PART I.—ORIGINAL COMMUNICATIONS.

ARTICLE I.

Surgical Cases: By Paul F. Eve, M. D., Professor of Surgery in the Medical College of Georgia.

SERIES NO. II.

Injuries of the Fore-finger.—To a proper and easy comprehension of the following cases, it may be well to preceed them by a definition of the manner in which the bones and joints of the fingers are here distinguished. The first bone of each finger, which articulates with the metacarpal row, is called the *proximal phalanx*, because the nearest; the second, the *middle*, for a very obvious reason; and the third, the *distal*, because the most distant from the body. So also of the articulations of the finger. The first is the *metacarpo-phalangeal*; the second, the *proximal phalangeal*; and the third, the *distal phalangeal* articulation. With this necessary explanation, I proceed to relate five cases of injuries of the fore-finger, which are chiefly interesting by demonstrating the fact, that a mutilated part may be often saved without benefiting the individual. For I now believe that amputation, in a majority of these cases, would not only have shortened the sufferings of the patients, but in the end have left a more useful hand to them. Knowing, however, the great importance of the fore-finger, and acting upon the principle that it is better surgery to prevent one operation than to perform a hundred skilfully, I, in each instance, attempted union of the divided parts.

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Case 1st. About the 1st of September, 1832, a negro man, aged 35 or 40 years, and belonging to Mr. J. L. Coleman, was placed under my care. He was a brick-layer by trade, and by using the trowel to cut bricks, had materially injured the fore-finger of the right hand. He had been under the charge of another physician, and when I first saw him, suppuration had commenced. The finger was freely and repeatedly lanced on its palmer surface, near the distal phalangeal articulation. Under the use of flax-seed poultices, a considerable quantity of matter was discharged, and with it some shreds of the flexor tendon.—After the openings healed up, the finger was diminished in size and remained stiff; the proximal as well as the distal phalangeal articulations being partially ankylosed. Several months after this, the patient, finding his fore-finger useless, and believing the middle one would supply its place, requested its removal, and it was amputated at the proximal phalangeal articulation. He, as well as his employer, now state that the right hand is not half as useful as it was before the injury was received.

Case 2nd. Dick, aged about 40, and belonging to Mr. Wm. J. Eve, had his left fore-finger very much mutilated while attending his master's cotton-gin, September 19th, 1835. The saws had cut it in three places; half an inch of its most distal extremity, including half the nail, was entirely lost; the proximal phalangeal articulation was completely laid open on its palmar surface, dividing of course the flexor tendon, and the third incision was over, but not into the metacarpo-phalangeal joint. The edges of the two latter wounds were brought together; the parts healed, and on the eighth day after the accident, the patient left for the plantation. I saw Dick the other day at the gin, and upon examination of the hand, I found the left fore-finger much diminished in size and permanently extended. He said he wished I had taken off the finger at the time of the injury, for it was now useless to him.

Case 3rd. On the day of the above accident, 19th September, 1835, a boy about 10 years old, belonging to Maj. G. L. Twiggs, was brought to my house, having received the following injury of the right hand, also from a gin in motion. The little finger was much mutilated up to near the proximal phalangeal articulation; the ring-finger from above its metacarpal joint, had the skin torn off from its whole dorsal surface, inclu-
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1836.

ding the nail; the middle, like the little finger, was greatly lacerated and its bones fractured; and the fore-finger, from its proximal phalangeal articulation, was divided longitudinally nearly in the centre, through skin, tendon, bones and even nail. It presented the appearance of a bifurcated finger, up to the above named joint, which was freely opened. The little finger was amputated at the proximal phalangeal articulation, the middle one at its metacarpo-phalangeal, the ring-finger was simply covered with lint, and to the fore-finger a bandage was applied after the divided tissues were brought together. It unexpectedly reunited. The finger is now permanently extended and much diminished in size, its only motion being at the metacarpo-phalangeal articulation.

Case 4th. On Sunday, 17th September, 1836, a boy about 10 years old, belonging to Mr. Wm. J. Eve, while using a hatchet, nearly cut off his left fore-finger. The incision extended diagonally through the proximal phalangeal articulation, laying open the joint, cutting off a portion of the cartilages and bones, and, though received upon the dorsum of the finger, the convex edge of the hatchet had penetrated the palmar surface. The lateral ligaments, at least the external one, and a portion of the skin on each side were all that remained undivided. The parts were brought together, without even removing the partially detached cartilages or bones, and although there was considerable inflammation and discharge of matter, the wound healed in about two weeks, and the boy returned to the plantation. Two days afterwards, there was a very severe change in the weather, when from exposure, the little patient took cold, the finger and whole hand became very much inflamed, the wound re-opened, and when he presented it to me, I at once removed the portion of finger now lying pendant in the palm of the hand. By subduing the inflammation, the stump, though the incision was made diagonally to correspond with that of the wound, regularly healed, and the patient again returned home, the 24th October.

Case 5th. On the 13th of October, 1836, Nathan, a negro man belonging to Mr. John Moore, while opening goods, had an anvil to fall upon his right fore-finger, which fractured its distal phalaux just behind the nail and also laid open the distal phalangeal articulation. Notwithstanding the nature of the accident, a severe contused wound, a fracture, and a compound disloca-
Essay on Revulsion, &c.  

Essay on Revulsion: By Joseph A. Eve, M. D. Professor of Therapeutics and Materia Medica in the Medical College of Georgia.

Although the history of Revulsion may be considered coeval with the earliest records of medical science, the principle of its operation having been evidently referred to by the Coan Sage, in his invaluable aphorisms, still its almost universal application and its paramount importance in medicine appear to be, by no
means, fully recognised and appreciated by the profession in general, even at the present day.

In the whole range of medical philosophy, there is no subject more interesting—none that involves so many important considerations, both in pathology and therapeutics.

In all the language of medicine, there is no term more beautifully expressive of the idea intended to be conveyed than Revulsion, owing its derivation to the Latin verb *revellere*, to draw away, thus signifying a drawing away or abstraction of excitement from one part to another.

Without delaying time to examine the opinions of the ancients, or to consider the difference between revulsion and derivation, which Bouchard has satisfactorily proven to be imaginary and futile, we would simply signify by revulsion, an augmentation of excitement in one organ, part, or system, which causes a suspension or depression of excitement elsewhere—whether this augmentation be spontaneous or the result of artificial means.

The object of revulsion is to create a centre of fluxion which shall interrupt the tendency of the fluids towards a diseased part, "where there is a focus of irritation with exaltation of the vital properties,"—that is, to cause a diversion or abstraction of excitement, or irritation from one point to another, whereby to arrest haemorrhage, remove congestion, or relieve pain.

By restricting the signification of Revulsion, merely to the operation of external revellents, physicians have generally conceived a very limited and imperfect idea of the importance of this principle of revulsion and its almost unlimited applicability, in solving the mysteries of disease, and explaining the *modus operandi* of therapeutic agents. There is indeed, scarcely one mean in medicine, whose effects do not depend more or less on this principle. Emetics, cathartics, dinretics, diaphoretics, and all local excitants, operate not only by the secretion and consequent depletion they cause, but by effecting a revulsive determination of excitement and afflux of blood to the organs whose functions they excite. Cupping glasses and leeches are as unequivocally revellent in their operation, as blisters and sinapisms—the only difference being, that the irritation caused by the latter is more violent and persistent, whilst that made by the former is resolved as fast as formed by the afflux of blood, from the bites and scarifications, thus approximating more nearly, in their
mode of operation, to those medicines that promote the secretions; in the action of which, the same phenomena are observable, in the same succession—stimulation, irritation, afflux, congestion and effusion—which last event, producing immediate resolution, prevents the irritation from affecting sympathetically the rest of the economy. In the employment of general blood-letting, more than is generally supposed, is attributable to the revulsive determination of blood toward the part from which it flows; this is particularly conspicuous in the effect that venesection, practised on the foot, exercises over the brain, especially if the foot be immersed in hot water, and the patient be sitting or standing erect—syncope results, under such circumstances, from the loss of a very small quantity of blood; a quantity, which, taken from the arm, would not sensibly affect the head. Inasmuch as the object of revulsion is the production of sedation or depression of excitement in the part affected, some authors have styled revulsives indirect sedatives, but as their mode of operation is essentially stimulant, and the sedation caused, only an ulterior consequence, the appellation is inappropriate and should not be retained.

Our knowledge of revulsion is based upon an observation of the most ordinary and obvious phenomena in physiology—such as the reciprocal concentration and abstraction of excitement—the suspension of some processes, whilst others are exalted, and the numerous reverse sympathies or antagonistic relations that exist between different organs and systems, by virtue of which, an exaltation of excitement in one is attended by a corresponding depression in another—which principle is also beautifully displayed in pathological facts of every day occurrence—the metastasis of disease from one point to another, and the mitigation or entire subsidence of one affection by the suprvention of another, in a different part.

By a wise and happy provision in the animal enconomy, irritation has a constant disposition to extend itself from the part first attacked to other parts of the system—one part or organ invoking, as it were, the sympathetic aid of others, in sustaining or resisting an injury, which, otherwise becoming more and more intense and insupportable, would produce disorganization and death. Pathologists designate this law or principle in the economy, very appropriately by the term sympathy; upon it depends
reaction, without which every irritation of much intensity, or involving an important organ, would prove inevitably fatal; for the suffering part becomes a focus of attraction and concentration of the excitement and of the fluids from all parts of the organization, until it is overwhelmed; or other parts beginning to sympathize and share the irritation, the excitement becomes diffused and reaction established; as we see admirably exemplified in the cold and hot stages of intermittent fever.

In the cold stage, the excitement and the blood forsake the exterior of the body and concentrate upon the interior, which is oppressed and deluged with the most intense irritation and congestion; which are overcome, after a shorter or longer duration, by reaction, which causes an equalization of excitement, if the sympathies be sufficiently active alone, or by the aid of artificial revellents, to cause its diffusion, thus constituting the hot stage. But if the sympathies fail, the irritation and congestion still increasing, the balance of excitement is irrecoverably lost, and the patient succumbs in the cold stage. Thus, we perceive without the play of the sympathies, constituting reaction and causing a revulsion of excitement from the interior to more superficial and less vital parts, no patient could survive the cold stage of fever; but the equilibrium of health is not restored, until the hot is succeeded by the sweating or critical stage.

Irritation and inflammation frequently extend, by sympathy, to remote parts, without materially relieving the primary location—such sympathetic affections are very common attendants on all inflammatory diseases, both acute and chronic—they are generally regarded as symptoms and often serve as diagnostic of the original malady. But when the sympathetic replaces, that is, proves revulsive of the primary affection, it constitutes a metastasis—if to a more vital part, it is attended with more danger and its cure is to be effected as promptly as possible, by re-exciting the first. If a depuratory organ, such as the skin, kidneys, &c., be the seat of irritation thus sympathetically transmitted, and the irritation be such as to remove the primary disease, but not so intense as to suspend the functions of these organs, the sympathetic irritation will, in turn, be resolved by increased secretion from them, and entire resolution of the disease be the result, which in medical language is styled a crisis; thus physicians speak of critical sweats, diuresis, &c; and it is thus on the prin-
inciple of revulsion, that we can comprehend the philosophy of the mode of operation of medicines addressed to the secretions, in the treatment of febrile diseases. But every determination of excitement to a secretory organ, causing copious secretion therefrom, does not invariably prove critical, because the sympathetic is not always sufficiently intense or persistent to replace the original irritation, and the crisis is therefore not effected—the disease is only temporarily or partially relieved. There is then, only this, though by no means an unimportant, difference between a metastasis and a crisis—in each there is a transmission of irritation from one part to another, which proves revulsive of the original affection; but in the former, we have only the substitution of one disease for another—whereas, in the latter, the secondary irritation is resolved, immediately, by secretion from the organ that receives it: thus for example, if a gastritis be translated to the brain or its meninges, a disease is developed more grave and dangerous than the first; but on the contrary, if the skin be the part to which the translation is made, the direct result will be a free perspiration which will most probably prove critical of the gastric inflammation, unless the reflected irritation be of such intensity as to suspend secretion, and then the consequence will be an erysipelas or phlegmonous inflammation, which may still be revulsive of the gastritis, and the patient will have exchanged a dangerous internal, for a comparatively mild and safe external disease. Innumerable examples might be adduced of similar sympathetic transmission of morbid excitement from one organ or part to another, constituting metastases or crises; and it is by attentively contemplating these, that we are enabled to derive correct views of revulsion, and deduce proper principles and precepts for its employment. Keeping always in view the grand principle of revulsion and the sympathetic connections of organs, but never losing sight of the importance of the humours in the pathology and treatment of disease, the scientific practitioner endeavors, in the management of fever, to excite the secretions with the double purpose of eliminating effete and injurious matter from the circulation, and of causing a revulsive determination of excitement and afflux of blood to the secretory organs, with the hope of effecting thereby a crisis: and he only resorts to the more violent and unnatural method of inflaming the surface to produce revulsion from the interior,
when milder resources are inadequate and the danger to be averted, threatening.

When the secretory organs are in a state of excitement too high for secretion, any means calculated to excite them must, of course, not only be nugatory but hazardous, instead of producing critical evacuations they would cause inflammation. It is therefore always proper, in diseases of high excitement, to employ direct debilitants to reduce the forces of the system, before having recourse to exciting medications, either to promote secretion or cause revulsion; otherwise they will not only fail to accomplish the object intended, but exasperate the disease by increasing the general excitement.

Some modern authors proscribe altogether the use of revulsives during the continuance of fever, except when an important organ, as the brain or heart, is violently and dangerously affected, in which cases all agree that the most powerful revulsion and copious depletion should be, immediately and simultaneously, practised. The employment of the more active or inflammatory revellents should certainly be deferred, during an exacerbation and until violent excitement has been moderated; but they may often be very advantageously employed long before the entire subsidence of fever; and the gentler revulsive means may be beneficially resorted to, in the very commencement.

The principle of revulsion is, indeed, as applicable to the remedial management of the incipient as of the final stage of fever: but during high excitement, while the sympathies are active and the vessels replete with blood, direct depletion is necessary before any appliances that would increase excitement are admissible. Energetic revulsives are not therefore to be postponed, in the first stage of fever and in acute inflammations, from a fear that the artificial will be translated and added to the original inflammation; but because they will aggravate the disease by augmenting the general excitement.

We should then commence the treatment of such affections with the mildest revellents, such as fomentations, cataplasms, baths, frictions, leeches, cups, &c.; and should these fail in effecting revulsion, resort to the more violent epispastics, as the violence of excitement subsides or is reduced by depletory measures. We are aware that what we have said impugns a proposition very generally received as an axiom in medicine, and par-
ticularly insisted on by the author of "the new medical doctrine;" that is, "that revulsive irritations must be stronger than those they are intended to replace, otherwise they turn certainly to the benefit of the latter"—that there is no medium between extinguishing and exasperating the original affection: but we consider this to be a dangerous error in theory, which has led to very prejudicial results in practice—causing on the one hand an unnecessary and injurious postponement of the employment of revulsives, or on the other determining the selection of those unnecessarily severe. If this proposition were true, the most acute inflammation would require the most intense revulsion; whereas we know that acute inflammations are often greatly mitigated, by very gently revellent means, as for example, gastritis by fermentations over the epigastrium—pleurisy by warm applications to the side—croup by warm wet cloths applied to the throat—even the physiological excitement of some organs will, frequently, moderate or suspend the sufferings of others—thus we contend that irritations and inflammations may be relieved without being entirely extinguished, and that grave affections may be mitigated and sometimes entirely replaced, by very mild revulsive excitement, even by such as may be attended with no pain and not even transcend the normal point. Were the position assumed by our opponents correct—were there in the employment of revulsives, no medium between exasperating and extinguishing the original affection—did the more intense always overcome and appropriate to itself the lighter excitement, we should never succeed in producing revulsion; for the primary would always attract to itself the artificial irritation in its incipiency, and as fast as formed, and thus never fail to be aggravated by it. But of this observation constantly declares the fallacy; for we frequently see blisters fully drawn without either removing or increasing the inflammation, for which they were prescribed, which remains unaffected, and sometimes requires a succession of blisters or a perpetual blister for its final extinction.

We would by no means contend for the exclusive use of the gentler revulsives, we know very well that they will not always suffice; we would only argue that they may often be, advantageously and safely, employed in the first stage of acute diseases, when the more potent would be altogether inadmissible. We can generally, with excellent effect, commence the treatment of
acute inflammations of the thoracic and abdominal viscera, by employing gentle revellents that will not sensibly increase the general excitement, and as it becomes moderated, substitute those that are more active, until the strength and activity of the system having been sufficiently reduced, the most energetic may be employed, not only safely, but with the effect of causing complete revulsion and preventing the inflammation from becoming chronic, and terminating in disorganization.

A very important consideration, in the administration of revulsive medications, is the adaptation of the means employed to the indication to be fulfilled in different cases. As a general rule, subject however to some exceptions, the revulsive irritation ought to correspond to that which it is intended to replace; for example, in haemorrhagic irritations, as haemoptysis, &c., cups and leeches will be most appropriate and beneficial; and if the disease to be treated have resulted from the suppression of a periodic or habitual sanguine discharge, the proper revellents are those whose operation involves evacuation of blood: in nervous irritations, rubefacients and such other revulsive medications as excite the surface, without producing inflammation, are generally preferable—in colic, while the affection is confined to the nervous tissue, the sanguine not involved: that is, before inflammation commences, warm fomentations; cataplasms, stimulating frictions, sinapisms, &c., are much better adapted to the case, than the more permanent epispastics; but when inflammation has been developed, the latter are much more efficient, it is however often necessary to premise or accompany their employment with free sanguine depletion. When it is desired to recall a superficial affection, such as erysipelas, &c., whose disappearance has been attended with injurious results, sinapisms are the most proper remedies; but if the malady we design to relieve, depend on the sudden healing of a deep ulceration, or if the indication be to cure an internal abscess, such revellents will be required as shall cause and maintain an artificial suppurating ulcer, setons, issues, moxa, &c.

The choice of the means to be employed should, in a great measure, be determined by the duration and obstinacy of the disease: recent and light affections generally yield easily, and seldom require more than the most simple and transient revulsives; but the more chronic a malady is, the more intense and
permanent will be the revulsion demanded for its extinction.—
In the incipient stage of croup, warm fomentations to the throat are, often, sufficient at once to dispel all the symptoms: in the same stage, affections of the lungs and liver are frequently removed, promptly, by the revulsive operation of an emetic or cathartic, which later in the same cases would prove ineffectual if not injurious. In sudden metastases to important organs, as the brain, heart, &c., the selection of a revulsive should be governed by the power and promptness of its action; such cases demand the immediate application of the most prompt and energetic simptoms, actual cautery, scalding water, concentrated mineral acids, &c.—the same speedy and powerful revulsion is requisite, in congestive fevers, to equalize the excitement and determine the circulation to the surface.

One of the most important points to be regarded, in the employment of revulsion, is the selection of the place upon which it should be practised. As a general rule, external revulsives should be applied to the surface directly over the suffering part; as to the side in pleurisy—to the breast in pneumonia, &c.; but there are many exceptions to this rule. Active revellents applied very near sensitive organs, instead of proving revulsive, often aggravate irritation in them, by causing toward them a determination of excitement and consequent afflux of blood.—In affections of the brain, for example, revulsives applied to the scalp would prove highly prejudicial, if not fatal, except in extremely low states, when the vascular system is so exhausted of blood, the sympathies so paralyzed and the excitability so nearly extinct, that inflammation of the cutaneous covering can extend its influence no farther than to cause a feeble afflux thereto from the cerebral mass within. In acute gastritis, the same danger attends the action of blisters on the epigastrium, before the general excitement has been sufficiently reduced by blood-letting, and that of the stomach by appropriate means, not on account of any direct or intimate sympathy, as Goupil asserts, between the skin and digestive mucous membrane, by which one constantly participates in the affections of the other. According to this author there exists, between the skin and pulmonary mucous membrane, an inverse sympathy to which he attributes the success of revulsion in inflammations of the lungs—and between the skin and digestive mucous membrane, a direct sympathy, and consequently
that "revulsives can only have an injurious effect in gastro-intestinal inflammations. Yet with the strangest inconsistency, he recommends the application of leeches to the epigastrium," and says, "we should not hesitate to range these animals amongst the revulsive means," and that "to be convinced that they can not act, except in this manner, it is sufficient to recollect the effects which they procure in gastro-enteritis, when applied to the epigastrium." The skin then, according to M. Goupil, sympathizes directly, under the influence of one revulsive mean; and inversely when acted on by another.—Who can listen to such reasoning—such extravagant assertions? And farther, is it not equally absurd to suppose, that the skin over the thorax entertains an inverse sympathy with the gastro-pulmonary mucous membrane and over the epigastric region, a direct sympathy with the same membrane? or, that the gastro-pulmonary mucous membrane, descending into the lungs and into the stomach, should hold different relations with the cutaneous surface? But with the same inconsistency, this author tells us again, "in cases where gastro-enteritis is the result of the disappearance of inflammation of the skin or subjacent organs, it is necessary to employ revulsives to recall it," and concurs with his preceptor, Brousshis, in directing blisters to the abdomen in cases of intestinal haemorrhage, but condemns the application of a vesicatory to the thorax in the commencement of pneumonia or pleurisy, as an incendiary practice. We object more to his fanciful theories, than to his practical precepts. The same principles are applicable, the same effects attend the employment of revellents, in thoracic and abdominal inflammations. The gastro-pulmonary mucous membrane bears the same relation to the skin, over the thorax and over the abdomen: in the acute inflammations of either cavity, violent revellents are improper, because they increase the general excitement and augment the force of the circulation, which affects in an especial manner the inflamed organs.

Blisters may generally be applied somewhat earlier, in inflammations of the lungs than of the stomach, inasmuch as the former are less excitable than the latter and not situated so near the surface. When inflammatory revulsives are applied very near inflamed organs, that is where there is but little substance interposed, there is danger of the revulsive inflammation, by sympathy of continuity, as it is termed, extending to and aggravating
the original affection. This danger, however, is seldom to be apprehended from blisters to the epigastrium:* and we appeal without the least hesitation, to the experience of American physicians, for their beneficial effects in gastric fevers, after the first violence of excitement has been subdued by bloodletting and other proper measures; and in debilitated subjects at the very commencement of an attack; for in such patients the general system is very little if at all disturbed, by the excitement of a blister and perfect revulsion is effected, from the gastric mucous membrane to the external surface. But generally, in cases of gastric fever, it is more safe and efficacious to apply them, first, to the arms and legs to abstract the excitement as far as possible from the point of concentration, and in the latter stage, after the system has been much reduced, to the epigastrium should it then be necessary; it will, however, seldom be required, at least such is the result of my own experience: but milder revellents, such as fomentations, cataplasms, cups and leeches, may be advantageously employed at the very first and simultaneously with blisters to the extremities. Besides the greater efficacy of epispastics thus applied at a distance from the suffering organ, a blister to each leg and arm will not cause one-fourth as much distress to the patient, or one-fourth as much disturbance of the system, as one to the epigastric region; and they will heal in half the time. So far from exciting much pain, in some cases of intense gastritis, the extremities suffer such a distressing numbness from the excitement being concentrated on the stomach, that the drawing of blisters is sometimes even pleasant to the patient, seldom the source of much complaint. In cases of acute gastritis suddenly occurring in persons previously much enfeebled, it will often be proper to employ blisters or sinapisms simultaneously to the extremities and the epigastrium, or in very quick succession.

With respect to the choice of place for the application of revellents—if the disease to be combatted supervene on the retrocession of an external inflammation, or the disappearance of some

*"Applied too near the diseased place, if the parts are thin, we run the risque of causing the external inflammation to unite with the internal, and consequently augment the evil. In the case where the affection we wish to displace, is without inflammation, this inconvenience does not exist any more than if the mean employed does not produce inflammation, as bloodletting, cups, &c."—Diction. des Sciences Medicales.
other affection, revulsion must be exercised on the part or organ originally affected; a much slighter irritation, excited there, will prove more certainly and effectually revulsive, than a much more intense degree elsewhere. In proof of this position, many interesting cases might be adduced, did our prescribed limits admit: the following very curious one must suffice. A patient admitted into the Hotel Dieu of Paris, complained of a most violent pain in the tendo achillis of the left leg, without either redness, heat, or swelling. After many curative means were employed in vain, it was discovered that some days previous to the attack, the patient had suddenly suppressed a gonorrhoea, and the affection could not be removed but by establishing the discharge from the urethra by the aid of ammoniacal injections.*

If the prominent affection be sympathetic of some other more obscure disease, it will be necessary to direct our attention primarily to the latter, on whose removal that which was sympathetically produced will subside. Pain in the right clavicle and shoulder is a symptom of hepatitis, and only to be relieved by means addressed to the liver. Headache generally depends on gastric disorder, and is removed by remedies that correct the state of the stomach. Distressing irritability of stomach and obstinate vomiting are, frequently, caused by sympathy with the uterus and requires remedies directed to that organ—in such cases, we have found a blister over the sacrum more effectual than any other remedy. Abortion may often be prevented and doubtless many of the distresses incident to pregnancy greatly mitigated, by revulsion practised on the same part. A host of visceral affections, some anomalous, others simulating colic, hepatitis, gastritis, pleurisy, &c. &c., are produced sympathetically, by irritation of the spinal marrow, and demand for their cure, leeches, cups, sinapisms, blisters, &c., along the course of the spine.†

Two very important considerations, in the administration of revellents, are duration and extent of surface. We often fail in our attempts to produce revulsion, by not continuing the application of revulsives long enough, and by not persevering to repeat

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* Dict. des Sciences Medicales.
† See Teale on Neuralgic diseases, and Essays in the 6th No. of this Journal by Dr. Heustis of Mobile and Dr. Ford of this city.
them when the first does not succeed. Blisters, though much less violent than sinapisms, generally effect much more, because they are more permanent in their operation. On the same principle, more benefit may frequently be derived even from cataplasms and fomentations long continued than from sinapisms.—Much benefit may be effected by the proper management of warm pediluvia, but to evince their best effects, they should immerse the legs nearly up to the knees, be continued from one to two hours, frequently repeated, and in the intervals substituted by bottles of warm water, warm bricks, warm cataplasms, &c. to the feet.

A comparatively mild revellent, long continued and applied to an extensive surface, will produce much more revulsion, than one much more intense, of less duration and extent: hence the efficacy of the general warm bath, of stimulating frictions of the skin and of diaphoretic medicines, whose beneficial effects depend, chiefly, on their causing a revulsive determination, to a part of such immense extent as the external tegumentary system. Certainly one of the greatest improvements, in modern medicine, is the more frequent substitution of external for internal medication. The steam bath is doubtless a potent mean, for causing revulsion to the surface and relieving the super-excitement and congestion of internal organs, and may be often very advantageously employed by scientific practitioners, in the treatment of congestive diseases; but its ignorant and ill-timed exhibition, in the hands of empirics, especially when immediately followed by cold applications, is unfortunately, too frequently the instrument of death.

In persons of nervous temperament, much caution is requisite in the administration of active revellents, as distressing and even dangerous results not unfrequently attend their application in such subjects; their use should, therefore, be avoided, except in very urgent cases, and the most gentle employed in their stead; but the state of the system, or the nature of the disease may afford a paramount indication for their employment, when the influence of temperament will not be felt—as exemplified in the following instance: A sinapism applied to a lady of nervous temperament, for the relief of a local affection, was followed the third day by a most tormenting secondary irritation which continued several days, notwithstanding all the remedies that could be suggested to allay it; subsequently, when in most imminent danger, caused
by repercussion of measles, the same individual derived, from the application of eight large sinapisms, the most signal benefit, without the slightest ulterior discomfort. These different results, under different circumstances, are easily explained.—When the first sinapism was applied, the skin enjoyed its accustomed degree of excitability; at the time of the second application, the excitement was abstracted from the surface and concentrated on the interior, and the most powerful stimulation was demanded to restore the equilibrium.

Notwithstanding so much has been written on revulsion, so commanding is its importance and universal its application in medicine, and so confused and vague the views generally entertained by physicians, that if these remarks afford any useful suggestions to the young and inexperienced members of the profession, or even serve to direct their attention more forcibly to it, my labor will be amply rewarded. We have endeavored to set forth, plainly, a few of the most prominent principles concerned in the operation and employment of revulsion; it would be an agreeable task, did our limits and engagements admit, to pursue the subject farther and consider the application of these principles to the remedial management of all or nearly all diseases, and to the modus operandi of at least a majority of our therapeutic agents; but this would be little less than to write a system of practice; for it will be found, on an attentive and philosophic examination, that this grand principle of revulsion is almost universally involved in the pathology and treatment of disease.
ARTICLE III.

Cases of Colica Pictonum: By L. A. Dugas, M. D., Professor of Anatomy, &c. in the Medical College of Georgia.

Case 1st.—M. J., about 12 years of age, apparently of a good constitution, and an apprentice printer, was taken in July last with pain in the bowels, which gradually increased in intensity until it became excrutiating. It had continued thus more than a week when I saw him, and learned that the most powerful cathartics had, during this time, been administered liberally without the slightest alvine effect. I found him writhing with agony; the pain had extended to the lower extremities, but especially to the feet; his system evinced no febrile action; his tongue was normal; in short, he presented every symptom of colica pictonum, to which his avocation exposed him. Having long since considered this a nervous affection, although the effect of a specific agency, I examined carefully the condition of the spine, but detected in it not the slightest tenderness when subjected to pressure, percussion, and lateral motion of the vertebrae. This circumstance deterred me from immediately directing my treatment to this region, and a few cathartic pills and a sinapism to the abdomen were ordered. On seeing him the next day, I found that the pills had not operated and that his sufferings were unmitigated, notwithstanding large doses of laudanum had been added to my prescription, during the night, by the lad's mother. I now ordered a blister to be applied to the spine, extending from the middle dorsal to the last lumbar vertebrae, and three inches wide; also another dose of the cathartic pills to be given whenever the vesication should commence. On my next visit, the following day, I had the gratification to find my patient perfectly free from pain; the blister had drawn finely, and the cathartic had acted kindly. Convalescence was rapid, and the boy returned in a few days to his former occupations, without any other remedy.

Case 2d.—M. B., an apprentice printer, about 15 years of age, has had several attacks of colica pictonum, at intervals of about six months. Called to him on the 9th August last, I found
him laboring under a violent return of this disease. The feet were also affected in this case.—No tenderness of the spine. A dose of oil and a sinapism to the abdomen were ordered, and remained without effect. On the 10th, finding the pulse full and resisting, at the same time that a tendency to stupor and delirium were manifested, 20 ounces of blood were taken from the arm, and the oil repeated. No diminution of pain having taken place, in the evening the dorsal and lumbar spine were freely cupped. 11th; passed a much better night than usual and feels much better, though not entirely relieved. A blue pill to be taken morning, noon and night. 12th; pains have returned with redoubled violence, delirium and slight convulsions from excessive suffering; bowels have been slightly moved; cups reapplied to the spine, and a blister over the cupped surface at night; blue pills continued. 13th; blister has drawn well; relief is complete. The bowels were now opened with oil, and the case discharged the next day.

Case 3d.—This is a return of the disease in the subject of the first case. It occurred on the 20th October, with precisely the same symptoms it had before presented. The costiveness had been endeavored to be removed by oil, &c. on the first day of the attack, but in vain. I immediately ordered a blister to the spine, which gave relief as soon as it acted—a cathartic then administered, acted without difficulty; and the case was discharged well the second day. Here the spine presented no tenderness.

Remarks.—It will be noted that the spine in neither of these cases, evinced the slightest sensitiveness; yet revulsives applied to it were invariably and promptly followed by the most decided relief. We may infer from this circumstance that the poisonous effects of lead are principally manifested in the sympathetic nerves, and that it is because of their free communication with the spinal marrow, that revulsives applied near this column act so advantageously. Indeed it would seem that the disease may in some instances extend, by continuity of substance, or otherwise, from the sympathetic nerves to the spinal marrow itself, thus accounting for the pains of the extremities, and even loss of motion, which so often complicate colica pictonum.

Augusta, November, 1836.
PART II.—REVIEWS AND EXTRACTS.


The work before us is the substance of a course of Lectures annually delivered by M. Amussat, in the amphitheatres of the Faculty of Paris. Professional rectitude and zealous industry have long since characterized this gentleman’s labours and impressed on them a practical importance far above the visionary productions of the closetted book-makers of the day. M. A. is essentially a practical man; one whose observations are all made at the bed-side and in the dissecting room, with an eye solely directed to the detection of truth and one whose purpose is the good of humanity. The writer of this notice, from his personal acquaintance with Mr. A., takes much pleasure in thus testifying to his claims at least to public confidence.

It is not our design to enter upon an elaborate Review of this work—the limits assigned will not permit it. We desire merely to call the reader’s attention to the subjects on which it treats, and to point out some of the views peculiar to the author. The first chapter is devoted to the consideration of the several varieties of stricture of the male urethra, their pathological anatomy, and the means of diagnosis; the second treats of catheterism with curved and straight instruments; the third relates to the means proper to relieve retention caused by strictures; the fourth includes the treatment of strictures; the fifth enumerates the accidents complicating strictures; and the last refers to diseases of the prostate.

M. Amussat divides strictures into three kinds, viz.: the organic, the spasmodic, and the inflammatory. Of the organic he establishes four species: first, freni; second, valvular strictures; third, those produced by a chronic swelling of the mucous membrane; fourth, callous strictures. The freni he considers formed in some cases by an acute inflammation of the mucous membrane of the urethra, passing into the chronic state at different points of this surface, and depriving it at these points of its natural extensibility. In other instances they appear to result from the cicatization of ulcers, and are then met principally about the fossa navicularis. M. A. denies that they are ever formed by false membranes, as has been supposed. With regard to the valvular strictures, which he thinks more common than all others, he views them as nothing more than freni which occupy the whole circumference of the Urethra.
Mr. A. denies that strictures ever exist beyond the bulb, and states that they are most frequently located about the junction of the bulbous and muscular portions, and at the origin of the fossa navicularis. His "exploring sound" is intended for the purpose of "examining the urethra from behind forwards, a direction in which the strictures are always more appreciable." Its mechanism is simple, and well adapted to the end proposed. In the chapter on catheterism, the author advances his claims to the discovery, or rather to the practical application of straight catheterism. Although many passages may be found in authors who preceeded him, which allude to the possibility of this operation, it must be conceded that the attention of the profession was not forcibly drawn to its advantages prior to M. Amussat's publication in 1822. "There are strong grounds for the belief, that M. A's. researches had no inconsiderable influence in the perfection of the instruments subsequently invented for crushing urinary calculi, for nothing useful had been done on the subject until it was demonstrated that the bladder could be penetrated as readily by straight as by curved sounds."

It will be perceived, (p. 77.) that it is to M. A. we are indebted for the valuable suggestion of "forced injections," in the treatment of retention. "Convinced of the difficulties often presented by catheterism and the introduction of bougies in cases of retention of urine from stricture, as well as of the dangers to which the patients are exposed, M. Amussat invented forced injections, a process still too little known, and which was unjustly at the time endeavored to be attributed to a German surgeon." This operation consists in forcing water into a catheter introduced as far as the strictured point; the urethra being pressed against the catheter prevents the reflux of the fluid, and this gradually penetrates the narrowed passage and finally makes its way to the bladder, after having sufficiently dilated the canal to permit the flow of urine.

After exposing the difficulties of obtaining a faithful impression of the stricture in the manner recommended by Ducamp, M. Amussat insists that, in certain parts of the canal, impressions may be left on the wax bougie whether the urethra be strictured or not. "The bulbous portion of the urethra is so arranged, that an impression can always be taken with the exploring sound, when the canal is healthy or diseased, when the experiment is made upon the living or the dead subject. When the extremity of the instrument has arrived at the bulb it is arrested by the cul-de-sac formed by the fibrous membrane which envelopes this body. However slightly the exploring sound be then pushed forwards, the spongy tissue which is thicker at the bulb than any where else, allows itself also to be more easily depressed, and then forms a kind of hollow in which is moulded the inferior part of the end of the wax with which the bougie is
armed, whilst above the wax enters into the area of the canal.—
Thus whenever an impression is taken at the bulb, if the operator
be guided by this impression, he will believe that the stricture is
more projecting below than above, and consequently will be in-
duced to cauterize especially in the former direction.

"To how many false passages has not this error given place!
It is so true that the cul-de-sac of the bulb can impose upon the
operator, that the majority of these accidents occur at this point."

M. A. gives the decided preference to the cutting instrument
over the use of caustic, in cases of valvular strictures. Indeed,
cauterization is attended with so much risk, that we are not sur-
prised to find it avoided as much as possible by so prudent a prac-
titioner as M. A. His instruments for scarification, though good,
are not described with sufficient lucidity to be understood by one
unacquainted with them. Whether this defect should be attribut-
ed to the translation or to the original, we cannot determine,
not having the latter by us.

The chapters on the accidents attendant on strictures, and on
the diseases of the prostate, are replete with interest. M. A's.
work is one in which the reader will find neither rhetorical nor
pedantic display; containing no theories, nor metaphysical spec-
ulations; it may appear dry and uninteresting to those who pre-
er fiction to truth; its merits will be duly appreciated only by
the man of practical experience.

The translation we doubt not is faithful, for in his zeal to ren-
der it so, the translator has but too frequently been led to give us
rather the words than the ideas of the author. These Gallicisms,
however, being rather more disagreeable than injurious to the
sense of the phrase, will not be uncharitably censured by those
who are aware of the difficulty of translating a language, with-
out being so much imbued with its genius as to confound this
with that of their vernacular tongue.

The translator will, we trust, not lay down his pen after this
effort; if he will favour us again with some of the many trea-
sures locked up in the French language, we promise no more to
notice the peccadillos of inverted and foreign phraseology. The
judicious notes interspersed through the body of the work, by
Dr. Jervey, will be duly appreciated by the profession.

D.

Augusta, November, 1836.
Extracts from the Note-book of a Physician of this City, during his attendance on the Parisian Hospitals.

M. Piorry's Remarks on the Blood.—M. Piorry thinks it pretty certain, that most of the cases of softening of the substance of the heart, now so often met with, are occasioned by protracted abstinence. He says, that independently of his having observed this very often, the analogous effect being produced on the other muscles, even during life, will strengthen his assertion. He considers coagulable lymph and the serum of blood as the very same fluid, and founds this opinion on experiments made by M. Serres and himself. The buffy or inflammatory coat that appears, on permitting blood to coagulate, is, according to him, nothing else than the deposit of a certain quantity of fibrine, held in solution in the serum. This once admitted, it is very easy to account for the formation of a greater or less quantity of buffy coat, according to the manner in which the blood is drawn, and the shape of the vessel in which it is received. If the orifice in the vein be made large, the quantity desired will be drawn in so short a time that the coagulation will commence in the entire mass at about the same moment, so that all the serum will separate from and cover the crassamentum, and deposit on the surface of this a thick buffy coat; but if on the contrary, the orifice be small, the discharge will take place so slowly that coagulation will have commenced long before the necessary quantity be drawn, and consequently, the deposit of fibrine from the serum will be made throughout the mass of cruror, instead of on its surface. With respect to the form of the recipient, it is obvious that if it be shallow and present a large surface, the coat will be thinner than if the same quantity of blood be allowed to deposit its fibrine on a smaller surface. Mr. P. adds in support of this opinion, the fact that by adding a small quantity of distilled water to the serum, a deposit will be produced precisely similar to that just alluded to.

Mr. P. confirms the experiments of M. Baruel, who says that the aroma evolved by pouring sulphuric acid on blood, is so strong and so different in that taken from different individuals, that he can thus very readily determine whether it has been obtained from a man or a woman.

Lastly, Mr. P. speaks of the effects produced on the quantity as well as quality of blood, by long fasting. Death from fasting, is caused by the diminution of its quantity and its almost total disappearance from the body. What is formed in such cases contains but very little fibrin. Reference is made to the experiments of Collard de Martigny on the subject.
M. Bouillaud’s Remarks on the Liver.—He considers hypertrophy of the liver to be caused, in most cases, by irritation and not inflammation. M. Pierry attributes it for the most part, simply to congestion; whereas Mr. Bouillaud seems to think the substance of the liver actually increases. The softening of the liver is characteristic of inflammation. He thinks many of the cases of suppuration of the liver reported, especially after surgical operations, are nothing more than the deposit of pus brought here by the veins, and previously absorbed from the suppurating surfaces. He makes the same observation with regard to the brain, &c.; but remarks that this deposit may, by its presence, induce the inflammation observed, and erroneously considered as the cause of the presence of the pus. If even an abscess be found without a softening of the parenchyma surrounding it, the presumption should be very strong that the pus was deposited by the veins. Pain may either exist or not, in hepatitis. Care should be taken not to confound the want of sound and of respiration in the lower part of the region usually occupied by the lungs, and usually owing to pleurisy, with that occasioned by hypertrophy of the liver, causing it to elevate the diaphragm and occupy the place of the lower portion of the lungs. The liver in its healthy state is perfectly insensible to the knife. The inflammation of the liver may extend by continuity of substance and cause peritonitis, pleuritis, &c. In hepatitis, the secretion of bile is generally increased; the stools are bilious; icterus often supervenes. Mr. B. thinks hepatitis often caused by irritating ingesta and all remedies which irritate the gastro-intestinal canal. These are absorbed and carried immediately to the liver, and consequently affect it also. He alludes especially to irritating cathartics; mercurials; alcoholic drinks. He thinks many of the cases attributed to the warmth of tropical climates, are due to the immoderate use of stimuli of all kinds, so freely used in those countries.

M. Dupuytren on Chorea.—M. Dupuytren exhibits to the class, a young girl, about 11 years of age, who was affected with chorea to such a degree, that she could not without much difficulty, carry food to her mouth. The only treatment has been cold affusions used daily; and in the course of about a fortnight she has so much improved as to be able to use the needle with facility. Mr. D. insists upon the great efficacy of this remedy.

Encysted Tumor of the Wrist.—M. Lisfranc mentions the history of an encysted tumor, situated beneath the radio-carpal ligament, which was laid open, and discharged a quantity of matter somewhat analogous to milk curd. In order to prevent the violent inflammation that usually supervenes in cases of this kind, and not unfrequently injures the movements of the
joint, he ordered the application in the vicinity of the wound, of
one hundred leeches after the operation, and a daily application of
fifty until all danger of inflammation had subsided. Through
mistake only fifty were applied the first day, which permitted the
development of a slight degree of inflammation; but the succes-
sive employment of the depleting animals soon allayed this, and
the patient is now well. Mr. L. thinks this a happy application of
the physiological principles, to the treatment of a disease here-
toore no less difficult to manage than rare in its occurrence.

M. Louis on Expectoration.—M. Louis contends that the
appearance of the expectoration can seldom lead to a certain
diagnosis in cases of pulmonary consumption. In fact, that there
are very few diseases of the lungs that can be characterized by
the expectoration. These are pneumonia and gangrene. The
former by the rusty, semi-opaque, or reddish expectoration; and
the latter by the peculiar gangrenous odour which occurs in no
other case. Mr. L. is aware that it has been said that in cases
of pleuritic effusion, attended with perforation, the expectoration
is of a peculiar nature, perfectly similar to the liquid pus found
effused in the pleura in such cases, and easily distinguishable.—
He however has never met but one case of pleuritic perforation,
and in this he could not discover the kind of expectoration de-
scribed. He thinks it probable, from the scarcity of the disease,
that many of the cases reported have been done so through error
of diagnosis.

Blushing.—M. Louis remarks, that Bichat was in error when
he thought the skin of the face different from that of the rest of
the body, inasmuch as it evinced by blushing, the emotions of
the mind. Had he ever uncovered a person at the moment of
blushing, he would have perceived that the whole surface of the
body partakes of this phenomenon and becomes flushed. It is
so marked in the patient before us, that he seemed at first to have
scarlatina.

Vaccine.—M. Guersent mentions the singular fact, that it is
with the utmost difficulty that vaccine can be made to take effect
in this hospital, (Hopital des Enfans). Mr. G. recommends the
matter to be taken from the arm as early as the seventh day, for
when taken later, or when the fluid becomes opaque, it produces
in this hospital no eruption. Is there no danger of destroying the
antivarious effects of the vaccine in the individual whose
arm is robbed at so early a period?

Rheumatism, &c.—M. Trousseau recommends as very effec-
tual, the introduction of morphia, or of belladonna, into the skin;
this being previously deprived of its cutis by hot water, or aqua
ammonia. Its known efficacy in tic-douloureux, led him to try it in rheumatic pains, gout, and obstinate head-aches, with the most signal success. The remedy should, of course, always be applied as near as possible to the affected part.

BUFFY COAT.—M. Rostan refuses to yield to the reasons assigned by Piorry and others, in proof of the want of coincidence of the buffy coat with inflammation. He thinks it not only indicates this pathological condition, but also its intensity.

SUDDEN DEATH.—M. Rostan remarks, on speaking of sudden death produced by rupture of the heart or aorta, that it is a great error to believe that apoplexy ever produced instantaneous extinction of life. It is impossible for any haemorrhage of the brain, unless it be situated at the protuberautia annulare, which very rarely occurs, to cause sudden death. There is always more or less lingering. We should therefore always suspect a rupture of the heart or aorta in such cases.

CANCER.—M. Trousseau considers cancer a living tissue, because it contains blood vessels, is subject to ulceration, granulation, &c.; but especially because it is neither expelled nor encysted, as are all foreign bodies.

DILUENTS.—M. Piorry says, the term Diluents, (Délavans,) applied to a certain class of remedial agents is highly correct, for by their use the blood is actually diluted and rendered less stimulating to the parts to which it is sent.

FALSE MEMBRANES.—M. Ducrotay de Blainville states, that false membranes never become organized, and that, consequently, inflamed membranes never form adhesions with each other when separated by effusions or other substances, nor unless they be in immediate contact.

This assertion is in direct opposition to what I this morning saw in the dissecting room; for on opening the body of a woman whose chest was the seat of an immense collection of pus, (say a gallon,) the lung of that side was found compressed against the mediastinum. Between the lung and the mediastinum there was a considerable quantity of albuminous looking matter, (coagulable lymph?) through which an immense number of capillary vessels could be very distinctly seen running from one pleura to the other. It was impossible to determine whether they originated in the plura pulmonalis, that of the mediastinum, or in the centre of the interposed substance,

The above is the title of a new periodical, the first number of which, published last month, we have just received. This work, as its title implies, is intended to furnish its subscribers with reprints of the most valuable foreign works, with the accompaniment of a portion of Journal matter. At the end of each year the subscriber will be in possession of about 2450 large octavo pages of choice medical works, printed on the best of medical book paper and with new type, so arranged as to be bound in complete and separate works, with title page and index to each. In addition to this, he will also have a volume of 432 pages of Journal matter, consisting of "histories of cases which have a definite bearing and application, summaries of opinions and practice, criticisms brief and pertinent, circumstances which exert an influence over the health of individuals and of communities," &c. &c.; making in all 2870 pages per annum for the very moderate price of $10—something less than half the cost of the same bought otherwise.

We fully agree with Dr. Bell, that "a periodical publication so deservedly and obviously beneficial," and we will add, economical, "to the profession, for whose use it is intended, as the Select Medical Library and Eclectic Journal of Medicine, needs little to be said in the way of explanation and eulogy."

We are pleased to see such an undertaking in the hands of Dr. John Bell of Philadelphia, whose well known professional worth is a satisfactory warranty of the most judicious selection of works and the best editorial management of the Journal.

The first number commences with the republication of Armstrong's Practice of Medicine, and comprises the first twenty lectures. It is not our purpose in this place, to notice the medical writings of Dr. Armstrong. They have been ably reviewed, and their merit established. Our space is too limited for an analysis which would do justice to a work, which should certainly be possessed, without abridgment, by every lover of medical science and usefulness.

We feel it due to our readers, however, as well as to the Editor, to notice, briefly, the Journal portion of the first number.—And in approaching this duty, we are disposed to say, that in addition to the promise of usefulness which the able editorship affords in this department, the very name, Eclectic, (and names, in modern nomenclature, mean the very nature of the things
named,) points to the solid basis of those truths, wherein alone can the edifice of true science be erected. It seems happily portentous of a faithful record of those truths from which alone the general laws or principles may be deduced, which like the sun’s rays in discovering to us the beauties of nature, shall dispense the light of true science around us, on all morbid phenomena. We rejoice at every signal of the approaching day, when physicians shall be teachable enough to receive the truths of nature, as facts which must govern their reasonings and their practice—when they will acknowledge that effects have causes, and that these bear a due proportion to those; and farther, that there are generally, in medicine, several causes, without either of which the effect could not exist. We see, in these signals, reason to hope that time past may suffice for us to have mourned over the desolations of systems which never had a solid foundation in truth; systems which sprang only from the phrenzied imaginations, the vanity, or the false reasonings of their authors. But we hasten to the contents of the Journal.

The number before us opens with Retrospection in Medicine. This is a subject which every candid physician will be ready to acknowledge has been too much neglected in almost all, and strangely and peculiarly in the latter ages. Such has been the intoxicating charm of novelty, and such the captivating sway of indolence, and we may add, such the servility of man, that he has only needed the phantastic trappings of novelty, with the prospect of exemption from mental toil, to induce him to follow superficially in the wake, to the neglect of every thing like profundity in science. And these things have been peculiarly grateful to the medical student who was delighted in being able to combine pleasure with the pursuit of fortune, “and gain the rewards of industry without suffering its fatigues,” & therefore fixed his eye on the printed parchment, rather than on that of which it should be the faithful testimonial. The idea of digging, deeply and toilsomely in ancient professional lore, has been spurned from him at the very onset. The name of Hippocrates, or Boerhaave, or even of Mauriceau or Cullen, has been scoffed at as out of date—as unfashionable. They have not reflected that truth is not, like an almanac, useless when out of date—that fashions have nothing to do with true science, and that, of all sciences, truth is of most importance in that of medicine. The whole article is so full of merit, proving the importance of retrospection, that we will not attempt to epitomize it, but refer the reader to it in its place, with the urgent request that every one will read it.

The second article is headed Clinical Medicine. With the spirit of building up science on the foundation of truth, the author very evidently purposes drawing the attention of the profession to the subject of clinical observation, and shews, by an able review of the subject, the value of a close and minute attention to
the characters of disease, at the bedside, and the indispensable necessity of a knowledge of anatomy and physiology, in order to be able to determine wherein, and to what degree the former may have deviated from healthy structure, or the latter from healthy function, under the influence of disease; as well as to be enabled to make those nicer specific distinctions, without which a correct diagnosis cannot be had.

"We must not only use, (says our author, p. 11.) but train our senses and intellect into the habit of patient attention, and learn to guard against the illusions of the former, and too hasty deductions by the latter. A preliminary acquaintance with the natural mechanism and healthy function of the human body, whose deviations from these states we propose to notice, is of course, indispensable."

"If (continues he, most correctly,) we know not the standard of health, how can we measure the deviations from it which should designate disease? This is almost a self-evident proposition, and for repeating which an apology would be due to the reader, were it not a matter of every-day observation, that hundreds, professing to pursue a regular course of study, hurry on at once to an investigation of morbid phenomena, and engage with ardour in disquisitions respecting their causes and seat, and the changes of structure by which they are accompanied, without the smallest preliminary knowledge of healthy organization and function. It is impossible for the most skilful and conscientious teacher of clinical medicine to put students, thus ignorant, in the proper path for accurate and independent observation on the phenomena of disease. They may learn to group symptoms, and to apply their information thus obtained after a nosological fashion; but for a due appreciation of the true changes, probable result, and indications for cure, they must be incompetent."

The whole of this article is one of great interest in the present attitude of the profession—just awaking to a sense of the necessity for the knowledge of the truths of nature, in order to the establishment of rational and sound therapeutics. For, as by the great law of inductive reasoning, pathological phenomena, contemplated as effects, determine by their analogy to other known phenomena the causation concerned, and, by a comparison with healthy structure and function, its kind and degree; so, reasoning from cause to effect, does the general law established determine the new powers or causes to be introduced into the concatenation of phenomena for the correction of morbid effects, which new causes or powers are the remedial means or therapeutic agents. And here is at once demanded for therapeutics, in general practice, as anatomy and physiology were for diagnosis, a knowledge of these powers, which is only found in materia medica and chemistry: and for surgery, all are required both for diagnosis and therapeutics.
The next article, is under the general head of Pathology and Therapeutics, and is on the subject of Acute Rheumatism. The subject of this article is one of great importance, because it is one of the most common, painful, tedious and uncontrollable afflictions—one which has but too often soiled the most faithful and talented of the profession.

In this we have M. Bouillaud's announcement, as a discovery worthy of note, of "the almost constant coincidence with acute articular rheumatism, of inflammation of the lining membrane of the heart (endocarditis,) or pericarditis, or both conjoined—endo-pericarditis." The editor is not struck with the novelty of M. Bouillaud's announcement, though he is fully satisfied of its truth. We are confident that we have, many months since, seen the announcement of the accompaniment of endo-carditis in these cases; and a demonstration of the fact has, we are sorry to know, occurred in our own practice during the present year. We did regard it, as the editor says, as a metastasis, instead of a part of the primary disease, and we confess we are yet inclined to the same opinion, both from the general character of rheumatism, and the want of conspicuous endo and peri-carditic symptoms, until the wane of the primary affection of the arm. According to M. Bouillaud, "the true seat of articular rheumatism is in the synovial membranes; the ligaments and parts external to the joints being only secondarily affected." In proof of this position he gives the fact, that in some fatal cases the synovial membrane has been found covered with coagulable lymph.

The treatment recommended is precisely such as the pathology of the case would suggest, viz.: "antiphlogistic, and above all, bloodletting." As the formula of M. B. goes to mark out to an extent proportionate with the nature of the lesion, a rigid antiphlogistic course, a point too often neglected in practice, we shall give our readers a concise view of it.

The first day of admission, the patient, if strong and of good constitution, is bled to 16 ounces. If very plethoric, 20 to 24 are taken—16 being, however, the usual quantity.

Second day.—Two bleedings from the arm of 12 to 16 ounces each, and in the interval, leeching or cupping, (the latter preferable,) to the extent of 16 to 20 3. The cupping glasses are applied around the affected joints, or to the pre-cordial region, if, as usual, the heart be implicated.

Third day.—One bleeding from the arm and the abstraction of 12 to 16 3, by cupping the joints, or the region of the heart.

Fourth day.—Fever, pains, swelling, &c. have sometimes completely subsided; in which case, no more blood is drawn. But if otherwise, the patient is to be once more bled to the extent of 12 or 16 3.

Fifth day.—Generally, the disease is in full progress towards
resolution. But should the fever, as is sometimes the case, continue well marked, depletion to 12\textsuperscript{3}, or cupping to the former extent becomes advisable.

From the sixth, seventh, or eighth day, the patient convalesces rapidly, and may now begin to take food.

In case of relapse, which however M. Bouillaud thinks less common than after the usual method of treatment, bleeding may be again and again necessary. Slight relapses may be treated by emollients, abstinences, baths, anodynes, &c.—the disease wearing itself out in a few days. To avoid relapses, the patient should guard most carefully against the slightest breath of cold.

As auxiliary to the above plan, M. B. resorted to abstinence, dimulcent drinks, blisters, compresses with mercurial cerate for resolution, emollient cataplasms, baths, opium in moderate doses, internally, or by the endermic method. To the last of these, the editor very properly enters his protest until the disease has been somewhat subdued by depletion.

The next subject under this head is the Difference between Acute and Chronic Rheumatism. Dr. Johnson of London, and M. Parise of France, have endeavoured "to separate acute from chronic rheumatism"—considering the former as arthritis, and the latter as a peculiar affection, probably neuralgic, of the investing sheaths of the muscular fibres, or perhaps the neurilema of the nerves themselves. The former of these opinions, we consider at least as old as the "Eau Medecinale d'Husson;" and as to the latter, we freely join with Dr. Bell in considering that there is no great novelty in them, and we design, on some favorable occasion, to give some views which we believe peculiarly our own, and of the truth of which we have been satisfied ever since we first saw Ten-Rhyne's account of acupuncture.

Connection of Hypertrophy of the Heart and Apoplexy.—Lallemand, Broussais, Andral, &c., but more fully, Bricheteau and Hope, have all conceived (the very evident fact) that the heart, particularly the left ventricle, exerts a very great influence over the brain, and have given cases illustrative of the position. M. Bricheteau gives twenty-two cases of apoplexy, in all of which hypertrophy of the left ventricle of the heart existed to greater or less extent.

M. Bouillaud found that out of fifty-four cases of hypertrophy of the heart, there were eleven in which cerebral disease, six in which apoplexy, and five in which ramollissement was found on dissection.

Dr. Hope gives twenty-nine cases of apoplexy, in twenty-eight of which, disease of the heart was found co-existent. He thence "concludes that the periods of life at which fatal apoplexy is most prevalent, are those in which hypertrophy of the muscular substance, or ossification of the valves and vessels of the
heart is of most frequent occurrence—namely, between forty and fifty, and between seventy and eighty." In some cases the lesion of the heart eluded suspicion. "The practical deductions from this pathology are clear—viz.: avoidance of all severe bodily exercise and all exciting emotions of mind. And as pointed out by M. Brichetecau, we should direct the occasional application of leeches over the region of the heart, instead of the temples, or any other part of the head, the internal use of digitalis, hydriodate of potassa, and other diuretics.

The next article contains Dr. Rennes' account of thirty-two cases of Frontal Neuralgia. Neuralgic affections have for several years occupied so large a portion of the journals, and become so familiar to most reading practitioners that we shall pass this article without farther attention.

The next article gives us an account of Dr. Barrea's case of Hemiplegia, which was cured by a formula, which it would be rather beyond the province of our apothecaries to supply, and which moreover is beyond the command of the whole Philadelphia College of Pharmacy: viz. "heavy thunder and lightning." Still, however, the case may have its uses. It may make a loud and forcible impression of a truth on man, which he has too long and too much neglected, that electricity in its various habitudes, is of infinitely more importance in the philosophy, as well as the practice of medicine than men have been willing to suppose.—For it seems that our old friend Magendie has taken the hint, and made the application of galvanic electricity to the chorda tympani of a young Polish officer, who lost his hearing at the battle of Ostralenca, which, after seven or eight applications, enabled him to hear the sound of a drum, then of clocks, bells, and finally speech. "It is, M. Magendie thinks, essential for the success of the plan, that there be direct contact between the nerve and the conducting wires"—which opinion is confirmed by two corroborative cases given by M. Roux.

We next have the use of Magnetism in Gout. We have here a narrative from the Bulletino delle Scienze Mediche of Bologna, which informs us that the ex-Dey of Algiers communicated, in 1831, to a Catholic clergyman, (Father Campagnati,) who was suffering under the gout, that the application of the loadstone was an Oriental remedy for the disease, and one of certain efficacy. The patient immediately procured a piece of loadstone and applied it in the next paroxysm, which was entirely removed by it; since which, he has always had recourse to it with the effect not only of invariably relieving the paroxysms, but of lessening both their frequency and severity. Similar results have followed its use by his friends, to whom he has advised it. Father Campagnati had been subject to the disease since 1805. On the first symptom, he goes to bed, and places the loadstone in close contact with the painful part; he soon falls asleep, and awakes free from pain and able to walk.
The next article is on the subject of the Fever, typhoid and continued, described by Chomel. This is an article of great interest—too long and too valuable to be condensed in this place, and we must refer our readers who have not the Lecon de Clinique Médicale, &c. of Professor Chomel, to the first number of the Eclectic Journal of Medicine, or the third number of the British and Foreign Medical Review, article second.

It may be profitable to our readers to observe, however, in passing this article, that the past summer has afforded us a number of opportunities for using the chloride of soda, as noticed by Chomel, but the use of which was more definitely and accurately established by Dr. Graves of Dublin, and have found it, thus used, a most invaluable acquisition to our remedial resources—coming happily into a place where all other resources had failed. As an anti-typhymonic in such cases, we hold it, at once entirely unrivalled. For its successful use, we refer the reader to the state of the system in which Dr. Graves found it most signally beneficial, which will be found in the Southern Medical and Surgical Journal, vol. 1, no. 2.

The next article given us in this number, is on Obstetrics.—Having already taken more space than we designed, we should pass this article by without comment, especially as it contains little of practical value; did we not feel bound to dissent from the position assumed by the Editor on some points in obstetrical instruction. Dr. Bell seems to object seriously to the time and space taken in lectures and in books, on the subjects of violent remedies, the use of instruments, dangerous incidents, unfavorable positions, menstruation and the generative function, formation of the decidua, &c.

It is most true that the knowledge of these matters is of comparatively rare use in practice; but if the consideration of violent remedies, or the use of instruments, or the occurrence of hemorrhage, convulsions, faintings, and such incidents; or if a bad position, were to occur but once in an age, the practitioner would be wholly inexcusable, who had not the means of decision in the case. And as some of these have their dangers as well as uses, great pains are necessary in instructing in their use and management. Nor are the functions above named, unimportant, either as facts of the natural history of man, or as to the light which a knowledge of healthy texture and function is calculated to shed on diagnosis, as well as treatment of female cases.

We must pass over the extracts from Drs. Davis and Hamilton on the subject of prolapsus uteri, with the observation only that the frequency and importance of this disease are such, that it demands much more close observation and reasoning on its nature and treatment, than we are inclined to believe they have given it. We have not the opportunity in this place of enlarging on the subject.
We pass over the subject of Hygiene in this number, as containing nothing of practical importance to us. A notice of Dr. Graves' lecture on the Chances of Life, we have given more at length in a former number.

Under the head of Medical Jurisprudence, we have a case of Suicide of a boy 12 years old, by Hanging. The case affords nothing of peculiar interest.

The efficacy of Hydrated Per-oxide, or Tritoxide of Iron, in cases of Poison by Arsenie, we have before noticed more fully.

Under the head of Surgery, we find nothing to attract our attention but the use of the Belladonna Ointment in cases of retention of urine, spasmodic constrictions of the uterus, and in strangulated hernia. The ointment for these purposes is as usual made of 3 ij. of the extract, to 3 i. of Lard. Thus we close our notice of a beginning undertaking, the first number of which has afforded us much pleasure, and which has our most cordial wishes for its success.

[From the Medico-Chirurgical Review.]

On the use of the Cochlea in the Organ of Hearing.—We need scarcely observe that the functions of the various parts that compose the internal ear in man, are imperfectly understood. That so complicated an apparatus should be essential to the perfect sense, is consistent with analogy and reason. But physical science has not hitherto informed us, what part is played by each component section of the mechanism, nor what is the individual office of the cochlea, the semi-circular canals, and so forth.

Weber, a physiologist of no mean rank, has laboured to prove that the office of the cochlea, is to appreciate those sounds which are transmitted through the cranium as a solid. The opinions and the reasoning of Weber on this subject are presented to the English public by Dr. Graves, the able Editor of our Dublin contemporary. We shall introduce such portions of his paper in that Journal, as will put our readers in possession of the main points which are urged in favour of the hypothesis in question.

"It is evident," says Weber, "that the propagation of sound to the internal ear, takes place not merely through the meatus auditorious externus, but also through the bones of the cranium; by the former we receive notice of sounds from without, by the latter, we more readily hear our own voice.—The vibrations produced by our own voice are indeed also heard by the route of the external ear, but they are conveyed with greater distinctness through the medium of the bones of the skull. Thus, if you stop both ears firmly with your fingers, so far is your voice from being rendered inaudible, that you hear it more distinctly and louder than before. If now we remove the finger from one ear, immediately we find that the sound of our voice appears stronger in the other. I shall now endeavor to prove that sounds propagated by and conveyed through the bones of the head, are heard chiefly by means of the
cochlea, whereas sounds coming from without by way of the meatus auditorius externus, are not so readily received by the cochlea, as by the route of the vestibule and the semi-circular canals.”

Weber observes that in almost all animals, the vibrations on which sound depends are communicated to the extremities of the acoustic nerve, by the two-fold means of a vibrating solid and a vibrating fluid. Why it should be so, is not at present clearly understood, but M. Weber asserts that it is the fact with regard to the greater number of animals.

Sounds lose comparatively little of their force by propagation through an uniform medium; but the contrary is the case when they pass from one medium to another, as from a solid to a fluid, or from a fluid to a solid. Thus sounds transmitted through water may be heard at great distances, while the head is under water; but they become inaudible the instant that the head emerges above its surface.

“Now it is found,” continues Weber, “that solid bodies communicate their vibration to fluids, with a facility proportioned to their extent of surface, and that solids receive vibrations from aeriform media more easily when the solid is shaped in the form of a membrane. A tense cord does not easily communicate its vibrations to the air unless it be fixed to some flat body, which being of a like nature solid, receives the vibration of the string without difficulty or loss, and propagates them to the air through the medium of its own extensive surface. It is an observation of these phenomena which has led to the adoption of sounding boards in those musical instruments, when the vibrations causing sound proceed from strings as in the case of the violin, the piano, and the harp, whereas sounding boards are not required in the various species of wind instruments. The reason of this difference is sufficiently obvious, in the one case a solid with an extensive surface must be brought into connexion with the vibrating string in order to diffuse its vibrations more energetically through the air, whereas in wind instruments the vibrations being derived from the air itself, no such provision is necessary.”

The two preceding facts may be considered as the premises of Weber’s argument. The conclusions follow thus.

The sonorous vibrations of the air in the mouth pass to the internal ear through the medium of the cranial bones. They impinge by preference on that portion of the acoustic nerve which is distributed upon the cochlea, because on it the nervous expansion is in intimate relation with its walls, which are themselves connected with the cranial bones. But the acoustic nerve where distributed through the vestibule and semi-circular canals is not so favourably circumstanced for receiving the vibration of the cranial bones, for here the nervous expansion is separated from the bony parietes either by means of a liquid secretion or of a loose cellular membrane. In accordance then with the law that sound is transmitted with most facility when the medium is not changed, M. Weber supposes that the acoustic nerve in close connexion with the bony cochlea, is more readily affected by vibrations of the cranial bones, than in the vestibule or semicircular canals, where another medium separates it from the bone.

With the following remarks, which we cannot materially abridge, we conclude.

“The preceding observations,” concludes Weber, “render it sufficiently apparent, that the membranaceous vestibule and membranaceous semicircular canals, differ in structure from the osseous vestibule and the osseous semicircular canals, in such a manner, that vibrations travel through the bones of the cranium with more facility to the cochlea and round sac, than they do to the membranaceous portions of the internal ear.

The next question is, whether the sonorous vibrations that are derived from the external air and proceed through the meatus externus to the ear, are propagated with greater facility and strength to the nerve of the vesti,
Use of the Cochlea in the Organ of Hearing. [Dec.

bule than to the nerve of the cochlea. In the first place, it is evident that the vestibule and the semicircular canals directly connected with it, must receive a stronger impulse from the aerial vibrations than the cochlea, for the former have a solid communication by means of the chain of ossicula with the membrana tympani, whose vibrations are consequently imparted at once to the membrane of the fenestra ovalis, whereas no such direct communication exists between the membrana tympani, and the fenestra rotunda. The membranes of the semicircular canals and the vestibule too, seem to be more easily set in motion by the fluid which invests and surrounds them, than is the case with the lamina spiralis of the cochlea. The latter is, nevertheless, furnished with provisions calculated to enable it to receive impulses from the external air also; for the fenestra rotunda, being closed by a membrane, must impart the vibrations that occur in the cavity of the tympanicum, while another opening, by forming a communication with the vestibule itself, must place the cochlea in connexion with the latter, in such a manner that the vibrations which the chain of ossicula have imparted to the fluid of the vestibule, must through that fluid be at once propagated to the cochlea.

I have next to prove the assertion which I made at the commencement, viz. that nature has so constructed the ear in man, and various other animals, as to make a provision for the reception of the sonorous vibrations in a twofold manner, by means of the acoustic nerve, which is so disposed in the internal ear as to present, for receiving these vibrations, a double surface of contact; the one consisting of a soft, pultaceous, nervous expansior, surrounded by a fluid, the other formed of a reticulated net-work of extremely minute, but firm, nervous, ramifications. The former receive the sonorous vibrations through the medium of a fluid, the latter of a solid. In man the cochlea is the portion of the organ where the firmer extremities of the acoustic nerve are disposed for this purpose. Fishes and amphibious animals have no cochlea, but they have an arrangement which answers the same purpose; for in osseous fishes we find that the membranaceous labyrinth contains three white little stony bodies, of great specific gravity, very hard, and much resembling vitrified argillaceous clay; two of these are enclosed with a sac full of fluid, adjoining the vestibule, and lodged in the lateral portion of the occipital bone; these lapilli are furnished with fine nervous filaments, fastened to rough depressions and elevations on their surface; thus vibrations are imparted from the lapilli to the acoustic nerves; the third lapillus is situated in the anterior portion of the membranaceous vestibule, and receives no nervous filaments. It has, however, another mode of communicating with the acoustic nerve, for it lies against a very large branch of that nerve where it expands on the membrane of the vestibule, and thus compresses this nerve between itself and the cranium. In cartilaginous fishes and in amphibious animals, in the place of these lapilli, we find certain little bodies consisting either of concrete gelatine or of a chalky pultaceous matter, and to which both Scarpa and myself have traced ramifications of the acoustic nerve; neither is the lamina spiralis of cochlea in man formed without reason of two structures, an osseous, and a cartilagino-concaceous tissue; for as the same nervous branches pass from the osseous to the cartilaginous portion of the lamina spiralis, it is natural to conclude that receiving sonorous impulses from both, these impulses are communicated by means of a different mechanism in the two cases. This idea is confirmed by an examination of the calcareous fragments found in the labyrinth of Rays, and which are composed of two portions; one pellucid and resembling a tremulous jelly, the other white and chalky, seem to discharge the same function in these animals, that the cochlea does in man. These fragments are so divided, that their gelatinous and chalky portions lie in contact by means of extensive smooth surfaces. Nature has so disposed the extremities of the auditory nerves in the semicircular canals of all animals, that these extremities receive
the sonorous impulses directly from a fluid. This is very plain, even in man, where the dilatations termed ampulla, and which correspond with a similar enlargement of the nerve, are both filled with and surrounded by a fluid. In fishes it is still more evident, for in Rays, a nervous filament can be traced to each ampulla, which it enters and forms within a crescent like septum."

We fear that in geniuses as the preceding reasoning must be owned to be, it is still extremely speculative. When we reflect on the facility with which sonorous vibrations are communicated through the whole body, composed as it is of media differing much more in nature and extent, than the nervous expansions on the cochlea and the semicircular canals can do, we are almost involuntarily led to pause before we yield implicit confidence to M. Weber's conclusions. Unfortunately, in the case of the internal ear, decisive experiments cannot be performed, and the observation of pathological changes in connexion with alterations of the functions, is attended with nearly equal difficulty. The amount of confidence extended to M. Weber's opinions will vary with the turn of mind of the individual who pursues them. One man yields assent to the evidence of probabilities, with much less difficulty than another. Whatever may be the actual truth of M. Weber's supposition, it is certain that it is ingenious, and possessed of plausibility. We think Dr. Gravies entitled to many thanks, for bringing this as well as other Continental papers before the profession in this country. This is not the first time, nor are we sure, will it be the last, that we have had or shall have occasion to express our sense of the zeal and the talents of that gentleman.

Comparative Mortality of Male and Female Life.—Mr. Rickman has been publishing some elaborate remarks on this, as indeed on other subjects connected with medical statistics, in the Medical Gazette. We shall notice some of the general results which Mr. Rickman draws, or which may be drawn from the data that he furnishes. Mr. Rickman deserves great credit for the industry he has evinced in collecting materials, and the zeal he has displayed in communicating his observations and conclusions to the public.

It is not necessary for us to repeat that the longevity of females exceeds that of males. This was first systematically shown by Karboon in a treatise published in the year 1742, and founded on the mortality of government annuitants in Holland. It is not then to prove this fact, already fully proven, that Mr. Rickman writes or that we condense his observations. His object is to show the various degrees of female longevity in the various classes.

He exhibits several tables. In the first are shown the results of a tontine, established under "the Million Act," in the year 1795; the last of the 1002 annuitants under which died in the year 1783. In the second table are the results of various tontines and other government annuities, current from 1785 to 1832, the rate of mortality for forty years being displayed. In the next table are the Parish Register Returns of the ages of those buried in eighteen years, to the extent of nearly four millions of persons. And finally we have a table of 1800 burials in Carlisle, between the years 1779 and 1787; and one of the Equitable Life Assurance Society, containing the ages at death of 5144 persons in 67 years, that is, from 1762 to 1829. These tables we need not insert, as their principal value must be to those engaged in actual calculations. We therefore proceed to Mr. Rickman's conclusions.

From the accurate investigation of the ages at death of persons in England, of all classes, for eight or nine years before, as well as after, the year 1821, it appears that the advantage in favor of the life of females amounts to four per cent. But in the classes who purchase government annuities, classes necessarily above the reach of hardship and privations, the advantage of the female is actually as high as thirteen per cent. A remarkable fact. Mr. Rickman observes in reference to this circumstance:

"That the increase of civilization should have protected the female sex from hardships of all kinds, especially from exposure to inclement weather,
and that this advantage added to their habitual estrangement from excesses in diet and exercise, should have lengthened life ten per cent beyond that of
the male sex, is not incredible, nor very surprising; but that this advantage
(for long life is but another word for comfortable life) should have been in-
increased to thirteen per cent by the progressive refinements of the last centu-
ry, is a fact which nothing but ample experience could have established.

The advantage of the female sex in the aggregate, is found to be four per
cent in longevity,—a difference sufficiently explained by their comparative
exemption from hard labor and bad weather; and this graduated diminution
of advantage, as compared to that of the select classes, leads to a persuasion
that no advantage whatever existed in favor of the uncivilized human female.

Physically as well as statistically speaking, an investigation of this ques-
tion is of some importance; and the Parish Register Returns of the ages of
the buried, may throw some light upon it. I ask your attention, therefore,
to the fact, that although the females are double the number of males alive at
100 years of age (129 to 60 in the year 1821), yet the deaths of the females
during the next ten years of life are in such proportion, that at the age of 111
the sexes are equal in number, viz. nine of each sex exceeded that age in
eighteen years (1813—1830); and beyond that age the females died earlier
than the males; so that the two last survivors were a female, who died at
120, and a male, who died at 124 years of age."

Mr. Rickman presents in the Gazette several tables illustrative of the in-
crease and decrease of mortality, at particular years, at decennary periods,
and in the two sexes. But as the laborious nature of the calculations is
heightened by the obscurity of Mr. Rickman's style, not one medical reader
out of six would be otherwise than mortally puzzled, at hunting the meaning
of the zealous and amiable dealer in deaths. Leaving many tables and some
most formidable diagrams to actuaries, we must content ourselves with pick-
ing out a fact or a conclusion here and there, for our edification or amuse-
ment.

Mortality of Doctors.—We are naturally deeply interested in the question:
are we longer or shorter-lived than other classes of the community? There
is necessarily much difficulty in ascertaining this point. No distinct records
of the births and deaths of doctors are extant; and those who arrive at con-
clusions on the subject must take for data the lives of physicians and surge-
os of eminence. But such data are very likely to prove erroneous. For,
in our profession, those who attain eminence are probably longer-lived than
the bulk of their brethren.

However this may be, Professor Casper, of Berlin, affirms that the medica-
 practitioners of Germany are shorter-lived than the members of other pro-
fessions. M. Du Bois, has arrived at the opposite conclusion. Of 850 med-
ical practitioners, he ascertained that 7 died between 20 and 30 years of age;
57 between 30 and 40; 83 between 40 and 50; 136 between 50 and 60;
202 between 60 and 70; 213 between 70 and 80; 116 between 80 and 90;
31 between 90 and 100; and 4 between 100 and 106. In fact, 365 of the
850 attained to 70 and upwards, which even exceeds the proportion allotted
to the long-lived theologians, of whom, according to Caspar, 42 per cent at-
tain the age of 70."
The material of these statements is taken from Eloy's Dictionnaire Historique.

The anxieties of the medical practitioner, his midnight watchings, and the
contaminated atmosphere he often breathes, must be sources of disease and
of mortality. But then, on the other hand, he has one great source of safety
open to him, which must tend to render the balance between him and his
patients even—he takes monstrous little physic. Whatever may be the real
state of the case, one practical rule is quite clear—we must all try to live as
long as we can, were it only for the honor of the profession.
Comparative Mortality of the Married and Unmarried.—Dr. Casper of Berlin, himself, we suppose, a married man, has published an Essay to prove that the married are much longer-lived than the single are. He asserts that, in the case of females, the mean duration of life for the married woman of 25, is about 36 years; while for the unmarried it is 30 1/2. At 30, there is a difference of four years in favor of the married; at 35, two years, and so on.—With respect to men, he asserts from Deparcieux's and the Amsterdam tables, that the mortality of those from 30 to 45 years of age is 27 per cent for the unmarried, while it is but 18 for the married; and that for 41 bachelors who attain the age of 40, there are 78 married men. The difference becomes still more striking as age advances: at the age of 60, there are but 22 unmarried men alive for 48 married: at 70, eleven bachelors for twenty-seven married men; and at 80, for the three bachelors who may chance to be alive, there are nine benefactors. The same proportion very nearly holds good with respect to the female sex; seventy-two married women, for example, attain the age of 45, while only fifty-two unmarried reach the same term of life.—M. Casper, in conclusion, considers the point as now incontestibly settled, that, in both sexes, marriage is conducive to longevity.

Mr. Rickman has very properly and ably exposed this libel on bachelors and maids. He has shown, satisfactorily that no material difference is appreciable in their respective longevities. The whole of M. Casper's conclusions are based in miscalculation and error. So let our younger readers take heart. At the same time, practical experience convinces us that, in the female sex, many diseases result from the inability to obey the dictates of nature. Who does not every day witness the thousand forms of hysteria with its many consequences, in unmarried women. And can any one believe that this is not prejudicial to longevity and health. The statisticians may, from circumstances, be unable to determine the numerical differences in the deaths of married and unmarried females, but the surgeon and physician who see human nature in detail, cannot shut their eyes to the obvious fact—that whether the unmarried can be proved to be as long lived as the married or not, they are certainly subject to more miserable maladies, and their health is impaired, if their existence is not shortened.

With males the question is widely different. Fortunately or unfortunately for themselves, they are not restrained from sexual gratifications, like the weaker sex. Marriage then, in their case, cannot be sexually very important, and its influence must be exerted on their general habits and feelings.

Professor Mueller's Account of the Arteries that produce Erection of the Penis.*—Professor Mueller of Berlin, has lately discovered, or, at all events, described the arteries of the penis which produce the phenomenon of its erection. We will present the most essential portions of his statements on the subject.

We need not remind our readers that the penis is almost exclusively supplied from the internal pudic artery. This ultimately splits into two branches, the artery of the corpus cavernosum penis, and the dorsal artery of the penis. The former penetrates the corpus cavernosum at its root, and ramifies within it; the latter, after sending twigs to the fibrous envelope of the penis, its fascia, outer skin, and prepuce, terminates by ramifying in the glans.

"The distribution of the principal branch of the artery penis was all that was hitherto known of this important vessel; it is in the more minute distribution of its branches through the corpus cavernosum penis that the secret of the cause of erection has remained concealed. It is not a lucky accident, but a systematical arrangement, and investigations proceeding from certain combinations that have guided me, in this instance, to an important discove-

* Medical Gazette, January 9, 1836.
ry. It is generally thought that the arteria profunda penis, which nourishes the substance of the penis, is at the same time capable of filling the cells of the corpora cavernosa, with blood during erection also; that the nutritive blood, as well as that serving for the purpose of erection, proceeds from the fine twigs of the same vessel into the fine (capillary) veins; that it passes inwards from these into the sinusous veins, and again from these to the vena dorsalis penis; and that the state of erection distinguishes itself from the ordinary state of circulation in this organ, partly in the quantity of blood circulating in its vascular net-work, and partly in an impediment offered to the return of the blood through the veins of the penis. The older writers, on the other hand, considered the sinusous veins of the corpora cavernosa to be cells; imagined that the nutritive blood supplied by the ordinary circulation did not at all reach these cells, or pass through them, but was carried off by appropriate veins; and that still, during the state of erection, the cells of the corpus cavernosum were filled with blood. Both views are, as we shall see, incorrect. The opinion of the old writers is proved to be unfounded, as well by investigations on the dead body as by the vivisections of beasts. In many experiments performed on the living horse, dog, ram, &c. I have observed, that upon making an incision in the corpora cavernosa, these bodies were no, in their unexcised state, much charged with blood, but that blood is contained in their sinusous veins, although certainly in less quantity than in the corpus cavernosum, urethra, which bleeds freely when cut across. For her, in the majority of human subjects blood is found in the sinusous veins of the corpora cavernosa penis."

M. Mueller, it appears, had long thought that erection did not depend on the arrest of the flow of blood in the dorsal veins of the penis. He had also thought that different branches of the artery of the corpus cavernosum served for the purposes of nutrition and erection. It was "one of the happiest days of his life," when he found this, his conjecture, true, and "the wonderful difference" between the two sets of twigs alluded to as described by the Professor as follows:

1. "The nourishing Twigs (Rami nutritii Arteria profunda Penis).—When an injection of the arteries of the penis is made with size and vermillion, a considerable portion of the injected mass is always forced into the cavities of the corpora cavernosa, as well in the human organ as in that of the horse and dog. When this mass of injection (of which I am still uncertain as to the means by which it enters into the cellular structure) is washed out, the rami nutriti will become evident. The rami nutriti of the spongy substance (which, since they are upon the walls of the sinusous veins in the interior of the penis, may be also called the vasa vasorum) are found to be as minute as the arteries of any other part; they distribute themselves upon the pillars of the spongy substance, until they become too fine to be perceived by the naked eye. As in the arteries of other parts, they anastomose; and lastly they form, as in other parts, the capillary net-work which is so difficult to be injected in the penis, owing to the facility with which the injection escapes into the cavities of the corpora cavernosa.

2. Arteria Helicina Corporis cavernosi (in man).—In order to see these arterial branches satisfactorily, an injection composed of size and vermillion must be thrown into a separated penis, through the arteria profunda. (In the horse the pudendal and obturatorial are to be injected together.) As before mentioned, a part will escape into the cavities of the corpora cavernosa. When the injection has become cold, the corpora cavernosa must be cut open longitudinally, and that portion of the injection which has escaped into the cells is then to be washed out with great care. If a size of a greater degree of consistence has been employed, it will be found to have become solid on cooling. In this case the penis must be soaked in water, and the mass squeezed out softly and carefully, until the cellular tissue is
emptied. When a thin size has been used this will, of course, not occur; then washing alone will be sufficient.

If the tissue of the corpora cavernosa be now examined with a magnifying lens on its posterior third, it will be seen that, in addition to the distribution of the arteries already described, there is another class of vessels, having an entirely different form, size, and distribution; these branches are short, being about a line in length, and a fifth of a millimetre in diameter; they are given off from the larger branches, as well as from the finest twigs of the artery. Although fine, they are still easily to be recognised with the naked eye; they come off from the artery mostly at a right angle, and projecting into the cavities of the spongy substance, they either terminate abruptly, or else swell out into a club-like process, without again subdividing."

Omitting the reference to these vessels in the stallion and the dog, we may proceed with M. Mueller’s description of them in man.

"These twigs branch off from place to place, sometimes alone, sometimes in greater number: little bundles will be seen, in which from three to ten twigs stand together; these, as well as the former, project constantly into the cells or venous cavities of the corp. cavern. penis. When the arteries thus form a tuft, they arise by a common stem, which immediately divides itself into the separate branches. Sometimes such a vessel, whether it proceeds from the artery as a single branch, or forms part of a cluster, divides itself into two or three parallel branches, which also end either abruptly, or else swell out near their extremity.

Almost all these arteries have this character, that they are bent like a horn, so that the end describes a half circle, or somewhat more. When such a branch so divides itself, there are formed doubly bent twigs, inclined one to the other. I have before observed, that many of these arteries enlarge towards their end; this enlargement is gradual, and is greatest at some little distance from the extremity, so that the end is somewhat conical. This cone, however, is rounded at the point, and giving off no branches, terminates immediately. The diameter of these twigs, in their middle, is from the fifth to the sixth of a millimetre: they preserve a great similarity: thus those which branch off from the large trunk of the artery, are not thicker than those which take their origin from the finest subdivisions."

Although these vessels project into the venous cavities, yet they are not entirely naked, but possess a delicate membranous covering.

"The arteries have no openings which can be detected, either on their surface, or at their extremities; and if the blood, as it is probable, proceeds from them during erection in greater quantity into the cells of the corp. cavernosa, so it must either pass through invisible openings, or at least through openings which only become enlarged by the great extension of the vessels. If the great number of these tendril-like branches which are given off from the art. profunda penis be considered in comparison with the many fine nutritive twigs of the same vessel, it must be evident that when the former are filled, they must take up by far the greater portion of the blood conveyed by it. The diameter of the art. profunda, therefore, not only includes the nutritive twigs which arise from it, but also the tendril-like branches, which likewise deriving their blood from it, yet it is probable, allow none to pass except during erection; therefore the blood in the unexcited state of the penis only pervades the nutritive branches, and thus only reaches the commencement of the venous cells in smaller quantities; whereas during erection, it is probable that the blood passes in quantity through these tendril-formed vessels into the cells."

M. Mueller states that these vessels are most numerous in the posterior part of the corpora cavernosa penis, and in the bulb. In the middle and anterior portions of the former, they occur but seldom, and in the anterior part of the corpus spongiosum urethrae they are less frequent; in the glans, M. Mueller has not distinguished them.
Such is the account of M. Mueller. These minute anatomical investigations can be prosecuted by so few, that the statements of a discovery must be taken for granted, until some industrious injector or dissector arises to confirm or to confute them. As the phenomenon of erection is by no means confined to the posterior part of the corpus cavernosum, it appears rather anomalous that there only these vessels, so essential to that phenomenon in the opinion of our author, should be numerous. This difficulty may perhaps, be more apparent than real, and we shall congratulate M. Mueller on his discovery, if it is supported by the examinations of others.

On the Treatment of Inflammation of the Testicle by means of Compression:

By J. C. F. Fricke, Surgeon to the General Hospital in Hamburg.

[In presenting to our readers the following important document relative to a new mode of treating Hernia humoralis, or swollen testicle, we shall for the most part make use of the author's own words, merely omitting phrases and brief paragraphs, here and there, which do not seem essential. It may be well to inform the reader, that Dr. Fricke is a surgeon of great reputation and of most extensive experience, and the author of some surgical works of much practical value.]

I had long meditated (says Dr. Fricke,) on the discovery of some means to obviate the tediousness and other numerous inconveniences attending the common mode of treating inflammatory affections of the testicle, by leeches, poultices, &c.; and at length it occurred to me that compression, which I had found so very serviceable in some analogous cases, offered the fairest prospect of a favorable result. The event completely answered my expectations; and I had soon the pleasure to perceive how, by means of this, the disease could be removed, in a simple, easy, and surprisingly rapid way.

Generally speaking, compression may be employed in every kind of inflammatory enlargement of the testicle, and from whatever cause produced.—We have found it equally useful in cases arising from gonorrhoea, whether springing from sympa thy in the inflammatory stage, or originating in what is called suppressed claps, and in such as have arisen from external injuries. The degree or period of the inflammation makes no difference.

The only contra-indication to the employment of this treatment, worthy of consideration, has been found in an affection of the general system. For instance, if the local inflammation had arisen from errors in diet, such as abuse of spirituous liquors, or if, contemporaneously with it, considerable disorder of the gastric system had shown itself, it was found necessary to remove this state before recourse was had to compression; as, otherwise, the usual result was not obtained, and the employment of compression was obliged to be postponed for a period.

In many cases the compression at first increased, in some degree, the pain of the inflamed testicle; in some cases (particularly when applied too forcibly,) it produced great pain; but this never continued long: the patient, after a short time, often in a quarter of an hour, and even in cases where the pain had been extremely severe, finding himself so completely relieved as to be able to leave his bed and to walk about in his room.

In inflammatory swellings of quite recent origin, a single application of the compression was found sufficient, in many cases, to remove the disease. When it was of longer duration, (say, from three to eight days,) it was found necessary to repeat the compression two or three times. Swelling of the spermatic cord, if it was not very considerable, did not at all contra-indicate compression; nor yet did other contemporaneous local affections, such as buboes, ulcers, &c. When a general febrile state was produced by the orchitis, compression was found the best means speedily to remove it, at least where the vascular reaction was not too great; although, in extremely rare cases, this was produced by the compression itself.
The unpleasant part of the treatment by compression was, as I have said, its occasioning pain in some cases. This result was observed chiefly in the early period of my practice, and I considered it as owing to our making the compression too strong. In my latter practice, on avoiding this, we heard no more of pain being produced by it. In some cases, in which the affection had been previously treated by cataplasms, &c., and where we had only made one application of the compression, there still remained for some time a slight painful swelling of the testicle; but it gradually disappeared.

In several cases I had occasion to observe, as the consequence of compression, nausea, inclination to vomit, and bitter taste in the mouth, coming on without any other evident mark of gastric disorder. When this was the case, compression evidently was of no avail; the pain remitted little or not at all, and the swelling did not decrease. On removing the compression, giving an emetic, or applying a poultice to the stomach, the symptoms of disturbance soon disappeared. In the few instances in which this affection of the stomach was observed, the compression had been for the most part too strong; in two of them, however, it seemed to depend on previous disease in the abdomen. It is however to be observed, that the cases in which this sympathy exists in such a degree as to give occasion to gastric disorder are, generally speaking, so rare as not to be regarded as any drawback on the superiority of this mode of treatment. It is necessary, however, in all cases where such a disposition shows itself, immediately to put an end to the compression.

The good effects of the compression show themselves very soon after its application, and the speedy abatement of the pain is always the surest sign of its efficacy. If the pain continues some hours in any considerable degree, a general disorder of the system may be looked to as explaining the failure of the treatment.

I will now give a comparative statement of the results of the treatment of orchitis by leeches, cataplasms, &c., and of that by compression, taken from the journals of the General Hospital, since the commencement of the practice in 1832. In all, we have compared seventy-four cases: of this number, fifty-one may be regarded as acute cases, or cases in which the symptoms of inflammation were strongly marked, and twenty-three as chronic cases, or cases in which the inflammatory symptoms had more or less remitted.—

Of the first division (of fifty-one), eighteen were treated with leeches, cataplasms, &c., and thirty-three by compression; of the second division (of twenty-three), nine were treated with poultices, leeches, &c., and fourteen by compression. The following are the results of the two different kinds of treatment, as regards the time occupied during the case:—Of the thirty-three cases of acute orchitis treated by compression, the average period of treatment was nine days;—of the eighteen acute cases treated without compression, the average was thirteen days:—of the fourteen chronic cases where compression was employed, the average period of treatment was twelve days:—of the nine cases submitted to other treatment, the average was fourteen days. Such were the average results; some of the comparative results of the two kinds of treatment, in reference to individual cases, were as follows:—Of the thirty-three acute cases treated by compression, five were cured in three days; five, in five or six days; six, in seven days; of the eighteen acute cases treated by other means, one case was cured in three days; one, in five days; two, in from seven to eight days, seven, in from eight to eleven days. In regard to the chronic cases, out of the fourteen treated by compression, one was cured in two days, and the greater number in ten or twelve days; while, of the nine cases in which cataplasms, leeches, &c. were used, the cure took place in no case in less than eight days.

Latterly, when experience had enabled me to treat the disease with more circumspection, the results of compression were much more favorable. In the
present summer (1835,) I treated in this way seventeen cases, which are not included in the above statement. Of these were cured in one day, one; in two days, four; in three days, four; in four days, two; in five days, three; in nine days, one; and two in ten days. The three last were severe and unfavorable cases. In nearly two-thirds of the whole of the above-mentioned cases, no hardness or swelling of the testicle remained behind.

I will now describe the manner in which I apply compression. At first I attempted to compress the testicle against the thigh and pelvis, by passing over it long and wide strips of sticking plaster, from the nates up to the abdomen. I was soon forced to give up this plan, as well because the compression produced by it was neither secure nor equal, and the patient was forced to keep himself in bed, and, even while there, to avoid all considerable movements. After many other unsuccessful attempts by means of temporary bandages, &c., I at length adopted the following, which is proved by experience to be the best.

For the purpose of compression, I employ strips of sticking plaster; the plaster being made very adhesive, but not of too irritating materials,* and spread on linen the breadth of the thumb. No preparatory measures are required; no leeches, cataplasms, &c.

In slighter cases the patient may stand before the surgeon, leaning against the wall, or he may rest on the edge of the bed or sofa, in such wise that the scrotum may hang freely down. If the scrotum and neighboring parts are much covered with hair, this must be removed; but, generally speaking, this is unnecessary.

The surgeon takes the scrotum in one hand, and separates the diseased from the sound testicle, while with the other hand he gently stretches the skin of the scrotum over the former; the spermatic cord is isolated in the same manner. If the testicle is much swollen, it must be held by an assistant; otherwise, it suffices for the patient himself to keep the sound testicle somewhat separate from the diseased. The surgeon now applies the first strip of plaster over the isolated spermatic cord, about a finger's breadth above the testicle, holding the end of the strip with his thumb, and passing it round the cord. He proceeds in the same way with the second strip, which must either in part or altogether cover the former. The first part of the process must be carefully done; the strips must compress the cord closely, (and for this purpose it must be kept approximated to the skin, which is to be tightly stretched over it;) otherwise, when the other extremity of the testicle is compressed, the upper end will be apt to slip upwards through the loose rings of sticking plaster; a circumstance not only occasioning pain, but rendering the whole operation abortive. In this manner we proceed, laying strip after strip, the last always lying over the former by a third of its width, until we have reached the thickest part of the testicle, and where it begins rapidly to decrease in diameter. The surgeon now changes his mode of proceeding, and, laying hold of the testicle already covered, passes his strips from above downwards over the lower portion of the testicle, and up over the back part. In this way the whole remaining portion of the tes-

* The following composition, contained in our Codex, is the plaster which I have employed for some years, and has been found preferable to all others:—

\[ \text{R. Emplastri Lithargyri, partes sex;} \\
\text{Colophonii pulverati (Picis nigrae,) partem unam. Scorsim liquata comminiscantur.} \]

The Emplastrum Lithargyri employed is made as follows:

\[ \text{R. Lithargyri subtilissime levigati, lib. v.} \\
\text{Olei Oliv. lib. ix. M. Coque igne moderato, spatula lignea semper agitando et pauxillum aquae subinde instillando, donec Lithargyrum perfecte solutum sit, &c.} \]
ticle is closely enveloped and compressed. I have already said that the compression must not be too great; and in most cases the surgeon will be able to judge as to the proper degree by the speedy disappearance of all the pain which had previously existed.

If both testicles are affected, we proceed to envelope one in the manner now described: when this is done, it will be found that there is not room left for applying the circular strips in the same manner to the other; we are therefore under the necessity of including both testicles in the circular strapping, the testicle already covered serving as a point of support for the other. Over the lower portion of this second testicle the strips are passed, as in the former case, from behind backwards.

In some cases where the skin is irritable, ulcerations take place; in this case small slits must be cut in the plaster, and a goulard lotion applied, which soon heals them.

Generally speaking, the patients can leave the bed immediately after the strapping, and walk about the room; and, in cases where the inflammation is not very great, or has been taken early, they may even go out and work a little.

The renewal of the straps must depend on the decrease of the swelling and other symptoms. In many cases one application suffices; otherwise, we remove the plasters when they have become so loose as to admit the introduction of the scissors between them and the skin.

Any other treatment the patient may require must depend on the complications of the disease: the orchitis, as such, needs nothing besides the compression.

In those inflammations of the testicle which originate from blows or pressure, &c. compression has proved the best treatment. Here, if the inflammation ran very high, I have usually applied leeches in the first instance, and kept on poultices for one or two days; but in slighter cases I had recourse immediately to compression.

The following are the principal advantages which the treatment of orchitis by compression possesses over other methods:

1. The speedy removal of pain.
2. The quick removal of the disease itself.
3. The simplicity of the method, and the slight trouble thereby given to the patient.
5. The comparatively slight care and attendance required on the part of the surgeon.—The two last points are of considerable importance in the hospital practice.—British and Foreign Medical Review.—Zeitschrift für die gesammte Medicin. B. i. h. 1. 1836. Hamburg.

On the employment of Belladonna in Injection, and Mercury in the metallic state in Ilius.

M. Hanius has had recourse, with three patients affected with Ilius, to the following lavement:

R. Fresh Root of Belladonna 3 j. Pour upon it a sufficient quantity of boiling water and digest in a close vessel for one hour. Add to 3 j. of the strained liquor, Infusion of Chamomile 2. s. for an injection.

The administration of this injection was almost always immediately followed by a cessation of vomiting and the evacuation of stercoraceous matter by the natural way. Once only was observed pretty profound narcotism, which was nevertheless promptly dispelled. The same medication has been crowned with success in a case of colica pictorum.
With respect to the treatment of Ilius by mercury, M. Hanius alleges,—1st. It is not correct to say, as M. Ebers recently has, that the metal passed promptly and by its own weight, from the stomach into the intestine. 2. Supposing that had taken place, and that the metal had accumulated against the obstruction, we cannot conceive how the antiperistaltic movement, provoked by obstruction of the digestive canal, will be overcome by an obstruction more considerable. 3. Still more inconceivable is it, that the intestine is not torn by the weight of metal accumulated in one point alone; weight which, according to Hauff, has been borne, in certain circumstances, even to three pounds. 4. That when the continuity of the intestinal canal is re-established, the mercury, instead of being passed together, as it ought to be, is, on the contrary, expelled by small parcels. 5. That the horizontal disposition of many parts of the digestive canal, will not allow us to suppose that the mercury will run through them, by the power of gravity alone. M. Hanius has proven the correctness of this reasoning by experiments directly in point, on dogs, and he has seen that the mercury is arrested in the stomach, that it remains there a shorter or longer time, that it passes into the intestines only by little particles, and by virtue of the peristaltic motion; finally, that it attaches itself strongly, in separate globules, to the surface of the intestines. If then the injection of this metal soon causes a cessation of the vomiting, it is because accumulated in the lowest part of the great curvature of the stomach, it opposes, in that point, by its weight, to the antiperistaltic motion—an obstacle equal, if not superior to that which is opposed to the peristaltic motion in the intestines, by the invagination or accumulation of fecal matter, &c.—Journal der Praktischen Heilkunde von Hufeland and Osann.—Journal des Connoissances Medico-Chirurgicales.

Continuation of the Notice of M. Lisfranc's Clinics.

We now come to the subject of "Chronic Metritis, or Simple Hypertrophy of the Uterus. It appears evident from this paragraph, and the next, which he denominates "Hypertrophy of the Uterus, with Transformation of Tissue," that M. Lisfranc uses the term Hypertrophy generically, as including two species, viz. simple hypertrophy and hypertrophy with transformation of tissue, &c.

We are compelled to dissent from such a view of the cases herein detailed by M. Lisfranc. We consider the name hypertrophy, eminently calculated to lead to error in pathology, and consequently in therapeutics. We are also disposed to find fault with that looseness of nomenclature which confounds metritis, or any species of inflammation with hypertrophy. We should
have been pleased to see the first term, metritis, continued alone in application to the cases on which M. L. gave this clinical lecture, as, with the assistance of a prefix, it is calculated to point with great precision to the pathology in the different varieties of these cases. But the instant things so different in themselves are made synonimes, each confounds the other, and the definite bearing of either or of both, is destroyed. But this subject enlarges so much on our attention, that, for want of room in this place, we must refer the reader to the first part of the next (January) No. of this Journal, where we intend to notice it at greater length.

The next subject noticed by M. L. is what he calls "hyper trophy of the uterus, with transformation of tissue." This subject we must also refer as above. This paragraph does not afford us any pathology of this case. It contains a good description of a certain case of diseased uterus and without any satisfactory reference to causes. Certainly there are causes of effects which are only momentarily in application on the production of continued effects. Such are not necessarily required for correct indication, if that their manner of operating be well understood; and the principle use we have for a knowledge of such, is that, knowing their mode of operation, we may better understand their effects, which are presented to our view in the character of morbid phenomena, or disease. But often some of the causes are abiding, and are continually renewing and extending their effects. Such must be both detected and well understood, before we may hope for rational indication in the case. The treatment, as far as it goes, is well adapted to the state of things in the case described. But the modus operandi of the principle remedy—the pessary in the shape of a bilboquet,* which he considers is by compression, we think entirely defective. We should surely not expect prompt, or certain effects from compression alone on any one point in diseases elsewhere, and especially when that pressure is only made occasionally and for a short time. Yet such we perceive to be his views by the following sentence.

"An excellent remedy is compression, applied by the use of a pessary of the shape of a bilboquet; this instrument being well placed, the uterus, by its tendency to descend, especially whenever the patient moves, takes exercise, or goes to stool, is pressed against it, and thus produces the effect desired."

We shall pass over "Tumours of the Uterus," "Miliary Polyli of the Os Tinæ," "Tubercles of the Uterus," and "Ulcerations of the Os Tinæ," which contain so much that is valuable,

* Bilboquet, is a term which the reader may not be able to understand even with the assistance of his French Dictionary, unless he be familiar with the French toy of that name. The hour-glass shape, with which all readers are familiar, will be about as descriptive.
Continuation of Notice of M. Lisfranc's Clinics. [Dec.

that every one should read these notes; though they are not exempt from errors in pathology, nor from some in practice to which these lead.

On the subject of Leucorrhæa, we find renewed evidence that M. Lisfranc is a practical, rather than a reasoning man.—Whilst we are bound to consider him as having taken most shallow etiological views of this case, his practice for its correction is well calculated for good effect—stopping short, however, as it must necessarily do, of that extent to which a rational pathology would have led. We intend to allude to this subject, however, in the next No. The following remark of M. L. is worthy of all attention. "It should be borne in mind, that when these discharges have long continued, they are true emunctories, and must therefore not be suddenly suppressed. The organs of the chest should always be carefully explored previous to arresting this discharge, for he has known this neglect prove fatal to a great number of females, whose lungs being tubercular, ulcerated very rapidly after the successful treatment of Leucorrhæa." He recommends, that in those cases in which the lungs may be suspected, setons, or issues, be established previously to their suppression.

The next and last subject we shall notice in this place, is the Amputation of the Os Tince. This is an operation which has become very common in the practice of M. Lisfranc; his number of cases amounting now to more than one hundred, within the last few years. The operation is an important one, and has surely been performed with great success by M. L., but we are forced to the conclusion, that like most other new or rare things, when brought into use, the frequency of this operation has been extended far beyond the bounds of necessity or prudence: and that the cause of these boundaries being thus transcended, is the error in the etiology of the cases. If we judge from all the authentic accounts of his operations of this description, we cannot fail to be convinced, that he has amputated in very many cases, wherein the disease for which the operation was performed might have been easily and speedily cured by duly liberating the vessels of the part, and suitable washes and application thereto.

Nevertheless, the operation is doubtless one which will sometimes be not only prudent, but indispensably demanded by the necessity of the case; and for a knowledge of the best manner of performing it, we refer the reader to the "Notes of a Physician," &c.; Southern Medical and Surgical Journal, No. 5, pages 311 and 312.

A frequent consequence of a fall on the hand is a painful swelling of the wrist, hand, and lower extremity of the forearm. This tumefaction is accompanied by a deformity consisting in an unnatural projection of the lower extremity of the ulna; a change of form in the forearm, which is rounded inferiorly; inclination of the wrist outwards and generally backwards, and of the hand in the contrary direction. Generally the only treatment consists in emollient applications. The swelling slowly declines, and the motions are not free for a long period. Six months after the fall, the wrist-joint has not recovered its suppleness. As the swelling disappears, the projection of the lower end of the ulna is more apparent: inequalities are felt on the palmar surface of the inferior extremity of the radius. Eventually the joints regain their mobility, but the deformity remains throughout life.

This accident has been considered by some to be a diastasis of the inferior radio-ulnar articulation, by others as a sprain; by Petit and Boyer as a dislocation of the wrist: but no external violence could separate from each other the lower ends of the radius and ulna; no sprain could change the direction of the hand; and, if the possibility of luxations of the wrist are admitted, (which Dupuytren doubts,) still they must be very rare, whilst this accident is very common. It can only be accounted for by a fracture of the radius.

Fractures of the carpal extremities of the radius are generally oblique from above downwards, and from the dorsal to the palmar surface. Out of forty-seven instances of fractured radius, forty-three were in this direction; two others were oblique fractures from above downwards, and from the palmar to the dorsal surface; in one other the inferior fragment was fractured vertically, and in another there was a star-like fracture into many pieces. In the most common variety, the obliquity was of various degrees, sometimes nearly transverse. In the common oblique fracture the inferior fragment is forced, by the violence of the blow, and the action of the muscles passing from the forearm to the hand, from below upwards and from before backwards. The superior fragment is drawn towards the interosseous space by the action of the two pronator muscles. The consequence of this displacement is a diminution of the breadth of the inferior part of the forearm and interosseous space; a depression on the external side of the radius, some lines above the wrist; an inclination of the carpal articulatory surface of the radius outwards and backwards. Cline and Cooper have attributed the prominence formed anteriorly above the wrist to the displacement of the inferior extremity of the upper fragment by the pronator quadratus; but M. Goyraud is convinced, from numerous dissections, that the inferior fragment is displaced, producing the prominence. The more oblique the fracture, the greater the displacement: in transverse fractures the violence only causes the displacement, and this may be so great as to simulate luxation of the wrist; an error which may be strengthened by the fact, that, after reduction, there is no tendency in the parts to become again displaced. The carpus follows the direction of the articular surface of the radius, so that the articulation of the wrist takes a direction separating it from the inferior extremity of the ulna, which consequently forms a projection remarked by Petit and Boyer, who believed it to be a consequence of luxation of the wrist. The hand would follow the same direction, if it were not for the internal lateral ligament of the joint, which prevents the hand turning outward; the flexor muscles, rendered tense by the wrist being thrown backwards in the common oblique fracture from behind forward, draw the hand forwards; in the fracture in the opposite direction, the extensor muscles draw the hand backwards. In the great majority of cases, the hand is fixed in the state of abduction and a little inclined forwards; sometimes, but rarely, backwards.—If the violence has ruptured the lateral ligaments, or separated the styloid process of the ulna, the hand and wrist are in a state of abstraction.
These oblique fractures of the radius are extremely frequent: they generally are caused by falls on the palm of the hand, but sometimes on the dorsal surface, the hand being strongly bent forwards. The indications of this fracture are—an unnatural projection of the lower end of the ulna, a depression on the radial border of the forearm some lines above the wrist-joint, a little increase in the dorso palmar diameter, and a little diminution in the radio-ulnar diameter of the forearm, at a point corresponding to the depression on the radial edge; pain in the lower extremity of the radius, augmented by pressure at this point, but not by the motions of the joint; pain also beneath the lower end of the ulna, from the dragging or rupture of the internal lateral ligament. In the commonest oblique fracture from above downwards and behind forwards, the wrist is inclined backwards, its axis forming an angle, more or less marked, with the forearm. From thence a depression on the dorsal face of the forearm, over the radius, and ten or twelve lines above the wrist, and a large prominence, convex from above downwards, on its palmar surface. The hand is bent forwards; and this inclination is more considerable in proportion to the deviation of the wrist. In the rare fracture from above downwards and before backwards, the wrist is bent forwards and the hand backwards. The inequalities are felt before the swelling begins, and when it is partly dissipated. Transverse fractures with great violence, and separation of the epiphyses, may be mistaken for dislocations; but, as Dessault remarked, in luxations the styloid process of the radius loses its relation to the carpus; in the other two accidents it is no longer in the same line as the radius, but it preserves its relations with the hand. Crepitation is often absent, from the want of mobility in the fragments and from the swelling. To sum up: the diagnosis is formed on the change in the direction of the axis of the wrist and that of the hand; the swelling characteristic of fractures; the pain seated not in the joint, but in the lower end of the radius, and the unusual projection of the lower end of the ulna. The absence of rotation in the end of the radius during pronation and supination has been dwelt on; but, from the large surfaces of the fracture and intimate connexion of the two bones, must not the motion of one be necessarily communicated to the other! This fracture is without danger: it leaves behind a deformity previously described, but M. G. has never known it produce obliteration of the interosseous space, nor loss of the motions of pronation and supination, which Dupuytren describes as a consequence of its being overlooked. Under such circumstances, the joint remains for a long time almost without motion.

Treatment.—To reduce the fracture, the forearm must be bent and placed in a position between pronation and supination; an assistant produces counter-extension by seizing the lower part of the forearm, whilst another extends the limb by drawing the hand gradually outwards, and slightly inclining it towards the ulnar border of the forearm. The surgeon pushes the flesh of the two sides of the forearm into the interosseous space, and then puts the broken surfaces into apposition. The fracture is easily reduced, but retained with difficulty in its situation. The apparatus employed by M. Goyraud consists of two splints, about the breadth of the lower end of the forearm, one of which is from eighteen to twenty lines shorter than the other, and its inferior extremity cut off obliquely; two graduated interosseous compresses; and two pads, one between three and four inches long, and the same thickness as the middle of the graduated compress; the other an inch in length, and like a wedge, its base being about as thick as the anterior interosseous compress. The interosseous compresses are applied on the two faces of the forearm, parallel to the interosseous space, and descending to an inch above the joint; below this point they are replaced by the pads, the larger one over the dorsal aspect of the wrist, and the wedge-like pad on the palmar side, with its base next to the graduated compress, and its apex to the carpus. The longer splint, applied over the dorsal graduated compress and
Surgical Observations, &c.

pad, is to descend to the posterior surface of the metacarpus; the shorter splint is placed over the palmar compresses and pad, its oblique extremity being inferior, and the acute angle of this extremity towards the radial edge of the limb, so that it is applied with the interposition of the euneiform pad against the superior part of the prominence formed by the os pisiform and os scaphoides. A tight roller confines the whole. The advantages of this method are the following: As the interosseous space terminates an inch above the wrist joint, the long graduated compresses generally used to prevent the bones coming in contact are of no use; but, by substituting pads whose surface corresponds (as these do) to the shape of the lower end of the radius, this bone is efficiently acted upon. The effect of the oblique extremity of the splint is to change the direction of the line formed by the prominence of the os pisiforme and scaphid process, which is almost horizontal, into an oblique line running from above downwards and from the ulnar to the radial border of the limb; that is to say, to fix the hand in the state of abduction, and to oppose more certainly the reproduction of the displacement; an indication which Cline and Sir A. Cooper attempted by the weight of the hand, which they allowed to hang out of the sling. During the last two years, this treatment has been adopted by M. Goyraud in eleven cases with complete success.—British and Foreign Review.—Journal Hebdomadaire des Sciences Médicales, No. 6, Février 6, 1836.

Surgical Observations: By Professor Chelius, of Heidelberg.

[In the first number of a new series of the Heidelberger Klinische Anna- len, recently published under the name of "Medicinische Annalen," this eminent surgeon has given an elaborate and highly interesting Report of his Surgical and Ophthalmological Clinical Practice in the Heidelberg Hospital, from 1830 to 1834 inclusive. We regret that our limits will only permit us to give a brief notice of some of the more important surgical observations contained in it.]

1. Amputation.—Professor C. mentions that, out of twenty-nine cases of amputation, he lost only two patients. The circular incision was in every instance put in practice, and ligatures employed to secure the bleeding vessels; in no case torsion. Two alone required the removal of the dressings for after-hemorrhage; in all the rest they were allowed to remain untouched as long as possible; in some till the third week, at which period the wound was found perfectly closed.

2. Lithotomy in the Female.—After discussing fully the merit of different plans that have been proposed, Professor C. adopts the method of incising perpendicularly downwards, (a modification of Bromfield's operation;) and for the following reasons: The urethra, throughout its whole extent, lies immediately upon the anterior wall of the vagina, as is likewise the case with the bladder. By the incision so directed these two points alone are implicated; the execution of the operation is simple, nor is it likely to give rise to any considerable loss of blood. The extraction of the stone will be attended with the least possible difficulty; and, should the large size of the stone demand it, the incision can be commodiously prolonged. Owing to the exact apposition of the vagina to the urethra and to the neck of the bladder, there exists a constant parallelism between the wound of the vagina, of the urethra, and of the cervix vesice; the urine finds a ready way of egress, and no danger need be apprehended from infiltration. From being able, in case of need, to carry the incision along the neck into the body of the bladder, every risk from pinching or tearing the cervix vesice is removed; lesions much more apt to produce subsequent incontinence of urine than the mere section of the neck.

As disadvantages resulting from this mode of operation, are enumerated the danger of vesico-vaginal fistula and permanent fissure of the urethra.
The first of these objections must be opposed by the various arguments adduced in support of the vesico-vaginal section generally. In this respect the conditions here are much more favorable than in the instance of recto-vesical lithotomy; for here the vagina is empty, and the entrance of foreign matters into the cavity of the bladder, as feces from the wounded rectum, rendered impossible. Nor is any inconvenience to be apprehended from the remote chance of the influx of fluid during the flow of the catamenia. The second objection is supported neither by anatomical nor physiological grounds, and is directly refuted by Professor C.'s own preparer experience.

Operation.—The grooved staff is introduced with its handle sustained vertically by the assistant, and its concavity pressed up against the pubic arch: in this manner the parts to be incised are more securely fixed, the entrance of the vagina somewhat widened, and the finding the groove on the staff facilitated, and, lastly, the section downwards of the urethra and vagina accomplished without trouble. The incision may be performed with a probe-pointed bistoury introduced to the requisite depth along the groove, and then made to cut its way outwards, dividing in its course the neck of the bladder, urethra, and anterior wall of the vagina, to the full extent wanted: or it may be executed by means of the lithotomy cachet of Frère Côme. Should the incision of the bladder be too small, it must be enlarged by means of the probe-pointed bistoury, conducted along the left index-finger.

Reports of three cases are related wherein the above plan answered.

3. Scrotal Calculus.—This case is remarkable from the multitude of concretions removed, amounting to twenty-seven in number. The patient was fifty-five years of age, and attributed the origin of the complaint to a fall upon the perineum, about twenty years previously.

4. Bronchocele, (Struma Lymphatica.)—Professor C. is of opinion, that in every case of this disease where the nutritious vessels are much enlarged and easily to be felt, their obliteration by means of ligature is equally indicated, as in the aneurismal form of the affection; for, although the diminution of the swelling in Struma lymphatica, after the supply of blood has been checked by tying the superior thyroid arteries, does not proceed with such rapidity, nor to the same degree, as in the vascular goitre, still however such a decrease in the bulk of the tumour will be obtained, that the inconveniences it had created will be in a great measure lessened or altogether removed.

The operation is of the simplest description. The rule given is to make the incision correspond, in direction and situation, with the course in which the arterial pulsations are most distinctly perceptible to the finger of the operator. This will most frequently be found to be between the omohyoid muscle and the point at which the vessel is entering the gland; often, however, between its origin and the same muscle. An advantage attending this method is, that, if it should not fulfil the desired end, diminution of the morbid growth, other means can, with greater confidence, be put in practice. Four cases are reported in which it proved of great service, and in no one was it productive of the least bad consequence.

5. Erectile Tumours.—Creosote was tried as a topical application in several cases of this affection, and especially nævus maternus in infants. The only effect its continued application seemed to produce was the formation of a superficial dry crust, which came away, leaving the tumour in statu quo: indeed, in one case, the volume of the nævus appeared to have augmented under the use of the creosote. From its inefficacy, he was obliged to have recourse to cautic, which he pronounces unfailing in its effects, and preferable to the knife, from the danger of mortal hemorrhage from the latter.

6. Removal of an Abdominal Tumour.—This is another addition to the sepulchretum of operations in that cavity. The tumour was of a fibrous texture, of considerable magnitude, attached by a pedicle to the uterus. The patient never recovered the shock of the operation, which she outlived.
seventeen hours. It is justice to state, that its performance took place at the earnest solicitation of the patient, in opposition to the advice and opinion of her medical men.

7. Teleaungiectasia Lipomatodes.—Under this strange name is detailed the history of a singular case of mixed tumour, partly erectile, partly lipomatous, occurring in the hand of a tailor, chiefly between the thumb and the metacarpal bone of the index-finger. As its presence interfered with the use of the needle, Professor C. determined to try the effect of tying the radial artery. Soon after the operation, so great was the amendment that he was again able to resume his handicraft. It is worthy of remark, that, in consequence of the supply of blood being diminished, it gradually lost its erectile character, assuming more and more that common to lipoma.

8. Stricture of the Æosophagus.—For the permanent cure of stricture of the œsophagus, Professor C., taking advantage of the principle introduced by Ducamp for strictures of the urethra, employs an oval ivory dilatator, attached upon a common œsophagus bougie, about an inch and a half from its extremity. An ordinary œsophagus bougie is first inserted, to ascertain the existence and situation of the stricture. Should this fail to make a passage, a thinner bougie must be used. Where the coarctation is considerable, it is sometimes necessary to use middling-sized urethra bougies. The bougie is left in ten or fifteen minutes each day, gradually exchanging it for one of larger caliber, until the dilatator is permitted to enter, which patients are found to endure quite as well as the ordinary sounds. Under this plan there is rapid improvement; and, after the lapse of a few days, a second thicker dilatator may be substituted for the former, until perfect dilatation is effected, and deglutition rendered free. For some time after the cure it is advised to introduce the instrument once every five, eight, or fourteen days, to prevent relapse. All instruments for the cure of stricture are always to be introduced by the mouth.—British and Foreign Review.—Heidelberg Medicinische Annalen, Band. i. H. i. 1835.
PART III.—MONTHLY PERISCOPE.

Medical Society of Augusta, 9th November, 1836.

The Society convened at 7 p. m. Dr. Bowen, the essayist for the evening, not having his essay present, the members were called on for medical intelligence. Whereon, Dr. Antony related a case of typhoid fever, in which salivation had supervened on the use of forty grains of calomel, in 8 grain doses, three hours apart, with 1 gr. aloes in each. This occurred about the seventh day—the disease having hitherto observed an intermittent type, and in the early stage had, from the symptoms of a tendency to cerebral congestion, required the free use of the lancet once, an emetic, and continued use of nauseating portions of antimonials, previous to the use of the calomel, but could not bear quinine. The salivation continued several days, the calomel had operated as a purgative, without evincing any change of hepatic secretion. During the continuance of the salivation, the fever gradually assumed a remittent, and finally a decidedly continued type, and typhoid character; during the progress to which, and within three or four days, the salivation, which was at first severe, gradually decreased and finally ceased altogether by the fourth day after salivation. The tongue was covered with a thick brown fur, thickened, with crimson colour of the apex, edges, and under surface. Litmus paper applied to the tongue, which was moist with saliva, promptly assumed a pale pink colour. Pulse small, week and fluctuating through the twenty-four hours from 90 to 100, with frequent intermissions. Continued coma, eyes half open, without expression; countenance hippocratic; jaw fallen; constant and considerable tympanitis.—Carbonate of soda was administered in doses of 10 grains every two hours, and every four hours 15 drops of chloride of soda, as suggested by Drs. Graves and Chomel, in 1/3 i. mixtura camphora, for forty-eight hours; during which time, the epigastrium having been previously vesicated, blisters were also drawn on the legs.

At the end of this period, the thickness and redness of the tongue had greatly abated, the saliva no longer produced the pink colour of the litmus paper, the intermissions of the pulse were less frequent, its tone decidedly improved, the tympanitic condition of the bowels was entirely removed, and the bowels, which had been disposed to looseness, became less relaxed.—But the thick fur on the tongue, the coma, the want of expression, the falling of the jaw, with dry skin and cold extremities, continued. Calomel 6 grains, with comp. powd. of ipicac 3 grs. were now directed every three hours, alternated with 3 ss. port-
wine and \( \frac{2}{10} \)ij. decoct cinchon., with serpentaria infusion. By the next day, the calomel secretion from the liver was evident.—The use of the calomel was however continued for two days longer, with the effect of a gentle evacuation of very black secretion about every three or four hours. During this time, perspiration made its appearance on the face, and gradually extended, with increasing warmth, to the rest of the surface; the irregularity and weakness of the pulse were corrected, and at last she awoke from her coma as from a sleep, knowing nothing of what had passed for the last twelve days. Her mouth now began to swell and evince the salivating effect of calomel, and soon became very sore, with the prompt abatement of the febrile symptoms. This case was given, as one amongst many, mainly in illustration of the fact, that mercurial salivation has little or no agency in arresting the progress of fever. Attention was also called to the fact of the abounding acid in the saliva, and the tympanitic state of the bowels, in connexion with the other typhoid symptoms, which were so promptly corrected by the alkali and chloride of soda. Dr. A. remarked that this display of acid and tympanitis had been frequently found during the season in connexion with these symptoms, and which had been very uniformly corrected by carbonate and chloride of soda. He also alluded to the fact of its almost universal prevalence some years ago, in an epidemic influenza which prevailed in Augusta, as was plainly evinced by the taste of the perspirable matter being nearly as sour as that of lemonade; and in which the pulmonary and the typhoid symptoms were much more promptly relieved by the addition of a little clean ashes, or carb. sod. or potass. with linseed and seneca infusion, than by all other means without the alkali.

Dr. A. stated, that during the past summer, he had delivered an encephalus, wherein the whole brain and medulla oblongata were deficient. How much farther down the spinal column the deficiency continued was not determined, from want of opportunity to continue the examination. The child lived in the full and regular performance of the functions of circulation and respiration, (with the exception of occasional short intermissions of the latter,) for the full term of twenty-seven hours. It was very strong and remarkably sensitive to the touch, so as to exhibit, when touched, somewhat of that convulsive effort produced by cold water thrown on one asleep.

Dr. Bowen stated a case of intermittent fever, to which he had been called, in which the pulse intermitted every eighth pulsation. The patient was then under the operation of what the family called "sandhill physic," a specimen of which the Doctor had not been able to obtain, and therefore could say nothing of its botanical character, but observed that its operation was very similar to that of tartrate of antimony. The regular inter-
mission of pulse continued through the use of purgatives and diaphoretics.

This case was treated with calomel, nit. potass. and tartrate of antimony; with arsenite of potass. A fine relaxation of skin was procured and the chills arrested. The patient relapsed, and sulph. quinæ was resorted to, but was abandoned because of the increased dryness of the skin and fever. He died on the twentieth day from the attack. The privilege for autopsy could not be obtained.

Dr. B. gives this case on account of the remarkable facts of the great regularity of the intermissions of the pulse, and the great dryness of the tongue at the same time that the skin was in a fine state of relaxation. The spleen was obviously very much enlarged. For several months previous to the attack, complained of considerable pain in the precordial region.

Dr. B. did not think an intermitting pulse a necessary accompaniment of great hepatic derangement; and therefore thought this symptom dependent on some alteration of the heart, the prime mover of circulation.

Dr. B. proceeded to give another case illustrative of the operation of lobelia. This article he said was given to a boy 10 years old, laboring under a bilious fever, at one o'clock in the afternoon. Soon after taking this dose, he was found to be in a stupor, with that general helplessness and extreme flexibility, which immediately precedes death, the eyelids half closed, eyes rolled back, and great difficulty of breathing. In this situation he continued for nearly twelve hours, when he vomited and was relieved.

Dr. Dugas then related a very extraordinary and interesting case of chronic hydrocephalus, which he had treated by tapping. This was a male child, born without accident, and enjoyed apparent good health until one month old. His head was then perceived to increase in size more rapidly than is usual in health; and subsequently, the cranial bones separated, the eyes became spasmodically turned downward, and at four months of age the child experienced slight general spasms, which in a few days amounted to convulsions. He appeared in other respects perfectly well, was fleshy and had been subjected to no treatment whatever. The circumference of the head was now 21 inches, and the fluctuation could be distinctly felt at the forehead, which was puffed up by the contained fluid. In this condition he had found the patient, on the 25th of June, laboring under convulsions which had commenced several hours before. Dr. Antony happening to be present, it was at once determined in consultation, to draw off a portion of the effusion; but having no more suitable instrument at hand, Dr. D. made the puncture with a couching needle, penetrating about one inch deep, in the left angle of the fontanelle. On withdrawing the needle, an ounce and a
half (\(\frac{3}{2}\) iss.) of limpid yellowish fluid oozed out, and no more could be obtained. The head was then bandaged; the convulsions continued during the operation, and two or three hours after.

On the 5th July, the operation was repeated with the same instrument, and the application of a cupping glass, when \(\frac{2}{3}\) more were drawn.

Aug. 12.—Head had very much enlarged, and on the use of a very small trocar, made expressly for the purpose, \(\frac{3}{2}\) viij. of fluid were removed.

Aug. 29.—Head larger than previous to the last operation.—Drew off \(\frac{2}{3}\) xi.

Sept. 12.—Head full, but not distended strongly. Drew off \(\frac{2}{3}\) xv.

Sept. 30.—Head again filled. Drew off \(\frac{5}{3}\) xiiss.

Oct. 16.—Drew off \(\frac{3}{3}\) xiv.

Dr. D. remarked that the convulsions subsided shortly after the first operation, and did not return, except very slightly, a short time before the third and fifth puncture, although the accumulation continually increased. Indeed his general health appeared unimpaired until the 15th October, when he became dull and stupid. The stupor gradually increased and he became insensible of the nipple when put into his mouth. On the 16th he appeared as if in a profound sleep, and had swallowed nothing for two days.

After the removal of the \(\frac{3}{3}\) xiv. on that day, he again readily noticed and swallowed several teaspoonfuls of milk poured into his mouth. He expired quietly on the 18th October.

The operations were never attended with the least change of pulse, nor symptoms of prostration—the only visible effect being the subsidence of the tumefaction, and of the tendency to spasm. Iodine, calomel, bandages, &c. were prescribed, but never attended to, from the unwillingness on the part of the mother to annoy the child, as she thought, unnecessarily. The fluid was, after several of the operations, exposed to heat, without coagulating in the least.

The Dr. then gave the following full and minute account of the autopsic examination:

**Autopsy.**—The cranium was opened longitudinally, by an incision made in the membranes connecting the two sides of the frontal and the two parietal bones. The brain was found expanded like a sack, lining the dura mater, and filled with fluid, which did not escape until the brain was punctured. The convolutions were entirely unfolded, and the walls of the sac thus formed were about a line or two thick. The corpora strata and thalami were not affected, and the third ventricle was nearly normal; the fornix, velum interpositum and plexus choroides existed; the septum lucidum was not found. The corpus cal-
losum could not be recognised, although the cerebral substance forming the walls of the sac was as firm as usual at this age.—Cerebellum normal—as also the medulla oblongata and encephalic nerves. The membranes presented nothing peculiar, save a great want of blood in the vessels of the pia mater. The inner surface of the cerebral sac resembled very closely a healthy mucous coat of the stomach. It was in some places covered with thick flakes resembling dense mucus; some of these were yellowish, some brown, others of a cream color and like thick pus. The yellowish patches were at the bottom of that portion of the sac corresponding to the anterior lobes of the brain, and were not very unlike the appearances left after the absorption of apoplectic effusion. The left hemisphere being the first opened, permitted the escape of the fluid contained in both, after which, on looking into the right cavity through the hole of communication with the left, a kind of longitudinal septum, though lacerated, was seen hanging from the upper part of the sac and reaching its floor. It resembled the cineritious substance, but was so pulpy as to be readily torn and thus to prevent a satisfactory examination. It may possibly have been formed by flakes analogous to those already alluded to.

On examining that part of the sac which corresponded to the external marks left by the punctures, the cicatrices of the seven perforations were distinctly seen in the cerebral substance, which at this place with its other membranes slightly adhered to the dura mater.

The contained fluid measured sixty-four ounces, was limpid and of the colour of pale urine.

The above case, although unsuccessfully treated, may, by confirming the practicability and harmlessness of tapping the brain, lead to its more frequent trial. The plan has proved successful in one or more instances, and therefore merits more attention than it has hitherto received. In this case the brain was punctured seven times and sixty-three ounces of fluid drawn off, yet not the slightest unpleasant effect ever followed the operation.

Dr. Joseph A. Eve, then made some observations on irregularity and intermittence of the pulse, which he was disposed to attribute to sympathy with the liver generally, when not dependent on organic affection of the heart—at least this was the conclusion to which he had arrived from observing intermittence frequently attendant on, or accompanying hepatic disease. He related the case of a lady of bilious temperament, and previously the subject of hepatitis, who, after long continued and repeated exposure to cold, was attacked with a most intense pain in the region of the liver and other symptoms of hepatic disease; and whose pulse during the attack was extremely irregular and intermittent, and reduced to a mere thread—were it not that it did not correspond with the muscular strength, voice, expression of
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countenance, and that he had seen cases somewhat similar, he should have supposed, judging by the pulse alone, that she was then moribund. Notwithstanding the pulse was scarcely perceptible and like that of a person in articulo mortis, recognising it to be a case of hepatitis, he did not hesitate to prescribe a large blister to the side and purgation with calomel and aloes, after the operation of which, the pulse gradually recovered its natural tone and rhythm and the patient was restored to health.

Dr. Antony remarked, that intermittent pulse, as well as palpitation, was a very frequent attendant on chronic bilious habits; very often observable and generally yielding more or less promptly to the correction of the habit, by evacuating the bile and improving the hepatic secretion by slow purging with calomel and aloes.

Dr. P. F. Eve gave the following case, evincing the dangerous effects of hygeian pills. He had been called on the 5th inst. to a married lady, whom he found laboring under a most severe attack of acute dysentery.

She had been complaining of irregular action in the bowels for two or three days, and during the day on the evening of which he was called in, she had had about 20 operations, attended with distressing tormina and tenesmus, the discharges being chiefly blood and mucus. She said she had taken no medicine whatever, and had no appetite for food or drink. After stating, however, his surprise at the want of a satisfactory cause for such serious effects, his patient admitted she had taken only six hygeian pills. The box was on examination found marked "Morrison's Pills, No. 2."

This proved to be the most violent case of dysentery he had ever seen. It resisted laudanum in large doses by the mouth and anus, a large blister over the abdomen, (there being no fever,) sixty grains of Dover's powder and three grs. of acetate of morpophine in twelve hours, combined with absolute repose in the horizontal position, (the patient using a bed-pan.) diet, &c. After taking one hundred and eighty grains Dover's powder and eight grains morphine combined with it, a mixture of 1 oz. tr. catechu 3ij sub-carbonate soda, and 6 grains sulphate morpophine, and 4 grs. morphine in starch injection, (suggested by Mr. Hewson, apothecary,) it was finally subdued on the sixth day of the attack. The patient had slowly recovered, and was that day discharged.

Dr. E. would not positively assert that the pills produced the disease. They should not, he thought, as they were professedly hygeian; but the facts of the case, he had stated.*

*We recollect that a few years since, when the Steamers applied to the Georgia Legislature for an act to legalize their practice, that some of the physicians then in the Legislature voted for the bill, as the best means of
Dr. Cunningham stated as a remarkable fact, that in no preceding season had he found with his patients so great a susceptibility of salivation by the moderate use of calomel, as in that which had just passed. He had usually prescribed it with a view to its cathartic operation, and that it had been not unfrequently the case, that salivation was produced within twenty-four hours. Although a remarkable susceptibility was thus manifested, Dr. C. did not recollect that in any instance, it had been violent, although some cases lasted more than a week. Dr. C's. impression was, that the intermittents which had prevailed the past season were of a mild grade, except in a small proportion of cases which were attended with gastritic symptoms, and that these readily yielded to the use of quinine, after the gastric symptoms were removed.

He had met with one case of hooping cough, which was ushered in by a violent attack of croup—the spasmodic cough soon developing itself after the removal of the first symptoms. The case required no peculiar treatment afterwards.

Dr. Antony corroborated Dr. C's. observation of the unusual susceptibility to mercurial salivation. His practice had been to give from 16 to 40 grains in broken doses of 8 grs. each, with 1 of aloes, 3 hours apart; following them, after two hours from the last dose, with a purgative portion to evacuate the bowels; and he had observed the salivation occur after the first day, with unusual frequency, even in the remitting type of fever.

convincing the community of the error—alleging that they believed nothing short of the demonstration which they would make, by being set at liberty for a few years, could convince the community of their error. The policy may have been good, but we did not admire the humanity of the measure, as there was no antidote to death. We do not believe that any man ever made or sold the Morrison pills for the purpose of preserving or restoring health, we think it possible, the traffic, as well as their unjust praises, may cease, if the mystery of their composition be divulged, so that any one may make them.

We will therefore refer to No. 3, page 190 of this Journal; but at the same time we give the bane, we offer an antidote, which is, observe the prosecutions still going on in England, and the frequent convictions of manslaughter, for the administration of the Hygeian pills.
Carbonate of Soda in large doses: By Mr. Neville.

Mr. Neville has recently published a small, but very well written, volume on mental derangement. But as the greater part of it is eclectic, or, in other words, compiled from the best authorities, it is unsuitable for a review—being itself, indeed, an analysis. There are several original remarks, however, and observations scattered through the volume, and the following passage contains some curious matters which we deem worthy of selection.—It is on the exhibition of soda, as a corrector or preventive of indigestion and its multiplied horrors.

"We selected two healthy young monkeys, nearly of an age. We preferred them to any other, in this instance, for experiments, on account of their similitude to man in their omnivorous capacities, as also in their passions. These creatures we had placed precisely in the same circumstances, and treated as nearly as might be in the manner in which we are accustomed to treat ourselves in society; that is to say, we had them placed in a comfortable warm room, gave them little opportunity for exercise, dieted them, according to the fashion of the times, with an abundance of the staple articles which constitute the food of an Englishman: they had tea, bread and butter, with some animal food, for breakfast; meat, vegetables, fruit pies, raw fruit, beer, and wine for dinner; and tea and supper as these meals are taken among the middling classes of society. In short, they were treated every way alike; save that to the one, and not to the other, a drachm and a half of the carbonate of soda, dissolved in water, was regularly administered in three doses during the course of every day. At the end of six months the two animals presented a very different exterior, and were evidently in dissimilar states of health. The one to whom the soda had been given was plump and lively; the other was thin, spiritless, and obviously diseased. We had this creature killed; when, upon examining its body, we found the muscles to be shrunk and pale, the stomach and alimentary canal congested, the mucous coat of the former especially thickened, the right lobe of the liver indurated, and the mesenteric glands much enlarged.

For fear the above result might have been occasioned by circumstances with which we were not acquainted, or over which we had no control, the same experiment was repeated, with precisely similar effects, on two other animals of the same species; and also a third time, upon two strong whelps of the Newfoundland breed of dogs, without any material difference being observable. The carbonate of soda appeared to prevent the accession of disordered function in each instance—the animals that were pampered and over-fed, without having it administered to them, became sickly and pined; those who took the salt three times a day thrrove, and enjoyed to all outward appearance the best state of health; nor, upon dissection, could any trace of disease be found in their bodies, which was always very apparent in those of the others."

The author relates some instances of the beneficial effects of soda in children. The following is an example.

"Twin boys, very healthy children, were placed, as nearly as might be, in similar circumstances, with two different and excellent dry nurses. One child was observed to thrive amazingly; but the other looked puny, and was evidently in indifferent health. Upon expressing our particular satisfaction at the appearance of the robust infant one day, the nurse, with a very complacent look, begged to assure us that "it all came of her bottle." On analysis of this medicine, we found it to contain a mixture of liquor potassae, infusion rhei, aqua anethi, and simple syrup. This mixture she was in the habit of giving to her little charge in the dose of a tea-spoonful night and morning, and more frequently still when he did not seem quite himself; though the original instructions prescribed only a few drops."

A gentleman, aged 40 years, had suffered so long and so severely from indigestion, that his life became a burthen to him. He was persuaded by our
author to take "two drachms of carbonate of soda, twice or thrice a day, in a bitter infusion." Though startled at the magnitude of the dose, he made the trial. Five months afterwards, Mr. Neville learnt from this gentleman, that on the very first day of the trial, he felt himself a new man. At the date of the latter he was eating and drinking ad libitum, having recovered his strength and grown hale and stout.

"A lady of distinction, whom we visited for some time, along with her ordinary medical attendant, a practitioner of eminence, suffered from indigestion nearly or altogether in as great a degree as the gentleman whose case we have mentioned above. All dietetic means, combined with the exhibition of alteratives, aperients, small doses of the alkalies, &c. had also proved utterly unavailing in this instance. At our earnest request, the patient was prescribed an ounce of carbonate of soda, divided into five equal portions, in the course of the four and twenty hours. Under this medicine alone she rapidly and completely recovered, regaining all her former spirits, and once more presenting the plumpness and bloom of perfect health."

There is no doubt that acidities in the stomach and duodenum—are productive of singular irritability in the mind and the whole of the nervous system. But we much doubt whether the carbonates of soda and potash can be taken in the above doses with impunity. We have known several instances where much smaller doses taken regularly have appeared to render the mucous membrane of the bowels more instead of less irritable. The constant use of it appears to us to clear away the mucus which is the natural defence of these parts against foreign matters that must pass along their surfaces.—*Medico-Chirurgical Review.*

**Detection of Sulphate of Quinine in Urine.**—M. Piory, one of the Clinical physicians of the Hotel Dieu, has published the following novel observations on this subject.—"Finding that the urine of patients who were taking quinine was sensibly bitter, I requested M. M. Vallée and Fermond to analyse it. The subjoined is their report. The urine of several patients, who had taken about half an hour previously a large dose of quinine, we acidulated with diluted sulphuric acid, and then evaporated the fluid to three-fourths of its original quantity. When cool, it was filtered, and then treated with quick-lime in powder, in order to decompose the sulphate of quinine and reduce it to the state of the simple alcaloid, which was precipitated along with the insoluble sulphate of lime. The precipitate collected on a filter was well washed, then dried and reduced to a fine powder. This powder was treated with alcohol, and allowed to digest for twenty-four hours: it was then filtered and evaporated, and the residue was treated with water acidulated with sulphuric acid: the solution gradually deposited a crystallized sulphate of quinine, which was readily recognisable by its well known characters."

*[Medico-Chirurgical Review.—Bulletin Clinique.*

**Odoriferous Exhalation from the Skin.**—There was a case lately in the wards of La Charite, under the care of M. Rayer, of this pathological curiosity. A woman, 38 years of age, was admitted in a state of extreme marasmus, and laboring under chronic peritonitis. During the eight days preceding her death, the surface of the arms and of the trunk exhaled a very strong odour of musk.

Strict inquiries were made to ascertain whether any musk, or other similar perfume, had been introduced into the wards by the nurses or friends of the patient, "et tout le monde, ainsi que la malade elle-même, nous a repondu par la negative." The treatment of this woman had consisted in the use of antiphlogistic, emollient, and revulsive remedies, such as leeches to the epigastrum, blisters and sinapisms to the legs, and demulcent drinks.

The post-mortem examination did not very satisfactorily account for the disease which proved fatal. The only lesions found in the abdominal visce-
ra were some old adhesions of the rectum to the posterior surface of the uter-
us, and of the colon to the liver; the ovaria and kidneys exhibited traces of
inflammation; the intestines were at different points congested with blood,
but did not present any well marked or very serious lesion.

These alterations do not certainly account for the extreme tenderness of
the abdomen during life, for the very obstinate diarrhœa, the excessive ex-
haustion and tendency to coma.

In a late number of the Annali Universali di Medicina, Dr. Speranza has
reported a case, somewhat analogous to the preceding one: but in this pa-
tient the extent of surface, which gave out the odoriferous effluvia, was much
more limited; for it was confined to one of the fore-arms.

He has collected the particulars of most of the cases which have been re-
corded; and among these, we observe that there are three, in which a strong
musky smell was emitted from the arm pits.—Medico-Chirurgical Review.—
Lancet Francaise.

Endermic use of Quinine in Agues.—The endermic use of quinine, in ca-
ses of intermittent fevers, has been adopted by several of the best physicians
in Paris. It is well known that, in many agues, the mucus membrane, not
only of the stomach, but also of the large intestines, is in a state of conges-
tion or of actual inflammation. The exhibition of quinine or of any other
tonic by the mouth, or in the way of enema, must, under such circumstances,
be positively injurious, and it has been with the view of avoiding any aggra-
vation of the intestinal distress, and yet overcoming the peculiar and un-
known state of the system on which the periodic recurrence of a morbid pa-
roxysm, in intermittent disease, depends, and which is so generally controll-
ed and removed by bark in all its forms, that the endermic use of quinine has
been so strenuously recommended, especially by those physicians whose
minds are ever haunted with the dread of gastrite or gastro-enterite.

Five cases, treated by M. Chomel at the Hotel Dieu, are reported by M.
Raciborski.

The first was certainly a very mild case. A man 28 years of age, robust
and hitherto in perfect health, was seized with a febrile paroxysm which
lasted for four or five hours, after exposure to cold and damp. The par-
oxysm returned regularly every second day, and on the intermediate days
the patient was quite apyreptic. On the morning when the sixth paroxysm
was expected, eight grains of sulphate of quinine were applied on the
epigastrum, which had been previously denuded of its cuticle by strong
ammoniacal pommade. The paroxysm was quite checked, and, although
the patient remained in the hospital for another week, there was no re-ap-
pearance of any agueish symptoms.

The second case occurred in a middle-aged man, who had suffered from
tertian fever in the preceding Autumn, and in whom the recurrence of the
disease at the period of his admission seemed to have been induced by a vi-
donent mental emotion. He had already experienced eight paroxysms within
the last 16 days. When admitted, he was quite free from any feverish dis-
turbance; a light demulcent diet was ordered. Two paroxysms occurred
in the hospital. Two grains, therefore, of quinine were ordered to be ap-
plied on a blistered surface of the epigastrum. On the following day, the
paroxysm returned, but at a later period of the day than hitherto, and it last-
ed only one hour, instead of four or five, as on former attacks.

The application of the quinine was repeated daily, and all disposition to
any recurrence of the intermittent illness ceased entirely.

The third case was similar. Only four paroxysms had occurred before the
endermic use of the quinine was tried. The application of four grains
daily effected a complete cure.

The fifth case, one of tertian fever, like all the preceding examples, was
more severe; the disease had been of longer duration; the patient had suf-
fured from ague before; and moreover the spleen was felt to be perceptibly enlarged. Six grains of quinine applied to a small denuded surface on the epigastrum an hour before an expected paroxysm, caused it to be much less severe and less prolonged than any preceding one; and by repeating the application once or twice again, there was no recurrence of any feverish attack.—Medico-Chirurgical Review.

 Remarkable Case of Hemiplegia.—"Francis Joseph, age 35 years, of slow unhealthy complexon, a seaman on board an Indianman, just arrived from England, was admitted into the General Hospital on the 27th of January, 1833, with hernia humoralis, which in a few days was relieved by free local bleeding and the exhibition of a solution of salts and tarter emetic to nausea and purging.

 On the evening of the 6th of February, the patient called my attention to a sensation of numbness, and imperfect muscular power of the left upper extremity, and a drawing of the mouth to the right side, which he said had been gradually increasing during the two preceding days; the expression of his countenance was uncomfortable, and his pulse, tho' small, was quick & hard.

 Bleeding to syncope, and a brisk mercurial purgative were prescribed.

 At 6 a.m. the following day, I found him hemiplegic; the muscular power of the left half of the body being completely paralyzed. Sensation imperfectly continued, whilst the circulation and temperature of the affected parts were natural. He passed evacuations involuntarily, and the urine was retained. He was heavy and drowsy, but complained only of pain in the sciatic nerve; percussion in the course of the spinal column caused no uneasiness.

 The head was shaved and cold applied, 30 leeches to the occiput, calomel purgatives and low diet prescribed.

 8th Feb.—The paralytic symptoms unrelieved; frequent dark stools pass off in bed.

 Thirty leeches to the cervical spine, and calomel purgatives continued.—Catheter passed, and oz. iv. of fætid ammoniacal urine drawn.

 9th.—No change for the better. Thirty leeches to the base of the head and cervical spine; calomel purgative and catheter passed.

 19th.—He appears somewhat exhausted by depletion, and the smart action which has been kept up on the alimentary canal. Pulse small and quick, countenance anxious; paralytic state of the left half of the body continues complete. Mouth affected by mercury.

 Blister from the back of the head to the sacrum. Pul. Jalap. comp. zi. at 7 a.m. Strychnine gr. 1-4 every 3 hours; milk diet and sage. Urine drawn off.

 11th and 12th.—The same remedies continued without advantage.

 13th.—During last night he passed a small quantity of urine, and he can now retain the feces until a bed-pan is placed under him; he can also raise the extremities from the bed. Remedies continued.

 14th.—Passed 4 oz. of fætid urine in the night, and three voluntary stools; has more power over the extremities, and the features are less distorted.

 16th.—Gradually improving under the same treatment; can now carry his arm up to his head.

 21st.—Has been progressing since the last date. He can at this time walk, drawing the limb awkwardly after him, and raise the arm over the head: the muscles of the face have recovered their action, and the angle of the mouth is scarcely observed to incline to the right side when he speaks.

 Medicine continued. Chicken diet.

 March 13th.—Has perfect use of the whole of the lately paralyzed parts, but he feels weaker on that than on the opposite side.—Strychnine discontinued. A mild aperient every morning.

 April 23d.—Discharged perfectly cured, and in good health. No tetanic or apparent nervous excitement was occasioned by the internal exhibition of Strychnine.