression with advantage.

This case occurred in a young woman who, for many years, had suffered from various forms of hysterical disease. Latterly she had become affected with a species of coma, which returned every day, and which usually lasted for several hours.

If she was aroused from this state, she became vehemently excited and convulsed. At the suggestion of M. Dezeimeris, M. Rayer tried the effect of compressing the carotid during the attack of coma. It was not continued for more than two or three minutes, before all symptoms of stupor ceased. The same practice was adopted several times afterwards, and always with the same effects.—L' Experience; Med. Chi. Rev.

Utility of Ergot of Rye in Paralytic Affections. It is reasonable to presume that the modus operandi of this remedy in tardy parturition, Amenorrhœa, &c., is its stimulant influence on the lower extremity of the spinal marrow. Hence some physicians have been led to try the use of it in some case of paraplegia; and, according to their report, decided benefit has been thus obtained. It seems to have no influence in hemiplegia; the seat of that more unfavorable species of palsy being either in the brain itself, or in the cervical portion of the medulla.

The Ergot has been employed with marked benefit in that form of paraplegia, to which infants during dentition and young children are subject. Adults too have derived equal benefit from its use. Thus M. Ducros of Marseilles mentions the case of a sailor who, by falling from the rigging of his ship, lost the use of his lower limbs completely. Moxas, and other means, had been unsuccessfully tried by Professor Delpech; and nothing seemed to do any good but the Ergot of Rye, under the administration of which he quite recovered.

The usual dose, it is proper to commence with, is six or seven grains: this should be raised gradually to thirty or forty grains, or until the patient begins to feel prickings, and a sense of formication in the limbs, somewhat similar to what are produced by the use of the Nux Vomica.

An excellent adjuvant of its remedial virtues is the occasioned exhibition of a turpentine enema.

Whenever we administer the Ergot of Rye for a length of time, it is necessary to guard against the septic influence of the agent on the system, by recommending the use of a generous animal diet, &c. &c. M. Ducros mentions a case in which sloughing of the heel supervened: by proper means, however, both the gangrene and the paralysis were cured.—La Lancette Francaise.

MEDICAL INTELLIGENCE.

Under this head we take the liberty of asking of the editors of Medical Journals in the United States, and of respectable physicians generally, their views of propriety relative to the use of secret preparations for effecting certain medicinal operations on the system, which operations are clearly indicated for the cure of disease, when all articles known to the profession fail to have the desired operation. We will illustrate our views in this interrogation by stating a case.

Let us suppose a case of dropsy, far advanced, in a patient 60 or 80 years of age—general, long continued, and increasing, anasarca, ascites, hydrothorax, to a degree which prevents recumbence, &c. &c. This is a case in which, it will be admitted, a cure may scarcely be expected from the ordinary, or any treatment the regular practitioner may suggest; or the best plans of treatment known to the profession have been tried, but the disease continues to increase after all desirable trials. Now shall the regular practitioner resort to any secret preparation for effecting his curative purposes, of the efficacy of which, in other similar cases, he is well assured; and the modus operandi of the preparation as plain and simple as that of any simple article or composition in the Materia Medica—whose operation is known to be safe, and the state of the case with its complications plainly marked out, and only that state treated with which the composition is found to best agree? And, suppose the use of such composition be adopted and found speedily successful in reducing the hydropic effusion, and in connexion with the other part of the plan of treatment, which makes up a part of the course, finally prove, with peculiar uniformity in such cases, its curative efficacy. Should physicians purchase for themselves, under obligations of secrecy! Should they recommend the state to reward the proprietor of such a discovery, and lay it freely before the world for the general good! And should practitioners, on finding such medicines more efficacious than any other, withhold the truths of their own observations on their use, merely because the secret of their preparation is not divulged?

We do not ask the sentiments of others, without fully committing ourselves in such cases, by stating that, however disagreeable, ungenerous, and uncharitable the concealment of the secret of preparation may be thought, we should, under such circumstances, adopt the use of such preparation, and report on it according to its merits or demerits, as we should on any newly discovered article in the Materia Medica, in favor of the virtues of which, ample testimony was afforded: and rather than allow a patient to suffer from the want of such remedy, and the impossibility of getting it under other circumstances, we should think it a duty to buy it under the obligation of secrecy. On ample experience of its efficacy, we should feel it a duty to receive information from any source, relative to any medicine which can better
meet the demands of humanity, than any we have at command. There was a time when Peruvian Bark, contained a secret, relative to its constituents which was not known, and the same may be said of many other articles; but physicians did not, on this account, reject that article. Black Drop has been a secret preparation, and is so to the present day; but the most respectable members of the profession, however desirous of knowing the preparation, and of divesting the suffering community of the burthen of patent right extortion, did not hesitate to use it in preference to the other preparations of opium then known; and even at the present day, when its base has been analysed, and its constituent elements are found with every practitioner, the Black Drop is used.

Whatever of error or disgrace which attaches to such a case, we are bound to conceive is to be fairly attributed to him, and to him only, who is willing to withhold from the service of humanity a secret, the withholding of which is equal to the bartering of human life for the purpose of exhorbitant individual emolument. Such a course is justly condemned, for the physician is answerable for the character of the profession to which he belongs: that character is eminent for charity, for the doing of the most possible good to suffering mortality; not only within the little circle of his own personal operations, but everywhere. How, consistently with this obligation to expansive benevolence, can he be possessed of knowledge so calculated for the relief of human misery and danger, and refuse its universal diffusion? The question then returns, shall he receive this knowledge under the circumstances? We are inclined to think, that he should not refuse to do a partial good because he cannot do all he desires; and, therefore, if he cannot avail himself of the benefits of such a piece of knowledge, with liberty to use it for effecting all possible good, he should, for effecting all within his own personal operations: and that when the secret, which is, indeed, the property of another, is communicated to him as a friend, or purchased by him, under the limitation to his own use in practice, he is bound by his obligation to truth, not to trespass on the rights of the discoverer, by disclosing it beyond the liberty given or purchased. Accident sometimes throws in the way of individuals out of the profession, facts of much value in practice. We cannot expect such to feel themselves under the same obligations to professional conduct and character as physicians do: besides, they are often indigent—sometimes, laboring under bodily disabilities. Here we feel the odium attached to secrecy in a professional man, entirely unmerited, and that the proprietor has even a fair claim of remuneration for his observations, &c.

All these conclusions of our own are, of course, only on the supposition that this medicine is worthy of the character given it. We should be pleased to have the opinions of others on this subject. We have thus thrown it before the professional public, in the hope of removing any unreasonable obstacle which may prevent the service of humanity in the least degree.

In the present attitude of the profession, it feels compelled to refuse even a demonstration of the successful operation of a medicine, until the composition be made known, with the privilege of freely communicating it to the world.