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EDITED BY

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"Je prends le bien où je le trouve."

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PART FIRST.

Original Communications.

ARTICLE I.

The Pathology of Phlegmasia Dolens. By H. V. M. Miller, M. D., Professor of Physiology and Pathological Anatomy in the Medical College of Georgia.

Milk leg, White leg, Swelled leg, Puerperal tumid leg, Anasarca serosa (Cullen), Bucknemia sparganosa (Goode), Phlegmasia lactea, Edema lacteum, Phlegmasia dolens, Crural phlebitis. These various names, by which this disease has at different times been called, indicate to some extent the changes of opinion which have taken place in relation to its pathology.

It has been observed, and imperfectly described, by older writers, more distinctly by Mauriceau, and its history still more accurately sketched by Puzos in the year 1759. These all concur in the opinion that it is caused by a deposit of milk in the affected part; and to prevent the metastasis upon which it was supposed to depend, many practitioners kept the child constantly to the breast, in order to determine the secretion of milk in its appropriate organ. Puzos, however, occasionally resorted to much more energetic treatment, from which it appears that he regarded the disease, at least in its subsequent progress, as highly inflammatory; but, notwithstanding the energy of his treatment, he bewails the loss of some of his patients in terms which would do no discredit to the renowned...
Sangrado himself. "J'ai eu le malheur de perdre plus d'une malade malgré toutes les saignées que j'avois pu faire: non que les saignées eussent été contraires; mais elles avoient été insuffisantes pour ces cas las, parceque le mal étoit plus puissant que le remède et qu'il n'y en avoir pas d'autre."

This view of its pathology is still perpetuated in the popular belief of this and of most of the countries of Europe, but has long since been discarded by the profession: first of all, perhaps, by Dr. Hunter, who, although he published nothing on the subject, and advanced no new theory of the disease, constantly in his lectures denied the correctness of the old.

In 1794, Mr. White suggested the opinion that the disease depended upon obstruction or some other morbid condition of the lymphatic vessels and glands of the affected part. This hypothesis, or the modifications of it, proposed by Mr. Tyre and by Dr. Ferriar, one of whom thought the lymphatics were ruptured, and the other that they were acutely inflamed, became generally prevalent.

In the year 1800, Dr. Hull attempted to show that many of the circumstances attending the disease could not be accounted for upon the supposition that the lymphatics were alone affected. He contended that there existed a general inflammatory condition of the limb, involving all of its textures, but having its primary seat in the muscles, cellular membrane and cutis. In accordance with these views, he gave to the disease the name by which it is still most generally designated—Phlegmasia dolens.

The general adoption of the name proposed by Dr. Hull is not to be regarded as a measure of the favor with which his pathological opinions were received: to these there were many objectors. It was not, however, until 1823, that appearances observed in post-mortem examinations were appealed to for the purpose of elucidating this topic. During that year, M. Bouillaud, and Dr. Davis, of London, published accounts of dissections of the bodies of persons, dead of this disease, which, if they did not enable them satisfactorily to explain all the phenomena which it presents, constituted something solid and tangible upon which to base subsequent pathological enquiries, and demonstrated the superior value of even a few facts, in such investigations, over the most ingenious speculations.
In none of these cases, nor in any which have since been published, did the lymphatic vessels or glands appear to have been primarily affected, and in most of them, in no other way than by slight tumefaction, such as frequently attends oedema of the extremities from other causes. In a few, they seem to have participated to some extent in the inflammatory condition of the neighboring parts, and in but one were they found in a state of suppuration.

In recent cases, the veins of the affected limb were uniformly found to be more or less firmly and completely plugged up with a coagulum of blood, which adhered to the sides of the vessels, the inner coat of which was of a deep red color, produced, it was supposed, either by contact with the coagulum, or by inflammatory action. In cases of longer standing, the vessel was found obliterated by the organization of the coagulum, or of the coagulable lymph which had been effused from its walls. These appearances were co-extensive with the disease, involving the vessels of one or both extremities, or extending some distance up the vena-cava, and implicating its communicating branches to whatever height the plugging and obliteration might have gone.

In accordance with the pathology which these observations were supposed to establish, the disease was called Crural phlebitis, and its proximate cause asserted to be "a violent, destructive inflammation of the iliac veins and their contributory branches, including, in some cases, the inferior portion of the vena-cava." Pressure upon the veins of the pelvis by the gravid uterus, during gestation, Dr. Davis thought, predisposed to the disease, and upon the sudden removal of it by the consummation of parturition the phlebitis was developed.

The facts, detailed in these publications, have never been controverted; but the explanation of them has been deemed so unsatisfactory by many persons as to create a doubt whether the cases described by Bouillaud and Davis were to be considered as examples of genuine phlegmasia dolens, or to be viewed as essentially different diseases, analogous in their nature to those formidable attacks of phlebitis which are sometimes consequent upon venesection, or succeed to accidental injuries. Even Mr. Lawrence, who made the post-mortem examination
in the first of the cases which threw any light upon the nature of the disease, became subsequently fully satisfied that phlegmasia dolens did not arise from inflammation of the iliac and femoral veins.

That inflammation in those veins had existed in the cases submitted to examination was undeniable; but in what way it was established, or how connected with parturition, or with the condition of the uterus, subsequent to delivery, had not been very clearly made out. If, as was said, it was produced by pressure upon the veins of the pelvis, why was it not developed during gestation; if, by the removal of the pressure, why was its appearance delayed, always for some, and often for many days after delivery?

Dr. Robert Lee has subsequently attempted, by numerous dissections, to demonstrate that the inflammation acknowledged to exist in the large veins, is in all cases propagated from the vessels of the uterus in which he thinks it originates. His publications furnish abundant testimony of the accuracy and faithfulness of previous observers, and of the fact that the cases submitted to examination were ordinary examples of phlegmasia dolens. They also prove, that in many instances the veins of the uterus are in the same condition as those of the lower extremity, but he has utterly failed to show why that condition should originate in the veins of either, or in what manner it may be extended from the one to the other. Other observers, indeed, and among them Dr. Locock, her Majesty's accoucheur, deny the universality of the diseased condition of the uterine veins, as contended for by Dr. Lee. But supposing this condition always to exist, will it account for all the phenomena which phlegmasia dolens presents, or are we, with Dr. Churchill, to conclude that some further information is necessary before we can fully comprehend its true theory?—and with Hasse, that the subject demands further investigation?

It is a fact, confirmed by universal observation, that the veins do not readily take on inflammatory action. They may be bruised, cut, torn, stretched, and injured in a variety of ways, without the exhibition of greater liability to inflammation than other tissues of the body; and when in common with the contiguous structures they have assumed this condition,
how seldom is it that the formidable and rapidly fatal symptoms, characteristic of what is called phlebitis, are presented. It cannot be denied, that in every instance in which any organ of the body is inflamed, the veins participate in that condition, and yet there is no propagation of the inflammation in either direction along their walls. There is nothing, in fact, in their structure which would favor such propagation, or lead us to suppose it possible, independently of the extension of the inflammation in the surrounding tissues. Their nutrition is independent of the blood which is contained within them, and is ministered to, solely by the *vasa vasorum* which are derived from the arteries, distributed to and serving for the nutrition of neighboring parts. Inflammatory action, which depends upon a perverted action of the nutrient vessels, cannot therefore exist in the veins alone, without being extended to or from the adjacent tissues, not along the course of the vessel, and certainly not with the rapidity observed in cases of phlegmasia dolens, for such is not the course of the nutrient vessels, and such is not their mode of vascular connexion. If, however, in defiance of well established physiological laws, we were to concede the possibility of the extension of inflammatory action along the coats of the veins, from any point where it might be established, as for example, in the vessels of the uterus, in what manner would we account for the peculiar direction which it takes, and for the effects which it produces. Upon this supposition, it would follow the route of the circulation until it arrived at the veins from one of the lower extremities, and then the reverse direction, until it had implicated all the vessels in communication with them, when it would capriciously extend its influence some distance along the vena cava and seize upon the veins of the other lower extremity, and terminate by obliterating the cavities of them all, and by the establishing of purulent deposits at one or several points in their course.

It will not remove the absurdity of the hypothesis to suppose, with Dr. Davis, that the puerperal condition establishes a predisposition to inflammation sufficient to account for every physiological absurdity, for the disease has been observed in females who were not in this condition, but affected with cancer of the uterus, simple ulceration, or other diseases of this or
other of the pelvic viscera which result in suppurative action; and also in persons of the male sex, suffering from hemorrhoidal, vesical, or renal inflammations.

In view of these difficulties, it is not surprising that, while due credit is awarded to the gentlemen who have with praiseworthy zeal investigated this subject, and perfect credence is given to their descriptions of post-mortem appearances, many persons have hesitated in the adoption of all their deductions, and of the names by which they choose to designate the disease, as indicative of its true pathology, and have preferred, with Dr. Churchill, to retain the older appellation while awaiting the further information necessary to the perfect theory of the disease.

It is not improbable, that the desired information has been delayed by the preconceptions of pathologists and their too close adhesion to the exclusive solidism which has supplanted the humoral pathology of older writers. The changes of structure in solid parts are readily appreciated by the senses, and are better calculated to arrest the attention and to furnish facts of indisputable authenticity, by which a solution of the various symptoms of a disease may be obtained, than the more mysterious and uncertain alterations to which the fluids of the body are subjected. It is difficult also to trace these alterations, from their origin to their ultimate results, with the precision and accuracy which are demanded by the rigid analytic philosophy of the present time; and hence in the investigations of the origin and nature of diseases the solid parts of the body have received a very disproportionate share of attention.

The extension of pathological knowledge has more recently in theory at least, led to the rejection of the exclusive claims of either fluidism or solidism, and to the concession that the animal structure is composed of parts, every one of which, may not only partake of disease, but under certain circumstances become the cause of it; and has induced enquirers to engage in the tedious and difficult task of tracing the different changes which the blood undergoes in its circulation, and the effects of agents upon it, whether these are the retained material of normal, or the product of morbid secretions, or foreign substances introduced from without.
Much is to be anticipated from the further prosecution of these investigations, and already it is probable that they justify us in advancing one step in the pathology of the disease at the head of this article, and if the deductions are not erroneous, will lead to a fuller understanding of phlebitis in all its forms.

The conclusions to which they would lead are, that phlegmasia dolens or phlebitis is caused by the introduction of diseased matter, usually pus, into the blood—that inflammation of a vein is not an essential part of the primary affection, which precedes constitutional symptoms, even when morbid matter has found its way into the circulation through a vein, and that when the veins are inflamed, it is an effect, and not the cause of the reception of diseased or foreign matter into them.

John Hunter showed that admixture of pus with blood caused its coagulation. If but a little of it be mixed with recently drawn blood, the latter will coagulate round the globules of pus and form a mass which will adhere to the first surface with which it comes in contact, and it is not until the coagulum thus formed, is broken up or dissolved, that its elements can circulate with the blood.

Mr. Henry Lee, of London, has recently shown that this change is produced in blood out of the body in two minutes, while fifteen minutes are required for the coagulation of unmixed or healthy blood.

The following experiment performed by him, proves that pus will cause the coagulation of blood more rapidly within the vessels than out of the body:

"The right jugular vein (of an ass) having been opened, two fluid ounces of pure healthy pus were injected and propelled in the course of the circulation, by pressure upon the vein externally, the vein became tense during the operation, and sensibly resisted the attempts that were made to propel its contents toward the heart, even forcible pressure was not sufficient to overcome the resistance offered to the return of the blood, symptoms of constitutional irritation followed, the vein was felt thickened as far as the sternum, and the animal was destroyed about nine days afterwards.

Post mortem appearances. ** * * * On the right side an abscess had formed in the course of the vein, and for two inches
the whole of the parts were imbedded in a confused mass of pus and lymph, in which it was impossible to distinguish the structure of the vein. Both above and below this for several inches, the vein was filled with coagula, which effectually obliterated it. These coagula extended for several inches in the course of the circulation; but beyond, in both directions, the vessel was pervious."

In a number of other experiments, "so sudden was the effect, that the mixture of blood and pus coagulated before it could traverse the jugular vein, as indicated by the induration and cord-like feeling of the vessel."

The immediate effect then of the introduction of pus into the veins is the coagulation of the blood within them, and the degree to which it may take place, will depend upon the extent of the injury and the degree of healthiness of the blood, and may vary from a small coagulum, such as re-unites the edges of a punctured vein to the prolonged plug which precedes its obliteration.

The object of the coagulum so formed appears to be to isolate the purulent matter, and thus prevent its introduction into the general circulation; and it is only when this intention is frustrated, by the large amount of pus, the mechanical disturbance of the process or the loss of the coagulability of the blood, that the grave and often fatal constitutional symptoms are manifested.

The blood coagulated within the vessels is in the same condition as if it were effused into a serous cavity, and becomes organised in the same manner, or as coagulable lymph would do in the same position, the only difference between them being the presence of the red particles in the former; and there is no sufficient reason to suppose that they would cause fibrin, which contains them to comport itself differently from that which is free from them.

The coagulum adhering to the sides of the vessel becomes a bond of union between them, a pellicle of lymph forms around it which increases in thickness, and finally becomes vascular and so firmly united to the sides of the vein, as to be inseparable from them. Inflammation is not necessary to the completion of this process; it is an example internally, of "union by the first intention," which is so frequently observed, and al-
ways desired in external injuries, and doubtless in many instances accomplishes the sequestration of the vessel or the insulation of the pus without the accompaniment of symptoms of constitutional irritation, or other changes in the surrounding structures than would result from the obliteration of a vein from the application of a ligature. But if the amount of pus be considerable, or the adhesive process be from any cause interfered with, additional phenomena are presented, characteristic of the farther progress of the disease. The pus, though cut off from the general circulation, may fail to be absorbed, and like other foreign matter, be discharged externally by the ulcerative process. Inflammation of the vein and of its communicating branches may be thus excited at one or many points, by the presence of the pus within it, or by the congested state of the capillary vessels, consequent upon its obliteration. This is precisely what is observed in disease, and what is produced by experiment.

"On the 23d of November, 1848, about an ounce of perfectly pure pus (previously warmed,) was injected into the right jugular vein of an aged ass; the vein immediately became corded, and the blood appeared to have coagulated in the vessel. 26th, the wound in the neck began to suppurate, and an abscess subsequently formed in the course of the vein about midway between the opening and the sternum." Several abscesses had also formed in the neighborhood of the external opening. (H. Lee.)

Cruveilhier produced similar effects by injecting ink into the veins of animals, the tannic acid of which would here seem to coagulate the blood as quickly as pus would do; thirty-six hours after, the large veins were distended with adherent coagula of blood, a number of bloody patches or congested spots were found in the muscles and cellular tissue of the limb, which, if the animal were allowed to live, subsequently suppurated.

These experiments certainly explain several of the circumstances occasionally attendant upon phlegmasia dolens. They account for the obliteration of the vessel which is known to precede inflammation of it, for the congestion of its communicating capillaries, for the exemption of those which have some collateral anastamosing branches, for the tumefaction of the limb, for the subsequent establishment of inflammation and for the
occurrence of suppuration at one or several points of the affected vein.

If any mechanical or other cause disturb the reparative process, the coagulum beginning to be formed, or an additional amount of purulent matter may be propelled in the course of the vein, and the same process be recommenced at another point, or if the occlusion of the vessel be not complete, the passage of successive portions of pus would seal up the cavity for a still greater distance in the direction of the heart, and thus, if the pus had its origin in the uterus, might successively implicate as has been witnessed, the vena cava and all the vessels emptying into it as high as the hepatic vein.

It generally happens, when the provisions to prevent the passage of this poison into the veins which are known to exist at the seat of suppuration, have been inoperative, that it will be arrested by the immediate effect which it produces on the blood. It is perhaps only when there exists some morbid condition of the circulating fluid induced by previous disease, the purpura condition, hemorrhage, or some vice, of constitution, that pus is permitted in any dangerous quantity to go the round of the circulation, and even then there exists a farther provision for its arrest and ejection from the body, not as has been supposed by the mechanical arrest of its larger globules in the capillary vessels, but by the repetition in them (with diminished force, but more favorable conditions of adhesion,) of the same phenomena that attend its first introduction. Under these circumstances, when the mass of the blood has become infected, are developed, the well known symptoms of constitutional irritation during which different organs of the body may be simultaneously attacked and various isolated spots in them will become rapidly disorganised, while the surrounding textures remain unaltered either in structure or color. The final effort to stay the progress of the poison is made in the capillaries and hence they are the seat of pathological appearances which vary according to the condition of the blood at the time. If it still retain coagulating force, though much impaired, one or more of the capillary vessels will become obstructed and the ordinary changes follow, local inflammation will be developed by the irritation of the poison and pus will be formed at the seat of the
congestion, and not translated thither from the original injury. In fact, in persons of enfeebled habits and where the blood is in a depraved condition at the outset of the disease, these distant abscesses are observed sometimes to occur without any apparent evidence of a previous attempt to circumscribe the poison, and even so early as scarcely to allow the supposition that pus could have been fully formed at the original point affected. But it is not difficult to comprehend how coagulation and arrest of circulation may be produced in the slow moving minute columns of blood in the capillary vessels, by causes insufficient to affect larger streams or even those in the normal and healthy state of the circulating fluid.

It is scarcely necessary, if the limits of this article allowed it, to exhibit proof of suppurative action in some organ having always preceded attacks of phlegmasia dolens. This has been abundantly furnished by persons who have sought to establish its necessary connexion with inflammation of the veins. In no instance has it occurred in persons, not in the puerperal condition, where purulent matter was not found in some organ from whose veins its transmission into the larger vessels would account for the phenomena, as in the left leg, after amputation of the right, after ulceration of the kidney, uterus, any of the pelvic viscera, or of hemorrhoidal, tumors, &c. In every case of parturition, the resemblance of the vascular condition of that portion of the uterus to which the placenta was attached, to a recent wound, or amputation, has been long the subject of remark, and will account for the production of purulent matter in cases which terminate favorably, without the accompaniment of metritis; and in most of the instances of a fatal character pus has been actually found in the veins, insulated by coagula in the same manner as in experiments on animals.

It is not intended to extend this notice to cases of phlebitis occurring in other parts of the body, but it is evident that if the conclusions expressed are not erroneous, they are referable to the same cause, as they unquestionably present similar phenomena. They occur most generally under circumstances which favor the ready introduction of pus into the veins, as when some of the larger veins have been wounded, and the
process of union has been disturbed; when some portion of bone has been involved in the original lesion, as in amputations or injuries of the head, in which the closure of the vessel is prevented by its firm attachment to unyielding surrounding structures. But in no part of the body is the same facility afforded for the occurrence of this accident as in the uterus. The intimate union existing between its muscular fibres and veins, renders the contraction and dilatation of the latter dependent upon the permanent contraction of the former, and consequently upon every relaxation of the uterine fibres, the coagula which close the large venous trunks are liable to be displaced, and no obstacle would be offered to the access of purulent or other offensive matter into them. And to this facility of entrance is perhaps to be attributed the fact that, in phlegmasia dolens, the coagulation and obliteration of cavity do not always begin in the uterine veins, which are sometimes found pervious and healthy, while the ordinary effects of the disease are manifested in the larger vessels.

These instances are much more readily accounted for upon this supposition than by attributing them to inflammation originating in the uterus and propagated along the walls of the veins. The healthy condition of the vessels in the supposed seat of the original lesion, forbids the idea of any such propagation, and leaves but the plain inference that the cause of the appearance is to be sought in the character of their contents.

Fortunately, the contraction of the muscular fibres of the uterus and the tortuous condition of its veins render the coagula so firm as usually to prevent the introduction of pus, from the surface of the uterus or when it may be formed in its substance by inflammation of the organ, and it is only in exceptional cases that phlegmasia dolens makes its appearance. Any cause which will relax this contraction or by other means disturb the coagula, will favor its production: hence hemorrhage, which would not be likely to excite inflammation, is not an unfrequent precursor of it, and in almost every instance it makes its appearance some days after delivery, when by the ordinary process of reparation the coagula are being separated from the mouths of the vessels by absorption or by the spontaneous contraction of their fibrine.
The study of the post-mortem appearances in cases of phlegmasia dolens and of so called phlebitis in other parts of the body, by whomsoever published, (but which cannot be here reproduced) will strongly tend to confirm the pathological views imperfectly sketched in the preceding pages, and if established they should so far modify the treatment as to avoid the danger of breaking up the adhesions and interfering with the process by which nature seeks to repair the injury, while combating an inflammatory condition which, when it exists, is but the effect of a pre-existing cause, and is never to be regarded as the origin or essence of the disease.

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ARTICLE II.

Additional Remarks upon the value of Veratrum Viride. By W. C. Norwood, M. D., of Cokesbury, S. C.

We have been endeavoring for some time to awaken and interest the profession in the powers and properties of Veratrum Viride. We now venture again, and the third time, to call aloud! We have been cautiously, and, as we believe, judiciously, using the above article, alone and in various combination, for the space of eight years, which ought to allow us to speak with some confidence, and should be a reasonable warrant for what we may assert in the sequel. After various trials and combinations, we unhesitatingly assert that we verily believe we have adopted that form of combination which is the best. We gave to the public, in two former numbers of this Journal, (see June No. for 1850 and January No. for 1851,) a portion of our experience, with a statement of what were the powers and properties of the article; and we give this in farther addition. Its powers are perhaps more strikingly-manifested in the speed and certainty with which it relieves and cures pneumonitis typhoides. Its culminating curative powers stand out in all probability more strikingly in this than in any other disease. We fearlessly assert, that it is as much of a specific in pneumonitis as quinine is in the treatment of intermittent fever, and that it will cut short and break up at the first outset of the attack as many cases—due allowance being made
for the violence of the attack and the importance of the organs
affected—as quinine will, of intermittent. We challenge the
world to produce its equal, either singly, or in any combina-
tion of remedies. Again: it is the sheet-anchor in typhus and
in typhoid fevers. It is the only remedy that has ever been
found to arrest the above fever or fevers, and to rob them of
the terror and dismay they are known so universally to pro-
duce. It not only cures cases beyond the reach of any known
remedies, in the last stage of the disease, but it breaks up many
cases at the outset, and cuts short others that are fully formed,
and in full and perfect progress. Farther: we have found
nothing that arrests convulsions in children, accompanied with
high febrile symptoms, from one year old and upwards, with
any thing approximating such certainty and speed. In hooping
cough, it stands unrivalled and alone, as a remedy that may be
relied on when accompanied with high febrile excitement.
Dr. J. A. Stewart, in writing to us in relation to its powers,
states thus:—"I know of no remedy worth mentioning, save
yours. Having seen cases of pertussis every day for ten
months, and used your remedy every few days, I cannot recom-
me it to that notice it deserves without being considered as
an enthusiast in its use." We hasten on to notice, farther, that
it is a powerful and reliable agent in the treatment of typhoid
dysentery: that with it we can readily manage that fearful,
malignant and mortal disease.

The next class of diseases we shall notice, and briefly il-
lustrate its powers in by a couple of cases, is the certainty and
speed—we mean undoubted certainty—with which it cures or
relieves the pain and febrile excitement occasioned in mumps,
by a metastasis to the testicle.

Case 1st, Mr. A.—Found him with the testicle much swelled
and intensely painful; great pain in the head; skin hot and dry;
pulse 110; tongue thickly coated. Commenced with eight
drops every three hours, the dose to be increased one drop
every portion till nausea or vomiting occurred. The third
portion excited free emesis. The pulse was reduced to 65
pulsations per minute, the skin became cool and moist, and
there was perfect relief of the pain and all unpleasant febrile
symptoms were subdued and removed, and by continuing the
remedy in small portions, so as not to sicken, there was no return of either pain or febrile symptoms. The symptoms of Mr. S., in the second case, were similar to the first, being free from pain, in the head excepted. He was treated in the same manner precisely. The third or fourth portion vomited freely, on the occurrence of which the pulse was reduced to 60 beats per minute, which before commencing was upwards of 110, with an entire removal of all pain and febrile excitement.

In traumatic lesions we have tested its powers sufficiently to warrant us in asserting that it will control and regulate any arterial excitement produced thereby. We fully tested that fact in the New York emigrant's hospital. Who can calculate its value and importance, by the ease and certainty with which it controls and subdues high arterial excitement after capital operations? How many cases run down and perish from high sanguineous excitement alone, without any other appreciable cause, after well executed operations? We feel confident that in the above we can afford the surgeon a remedy that will quiet his fears and remove his apprehensions in such cases, and that he can control at will inflammation, arterial and general sanguineous excitement, that so often supervene and defeat the successful result of the most skilfully executed operations in surgery.

We feel fully assured, that we can confidently offer to the world the desideratum so long sought and wished for, namely, an agent that will certainly and undoubtedly control and subdue morbid arterial excitement, the great frequency of the contractions of the heart and arteries, so especially belonging to all acute diseases, and the removal of which has been as difficult as its presence was universal in all severely acute diseases. Dr. Bass, writing us on the subject, observes, "It seems to act directly upon the heart and arteries, as manifested by a diminution of the force and frequency of the pulse; it relieves irritation, congestion and inflammation—establishes the equilibrium of the circulation—excites free diaphoresis and expectoration, which well adapts it for the treatment of pneumonitis, pneumonia typhodes and asthma—in which diseases I have used it effectually, or in other words, with unparalleled success." Dr. J. Branch, in writing us on the same, states, "I will simply
say, I regard it as one of the most important articles of the materia medica. You never made a more just and appropriate remark, than you did when you said, it would say to "the pulse thus fast shalt thou beat and no faster." I have used it in many cases of the severest sort of typhoid fever, with the happiest effect; it will cool the surface, reduce the frequency of the pulse, while at the same time it does not diminish its volume or strength. Indeed, I have sometimes thought that the volume and strength of the pulse was increased, in atonic cases, under the use of this article. The following will serve as an illustration of its use and effects:—When called to a case of typhoid fever—with a hot surface, frequent pulse, great restlessness, in a word, with all the symptoms of such a case—if the patient be an adult, I commence with giving him 8 drops of the article every two hours, and increase the dose a drop or two at every succeeding dose, until slight nausea is produced, never fearing but that when this effect is produced I shall have a cool surface, an infrequent pulse, and an absence of all febrile excitement. I then continue more or less of the article, until the case is broken up." Dr. J. A. Stewart, in a letter on the same subject, writes thus: "I do not believe any remedy or combination of remedies possesses the same powers in pneumonia or pleuritis as yours—it not only lessens the frequency of the pulse, but exerts a curative influence on the disease, and with regard to its lessening the frequency of the pulse, I unhesitatingly say, without fear of successful controversy, that it will control the pulse in any and every case where it is morbidly excited. I regard your "remedy" as peculiarly adapted to the treatment of pneumonitis, pleuritis, pneumonia typhodes, pertussis, typhus fever with increased action of the heart and arteries. Mr. Rodgers, in whose family you practice, was attacked with typhoid pneumonia about the time you left home, and Drs. Agnew and Traynham attended him, and when all hope of his recovery was lost, his family recollected that some of them had been rescued from an untimely grave by your remedy—urged the physicians to give the "drops." Neither of the physicians having the medicine, they determined to send to me for it; and, with only 5ij of the tincture, both of the physicians assured me they had saved Mr. Rodgers, and would
not take less than five dollars for the remnant of the two drachms."

We have every confidence that it will cure scarlet fever, also that it will be a valuable remedy in puerperal fever. We are waiting an opportunity to test its powers in the treatment of yellow fever. If we should succeed in curing yellow fever or materially lessening its fearful mortality, who will not hail it the master discovery of the age?

Above we have given a brief outline in addition to what we have heretofore published. We intend shortly to give a full detail of the powers of the article and our entire experience. We challenge the world to discredit the above. We pledge ourselves, and stand ready to demonstrate the powers and effects claimed. We have staked our reputation for veracity and medical skill on the above, and we are perfectly willing to abide the verdict of a liberal and enlightened profession and an intelligent community. Truth is omnipotent. The above was not got up in a day, or a corner, but is the result of years of laborious investigation, and of time and money spent to prove and test the certainty and correctness of our experience, and the conclusions reached, the world can either receive it or reject it.

[The preparation of Veratrum Viride used by Dr. N. is the Saturated tincture of the root.—Edt.]

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**ARTICLE III.**

*Report of a Case of Phimosis, with Remarks. By Juriah Harriss, M. D., of Augusta, Ga.*

Phimosis differs very much in character and form, according to the circumstances under which it occurs. It may be temporary or permanent, and the latter kind, which alone requires an operation, may be congenital or accidental.

Permanent accidental phimosis may be the consequences of chancres, vegetations, indurations of the prepuce, herpes, and adhesions of the prepuce to the glans penis. All of these causes induce phimosis, and frequently to such an extent as to render an operation necessary. When the deformity is con-
genital, it of course requires an operation. Ricord observes, that when the adhesions between the prepuce and glans penis are intimate and of long standing, they should not be dissected up, but only a portion of the prepuce should be removed, sufficient to allow free micturition. The old operation of slitting the prepuce above or below the glans, is very objectionable. It was first proposed and performed by Celsus; after prevailing a considerable time, it fell into disuse, but was revived and extolled by M. Cloquet. Since this, it has been the process preferred by the profession generally.

A very serious objection to this operation is, that it substitutes one deformity for another. It removes the phimosis, it is true, but there remain two flaps, which destroy the symmetry of the organ and constitute an impediment to coition. The operation of simple circumcision is decidedly preferable to the old plan of Celsus. The wound heals as rapidly, and leaves a much prettier result. Ricord's operation, which is in effect but a circumcision, is more neat and much to be preferred to either of the above modes. I will give his manner of operating, by detailing a case.

A boy, about eight years of age, being presented for examination, I discovered a very long prepuce, with a small tumor upon its lower margin. The tumor was situated just beneath the skin, in the subcutaneous cellular tissue. It felt very much like an adipose tumor. Its position and size lessened very much the perputial orifice and rendered micturition somewhat difficult. I deemed it advisable to circumcise the child, as by so doing I would relieve him at the same time of the tumor and phimosis; moreover, the wound would not be any larger than that required for the extirpation of the tumor, and this might result in a permanent phimosis which would itself eventually necessitate another operation.

Ricord divides his operation into four stages: 1st. An ink mark is made two lines in front of the base of the glans: this mark is of course oblique and serves as a guide to the forceps. 2d. A long needle, with its point covered with a ball of wax, to prevent pricking too soon, is then passed between the prepuce and glans and made to transfix the upper portion of the prepuce a line or two in front of the mark, at the base of the glans.
penis. 3d. The phimosis forceps are then applied to the prepuce in front of the mark and behind the point of the needle. 4th. The needle is next seized and pulled upon to extend the prepuce. 5th. The bistoury is, lastly, passed between the needle and forceps, and the protruding prepuce is excised. The operator should be careful to cut against the forceps, which have a smooth edge which serves as a guide and secures a regular surface.

After the section, and before the forceps are removed, a sufficient number of sutures are to be passed through the groove in the jaws of the instrument, and thus entirely through the two sides of the prepuce. The forceps are then removed and the sutures severed in the middle and tied upon either side.

I performed the operation according to the plan of Ricord, except that I did not apply the sutures, but made use of the serrefines, or small wire forceps of Vidal de Cassis. These forceps close of themselves and are very useful in slight wounds. They retain the parts together, and may be removed at any time without pain.

Upon dissection of the tumor, after the operation, I found that it was not adipose in structure, but was an encysted tumor. It was composed of a sack containing a soft substance, resembling rich cream. This matter I placed under the microscope, and found an abundance of rhomboidal crystals of cholesterol. These crystals were disseminated through the mass, and were in some points agglomerated together and overlapped each other. There were also an abundance of fatty granules or cellules (grumeaux graisseux.) There were but few elementary granulations, which is rather unusual in such tumors.

The cyst was composed of fine cellular tissue and a number of small cells, some with and some without nuclei. The cyst appeared to the naked eye delicate, pearly and semitransparent. The French style this kind of tumor a cholesteotome. Cold water dressing was applied to prevent hemorrhage and too great inflammation.

I performed the same operation upon an adult, sometime since; but owing to a strong syphilitic taint, the wound has not healed properly, and the patient is consequently not yet well. I may give a report of this case at some future time, with additional remarks upon phimosis.
PART II.

Eclectic Department

Cod-liver oil; Superiority to any other single remedy in phthisis; Illustrative instances of its value; Different kinds compared; Collateral remedies sometimes useful, often unnecessary; Effect of its introduction into the system by friction; Mode of action; Important practical generalizations derivable from a knowledge of its mode of action; The appreciation and use of facts. By Theophilus Thompson, M. D., F. R. S., Physician to the Hospital for Consumption, &c.

The great object, gentlemen, of all our researches is to attain to the successful treatment of disease. With this conviction I propose to devote the present lecture to the consideration of the effects of a remedy which you will have observed is very largely employed at this hospital, even to the extent of more than 600 gallons annually.

The records of the hospital give you an opportunity of comparing the effect of treatment conducted on general principles, irrespective of the use of this remedy, with treatment in which the administration of this medicine has occupied an important place; and the more carefully you institute the comparison the more will you be convinced of the value of this substance in the treatment of phthisis, when appropriately administered, and combined with the use of such other measures as any special circumstances in the individual patient may require.

But you will like to see examples of its use. I first introduced M. A. F., a female aged thirty-two. The expansion of the two sides of her chest at the upper part is not perfectly equal, although a practised eye may be required to detect the difference; in the left sub-clavicular region inspiration is interrupted; in the right subclavicular region the expiratory murmur is prolonged. The disease is at a very early stage, and cod-liver oil has been given in the hope of improving her strength, and thus warding off further disease. Her progress is encouraging; the pulse, in the last six weeks, having gone down from 116 to 80, and her weight increased five pounds.

The next patient, A. S., is a tailor, who has suffered much from confinement in close workshops. The principal physical signs at the time of his admission were, dulness on percussion and extensive moist crepitation over the upper half of the left chest. Softening of tubercular deposit was obviously proceeding rapidly, and this is the period in phthisis when the influence of remedies is usually least satisfactory. The patient looks very delicate. The pulse has remained about 100 for the last seven weeks, notwithstanding the administration of the cod-
liver oil, and his general aspect is unpromising; still some good effect has been produced, and there is an addition of five pounds to his weight.

The next patient, L. D., a young woman aged twenty-one, came into the hospital on the 31st of October, with moist crepitation at the apex of the right lung, and gurgling in respiration and cough on the left; phthisis existing in the second stage on one side, and the third on the other. The pulse, as in the previous patient, remains as yet unaltered, but there is an improvement of strength, a subsidence of night perspirations, a regular state of bowels, which were previously relaxed and, in the three months of her use of the oil, an increase of weight to the extent of six pounds. The local signs also indicate amendment. The expectoration is much diminished, and a dry, blowing respiration has taken the place of gurgling.

E. M., the patient now before you, under the judicious care of my colleague, Dr. Cursham, has acquired so ruddy a complexion that you would not suppose her an invalid. There is, however, cavernous respiration at the apex of one lung; still, the cough is subdued; the expectoration, once profuse, has ceased, and she has gained no less than fifteen pounds weight in about twelve weeks. It is right to mention that she has had spermaceti mixture and compound hemlock-pill for her cough; and of late, in addition to cod-liver oil, the following mixture: Twenty-four grains of ammonio-citrate of iron; two drachms of spirit of nutmeg; six ounces of infusion of calumba; an ounce twice a day.

Here is another patient, S. G., aged twenty-five, who is fattening, and the catamenia, long interrupted, have returned—a circumstance of great significance and promise. You find a little cavernous rhonchus, only, where there was formerly extensive gurgling; and a marked flattening in the subclavicular region indicates the process of contraction of a cavity. Her weight, which was seven stone thirteen pounds on her admission, in July, has steadily increased, and now, at the end of February, it is nine stone, two pounds, and the concurrent symptoms of vomiting, palpitation, and œdema, with which this patient was for a time harassed, have entirely disappeared. In addition to cod oil she had syrup of iodide of iron, and counter-irritation has occasionally been established by the application of a liniment made according to the following prescription: Take of iodine, and of iodide of potassium, each an ounce; of rectified spirit, two ounces: mix.

I must have the satisfaction of introducing one more patient, whose case is highly gratifying. This young woman, M. B., is, I am informed, the only remaining member of a large family
all of whom have died of phthisis. She was admitted five months since, with dull percussion at the right apex; at the left, gurgling in respiration, and cough. Her case was examined and recorded by two other medical gentlemen before I explored her chest, and my account corresponded with theirs as to the existence of cavity in the left side. To-day two of my colleagues have examined her, and agree with me in the opinion that no sign of cavity can now be detected in that situation. Let me describe the progress of her improvement: The extent of the gurgling gradually lessened, then dry cavernous respiration was the principal sign; this was superseded by blowing, and then bronchial breathing, and at present I detect nothing wrong except a little flattening of contour, slight dulness on percussion, and wavy inspiration. The catamenia have returned; the pulse has sunk from 112 to 80. Her weight five months since was seven stone twelve pounds and a quarter; we will try it again: it is now nine stone five pounds and a quarter.

You may wish to form an opinion regarding the comparative efficacy of the different kinds of cod-liver oil. In my early trials of the remedy, six years since, forty or fifty cases were treated with the coarse kind, resembling what is used in preparing leather, and the average benefit derived did not materially differ from that effected by the purest varieties subsequently employed. At a later period I had the curiosity to try these different kinds, combined with liquor potassae, and peppermint oil, giving alternately the coarse and the purified cod oil, and recording the report of the patients; and it is a curious fact that the majority actually gave the preference to the mixtures in which the coarser oil was introduced. Objections have been made to this combination as complicating the treatment with the addition of a medicine by some persons supposed to be inappropriate; but my experience is favourable to the use of liquor potassae, especially in the early stage of phthisis, and theoretical arguments might be advanced in its favour. In scrofulous affections, if Dr. Hughes Bennet be correct in his hypothesis, there is probably undue acidity of stomach, unfavourable to the solution of albuminous materials. The alkali of the salivary and pancreatic fluids, being neutralized, fails to convert the carbon into oil. The lungs not having enough carbon to excrete, local congestions arise; the blood is overcharged with albumen, and the albuminous exudation being deficient in fat, elementary molecules are not formed so as to constitute nuclei capable of development into cells, and tubercular corpuscles are the natural result.

Cod-liver oil probably tends to obviate the series of derange-
ments just described, by combining with the albuminous element of chyme, so as to form the healthy chyle-granules which feed the blood, and, for the reason above named, is probably better introduced in scrofulous subjects when combined with an alkali. It is a curious fact, that when, about seventy-five years since, cod-liver oil was largely used at the Manchester Infirmary, chiefly in the treatment of rheumatism, the medicine was ordinarily given combined with alkali; Dr. Percival’s favourite prescription being twelve minims of soap lixivium, an ounce of cod-liver oil, and half an ounce of peppermint water. The practice of administering a little lemon-juice afterwards would not necessarily interfere with the action of the alkali, and is worthy of incidental notice in connection with the recent valuable suggestions of Dr. G. O. Rees in the treatment of rheumatism with the acid of lemons. Occasionally, although not frequently, the stomach rebels against the oil, however purified, and in whatever combination; and I have been accustomed in consequence, under such circumstances, to introduce the oil endermically.

Three years since I was requested to see a gentleman from the country, confined to his bed, emaciated, hectic, and apparently failing rapidly, with a cavity at the apex of the right lung. There was considerable diarrhoea; and thinking the internal use of cod-oil unseasonable, I ordered an ounce, combined with oil of lavender, to be rubbed into the chest night and morning. This gentleman gradually rallied, and returned to the country, where he advanced much in strength and weight, and rode about on horseback. I examined him last year, and judging from the physical signs, found the size of the cavity materially reduced.

J. S., a patient under my care for the last two years, with softened tubercle in the left lung, notwithstanding the adoption of a tonic regimen, and the internal administration of cod oil, got gradually worse, and in the four months preceding August, 1850, her weight was reduced from 105 to 97 pounds. I then prescribed, as a liniment, three ounces of cod oil; an ounce of sal volatile; half a drachm of oil of lavender; five grains of opium: half to be rubbed in night and morning. In a fortnight improvement commenced, and in two months her weight had risen to 104 pounds.

M. A. W., a patient lately in the hospital with cavernous respiration at the summits of both lungs, and who had weekly lost on an average a pound in weight for twelve weeks, rallied, gained a little weight during the first month of using the same liniment, and left the hospital somewhat improved. But I will not multiply examples. It is enough to say that satisfactory
results have been sufficiently frequent to authorize the measure, sometimes as an auxiliary to the internal use of the oil, but more especially as a substitute when the stomach revolts at its internal administration.

I am indebted to Dr. Glover, of Newcastle, for a reference to some observations of Dr. Klencke, of Braunschwig, confirmatory of the results just described. In a memoir on the Therapeutical History of Cod Oil, Dr. Klencke says,—“I shaved some young dogs, and rubbed them with cod-liver oil twice daily for three weeks. At the end of this period they were in as good condition as dogs to whom oil had been internally administered; their bile was found as rich in fat, and their chyle equally charged with corpuscles without nuclei.” Klencke adds that similar changes were observed in the bile and chyle of a cat bathed twice a day for some time in the same remedy, and that some oil was discovered in the urine of the animal, proving its free absorption by the skin.

You will naturally ask me whether there are any disadvantages incident to the use of so valuable a remedy? and you may repeat questions I have occasionally heard: Does it often produce diarrhoea? Does it tend to increase hæmoptysis? As respects the latter question, it might be sufficient to mention that the average frequency of the occurrence of hæmoptysis, as recorded by Louis and other observers, was fully as great in phthisical cases before cod-liver oil was introduced as it has proved in those cases statistically reported at this hospital in which this remedy has been perseveringly used. When hæmoptysis is active, as characterized by phenomena described in my second lecture, it is, indeed, easy to imagine that a remedy which increases the fulness of the pulse might aggravate the spitting of blood; under such circumstances the fish-oil should be discontinued, and the removal of blood by cupping may be desirable. When, however, as is frequently the case, the hæmorrhage is passive, means which tend to enrich the blood are calculated to lessen the hæmorrhagic tendency, and its occurrence is by no means an adequate reason for the suspension of the oil.

As respects diarrhoea, a malady which the remedy under consideration has been supposed occasionally to aggravate, my own impression is that no such influence is evinced unless a state of erethism of the mucous membrane is present, in which case measures should be used to obviate such condition prior to the administration of the oil. Many of the patients take the oil unmixed, or, when such combinations are appropriate, floated on nitro-muriatic acid mixture, or on lemon-juice. The addition of creasote occasionally makes the stomach more tolerant of the remedy.
An ounce and a half of cod-liver oil, four drops of creasote, two drachms of compound tragacanth powder, and four ounces and a half of aniseed water, form a suitable mixture, of which an ounce may be taken thrice daily.

Those who take the oil unmixed, may cover the taste by eating dried orange peel, or by introducing a little dinner-salt into the mouth before and after the oil.

You will observe from the cases tabulated in the preceding page, all of which you have had an opportunity of seeing,—and the conclusion is in harmony with more extended observations,—that if the use of cod oil has any influence on the condition of the bowels, that influence is rather astringent than laxative.

I believe the fact to be that this medicine has no direct influence on the intestinal action, but that by improving the general health it tends indirectly to restore a natural condition of the bowels, whilst it expands the pulse, lessens the expectoration, moderates the night perspirations, and in many instances supersedes the necessity for the use of any other remedy.

You will say the evidence adduced of the powers of cod oil is strong, but that the remedy was formerly highly estimated and yet fell into disuse, and you may inquire whether it may not exhibit the fluctuations of fashion, and again sink into oblivion. The best way to secure for any remedy its proper place in therapeutics, is to determine its mode of action; and with this view I have from time to time endeavoured to obtain an analysis of the blood of patients who were in the course of improvement under its use: as an example, let me show you the analysis of the blood of a phthisical man in the Le Blanc ward, who had gained fourteen pounds weight in three months and had essentially improved under the cod-oil treatment.

Dr. Snow did me the favour to make the analysis. I place by the side, for comparison, the analysis of the blood of a healthy male, as given by Becquerel and Rodier:

<table>
<thead>
<tr>
<th>Of a Phthisical man after three months</th>
<th>Treatment with Cod oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water ..................................</td>
<td>779.0</td>
</tr>
<tr>
<td>Blood-globules ........................</td>
<td>141.1</td>
</tr>
<tr>
<td>Fibrine ................................</td>
<td>2.2</td>
</tr>
<tr>
<td>Albumen ................................</td>
<td>69.4</td>
</tr>
<tr>
<td>Extractive and salts ..................</td>
<td>68</td>
</tr>
<tr>
<td>Fatty matters ........................</td>
<td>1.6</td>
</tr>
</tbody>
</table>

The interest of these analyses is increased by their harmony with the observation of Simon, who recorded an increase of blood corpuscles and diminution of fibrine under the use of cod oil; and their importance becomes more obvious when they are viewed in reference to the facts stated by Andral and Gavarret.
who, having analysed the blood in twenty-one cases of phthisis found their maximum of fibrine, 5.9, their minimum 2.1, and that the amount of corpuscles approximated to the normal standard in only two instances, in which it was represented by 122.1 and 120.4. Frequently, indeed, the amount was below 100, and the decrease of corpuscles was almost always accompanied with a corresponding increase of fibrine. (Simon's "Animal Chemistry," vol. i., p. 281, Sydenham Soc. edit.)

You see that, in the patient just referred to, the proportion of blood corpuscles pretty closely corresponds with that characteristic of health, and Mr. Rodgers reports a similar result from the examination of the blood of some other patients to whom we have given the oil. As far as I am aware, however, chemical observations lead to the conclusion, that in phthisis deficient proportion of blood-corpuscles is the usual peculiarity. Struck with this circumstance, I took pains to collect, chiefly from Simon, analyses of the blood in different diseases, and I have placed before you averages of the proportion of blood-corpuscles and albumen in certain diseases, with a view to compare them with phthisis.

Average Proportion of some Constituents of Blood.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Albumen</th>
<th>Corpuscles</th>
</tr>
</thead>
<tbody>
<tr>
<td>In health</td>
<td>76</td>
<td>130</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>80</td>
<td>122</td>
</tr>
<tr>
<td>Phthisis</td>
<td>100</td>
<td>78</td>
</tr>
<tr>
<td>Rheumatism</td>
<td>100</td>
<td>74</td>
</tr>
<tr>
<td>Diabetes</td>
<td>105</td>
<td>80</td>
</tr>
<tr>
<td>Chlorosis</td>
<td>72</td>
<td>56</td>
</tr>
<tr>
<td>Bright's disease</td>
<td>103</td>
<td>50</td>
</tr>
<tr>
<td>Carcinoma</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>Erysipelas</td>
<td>—</td>
<td>100</td>
</tr>
</tbody>
</table>

You will observe that there are two diseases which present a peculiar similarity to phthisis, in their proportions of albumen and of corpuscles. These are rheumatism and diabetes. Now it is a remarkable fact, that rheumatism is the malady for the treatment of which cod-liver oil was first introduced into this country, and for which it has been so largely and successfully employed elsewhere. The variety of rheumatism in which it was most effectual is that in which the impoverished condition of blood is most likely to occur.

Dr. Percival, half a century since, (see Works Literary, Moral, and Medical, by Dr. Thomas Percival, vol. 4, p. 354,) observes,—"Men and women advanced in years, whose fibres may be supposed to have acquired a degree of rigidity, find surprising effects from it (cod-oil.) Some who have been cripples for many years, and not able to move from their seats, have after a few weeks' use of it been able to go with the as-
sistance of a stick, and, by a longer continuance, have enjoyed the pleasing satisfaction of being restored to the natural use of their limbs, which for a long time before had been a burden to them. Two cases occurred lately in which the oil had an extraordinary effect, even on young persons, whose ages did not exceed ten years. Guaiacum, calomel, blisters, &c., were tried on both these patients, but with so little benefit that opiates were given merely to procure temporary relief. Their lower limbs seemed to be a burden to them, and they had such an appearance of distortion, that no hopes of relief could be well entertained. In compliance with the particular request of their parents, the cod-oil was given. The one obtained a perfect cure, the other nearly so; the latter having a little distortion in his back, is prevented the use of his legs. So general (adds Dr. Percival) has been the use of the oil with us, that we dispense fifty or sixty gallons annually; and the good effects of it are so well known amongst the poorer sort, that it is particularly requested by them for almost every lameness. Except bark, opium, and mercury, I believe no medicine in the materia medica is likely to be of more service, and I should wish for a more general use of it in order to prove that the above account of its good effects is no exaggeration."

I am strongly impressed with the value of the remedy in diabetes. It is true that this disease involves an additional element, which it is not easy to suppose amenable to such a remedy as fish-oils, but the benefit derived in many respects is often remarkable.

In the month of April, 1848, a patient came under my care who had been affected with diabetes for some months, and had taken creasote and other medicines with little advantage. At the time I first saw her the quantity of urine passed in twenty-four hours, amounted to ten pints.

The following table will show the progress under the cod-liver oil treatment;—

<table>
<thead>
<tr>
<th>Dates</th>
<th>Remedies</th>
<th>Urine.</th>
<th>Specific Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td>1848</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>Cod-oil, two drachms three times a day.</td>
<td>Ten pints.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ditto.</td>
<td>Six pints.</td>
<td>1.040</td>
</tr>
<tr>
<td>13</td>
<td>Ditto.</td>
<td>Four pints.</td>
<td>1.042</td>
</tr>
<tr>
<td>27</td>
<td>Cod-oil, four times daily.</td>
<td>Six pints.</td>
<td>1.042</td>
</tr>
<tr>
<td>May</td>
<td>five times daily</td>
<td>Three pints.</td>
<td>1.037</td>
</tr>
<tr>
<td>4</td>
<td>Ditto.</td>
<td>Three pints.</td>
<td>1.020</td>
</tr>
<tr>
<td>11</td>
<td>Ditto.</td>
<td>Two pints and quarter.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subsequently this patient passed unavoidably into other care and owing to a misunderstanding, did not resume the cod-liver
oil, which had been, from temporary causes, intermitted. She took a variety of remedies, including sulphur, hydrochloric acid, opium and alkalies. Drachm doses of carbonate of soda for a time acted favourably, but on the whole she retrograded. Her weight, which in June, 1848, was 107 pounds, had fallen, by December, 1849, to 88 pounds. Her appearance was haggard and there was threatening of pulmonary disease. The cod-oil was resumed, and even then with temporary advantage, but she ultimately relapsed and sank.

The theory which I have now proposed in explanation of one mode of action of the oil is in harmony with the fact that its good effects are specially produced in women and children, for in them the relative proportion of corpuscles is stated by chemists to be small.

I may state that the remedy has afforded me most satisfactory results in neuralgia and sciatica, when associated with anaemia. Whenever arterial or venous murmurs indicate such a condition, a rapid improvement may be expected to follow the administration of the oil, even without the assistance of ferruginous medicines. In some disturbed manifestations of the nervous system which may appear more moral than physical, the presence of a weak, small pulse, has sometimes led me to give the oil, and with signal success. Do not think that I dwell on this subject from any love of fanciful hypothesis. When the light issuing from a certain number of facts seem to converge towards a particular point of explanation, it is useful to try the applicability of that explanation to analogous facts, and thus to entertain, I do not say to adopt a theory—a sort of tentative theory, or "prudens quaestio." If the theory prove universally applicable, we obtain a law; if the explanation be found incorrect, it is yet seldom fruitless: indeed the proof of its inadequacy serves to narrow the field of inquiry, and to increase the probability that the next step may be in the right direction towards the attainment of truth. Time is sometimes lost in the laborious accumulation of miscellaneous facts. Numerism is productive only by the amount of "lumen siccum," intellectual intuition,—applied in the selection and appreciation of facts. There is an aristocracy in facts as well as races, and the mind should be taught to discern their prerogative dignity. "The naturalist who cannot or will not see that one fact is often worth a thousand, as including them all in itself, and that it first makes all the others facts—who has not the head to comprehend, the soul to reverence, a central experiment or observation, (what the Greeks would perhaps have called a protophænomenon,) will never receive an auspicious answer from the oracle of Nature."

To apply these observations to our immediate subject, let
me remark that changes produced on the blood by diseases or remedies may fairly be placed amongst the cardinal facts. It can scarcely be doubted, that if a professor accomplished in chemistry were officially connected with every hospital, such facts might be so collected as to render the discoveries of this important science available, in a remarkable degree, for the advancement of practical medicine.

Should further observation confirm what has been suggested in this lecture regarding the influence of fish oils on the composition of the circulating fluid, we shall discover more than the reason of their usefulness in phthisis; we shall show that they have no exclusive adaptation to that disease, but that they may be given with equal promise in various diseases associated with analogous conditions of the blood; and thus we may come to establish a therapeutical law so widely applicable as to simplify our principles, extend our resources, and consolidate our system of practical medicine. Such a generalization would commend itself to my mind by its freedom from complication and obscurity; for I am sure you will agree with me as to the evidence afforded in the noblest triumphs of philosophy, that although shallowness and obscurity are continually associated, yet that the ocean of truth is clear as well as deep, and that in proportion as we approach the truth, we shall attain to simplicity.

[London Lancet.

On a rarely observed, but very fatal Effect of Gastro-intestinal Revellents; especially of the Tartrate of Antimony and Potassa, and particularly in the treatment of Pneumonia.

By Wm. M. Boling, M. D., of Montgomery, Alabama.

There are but few articles of the Materia Medica which exercise so certain a control over any serious morbid state or action, as the tartrate of antimony and potassa does, over inflammation of the pulmonary parenchyma. Its efficiency, I may say, is universally admitted. Unfortunately, however, its value as a remedy in pneumonia, or any other disease indeed in which its protracted use may be required, is diminished by the circumstance of its occasioning in many instances, violent disease of some of the abdominal viscera, which often leads to a fatal result. It is in pneumonia, however, according to my own observation, that the effect referred to is most frequently produced by it, and developed in the most violent and rapid manner; probably, it is but reasonable to suppose, because in this disease its protracted administration is more frequently practised than in any other. As generally administered, it is not im-
probable, that the remedy, even in cases in which the ultimate result may be favourable, produces by its contact, more or less irritation of the gastro-intestinal mucous membrane, which gradually subsides, after its suspension, during convalescence. Its visible effect upon the skin, when used locally, might lead to such an inference, and indeed appearances somewhat analogous to this are sometimes observable, not only after death, in the gastro-intestinal mucous membrane, but during life, in the mouth and fauces, as a result seemingly of its use. In fact it is to a revelling effect, resulting from this local irritant action, that its efficacy in pneumonia and other diseases, is attributed by the advocates of the physiological doctrine. It is not, however, this local action, merely as spoken of and described by the generality of writers, to which it is my object to call attention at present, but more particularly to an array of symptoms of a much more violent and sudden character, connected seemingly with a metastasis of morbid action, from the thoracic (when administered in the diseases of this cavity), to the abdominal viscera; the result, it may be, of an exaggerated influence of the character mentioned. Whatever the correct explanation, however, as to the mode in which the effect is produced, the condition itself is one of extreme danger.

There is reason to believe, however, that though in the treatment of pneumonia, the state in question is more frequently induced by the use of tartar emetic, than by anything else, a similar condition is occasionally brought about by other agents administered to such an extent as to produce a high degree of irritation of the gastro-intestinal mucous membrane; and I believe that it is with more certainty developed, under a combination in the treatment, of calomel with the antimonial, than by the latter alone.

Supposing the remedy to have been continued several days, the phenomena referred to, are developed much in the following manner. The patient may seemingly be doing well under the continued use of the remedy; the dulness on percussion, and the frequency of the pulse diminishing; the skin perhaps becoming moist, and the respiration improving. Suddenly in some cases, in others somewhat gradually, the patient becomes restless, the thirst is augmented, the discharges from the bowels are more numerous and thin, the abdomen becomes tympanitic and perhaps tender, the tolerance is lost, and though he may not have done so for several days, he vomits or makes frequent efforts to do so; the tongue becomes dry and pointed; there is jactitation present, anxiety of countenance, delirium and perhaps stupor a short time before death. Occasionally jaundice supervenes, and in a few cases the matter vomited bears a close re-
semblance to that ejected in yellow fever. During the progress of the change, the pulse becomes more frequent, hard, concentrated, small and thready.

The rapidity with which the symptoms mentioned are developed varies a good deal in different cases. I have known instances in which death has taken place in about six hours from the time of the first evident unfavourable change; in every respect, up to that time, the progress of the case being apparently favourable, and the graver symptoms subdued. Often the case is protracted to ten or twelve hours, and sometimes to a longer period.

Simultaneously with the changes above spoken of, or, as it were, preceding them rather, a more or less rapid disappearance of the signs and symptoms of the primary disease takes place. From a state of almost complete solidification of an entire lung, with dulness on percussion, and bronchial respiration; in the course of four or five hours, I have found the pulmonary tissue permeable, and the chest resonant and yielding a healthy respiratory murmur; a corresponding improvement in the cough, thoracic pain, difficulty of breathing, &c., proceeding at an equal rate. The rapidity with which this change in the condition of the lung takes place is proportionate to the violence and rapidity of the newly developed abdominal disease.

In any case of pneumonia under the antimonial treatment, although the patient may seemingly have been doing well, the supervision of the slightest tympanitis, with augmented thirst and a tendency to diarrhoea, may be regarded with suspicion, as the probable precursors of a very grave condition; and I am now led to regard my patient's doom as almost settled, when, in addition to these symptoms, there is a rapid instead of a gradual removal of the dulness on percussion, unattended with the crepitant rate of resolution. Where a case is closely watched the latter will be found to precede somewhat the former symptoms of the progressing change; and I have more than once surprised, not only the relatives of patients, but professional gentlemen in attendance with me, by announcing a coming change for the worse, basing my opinion on the physical sign just stated, where everything otherwise seemed favourable; the patient comfortable, and apparently, perhaps, convalescent.

This termination of pneumonia, under the administration of antimonials, especially when given in what would be considered anything like adequate doses by the advocates of the doctrines of Rasori, I am led to believe cannot be of very rare occurrence in the south; for I think that I have seen almost as many patients die of the superinduced or substituted affection as of the primary. And yet the largest quantity for the twenty-
four hours, in which I have been in the habit of prescribing the tartarate of antimony and potassa, falls far short of what would be considered a medium dose for the same time, by the generality of physicians of the contrastimulant school. Under the supposition, however, that it not unfrequently occurs, it is somewhat strange that we find so little in the works of authors who have written on pneumonia, especially as treated with antimony according to the contrastimulant doctrine, in which anything like a distinct reference is made to it, much less an accurate account of the condition. Neither in the French nor Italian writers of the contrastimulant school accessible to me have I been able to find any account of it, though in many we find allusion to the mere local irritant action of the agent in question upon the gastro-intestinal mucous membrane. This is more especially, however, the case among the advocates of the physiological doctrine, by whom the curative influence of the remedy in question, in pneumonia, is ascribed to a revellent operation. The condition spoken of by the followers of Rasori as a loss of the tolerance, resembles it in many respects, and I have sometimes suspected that in their descriptions they may have had in view a state identical with that to which I now have reference. If so, however, their delineation is incomplete in several important particulars; and I would especially mention the sudden subsidence of the original disease, with the occurrence of the new train of alarming symptoms. Moreover no one, I imagine, who has ever observed a well-marked case of the state to which I have reference, even under the influence of a favourite doctrine, could see in it merely a general depression of the vital powers somewhat below the standard of health; and, in short, could suppose that the phenomena manifested were not the consequences of actual local lesion of the viscera of the abdomen.

I have been disappointed in not finding an account of it in such of the writings as I have met with, of the Italian followers of Rasori; because, not only from the immense doses in which they are in the habit of administering the antimonial preparations, but from the similarity of their climate, and diseases generally to our own, in their hands especially, I had been led to suppose it must frequently occur. Owing to the fact, that in the north, the susceptibility of the gastro-intestinal mucous membrane to irritant impressions is less than in the south, it probably occurs less frequently there than with us. One rather mild, but unquestionable case, I find recorded in the American Journal of Medical Sciences for April, 1848, by J. F. Peebles, M. D. of Petersburgh, Virginia, in a paper calling attention to certain unfavourable effects of tartar emetic. Two other cases
are given by B. R. Jones, M. D. of Montgomery Alabama, in the *New Orleans Medical and Surgical Journal* for September, 1850; in which he particularly refers to it as a result of the operation of antimony.

My own attention, several years ago, was forcibly drawn to this unfavourable action of the tartrate of antimony and potassa in pneumonia especially, and it was alluded to in a paper on the treatment of the inflammatory affections of malarious districts, which I published in the *American Journal of Medical Sciences* for July, 1844. Two cases are there given, among others of a different character; and, in regard to one of them, the following remarke is made. “In this case, an occurrence took place, which is by no means unusual with us here, in the treatment of acute thoracic diseases, particularly when tartar emetic or calomel is used to any considerable extent, and more especially when they are used in combination; viz., the super-\f
vention of gastro-enteritis about the time, or *soon after a con-
iderable amendment has taken place in the original disease.*”

But, though I have been able to find nothing, or but little, that can be regarded as having allusion to the accident in ques-
tion, where most I expected to find accounts of it, viz., among authors of the school of Rasori, in speaking of the use of tartar emetic in pneumonia, a graphic description of a similar state produced by the continued administration of calomel may be found in the work of Golis on hydrocephalus. “Many times,” he says, “I saw, under these large and long-continued doses of calomel, the hydrocephalic symptoms *suddenly* disappear, and inflammation of the intestines arise, which terminated in death. Still oftener, I have observed this unfavourable accident, from an incautious use of calomel in croup; viz., where all the fright-
ful symptoms of this tracheal inflammation, which threatened suffocation, would *vanish suddenly*, and enteritis develop itself, which passed rapidly into gangrene and destroyed the patient.” — *(Davis, on Acute Hydrocephalus.)*

Although it is probable, that it is through a local irritant ac-
tion of the antimonial upon the gastro-intestinal mucous mem-
brane, that the effect in question is brought about; the manner and circumstances of its development lead not unreasonably to the inference, that a real metastasis takes place; that in addi-
tion to that irritation, which the remedy, probably, in almost every instance produces, where it is long used; that, for instan-
ce, which it would produce in a healthy subject; there is a superadded morbid action, transferred upon the abdominal vis-
cera, in lieu of the pneumonia, which has suddenly disappeared. It will be remembered, that, generally, it is not till after a par-
tial subsidence of the pneumatic symptoms, that evidences of
the gastro-intestinal irritation are manifested. It partakes, then, more of the character of metastasis than revulsion, though an irritant action may have determined it.

Why the morbid action, from which the patient was, probably, to all appearance in no great danger, in the lungs, should prove so frequently fatal when transferred to the abdominal viscera, is a question which naturally suggests itself. Perhaps it may be the suddenness of the invasion. Perhaps the translated morbid action, operating in conjunction with a morbid state, which had already been developed in a high degree in the gastro-intestinal mucous membrane by the remedy, but which, up to the moment of the metastasis, had remained latent, in consequence of the preponderance of the pneumonic inflammation. Perhaps, a greater depression of the vital powers results from an equal degree of morbid action in the gastro-intestinal mucous membrane, than in the pulmonary parenchyma.

Notwithstanding this occasional unfavourable influence of the tartrate of antimony and potassa, I have felt reluctant to dispense with its use entirely in the treatment of pneumonia, in which, otherwise, its efficacy is so great; and, for some time, it has been an object with me to devise some plan of administration, by which, while its favourable operation might be secured, the former effect might be entirely, or in a great measure avoided.

Without entering into any detail or discussion of the various and somewhat contradictory views entertained by different physicians, or sects of physicians, as to the modus operandi of the tartrate of antimony and potassa, I think it may at present be safely assumed that, while its sedative or contrastimulant influence is exerted, after its absorption and commixture with the circulating mass, the unfavourable effects resulting from its administration, to which reference is here made, are consequences of its direct local action upon the gastro-intestinal mucous membrane. To be sure, according to experiments of Magendie it would appear that its emetic operation is secondary to its absorption, and the result of a special affinity for, or action upon the stomach, while in its transit through the vascular circle; but it would seem a visionary refinement in toxicology, to refer the effects of which I have been speaking to an influence thus exerted, aware, as we already are, of its irritant action upon the mucous and dermoid tissues, when locally applied.

It is not at all improbable, however, that in some rare cases, the revulsive operation of the remedy on the gastro-intestinal mucous membrane may prove favourable, according to the views of Broussais; but, knowing as we do, that other gastro-intestinal revellents exercise no such special control over the
phlegmasiae of the thoracic viscera, as the agent in question, as a general rule, his explanation of its modus operandi will, I am inclined to believe, be deemed incorrect. On the contrary, when the local effect on the gastro-intestinal mucous membrane is developed in any considerable degree, recovery, even when it follows, is retarded rather than advanced by the circumstance; not only by the additional febrile disturbance, but by the diminished absorption which results in consequence; and that when it occurs in a high degree, it occasions in pneumonia the train of alarming, and so often fatal phenomena.

Assuming then that the sedative effect of the remedy through which its curative influence in pneumonia is brought about, is produced by that which is absorbed; and the deleterious effects under consideration, by that which, remaining unabsorbed, or which is not for a considerable time absorbed—remains long applied in contact with the gastro-intestinal mucous membrane—by what indeed may very properly be deemed a redundancy of the article—that over and above what can be readily acted on by the absorbents, it is manifest that to secure the former and avoid the latter, no more of it should be prescribed than it is probable will be promptly taken up by these vessels, and its administration regulated in such a manner as best to secure this end.

With this object in view, I at first commenced to diminish the dose, although in no case had I ever given it in anything like the quantity recommended by many physicians of the contrastimulant school; nor did I find the efficacy of the remedy less when I had fallen back upon about the quantity advised by many before the rise of the contrastimulant doctrine: say three, four, or at most six grains in the twenty-four hours, than when I gave it in doses twice or thrice as large; but its mischievous effects were infinitely less. It does not necessarily follow because in many cases the larger doses of the ultra contrastimulists are tolerated for the time, and generally without any manifest ulterior mischievous effects, that they are really required.

Besides this reduction of the dose, say for the twenty-four hours, to the smallest possible quantity capable of producing a sedative influence, I have also adopted the plan of giving it in small portions, frequently repeated, so that not more will be swallowed at a time than may be promptly, at once indeed, acted on by the absorbents, rather than in larger portions at longer intervals, by which the mucous membrane would be of necessity subjected to a longer contact with a part of each portion swallowed. The method has seemed to me a bad one, of giving the quantity intended for the twenty-four hours at lengthened, though equally divided intervals throughout this
period; but still worse the plan followed by Laennec, in some cases, of giving the entire quantity intended for the twenty-four hours, in but three or four portions, at short intervals, and then omitting it for the remainder of the day. By this method the local or revellent influence of the remedy is induced in the highest possible degree, while the sedative influence is obtained in a degree, perhaps, proportionably lessened. Generally, I give from three to six grains, according to the extent of the inflammation and the grade of febrile excitement present, in the twenty-fours, dissolved in six ounces of water. Of this solution, I give, during the day, a teaspoonful every half hour; but, if the patient is disposed to sleep, that his rest may not be too much disturbed, twice the quantity every hour during the night. I have not found, as we are led to believe would be the case by some of the followers of Rasori, that the tolerance of these smaller doses is less readily established than of the larger. In some cases, where the attack is violent, in connection with blood-letting and other appropriate measures, with the view of bringing the system as speedily as possible to some extent under the influence of the agent, I venture to give at first one or two doses, say of a third or half a grain each, of it. To favour its rapid absorption, by all means the remedy should be administered in perfect solution, in water alone; and the plan of administering it in combination with mucilage, as of acacia, flaxseed, elm, &c., is eminently calculated to lead to the result it is intended to obviate. Instead of sheathing the gastro-intestinal mucous membrane, or at least of protecting it in this way against the local irritant action of the remedy, such substances favour the latter effect, by retaining the salt for a long time in contact with the mucous surface, in consequence of the obstruction to its ready imbibition, which they present. That absorption should take place, it is manifest that contact is necessary; consequently, nothing can be gained by placing either the absorbing surface, or the remedy to be absorbed in such a condition as to protract the process. Neither do I think the plan is a good one, of giving such fluids in the intervals; though from the universality of the practice, popular prejudice is so strongly set in its favour, that the physician who prohibits them entirely is in danger, in case of a fatal result, of censure from the patients' friends, for the omission. The pilular is also a very objectionable form of administration; being calculated to lead to a slow absorption, and a protracted contact of the remedy, with a limited portion of the gastro-intestinal mucous membrane; favouring thus a concentrated local action, and the development rather of its topical irritant, than of its general constitutional influence. The form of administration in complete solu-
tion, in as large a quantity of water as it is probable will be entirely absorbed in the intervals between the doses, I regard as important.

Although I have had reason to be gratified with the method above recommended of administering the remedy in question in pneumonia, it is more than I am willing to assert, that its noxious operation can be thus, in all cases, entirely obviated.

More recently, with the same object in view, in some cases I have adopted the plan of administering the tartrate of antimony and potassa, in the form of enema, under the impression that its local irritant action upon the rectum, would be unimportant, in comparison with that on the stomach and duodenum; hoping the while, that in adequate doses its general sedative operation might be as well secured. In the use of the remedy, after this method in pneumonia, I generally give about three grains every third hour, with fifteen or twenty drops of the tincture of opium in an ounce or two of warm water; and its controlling influence, where the enemata have been well retained, has not appeared to me appreciably less, over the febrile excitement and local morbid action, than when I have administered it by the mouth.

Although the results of my practice from this method of treatment have been highly favourable, one case stands on record in my case book, in which it was principally adopted, calculated to cast a doubt upon its invariable innocuousness. Determining in the commencement of the attack to treat the case principally with the antimonial enemata, I ventured—as I thought I might do with safety, having this intention in view, and as the attack was a very violent one—upon a more free administration of the remedy by the mouth, during the first eighteen hours, than is my common practice; and it is not improbable that it was to this, in conjunction with the action of mercurials administered occasionally by the mouth during the progress of the case, that the metastasis was in reality attributable. Still I could not entirely divest myself of doubt on the subject; but even admitting in this instance an unfavourable operation from the enema treatment, I still rest satisfied of its comparative safety, in contrast with the usual method of administering the remedy by the mouth.

In the case in question, up to the evening of the fifth day, the patient was apparently doing well; the febrile excitement regularly moderating, and the organic disease gradually subsiding. At this time a very slight tendency to tympanitis was discoverable, and a more rapid removal of the thoracic dullness on percussion had taken place, than between any two of my previous visits. The patient expressed himself better, however
and the general symptoms were apparently favourable. It was consequently with no slight surprise on the part of the patient's friends, as well as of a professional friend who, on this occasion, visited the patient with me, that my intimations were received of a probable speedy fatal termination. The signs and symptoms of pneumonia rapidly disappeared; the tympanitis increased; diarrhoea, thirst, restlessness, jactitation, delirium followed by incomplete stupor of short duration, came on, and in ten hours from the time of the first symptom of the approaching change, he was dead.—[Amer. Journ. of the Med. Sciences.


The following description relates to an affection which, although very common, is but very little noticed in books. This has probably arisen from its having been placed among the symptoms of other diseases, although it is quite distinguishable from them.

It resembles most closely the disease described by Dr. Tilt under the name of subacute ovaritis; but the cases that I have seen have led me to differ from that very intelligent writer, and to conclude that the affection to which I refer is not inflammatory. I have, therefore, preferred the term Ovarian Irritation.

I have met with it in women of all ages between the commencement and cessation of menstruation, so that I do not think age has much influence in the production of the disease; but I am quite certain that it is most frequent in women of a delicate, nervous temperament, though by no means confined to them.

The chief characteristic symptom is an uneasiness, amounting in the greater number of cases to pain, and in some cases to very severe pain, to one or both iliac or inguinal regions, but most frequently in the left, which Professor Simpson seems to think is owing to the propinquity of the left ovary to the rectum, and the exposure to any irritation thence arising. This pain may be a constant dull aching, or it may be acute and occurring in paroxysms; it is greatly aggravated by standing, and generally by walking: indeed, in the severer cases, I have known the patient quite unable to walk.

There is generally some complaint of fulness about the iliac region, but upon careful examination I have rarely been able to satisfy myself that this was more than a sensation: I certainly never felt anything like a distinct tumor. There is,
however, always considerable tenderness, which in some cases is extreme to the slightest touch. When the irritation is great it may be extended to the bladder, giving rise to a desire to evacuate its contents frequently, and causing great pain in doing so. Hysterical paroxysms are by no means unfrequent. In two of the most violent cases of hysteria that I have seen for some time, there was extreme tenderness of the region of the left ovary and pressure there aggravated the hysterical paroxysm.

If we make a vaginal or rectal examination, we shall most frequently discover nothing unusual, neither heat nor tenderness nor swelling; in a few cases, however, I have found that moving the uterus laterally caused uneasiness in the side affected. When speaking of a rectal examination in subacute ovaritis, D. Tilt remarks, that the ovaries are more or less painful on pressure, and that they are from twice to four times their original size. This I have not found in the affection now under consideration, and it constitutes one reason for my doubting that it is the same disease, as that described by Dr. Tilt.

These are the principal local and direct symptoms I have observed; they vary much in degree, and are in some cases so intense as to resemble an attack of acute ovaritis. They differ also more or less according to the circumstances in which the attack occurs; and in order to elucidate this point, I shall briefly enumerate the circumstances.

1. In patients who suffer occasionally from amenorrhœa, it is not uncommon to find ovarian irritation at these periods, and not altogether confined to them. Whether the ovarian irritation be the cause of the suppression of the catamenia, or merely a symptom, is a question not easily decided. In many cases I think it is probably the primary affection, but in some others it appears to be the result of the amenorrhœa. The suffering is often considerable, and may be prolonged until the next catamenial evacuation; if that be full and free, the pain and tenderness generally disappear.

2. Upon the sudden suppression of menstruation, it is not unusual for the ovaries to be almost instantly affected, either by the form of disease I have described, or by an acute inflammatory attack, which is more rare.

3. In dysmenorrhœa there is more or less ovarian irritation. If we examine the patient minutely as to the seat of the pain during the period, we shall find that it is principally in the region of one or both ovaries, and often accompanied by tenderness on pressure. In the majority of these cases I am inclined to think that the ovaries are secondarily affected.
4. In menorrhagia, the ovaries may apparently preserve their integrity for a long time; but if the attacks be frequent, I have generally found that these organs, one or both, become affected, and that the irritation frequently continues long after the discharge has ceased.

5. I have repeatedly seen this ovarian irritation accompany congestion and erosion of the cervix uteri, but it most frequently comes on after the latter disease has persisted for some time or after it is nearly or quite cured. The ovarian irritation, however, in these cases, very soon subsides.

6. I have already mentioned its occurrence in hysteria, both when the latter is evidently dependent upon catamenial disturbance, and when the periodical discharge is quite correct.

7. In some few cases I have recognised ovarian irritation in cases where the uterine and ovarian monthly functions were apparently accurately performed, but the patients were of a highly nervous temperament, in delicate health, and without offspring.

These various classes include, I think, all or nearly all the examples of the diseases which have come under my observation. In many cases it requires care to separate the ovarian symptoms from those caused by the concurrent disease, but in other instances this distinction is quite obvious. When uncomplicated, the disorder rarely gives rise to any general or constitutional symptoms. Many of the subjects of it are delicate and weak, and of course this attack keeps them so; but ordinarily, the pulse is not quickened by it, and there is neither heat of skin nor thirst. The appetite is seldom good, but it is not worse than usual, and the bowels are generally irregular. I have examined the urinary secretion, and have repeatedly found it scanty, acid, and occasionally mixed with mucus.

As to the pathology of this affection, there are several points of considerable interest. I think we can entertain no doubt that the ovaries, one or both, are the seat of the irritation; the peculiar and fixed locality of the pain, and its frequent connexion with the ovarian function of menstruation, all confirm this view. But the next question is more difficult to decide positively, viz: Is the disorder an inflammatory affection of the ovaries, either acute or subacute? The disease described by Dr. Tilt certainly presents characteristics of inflammation, which I have never observed in the present disorder. The absence of tumefaction generally, and of a distinct tumor always, the negative results of an examination per vaginam and per rectum, the intermitting and paroxysmal character of the
attack, the absence of all the ordinary results of inflammation (as abscess, accumulation of fluid, &c.), even in the several cases, and the success of a certain line of treatment, are all, to my mind, very strong arguments for the non-inflammatory nature of the disease. In most of these particulars, it differs from the subacute ovaritis of Dr. Tilt. I have certainly seen some cases in which the point seemed doubtful, and it is probable that the one form of disease may, under certain circumstances, merge in the other; but I cannot resist the conviction, that the affection I have described is essentially neuralgic and not inflammatory.

Again, it may be asked, is this ovarian irritation the cause of the menstrual disorder or its effect, or merely a concomitant symptom? No one acquainted with the present state of ovarian physiology could deny that the integrity of the menstrual function must be largely influenced by the condition of the ovaries. If this ovarian irritation always preceded the menstrial period, I should be inclined to attribute it to the subsequent distress; and in many cases it appeared to me that I could so trace it as the chief cause. But, in some cases, the ovarian irritation distinctly followed the menstrual disturbance or came on towards the termination of the monthly period; and lastly, in other cases, the irritation existed with no menstrual derangement at all. Without doubting, therefore that ovarian irritation may disturb the menstrual functions in various ways, I cannot agree with those who think it invariably does so, nor yet with those who are inclined to attribute all menstrual disorders to deviations from the normal condition of the ovaries.

I need not occupy time by enumerating many causes for its production; all those which act either upon the uterus or ovary and disturb their functions, may be considered as causes of ovarian irritation, and among these the most frequent, probably, is cold.

I believe that, in many cases, excess in sensual intercourse has given rise to it; and I am also inclined to think, that in a few cases I have known it originate from the entire deprivation of that stimulus. For some valuable remarks upon this subject I shall refer my readers to Dr. Tilt's excellent work, a review of which appeared in a late number of this journal; all that he says upon this point is, I think, equally applicable to ovaritis and ovarian irritation.

The circumstances under which the attack occurs, I mean its relation to the menstrual functions, the symptoms, and the peculiar locality of the pain, render the diagnosis tolerably easy in most cases. It may, certainly, be mistaken for intes-
tinal irritation; but, in general, there are no other symptoms than the pain to justify such an opinion. The bowels, even if irregular, are free from irritability.

It will, however, require a little more trouble to render it certain that there is not acute ovaritis, which the tenderness might lead us to suspect. But this tenderness is generally much greater than that resulting from inflammation; it is a kind of a nervous tenderness which shrinks from the weight of a finger as much as from severe pressure. Moreover, in acute ovaritis, the organ is always swollen and enlarged, and it can generally be felt distinctly to be so by an internal examination.

In phlegmonous inflammation of uterine appendages, or pelvic abscess, as it has been termed, the hard and painful tumefaction is quite plain at the brim of the pelvis, and, therefore, it cannot easily, be confounded with the present disorder.

I shall not enter at any length into details of the treatment of this disease, inasmuch as I have only my own experience to which I can refer. The choice of remedies will be governed, to a certain extent, by the health, strength, and state of constitution of our patient. With strong, healthy women, I have tried leeches to the ovarian region, with some benefit, but not complete success, nor in all cases; from six to twelve may be applied at once, and repeated, if necessary, after an interval. Poultices after leeching are of use; and indeed, when no leeches have been applied, I have seen much comfort and relief derived from repeated poulticing. With delicate women, and they are frequently the subjects of this disease, bleeding in any form has appeared to me rather injurious than beneficial.

I have tried the repeated application of small blisters with better results than leeching. The irritation of the surface certainly relieves the pain in many cases, and, if continued, may finally cure it; but, I must confess, I have seen it fail repeatedly.

Anodyne liniments and anodyne plasters occasionally seem to afford relief, but they are often of little or no use; I tried anodyne enemata several times with partial success.

In two or three cases I used the tincture of aconite, applied liberally to the iliac region, but I confess the result disappointed the expectations I had formed.

Having failed in affording relief in two or three obstinate cases, I determined to try the effect of opium applied to the upper part of the vaginal surface. I accordingly ordered some balls or pessaries to be made, somewhat in the mode of Dr.
Simpson's medicated pessaries, each ball to contain two grains of opium, half a drachm of white wax, and a drachm and a half of lard. The whole, when mixed together, formed a ball about the size of a large marble, and I placed it at the upper end of the vagina by means of the speculum, leaving the patient in bed for the rest of the day. The success was quite beyond my expectation; the relief was very speedy, and in most instances complete. Even when the pain did return after a few days, a second application removed it. The tenderness disappeared with the pain, and no unpleasant consequences have resulted in any instance.

I have now tried this remedy in a considerable number of cases, and with almost invariable success. I have rarely found it necessary to bleed or blister since I first adopted this plan; and I recommend it, with considerable confidence, to the profession. I may add, that I have tried these pessaries in cases of dysmenorrhœa, applying one the day before the catamenia were expected, with decided benefit.

It is hardly necessary to say that, in this disease, the bowels should be regulated, and gently freed by medicine when necessary. If the appetite is bad, vegetable bitters may be given, and I have generally found it useful to combine some alkali with them.—[Dublin Quarterly Journal of Medical Science.

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History of a case of Congenital Ovarian Tumor with Cysts, Fatty Matter, Hair, and Bone, in which Ovariotomy was proposed. By Robert Lee, M. D., F.R.S.

I was requested by Mr. Gaskell, in November, 1842, to see Miss F——, about twelve years of age, who had not long before suffered from an attack of mumps, followed by pain and enlargement of the abdomen. The whole abdomen, and especially the hypogastrium, was large, hard, and irregular. It was supposed by the mother of the patient that sufficient attention had not been paid to the regular evacuation of the bowels while at school, from which she had recently returned. The catamenia had not appeared, and there were none of the symptoms of puberty present. Active cathartics were given, but the enlargement and hardness of the abdomen continued after the bowels had been thoroughly evacuated. I saw the patient with Mr. Gaskell thrice at short intervals, and formed the opinion that some obscure organic disease, not glandular, existed.

Dr. Merriman was then consulted, and I am indebted to his kindness for the following account of the case from the 22nd December, 1842, till the month of May, 1843:
Congenital Ovarian Tumor.

[January,]

"On first seeing this young lady, I was sensible of a fluctuation low in the cavity of the abdomen, and a feeling of tightness within the pelvis, which led me to believe that the pelvic viscera were involved in the disease, and I ordered diuretics as principal remedies. Miss F—— was from time to time brought to my house; and on the last day of her paying me a visit, the opinion I gave of the case was so unfavorable as to induce her parents to wish that Dr. Paris's opinion should be taken. Dr. Paris met me, and a plan of treatment was adopted and acted upon for about a week. Meantime her parents had been urged to consult the late Mr. A. White, who saw her with me January 23rd, 1843, and on this occasion a tumor, evidently ovarian, was distinctly to be seen emerging out of the pelvis. She was now put upon a course of hydriodate of potash, which, together with change of air and more advanced season, appeared to improve her general health. Throughout the month of March her health remained much the same, but the tumor did not diminish, and in April Mr. Aston Key was called in. He continued to give the hydriodate of potash, and had the parts fomented, without much benefit. She was brought to me in the month of May, and, I believe, went to the sea-side."

About the end of October, 1843, nearly a year having elapsed from the time I first saw Miss F—— with Mr. Gaskell, her parents again consulted me respecting her, and as the abdomen was then greatly distended with fluid, I recommended that she should be tapped, and that Mr. Aston Key, under whose care she had been for some months, should be requested to perform the operation. This was done on the 2nd of November, and a quantity of dark-coloured, gelatinous fluid, evidently the product of an ovarian sac, was drawn off. As no case of ovarian dropsy at the age of thirteen had ever before come under my observation, and before the appearance of the catamenia, I had been led to conclude that the fluid was contained in the sac of the peritoneum, and that the case was not one of encysted dropsy. After the fluid had been drawn off, the lower part of the abdomen was still hard and irregular, and a solid mass about the size of a hen's egg, was distinctly felt the day after the tapping in the epigastric region.

From the 3rd of November, 1843, to the 7th of February, 1845, I was never consulted by the parents of Miss F——, nor obtained any information respecting the state of her health. On the morning of the 7th of February she was brought to my house by her father and mother. The abdomen was again largely distended with fluid. I was informed by them that they had been induced to consult Dr. F. Bird, and that he had given it as his opinion that their daughter's case was in all res-
pects most favorable for the operation of ovariotomy. They further stated that Dr. Locock had been consulted the day before, and that he considered the case highly favorable for the operation, and urged its immediate performance. It had, in fact, been determined, before they came to me, that the operation should be performed, and they seemed confident that their daughter would speedily be restored to perfect health. Apparently their purpose in calling upon me, was not so much to obtain my sanction to the proceeding as indirectly to reproach me for not having long before recommended or performed an operation which they believed to be so efficacious and devoid of danger. Instead of offering any observations on the propriety of the operation, I took down Vol. xxvii. of the Medico-Chirurgical Transactions, and turning to Mr. B. Philips’ Table of “Operations for the Extraction of Ovarian Tumors,” begged them to run their eyes along the column of results. In this they saw the word “death” repeated twenty-eight times, thrice three times running, and once four times without any intervening case of “cure” or “recovery.” Nothing further was said respecting the operation on that day.

On the 16th of July, 1845, I was requested to meet in consultation, Dr. S. and W. Merriman, Dr. H. Roe and Dr. F. Bird, to consider the propriety of the operation of ovariotomy in this case. I pointed out the necessity of having the patient again tapped, and the condition of the ovarian cyst and tumor, and of all the pelvic and abdominal viscera, carefully determined before any operation was attempted. After some opposition, I succeeded in obtaining the acquiescence of all to this proposal. During the tapping, the canula being obstructed, the fluid ceased to flow, and on inquiry into the cause of this, it was discovered to have arisen from a quantity of fatty matter and long hair. It was at once obvious that the dark-coloured viscid fluid was not escaping from an ordinary ovarian cyst, but from a cyst containing, along with the fluid, long hairs and fatty substance, and probably a jaw-bone and teeth, as in numerous recorded cases of congenital malformation of the ovaria. After the fluid, fat and long hairs had been drawn off, a large irregular mass remained in the hypogastrium, and the small tumor in the epigastric region was still to be felt. At this consultation “it was the opinion agreed to, that the operation was not immediately necessary, and might with propriety be deferred three or four months.” Dr. W. Merriman made this memorandum the same day.

To the best of my recollection I never saw the patient again, and, until about the end of August, 1846, could not learn what had become of her. I was then accidently informed that Miss
F—— had died at Ramsgate, but after much trouble I have not succeeded in ascertaining precisely when this took place. The body was, however, brought to London, and a post-mortem examination made by Dr. H. Roe, Dr. F. Bird, and Mr. B. Holt. Mr. Holt did not preserve any notes of the morbid appearances, and does not know the date.

On the 6th of September, 1846, Dr. F. Bird very kindly gave me the following description of these, which I took down in writing in his presence, and the same day copied into my journal of cases, from which it is extracted.

"Abdomen greatly enlarged. On opening the integuments, adhesions equal to a space of six inches, the centre where the puncture had been made, from which the adhesions radiated. No other adhesions elsewhere. Slight attachments above to the omentum. A great ovarian sac came into view, connected with the right ovary, involving the whole of it, the pedicle formed by the broad ligament and Fallopian tube, which was eight inches long; the chief vessel was the spermatic; the anterior half of the tumour presented a spherical outline, but, posteriorly, nodulated throughout; the sac an inch thick anteriorly, whereas, behind it was extremely thin, like tissue paper; within this a soft vascular mass, which had ulcerated, and this had poured out a great quantity of blood; the sac having given way, hæmorrhage had also taken place into the peritoneum. On laying open the sac, it was multilocular, but one large cyst, with a number of small ones; patches of inflammation on the lining membrane. One large and hard mass existed on the left side, where we felt the hardness traced up on the left side, eight inches long, four wide, and two in thickness; consisted of numerous small condensed cells, having a centre of bone, with hairs—not yet examined."

I obtained permission to examine this mass, by making an incision into it. The structure was that usually termed by pathologists malignant disease of the ovary. The tumor had interspersed throughout its substance numerous long hairs and pieces of bone.*

A case in some respects analogous to the preceding occurred several years ago in the United States of America, in which the operation of ovariotomy was performed, and was followed by a fatal result. I am not aware that any other case resembling this has yet been recorded.—[London Lancet.

*Had a full examination of all the parts of the tumor been made, it is probable that teeth would likewise have been discovered.
On the use of Fat in the Animal System. By Prof. Draper.

There is deposited in certain parts of all animals a substance insoluble in water, fusible at a low temperature, combustible, and, though of variable constitution, known under the general designation of fat.

I shall direct your attention to the nature and functions of this substance. It discharges an important duty in the economy.

Fats are secreted from the blood, in which they pre-exist, by the adipose cells, which sometimes occur sparingly scattered through the areolar tissues, or, when clustered, constitute the adipose. The primary form of these cells is spheroidal, though, as is often the case both in plants and animals, this form is departed from through the influence of pressure, and polygonal forms are assumed. Between the cells of adipose tissue a net-work of blood-vessels ramifies, for the double purpose of furnishing to the cells the fat they are to secrete, and likewise water; advantage being taken of the proverbial insolubility of all oily material in this liquid, and so long as the walls of the cells are kept moist, the contents cannot escape by transudation.

The adipose tissues occupy an intermediate position between the tissues that are constant and those that are variable. They do not necessarily exhibit that extreme proneness to change so characteristic of the muscular or nervous. With some insignificant exceptions, which will be discussed hereafter, no oily substance ever escapes from the system until it has undergone change. These bodies being insoluble, in water, cannot be removed in the urine.

It is not alone in animals, but also in plants, that we find fat. In the leaves of various grasses, in seeds, and fruits, it can be detected, by resorting to proper chemical processes. In those articles that are used as food by the herbivora, it constitutes a very appreciable part. One hundred pounds of Indian corn contain about nine pounds of a thick oil, and one hundred pounds of dry hay contain about two pounds of fat.

What is the purpose for which nature resorts to this substance? I may answer that question by asking another. Why do men resort to it? Why do they go in ships, and brave the winter of the Polar Seas, encountering the perils of the whale fishery? Why, in some parts of the country, are animals raised, as much for their fat as their flesh? What is the object of all those inventions which transmute the lard of the hog into a pure and cleanly body, approaching in quality spermaceti or the wax of the bee? It is for the purpose of availing ourselves of the combustion of this tribe of bodies, which ex-
perience has shown are the best of all sources of heat. Fat is burnt in lamps and candles, because it is the most compendious source from which a high temperature can be obtained. Nature resorts to the combustion of this substance in the interior of the system, for the same reason that we do in domestic economy.

The constitution of the common fats is that they contain carbon, hydrogen, oxygen; the two former in great excess. During their oxydation a very large amount of heat is set free, because the heat-giving powers of hydrogen are brought into operation. When a fat burns, if there be an abundant access of air, the carbon turns into carbonic acid, and the hydrogen into water; but if the supply of air be limited, and this is a remark which should be borne in mind from is constant-physiological application, the hydrogen burns away first and leaves the carbon. In our experiments, we often witness this; it gives origin to the dense black soot or smoke that arises from smoky lamps. When the combustion of an oil or fat in the system is complete, the products arising, carbonic acid and the vapor of water, are so constituted that they can escape through the lungs; and advantage is taken of this incident to effect the grand process of the introduction of atmospheric air. These bodies thus ministering to the functions of respiration, we speak of them as elements of respiratory food.

Two opinions have been entertained respecting the origin to the fat thus deposited in the tissues of animals. 1st. That it is manufactured in the system by certain vital or chemical metamorphoses from the food, in which it is not found to any great extent. 2d. That it is simply extracted from the food, in which it occurs naturally, being fabricated, in the first instance, by plants.

There are many facts which seem to show that fatty bodies can be formed from other organized substances. Several years ago it was discovered, on opening one of the burying grounds in Paris—the Cemetery of the Innocents—for the purpose of removing the dead bodies that had accumulated there, that all those which were below a certain depth had become converted into a fatty substance, now known under the name of adipocire. The muscles, the hair, the brain of these bodies appeared to have been entirely changed, giving origin to this substance, which has received its name from a resemblance it possesses to wax and fat.

But, as respects the case of the cemetery of the Innocents, and the production of adipocire generally, Chevreul has established its nature by showing that adipocire contains the same constituents as human fat, partially saponified by ammonia. A
mass of flesh, placed in a current of water, will, under certain circumstances, change into adipocire, but not more truly fatty matter can be obtained in this way, than could have been extracted directly from the flesh by the action of sulphuric ether. So we conclude that, whenever the change takes place, it is not a production or generation of fat, but the muscular and other tissues decaying away, the fat is simply set free, and becomes saponified by the ammonia, arising during the putrefaction.

In a former lecture it was stated, that both waxes and fats occur in the leaves of plants. These substances possess such a relation to one another that all the oily bodies may arise in succession from wax by a series of partial oxydations. Under the influence of the sunlight, the leaves effect the decomposition of carbonic acid, causing its oxygen to be evolved and its carbon to be fixed in their tissues. There can be little doubt that one of the starch family of bodies is the first to make its appearance. The formula of those bodies shows that, by partial oxydation, they can be converted into fat, a result that we witness every summer. The sap which has a sweet taste in the stem, loses its sweetness in proportion as oily matters form in the fruit.

From plants, animals derive the oleaginous substances they fix in their tissues. The vegetable world obtains them from the carbonic acid and water of the air,—the animal returns them back to the atmosphere as carbonic acid and water again. And, indeed, in this manner, all the carbonaceous atoms of which our bodies are composed, vibrate as it were backward and forward from the inorganic to the organic world. Now they reside in the air, and are tossed about by winds and currents—now they are organized as vegetable forms, and, after serving awhile for the sustenance of animals, are cast back by processes of oxydation into the atmosphere, to run their race again.

The general mode of accumulating fat is by collection from the food, both in the case of carnivorous and also herbivorous animals,—the food in which it occurs most commonly to a sufficient extent. But the animal system can, when forced thereto, transmute both starch and sugar into the condition of oil, in the process of duodenal digestion.

I have so often incidentally referred to the physiological uses of this important body, its destruction by oxydation in the interior of the system, for the purpose of sustaining animal heat, so often pointed out the great superiority it possesses over other bodies in this respect, by reason of the large amount of hydrogen it contains, that it is scarcely necessary to dwell on those
points in detail. In fevers, where there is an abstinence from food, we see how quickly the fat disappears, a general emaciation setting in, and from those deposits where it has been so carefully stored this combustible body is removed.

For the accumulation of fat, whether it be incidental, as in the human species, or purposed, as in the preparation of cattle for the market, there are obviously two conditions. The accumulation will depend—1st. On the quality of fat presented in the food. 2d. On the slowness of its consumption in the system. Now, there are several circumstances which bear on this latter condition, and which here require to be pointed out.

1st. Whatever checks the respiratory process, or the introduction of oxygen into the system, will aid in the deposit of fat. Quick respiration implies quick oxydation; for the air introduced must have its affinities satisfied. To promote the accumulation of fat, an animal must be so situated that its respiration shall be slow.

2d. The higher the surrounding temperature the less is the loss of heat from the body by radiation and contact of the air, and the system is not required to develop so much heat, and consequently the destruction of fat is less. A high external temperature tends, therefore, to the accumulation of this body.

3d. Rest, or quiet. All movements taking place in the muscular tissues tend to the acceleration of the respiratory act. A man runs, and he quickly begins to pant. Large quantities of air are introduced, and the destruction of fat is the consequence. For this reason, of all the conditions under which an animal can be placed, sleep is by far the most favorable for the accumulation of fat. The respiration is tranquil and slow, there is a great freedom from muscular exertion, and usually the temperature is higher than when we are exposed in the pursuits of active life to the open air.

These things have been long understood by persons interested in the fattening of animals before their significance was detected by physiological chemistry. In certain places, where an inordinate obesity is given to animals for special purposes, each of these conditions is carefully observed. When geese are fattened for the sake of their livers, a delicacy much sought after by epicures, the process is to cram the bird with as much Indian corn, or other oily food, as possible, to tie its wings and feet, to ensure quiet, to place it in the chimney corner, or other warm situation, where the temperature is pretty high. Under these extraordinary conditions the bird sleeps profoundly, breathes slowly, introduces little air, destroys little fat. But the absorbents are busily engaged in taking it up, and an amazing accumulation is effected at last.
We sometimes see at agricultural exhibitions, logs in a state of prodigious fatness. The form of the animal is altogether gone, if its feet touch the ground they are of no use as organs of locomotion, the snout barely projects beyond the rotundity of the face, the tip of the tail looks as if it were at the bottom of a pit. This forced condition of things has been produced by resorting to the precepts just laid down. The animal has been kept in a dark, warm place, crammed with oily food, in quiet, and asleep. Every thing is done to lower the respiratory process, and abate the destruction of fat.

When we come to discuss the functions of the liver, we shall find that the secretion of that gland, the bile, stands in a certain relation to the respiratory function,—bile, the predominating constituents of which, carbon, hydrogen, sulphur, are all combustible bodies. In cases where there is an interference with the respiratory functions, as in phthisis, and where less oxygen than usual is introduced into the system, these combustible bodies cannot be got rid of in the usual way, by converting them into carbonic acid, water, &c., and a reflected action is thrown upon the liver, which, unable to discharge its duty, often becomes engorged with fat. In this respect the condition is not unlike that artificially produced in the goose, as above mentioned.

I am persuaded, also, that these things are intimately connected with those embarrassments of the action of the liver, and hepatic diseases generally, which are so constantly encountered in hot climates, and in the warmer portions of our own country, in the hot seasons of the year. The high temperature of the surrounding air, often at a point near that of the animal system, prevents any great loss of heat, either by radiation or by contact; the dew point, too, is commonly very high, and loss of heat by evaporation goes down to a minimum. In this semi-febrile condition, a man instinctively abstains from every thing that can raise his temperature, he avoids violent or perhaps even moderate exercise, he sleeps in the heat of the day, and as far as he can diminishes the activity of the respiratory functions, and the quantity of air introduced. But as the consequence of this, the lungs are unable to discharge their appointed duty, an embarrassment is thrown on the liver, the carbon and hydrogen since they can be no longer burnt, fall under the action of that gland, which is overtaxed with the unnatural task.

It is for this reason that men in warm climates instinctively abhor all oily and fatty food, and choose fruits and watery diet. In these the amount of combustible materials is small—the use of them, therefore, leads to the evolution of little heat, and the
disturbance I am dwelling on is to an extent avoided. How different with the man who lives in the cold north regions; an orange or pine-apple is but a poor temptation to a Laplander or Esquimaux. He wants tallow and train oil. The cold air that surrounds him keeps his temperature down, so that he has hard work to keep it up. He wraps his greasy person in furs of warmest kind and consoles himself with the belief that in another and happier world the righteous shall feed on the blubber of whales.

What, then, gentlemen, is the result at which we arrive from a full consideration of the subject? We conclude that man and all other animals under ordinary circumstances find in their food all the fat they require; that these have been made in plants by the all-pervading influence of the sun; but, under special circumstances, we are constrained to admit, that if fat does not occur in the food to an extent sufficient for the wants of the system, the system by resorting to processes of sub-division, which we can artificially imitate, can manufacture it: that introduced by the lacteals, but not by the veins, the fats are either destroyed by gradual oxydation for the production of heat, one fat after another appearing in succession, as these partial oxydations go on, and carbonic acid and water being developed at last,—or the excess is stored up in the adipose tissues for the future wants of the system, or, in the female, it passes into the secretion of the mammary gland, and is a constituent of milk. But whether it is thus stored up or thus secreted, its final duty is the same, it is to be burnt for the sake of the caloric it can evolve, and thus translated into carbonic acid and water is restored to the atmospheric air, ready under the influence of the sunshine to be metamorphosed by plants back again into fat.

From these general views we now descend to particulars, and I shall proceed to offer you rigorous proof that both in herbivorous and carnivorous animals the fat deposited is not made in the stomach, but collected from the food. We shall then examine the system followed on the great scale by those who are interested in the fattening of cattle for the market, and also the production of milk, one of the main constituents of which is butter, this will furnish us with striking illustrations of the principles under consideration. Next, we shall see how all oily bodies when once introduced into the system begin to undergo change, and evolve caloric, and how, in order to regulate and control this, a special mechanism is resorted to, in which the cutaneous and respiratory surfaces and the malpighian bodies of the kidney discharge an important duty.

[N. Y. Med. Gazette.]
A Case of Sciatica treated successfully by Inoculation with Sulphate of Morphine. By Charles Brackett, M. D., of Rochester, Ind.

The following, if you think proper, you may publish. It is concerning a case of Sciatica, (I like the shorter, and full as expressive term, in lieu of the Neuralgia Femoro- Popliteæ,) of long standing, which I treated by inoculating the skin over the course of the nerve with Sul. Morphine, made into a thin paste with Croton Oil.

This was a case of some years duration, and had been treated in this country and New York without an appearance of benefit.

The patient Wm. R., aged about fifty years, of a spare habit but large and muscular frame, and active disposition, had suffered for the past ten or fifteen years with occasional rheumatic attacks, affecting generally his upper, though often his lower extremities and back. The pain, and weakness in his back, and in the course of the sciatic nerve for the past two years, had been persistent, so that he needed the aid of a cane when walking; for the past few months he had been confined to his bed, suffering such pain as only the victim of neuralgia has a knowledge of. I have tried most of the medicines which I thought could give him relief, both in the form of internal and external medication; at length I concluded to try this plan of inoculation, although I had not a remote idea of deriving permanent benefit from it, yet I could not bear the idea to give him up to the perpetual use of morphine, from which alone in large doses he found relief.

I began about the origin of the nerve, and inoculated the paste above mentioned about every four inches, down to his heel, which was as far as he felt any pain. That night he rested better than he had for a long time previously, the pain being entirely removed along the track of the inoculations; towards morning the pain attacked the Anterior Tibial Nerve, where previously it had never existed, and where it became as acute as it ever had been on the posterior part of his leg. I followed this pain up with my scarifications, putting in as much of the paste as I dared do in from four to six punctures made with a point of a thumb lancet at each place of inoculation. At this time I made my points of inoculation about three inches apart from the knee to the middle of the dorsal surface of the foot, so far as the pain existed; it ceased, and at my next visit it had appeared in the Plantar Nerves. I scarified and inoculated the sole of his foot, and from that time till his death he never suffered from any pain about that leg.
Quinine in Cholera Infantum. [January,

This patient, a robust Virginian, suffered more I think than any one I ever saw. Judging from his appearance, I thought it must be truly perfect agony he suffered.

He lived about a year after the cure of his Neuralgia, when he died from complicated disease of the Spleen and Liver, chronic in its character. As a post mortem was not allowed, I cannot give the exact condition of the viscera.

Though there is nothing remarkable about this case as respects the originality of its treatment, which I do not claim for it, yet the rapid and almost magical effects of the inoculation, together with the total and permanent disappearance of the neuralgic disease, I think probably ought to place it among the first remedies to be used in this disease, the treatment of which (through necessity from an absence of a knowledge of its existing causes) so often assumes an empirical tendency. At any rate it is to be considered a valuable adjuvant to other treatment.—[North-western Medical and Surgical Journal.

Quinine in Cholera Infantum. By G. W. Booth, M. D., of Hardin county, Tenn.

I have for some time intended to call the attention of my professional brethren to the quinine mode of treating cholera infantum. I have practised in Mississippi and Tennessee for several years—regions where that disease annually makes its visitations. I have had an opportunity of seeing much of it, and treating a great number of cases. I believe its remote cause to be identical with that of our common autumnal fevers.

It prevails at the same period of the year, and in the same locations, and I have found it amenable to the same treatment, aided by the usual remedies for the local complications. There are in all the cases that have fallen under my notice distinct remissions, if not intermissions. During this subsidence of the symptoms, I give quinine liberally, and, in fact, in many cases I give it, regardless of fever, throughout the disease. I can confidently recommend this mode of treatment as pre-eminently successful, after testing it for many years. I have seen many cases recover under the use of the sulphate, that I should have despaired of without its aid. I write this simply to get you to call the attention of the profession to the use of quinine in this disease. I have never written an article for the medical press; and this is not intended for the public eye.* I do not expect that any, or at least many, will adopt my mode of treatment

[*We insert it nevertheless, in the hope that Dr. B. and others of what are called country practitioners will be encouraged to write for the medical press.—Ed.]
differing from what is usual, on the recommendation of an obscure practitioner—one entirely unknown to fame. As this is the season for the prevalence of cholera infantum in your city, I request you to give it a full and fair trial; and if you find it successful, then send it abroad under the prestige of your Gazette. I use the quinine in every stage of the disease, in what would by many be considered large doses. Occasionally I defer its use for a short time, to relieve some of the most urgent symptoms—such as excessive gastric irritability, and cerebral affections. [New York Medical Gazette.

Abstract of a Paper on the Variations of the Sulphates and Phosphates excreted in Acute Chorea, Delirium Tremens, and Inflammation of the Brain. By H. B. Jones, M.D.

Having determined the variations of the sulphates in the states of health when different diets, amount of exercise, and medicines were taken, the variations of the sulphates in disease were examined. At the same time the total amount of alkaline and earthly phosphates was determined, partly in order to see whether the amount of sulphates and phosphates bore any relation to one another, and partly to test the conclusions which were drawn in the author’s previous paper on the variations of phosphates in disease. The cases were thus classified:

1st. Acute and chronic diseases, in which the muscular structures were chiefly affected, as chorea.

2d. Functional diseases of the brain, as delirium tremens.

3d. Acute inflammatory diseases of the nervous structures, as inflammation of the brain.

4th. Chronic diseases of the nervous structures.

5th. Acute diseases, in which neither the nervous nor the muscular structures were chiefly affected.

6th. Chronic diseases, in which neither the muscular nor the nervous structures were chiefly affected.

The three last classes gave only negative results.

In illustration of the first class, three cases of most intense chorea are detailed; the urine was examined frequently, from the third to the eleventh day. The phosphates were found to be diminished. The sulphates were found to be in very great excess. The urine was found to be so loaded with urea, that nitrate of urea, chrystalized out before the urine was concentrated. The specific gravity of the urine was as high as 1036 in one case, 1035 in another, and in the third, 1031.

In illustration of the second class, three cases of delirium tremens are given. The urine was examined from the fifth to the
fourteenth day of the disease. The phosphates were not found to be so remarkably as in the cases reported in the previous paper. The sulphates were found to be exceedingly increased. The amount of urea was so great that nitric acid caused an instantaneous crystallization. The specific gravity also was in one case, 1041; in another, 1037; and in the third, 1027. In other words, there was the most remarkable correspondence between the state of the urine in acute chorea and in delirium tremens.

In illustration of the third class, four cases of acute inflammation of the brain are given. The urine was examined from the fourth to the twenty-sixth day. Though the inflammation in these cases was not so intense, as in those which were recorded in the author's previous paper referred to, yet they confirm the statement that in inflammation of the brain, the phosphates in the urine are increased; they also lead to the conclusion that the sulphates are at the same time increased in the same degree.

In conclusion, the author states the phenomenon common to acute chorea and to intense delirium tremens is increased and unceasing muscular action. The muscles are highly complex organic compounds, in which sulphur exists in an unoxidized state, and the muscular action of oxygen, which, among other results, gives rise to the formation of sulphuric acid and urea, the amount of oxidation being proportioned to the intensity of the muscular action. The result produced is an increase of the sulphates and of the urea of the urine, just as in health they would be increased if continued strong exercise were taken. The increased amount of urea does not constitute a disease resembling diabetes, but it is only an evidence of the changes which are taking place within. The increase of sulphates and phosphates in inflammation of the brain, is also an evidence of increased oxidation of the nervous structures. These simultaneous variations depend on the fact that the amount of sulphur in the brain is nearly the same as the amount of phosphorus. Thus at one time we have evidence of increased oxidation of the elements of the nervous structures; and we may thus arrive at the conclusion, that at one time the function of the nerves, and at another that of the muscles, is inordinately increased.

[London Lancet.]

Intermittent Fever, affecting only one half of the Body.

Dr. M. L. Knapp has given in the September number of the New York Journal of Medicine, the history of a case of fracture of the tenth dorsal vertebra, with other injury to the spine, which
resulted in complete paralysis of sensation and motion of the lower half of the body. While in the state of paraplegia he was attacked with intermittent fever and strange to relate, only the part of the body above the fracture suffered the lower half that was paralysed retaining its ordinary temperature.

Dr. Knapp goes on to say:—"The peculiar condition of the patient, however, under a paroxysm of fever is full of interest, and arrests the attention in a remarkable manner, filling the mind with a kind of awe. One half of the body of the man had a perfectly developed ague, and the other half had none! Who ever heard of or saw the like before? Who ever will look upon the like again? Does it establish the nervous pathology of fever? The distinctive symptoms that go to make up an intermittent fever, were strongly marked, and observed their regular succession in all parts of the system above the injury where the cerebro-spinal influence was maintained; but the parts below were completely exempt from all febrile phenomena—neither cold, nor heat, nor pallor, nor rubor, nor sudor!

If this case does not prove the nervous pathology of fever, it proves at least that parts cut off from direct and healthy connection with the spinal axis are exempt from the phenomena of fever; and the inference is that these nervous phenomena are consequent on the primary impressions made on the cerebro-spinal system by the malarious poison circulating in the blood. The altered and vitiated secretions of the stomach, liver, etc., for which oceans of mercurial cathartics have been given in malarious fevers, aimed at the primary cause of the disease, are but secondary phenomena.—[Charleston Med. Journal.

On the Constitutional Origin of Erysipelas, and its Treatment.

Dr. A. J. Walsh has furnished the Dublin Quarterly Journal, (Aug. 1850) some remarks on this subject, with cases, which are worthy of consideration. The following is a summary of his remarks:

1st. That erysipelas is a constitutional disease, depending solely on a morbid state of the blood; and that the eruption and fever are the means that nature takes to get rid of this poison.

2d. That, for all practical purposes it is only necessary to divide the disease into idiopathic and traumatic.

3d. That tartar emetic seems to act specifically in erysipelas, by assisting nature in her efforts to throw off the disease.

4th. The best method of administering this medicine is by dissolving one grain in a quart of any bland fluid; the solution to be taken in the twenty-four hours.
5th. That as soon as the tartar emetic has acted sufficiently, sulphate of quina, or some other tonic is to be administered.

6th. That, if the patient is debilitated, we must administer tonics at the same time that we give the tartar emetic.

7th. That under this treatment the erysipelatous inflammation may spread, but not with the same violence, nor to the same extent, as if the disease were left to itself.

8th. That we shall often require to give aperient medicine during the course of the case, as it is absolutely necessary to keep the bowels free.

9th. That local applications are unnecessary, and often injurious.

10th. That incisions are not necessary, except in the third, or suppurative stage: and if the antimonial treatment be early resorted to, it very rarely occurs that suppuration takes place.


On Anasarca in Disease of the Heart. By M. Chomel.

The progress of infiltration is ordinarily slow and progressive in affections of the heart; but, nevertheless, nothing is more common than to meet with individuals among the working-classes, who, while presenting the appearance of health, and without having manifested any sign of disease, are seized with anasarca, the physical and material signs of cardiac alteration not being present, or only, at all events, to a very slight degree. This is because there are causes prevailing in this class of society—such as excess of labour, fatigue, watchings, misery, drinking—which, in a measure, precipitate the course of the disease. These causes come in addition to the natural influence of the disease; and the anasarca appears at a period when without these it would not have manifested itself. So, when these causes are removed, and the patient is kept at rest, and sheltered from the unfortunate conditions that have given rise to so serious a complication, the œdema diminishes daily, and the patient soon leaves the hospital believing himself cured. Few exposures to excesses, fatigue, or misery, reproduce the anasarca, which may be again dispersed, and that for several times; but after a certain number of such attacks, it in the end becomes permanent.

Frequently the appearance of an acute anasarca throws a ray of light on obscure and embarrassing cases, indicating in the great majority of cases an acute disease of the heart. Doubtful endocarditis and pericarditis are often thus revealed to the observer by general œdema. M. Chomel thus considers that in the case of anasarca coming on, when we can discover
Pleuritic Effusions.

neither change in the blood nor albumen in the urine, we are authorized in admitting the existence of disease of the heart, or large vessels, even when all material signs of this affection are completely absent.—[Brit. and For. Med. Chir. Rev., from L'Union Medicale.

Cases in which there was unusual Difficulty in the Diagnosis of Pleuritic Effusions. By T. A. Barker, M. D. (Proceedings of Royal Med. Chirurg. Society, May 27, 1851.)

The first case related by the author was one in which there was extensive emphysema of the left lung, which had encroached greatly on the right side of the chest, pushing the heart and mediastinum beyond the mesial line. The right lung, which was closely adherent to the costal pleura, was reduced to about a fourth of its usual size, was exsanguine, and contained no air, resembling a lung compressed by effusion in the pleura. In consequence of these changes, no respiration could be heard in the right lung during life; the right side of the chest was universally dull on percussion, and the patient could only lie on the right side or sit erect. Along with these symptoms were others closely resembling those which usually attend hydrothorax; and the dyspnœa and symptoms of approaching apnoea being very urgent, the author thought himself justified in having a very fine trocar introduced into the chest, in order to ascertain positively whether there was fluid. No inconvenience resulted from the operation, and the symptoms were soon afterwards explained by the discovery, on post-mortem examination, of the very unusual state of parts above described.

The next case was one in which, without any of the general symptoms of pleuritic effusion, it was discovered, by auscultation, &c., that there was no respiration going on in the posterior or third of the left lung. In four days the person died. The lungs were healthy; but there was extensive effusion, confined to the back part of the chest by a very narrow line of adhesion extending from the upper and back part of the chest to the diaphragm, half way between the ribs and the sternum. The author referred to three other cases which he had seen, in which the pleuritic effusion had been limited by adhesions in the same position and precisely similar; only one of these had been seen by him during life, and in that the symptoms closely resembled those in the case last related. Two other cases were shortly alluded to, in which there was emphysema to a considerable extent; but respiratory sounds could be heard in every part of the affected sides, in consequence of the lung
being kept partially in contact with the ribs by mucous adhesions, forming several separate cavities in which the purulent matter was contained.—[Lond. Med. Gaz.]

**Miscellany.**

A new Method of preventing Fats and Fixed Oils from becoming Rancid.—By Charles W. Wright, M. D., of Cincinnati.—In company with one of the early settlers of this part of the United States, the conversation turned upon the history and habits of the Indians formerly living in this valley, and among other things he mentioned the curious manner in which they preserved bear's fat from becoming rancid, of which the following is a brief account: In the early part of winter the fat is removed from the body of the animal and subjected to the trying-out process, as it is termed; that is, it is subjected to a degree of heat sufficient to coagulate and separate the azotized matter which subsides to the bottom of the vessel, and the oil is drained off. After this operation is completed, it is melted again with the bark of the slippery elm tree, *ulmus fulva* finely divided, which may be used either in the fresh or dry state. The proportion is about one drachm of the bark to the pound of fat. When these substances are heated together for a few minutes, the bark shrinks and gradually subsides, after which the fat is strained off and put aside for use.

The bark communicates an odor to the fat that is hardly to be distinguished from that of the kernel of the hickory nut.

Thinking this might be turned to account in the preservation of the fatty matters, I subjected many of them to experiment, and in every instance the result was alike successful. One specimen of butter, (an article which is well known becomes rancid sooner than any other kind of fat,) prepared in this way more than a year ago, is as sweet and as free from disagreeable odor, as the day it was made, having been exposed all this time to the atmosphere and changes of temperature.

Hog's lard may be preserved in the same manner.

This fact will be of much importance in the preparation of cerates and ointments which can be thus protected from rancidity.

In the lubrication of delicate machinery an acquaintance with this fact may be of benefit by preventing the injury that results from the use of rancid oil.—[Western Lancet.]

**Free Medical Education.**—The class at the University of Michigan, numbers 151 bona fide under graduates. If the physicians who are availing themselves of the free lectures were included in the catalogue, as is the fashion elsewhere, the aggregate would exceed 200. The course of instruction in this school is thorough, and the standard of qualification for the doctorate elevated, so as to challenge comparison with the best colleges in the country. At present there are 5 Professors, shortly to be increased to 7. Such provision
for free medical teaching, must prove a blessing to the state, which has so liberally endowed their University and set the example of a free Medical College.

It must not however, be supposed, that free medical education is exclusively to be had in Michigan, else injustice would be done to other schools, every where in the country. To go no farther back than last year, we know two Colleges, which in the aggregate on their catalogues, numbered 641 students, viz. 411* and 230, † respectively, and yet the highest number of tickets paid for, numbered 140 in the former, and 151 in the latter. By this it is apparent, that free medical education was extended to 271 in the one, and 79 in the other, being an aggregate of 350 free students in these two colleges!

The difference lies in the fact, that in Michigan this liberality is extended by the State, while in New-York, the credit is due to the Professors in these schools, and to the very natural ambition of excelling each other in the numbers of their students. Many gentlemen who can afford it, would doubtless rather lecture to large classes for nothing and find themselves, than to be paid for teaching small classes. The title and position is sought, rather than the emoluments of professorships; and if such men are capable and faithful to their trust, they are worthy of double honor, and to them should be awarded the merit of making medical education free, at their own expense. They may not thank us for depriving them of the prestige they derive from the hypothetical receipts of their chairs; but it may serve to reconcile restless aspirants for high places to learn that they do not pay at all, in the proportion which they seem to do, from the statistics of college catalogues, which are signa fallacissima. Let such learn to be content with the emoluments derived from diligent practice, and seek to make their private station a post of honor, for such it will be, when they shall inspire public confidence in their integrity, skill and success. Such practitioners secure both dignity and emolument beyond the modicum of either, which they can hope to reach as public teachers.—[New York Med. Gaz.]

Professor Gorini.—This gentleman, who is professor of natural history at the University of Lodi, made, before a circle of private friends, two nights ago, a very remarkable experiment illustrative of his theory as to the formation of mountains. He melts some substances, known only to himself, in a vessel, and allows the liquid to cool. At first it presents an even surface, but a portion continues to ooze up from beneath, and gradually elevations are formed, until at length ranges and chains of hills are formed, exactly corresponding in shape with those which are found on the earth. Even to the stratification the resemblance is complete, and M. Gorini can produce on a small scale the phenomena of volcanoes and earthquakes. He contends, therefore, that the inequalities on the face of the globe are the result

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* University of New York ?
† College of Physicians and Surgeons, New York ?
of certain materials, first reduced by the application of heat to a liquid state, and then allowed gradually to consolidate. In another and more practically useful field of research the learned professor has developed some very important facts. He has succeeded to a most surprising extent in preserving animal matter from decay without resorting to any known process for that purpose. Specimens are shown by him of portions of the human body, which, without any alteration in their natural appearance, have been exposed to the action of the atmosphere for six and seven years; and he states that at a trifling cost he can keep meat for any length of time in such a way that it can be eaten quite fresh. The importance of such a discovery, if on a practical investigation it is found to answer, will be more readily understood when it is remembered that the flocks of sheep in Australia are boiled down into tallow, their flesh being otherwise almost valueless, and that in South America vast herbs of cattle are annually slaughtered for the sake of their hides alone.—Times.

Kate Dresser, 36 years old, of Schuykill Co., Pennsylvania, has had more children than most women. The first child was born in 1826, and the last in February, 1851. She had twins five times, and in February, 1848, had four children at one birth! making twenty-one children in twenty-one years, and six children in the space of eighteen months! The four children at a birth were apparently healthy and well formed. One lived about four weeks, another eleven months, the third a little over a year, and the fourth, a fine boy, is still living. There are now twelve of the whole number living, seven boys and five girls!—[Boston Med. and Surg. Jour.

Distribution of Prizes to Idiots.—The French periodicals contain the details of a singular exhibition at the Salpêtrière Hospital of Paris. This is the great asylum for aged and incurable females, and contains a great number of idiotic and epileptic inmates, who are incited to cleanliness, industry and good behaviour, by the distribution of prizes to the most meritorious in these particulars. The scene is represented as having been exceedingly interesting.

Quarantine Laws.—A convention of some of the most distinguished physicians of Europe, has been for some time sitting in Paris for the purpose of maturely considering the quarantine regulations in force, and of recommending to their respective Governments such modifications as they may deem proper under the more enlightened views of the age. The result of their labors will be very interesting to all commercial communities.

Scrofulous Ophthalmia and Granular Lids.—These intractable affections have been treated with great success by Dr. Isaac Hays, of
Philadelphia, with cod-liver oil. The testimony of a practitioner of such well established reputation cannot fail to secure to this plan of treatment a fair trial.

**Suicide with Chloroform.**—We perceive that Dr. Reyer, chief physician of the Imperial Hospital at Vienna, has recently committed suicide by fastening a bladder filled with chloroform to his mouth and nostrils by means of adhesive plaster.

**Death of distinguished men.**—It is our painful duty to record the deaths of several of the most distinguished members of the profession in this country. Within the last two months we have lost Professor Granville Sharp Pattison, of the University of New York, one of the ablest lecturers on anatomy we have ever heard; Dr. John Kearny Rogers, long known as one of the best surgeons of New York; Dr. James R. Manley, one of the most aged and respectable physicians of the same city; Dr. E. De Kay, a distinguished naturalist; and Dr. Nicholas Hard, the able professor of anatomy in the Medical College of Iowa.

We are indebted to the authors for quite a number of pamphlets, which we regret not having room to notice more at length. Among them are:

A Lecture on Sanitary Reform, by Lewis Rogers, M.D., Professor in the University of Louisville. It is an able and strong appeal upon the subject, and will be again noticed by us.

Two Lectures, by Professor Jackson, of Philadelphia—the one showing that “Medicine is a Science and not a mere Art”—and the other upon the “Vital Forces.” Both are full of interest, and in the distinguished author’s most captivating style. The latter is especially valuable as bearing upon practical principles of great importance.

An Appeal to the Legislature of Alabama, for the establishment of a State Hospital for Lunatics and Idiots; prepared by order of the “Alabama State Medical Association.” This paper is from the pen of Dr. Lopez, of Mobile, and is one of the most interesting of the kind we have seen. It is to be hoped that the philanthropic efforts of the association may be favorably acted upon by the Alabama legislature.

The Transactions of the first annual meeting of the Kentucky State Medical Society, held in the city of Frankfort. Being its first meeting, nothing more was done than the appointment of committees and the adoption of a constitution.
Proceedings of the organization of the Physicians' Society for Medical observation of Greene and adjoining counties, Georgia. We wish this society every success, and hope it may lead to the formation of others like it.

An Address on the Hygienic and Medicinal uses of Alcoholic Stimulants; by F. M. Robertson, M. D.—being No. 10 of a series of addresses delivered before the Charleston Total Abstinence Society. An excellent address, full of valuable truths to the physician as well as to society at large.

Report of the Committee appointed on Mrs. Willard’s theory of Respiration, by the New York State Teachers’ Association.—Mrs. Emma Willard, so well known as a teacher of young ladies, is ambitious to enlarge the field of her inculcations, and to enlighten physiologists and pathologists in relation to respiration, circulation, and the treatment of diseases. The reporters “beg leave to state that they believe the theory to be true.” “This theory affirms that the motive power, which causes the circulation of the blood, is created by an expansion of the volume of the blood in the lungs, produced by the combustion of the carbon of the venous blood, caused by the oxygen of the air introduced by breathing.” Since the publication of her Treatise on the Motive Powers, &c., Mrs. W. has issued another work, entitled “Respiration, and its Effects; more especially in relation to Asiatic Cholera and other sinking diseases.” Truth is valuable, from whatever source it be derived, and if our fair country-woman can aid us in its discovery, let us not be slow to award her all merited praise.

Dr. R. D. Arnold, the worthy President of the State Medical Society, has been recently elected Mayor of Savannah.

There are now three or four Female Medical Colleges in the United States. It is not stated whether the Graduates are to adopt the Bloomer costume or not.

Colleges of Dental Surgery are being multiplied. We see another recently established in Syracuse, N. Y. We believe that no institution of this kind exists in Europe—a singular fact.

Kossuth and Sir James Clark.—Sir James Clark has waited on the distinguished Hungarian refugee, and kindly proffered his professional services. We do not know whether the offer was accepted.—[London Lancet.

[We hope that this contemptible way of seeking notoriety will not be adopted by any respectable practitioner in our country.]