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PAUL F. EVE, M. D., and I. P. GARVIN, M. D.

Medical College of Georgia.

"Je prends le bien où je le trouve."

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PART I.—ORIGINAL COMMUNICATIONS.

ARTICLE I.

Remarks on the use of the Sub-Nitrate of Bismuth in certain gastric derangements. By I. P. Garvin, M. D., Professor of Materia Medica, &c., in the Medical College of Georgia.

The utility of the Sub-nitrate of Bismuth in certain painful affections of the stomach, has been known to the profession, ever since the publication of Odier, of Geneva, who was the first to employ it internally. In presenting the remarks which follow, we are therefore not to be understood as claiming any originality, either as to the mode of its action or application. Our sole object is to invite attention to a most valuable remedy which we think is too much neglected. Notwithstanding the length of time which has elapsed since the remedial powers of the sub-nitrate were made known, and the numerous facts which prove its value, some of the best writers on the materia medica have failed to notice it at all. Under these circumstances we have thought that a few cases illustrating its beneficial effects, would not prove unacceptable to the readers of the Journal.

Bismuth has been employed with benefit, in the vomitings of children which are connected with dentition, in the diarrhoeas which attack feeble infants upon slight causes, and in those which follow acute diseases, but are unattended by fever; but these and some other applications of the article we do not intend now to notice, but shall confine our remarks to its effects in some of those nervous de-
rangements of the stomach, which prove so distressing to the patient and harrassing to the practitioner. Our observation has satisfied us that such nervous affections of the stomach, and indeed many other nervous diseases, are of more frequent occurrence in malarial regions, than in such as possess a salubrious atmosphere. Nor is this fact at all surprising, when we consider that it is upon the nervous system that malaria exerts its principal morbific influence as is proven by its agency in the production of intermittent fever—a disease, confessedly of nervous origin. These diseases of the stomach, like most nervous affections, are usually paroxysmal, and whilst relief is most urgently demanded during the sufferings of the paroxysm, the patient, and sometimes the physician, neglects the radical treatment, which can only be carried on during the intermissions.

Case. The first case in which we obtained very marked benefit from the employment of the bismuth, was in that of a female, of a spare habit, nervous temperament, and about forty years of age. In the early part of the summer, she had an attack of fever in Florida, from which she seemed to have entirely recovered. In the month of September she had a succession of violent paroxysms of gastralgia, occurring at irregular intervals, sometimes of one or two weeks. During the three or four earlier attacks, she was from home, and the care of the case devolved upon another physician, but we learned that she had taken morphine, chloric ether, and other similar remedies for the agonizing pain. Between the paroxysms she was directed to use the sulphate of quinine, in doses of several grains each day. This article, however, appeared to have exercised no beneficial influence, for though it had been regularly taken, the disease had renewed its assaults. The first attack in which we saw the patient lasted about three hours: her face was pale—the skin bathed in a cold sweat—the pulse soft, small, and but slightly accelerated—there was an occasional vomiting of a fluid resembling very much the black vomit of yellow fever—and there was pain in the epigastric region of a most distressing character. A large dose of the acetate of morphine was administered, and as the last matters ejected from the stomach were mixed with blood, to the great alarm of the patient, with the morphine was combined four or five grains of the acetate of lead. The relief afforded by the combination was almost instantaneous, so much so that the patient expressed some curiosity to learn what she had taken. At first we were disposed to attribute the usual promptness with which the anodyne acted, to
some modification of the condition of the stomach produced by the hemorrhage, but from subsequent trials of the combination of the acetates of morphine and lead, in this, as well as in other cases of a similar character, we are satisfied that the acetate of lead was also an efficient agent in the production of the beneficial effects, probably by virtue of its sedative action on the irritated mucous membrane, and by restraining the acrid secretions from the gastric surfaces, thereby preventing the irritation which they must excite on these morbidly sensitive parts. After the paroxysm we have just noticed, our patient continued the use of the quinine for some days, when she was again violently attacked. We should have mentioned before, that these attacks did not seem to depend at all upon the ingestion of food, either in too great quantity, or of an indigestible quality. In this instance, a small quantity of rice was the only article which had been taken into the stomach. On this occasion, as before, the combinations of the acetates of lead and morphine gave prompt relief. The patient was then put upon the use of small doses of blue mass in conjunction with quinine, but the paroxysms continued to return. Having employed the bismuth in some other gastric derangements with benefit, and knowing that in the hands of others it had been found useful in cases very similar to the one under treatment, we abandoned the further use of the mercury and quinine, and put the patient upon the use of the sub-nitrate in doses of two grains three times a-day, increasing the dose one grain every two days. From the day on which she began the use of this remedy she had no return of the disease. Her general health improved, and she remained free from this complaint up to the time of her death, which occurred about a year subsequent to the cure.

The next case was one very similar in its general features to the foregoing. The patient was a female of a corpulent habit, and about thirty-five years of age. Her health had been good up to the latter part of the summer, at which time she had an attack of intermittent fever, from which, however, she soon recovered, but was soon after attacked with paroxysms of gastralgia, occurring at uncertain intervals, and lasting from one to eight or nine hours. The duration, however, was generally two or three hours. As the earlier paroxysms were short, and as she lived at a considerable distance, she did not apply for medical aid until the attacks had become of very frequent occurrence, and more protracted in their duration. When we first saw her she had been laboring under a very violent paroxysm
for some hours. Her skin was cold and bathed in sweat, the pulse feeble and very slightly accelerated, and she vomited frequently considerable quantities of an acrid and nearly colorless fluid. The acetates of morphia and lead were administered, and relief of the pain promptly followed. As there was loss of appetite, with a sallowness of the skin, and a deficiency of bile in the evacuations, she was put upon the use of small doses of blue mass. Her skin soon became clearer, and her appetite and general health improved, nevertheless the paroxysms of gastralgia continued to return, though they were neither so frequent nor so violent. She was then put upon the use of the bismuth, and from that day to the present time she has had no return of the complaint.

The third was one of a different character. The subject was Miss ——, of a rather spare habit, and about thirty years of age. For a long period she had been subject to attacks of vomiting, which would continue from two or three hours to as many days. During these attacks the stomach would be thrown into the most violent contraction by the introduction of the smallest quantity of even the blandest fluid. Her skin was cool and moist, and her pulse feeble, though not at all increased in frequency. In her most violent attacks she was affected with spasms. Upon the subsidence of the vomiting, a rash, very much resembling that of scarlatina, generally appeared upon the skin. She had gone through the whole catalogue of anodynes and antispasmodics. In one paroxysm an article would give relief, which would fail entirely in the next, but it not unfrequently happened that all failed. The dread of the return of the vomitings embittered the life of this lady, and led her to practice an almost entire abstinence from all the common articles of food, except those of the most digestible kind, and in very small quantities. After a trial of various medicines, (quinine among the number,) she was put upon the use of the sub-nitrate of bismuth, which was continued, with occasional intermissions, for a considerable length of time. After discontinuing the remedy, she had a slight return of her old complaint, but with this exception she has remained free from the disease to the present time.

We are informed by Dr. Joseph A. Eve, that he has also employed the bismuth in several cases of gastric disease of a painful character, with the most marked benefit. He generally combines with its use, the employment of small doses of blue mass. The mercury he discontinues in a short time, but increases the doses of the bismuth regularly.
Dr. Dugas also informs us that he has used it frequently, and with almost invariable success, in those annoying sensations of oppression or pain in the epigastric region, so common with ladies of a delicate constitution and sedentary habits. In such cases he prescribes five or six grains to be taken about an hour before each meal, until relief be obtained, and then morning and night for a few days longer.

We have also used the article in several cases of dyspepsia, but have not witnessed any very marked benefit from its employment, except in those instances where pyrosis was present. In such cases we had much reason to be pleased with its effects.

If the mode of action of bismuth were well understood, it is probable that it would be found useful in other diseases than those in which it is now employed, but its modus operandi is exceedingly obscure. "If we endeavor to ascertain," says Trousseau, "the action of the sub-nitrate of bismuth, we will be much embarrassed; no intermediate effect between the employment of the medicine, and its curative results, can be perceived. Notwithstanding the attention we have given to it, we have not been able to perceive the least influence on the general functions. When an individual in good health takes the sub-nitrate of bismuth, the only phenomenon to be noticed is constipation, but the nervous functions, the animal heat, the movements of the heart, the urinary and cutaneous secretions, are not influenced in an appreciable manner." We can therefore only infer the nature of its action, from the character of the derangements in which it operates beneficially. As these are characterized by an exaltation of the nervous sensibility, the medicine is supposed by Trousseau to possess sedative properties, and to be also somewhat astringent. Merat and De Lens rank it as a sedative, acting directly on the surface to which it is applied, and not as the opiates. Dr. Wood considers it as tonic and antispasmodic. We think that it is an error to attribute to it any astringent property. Its effect in constipating the bowels, and in arresting certain diarrhoeas is evidently due to its property of reducing the nervous sensibility.

Considerable fear is entertained by some lest poisonous effects should follow the use of bismuth. It is true, that when imperfectly prepared, it may contain a small portion of arsenic in the form of an arseniate of bismuth, and to the presence of this substance must any ill consequences be attributed which may follow ordinary doses, for when the sub-nitrate has been prepared from the pure metal, precipi-
tated and well washed, no danger need be apprehended though
the dose should be carried to half a drachm, or even more. Howe-
ver, in over doses, even the pure sub-nitrate may produce alarming
effects, such as great gastric distress, vertigo, drowsiness, &c.

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**ARTICLE II.**

**Strangulated Omental and Intestinal Hernia—operation and recovery.**

*By Charles West, M. D., of Waynesboro', Ga.*

On the 17th September, 1841, I was called at midnight to see a
negro, (John,) in consultation with Dr. S. I found the patient suffer-
ing from a tumour in the left scrotum, very painful on pressure, red,
shining and elastic. The attack came on about twenty hours previ-
ously when in the act of throwing a heavy piece of wood from a
wagon. He has had constant nausea for six or eight hours, with
frequent vomiting, and one or two scanty stools without relief. The
paroxysms of pain were intense, extending over the whole abdomen,
with an increase of nausea at each return of pain; the pulse was
100, strong and corded. He says, that about twelve years ago, he
had a similar accident, which was relieved only after great efforts,
and aided by the use of the tobacco enema. He has always felt a
considerable thickness in the scrotum since that attack, and has had
frequent returns of the enlargement coming on gradually after ma-
king any great effort—but he has always succeeded in relieving
himself by sitting in cold water—this relief occurring gradually
during two or three hours, and never suddenly. At the present time
the presence of an ancient omental, and a recent intestinal hernia, is
clearly perceptible.

Persevering efforts at the taxis alone, and then the tobacco enema
producing great relaxation, followed by renewed efforts, were used
for several hours without success. Venesection and the warm bath,
both carried to fainting were then resorted to, with as little success.

After exhausting every means which was thought capable of aver-
ting an operation, the latter alternative was advised at 8 A. M.—
Through the opposition of both master and servant, the operation
was postponed till night, about forty hours after the beginning of the
attack. At this time the tumour was red, glossy, hard, and very painful, the whole abdomen very sensitive on pressure, the paroxysms of pain extremely severe—the pulse 140, small and feeble. There was nausea, but no vomiting.

The cremaster muscle was found to have lost its fibrous appearance entirely, and seemed confounded with the serous membrane beneath. The division of the hernial sac permitted about an ounce of serum to escape, and brought into view a portion of omentum. This was found closely adherent to the tunica vaginalis, the false membrane being very strong, and requiring the use of the point of the knife to detach it. When dissected from its adhesions, it measured six inches in length, four in breadth, and one in thickness. Beneath this, a fold of intestine was found of a dark red color, so closely strictured, that it was impossible to draw out any portion, or to return it. At the external ring there was no stricture, though the omentum had formed close attachments to the whole inguinal canal, and seemed sufficient to compress strongly the intestine. At the internal ring, a stricture was found so rigid and close, that the finger nail could not enter. From the presence and adherences of the omentum, the stricture was with difficulty divided, by using a small conductor, and a sharp pointed bistoury; the probe-pointed bistoury and Sir Astley Cooper's hernia knife, being both too thick to pass between the intestine and fibrous cord, though repeated efforts were made to effect it. Having returned the intestine, the omentum was next cut off close to the abdominal fascia with little or no hemorrhage. The wound was dressed with four sutures, and adhesive strips. Four hours afterwards, a blister was applied over the whole lower abdomen, though complete reaction did not take place until several hours had elapsed, and about the time of the drawing of the blister.

A saline cathartic was then given, which did not operate till eight hours after. The wound cicatrized without difficulty, and on the twenty-first day the patient was discharged. For three months after he suffered severe colic pains after eating indigestible substances, but these gradually disappeared. There has been no return of hernia.

This case has been recorded, not for any thing remarkable in its history, or the operation, but as connected with some reflections which it suggests.

1st. The necessity of carefully examining every case of hernia after the reduction has taken place, so as to avoid, if possible, leaving any portion of omentum in the sac unreduced, since it will render
an operation at some future day inevitable, and by prolonging and complicating the operation, increase the danger of the patient.

The presence of an unreduced omentum, though small, renders the use of a truss highly dangerous, and if large, doubly so, from concealing the presence of a small nucleus of intestine from even a careful observer. The irritation produced by that instrument always causes a thickening of both omentum and intestine, and renders reduction without an operation a matter of impossibility.

2d. The diagnosis of this case was materially aided by attention to its history since the previous accident. The constant presence of something not intestine, in the scrotum of that side, its volume frequently increased by bodily effort, and always relieved, not by pressure, or favorable position, but by the use of cold water, not suddenly with a gurgling noise, but gradually, seemed to point out the existence of an old omental hernia, which was confirmed in the sequel.

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ARTICLE III.

An Essay on the Abuse of Diuretics—some of the morbid conditions of the Urinary Organs arising therefrom, and their Treatment, with Cases:—Read before the Medical Society of Augusta, June 7th, 1845. By H. F. Campbell, M. D., Demonstrator in the Medical College of Georgia.

In the selection of a subject for this essay, the above particularly urges itself upon my attention—first, from its great importance in a pathological and therapeutical point of view; and secondly, from the fact that, I have recently had occasion to deplore the pernicious effects of the abuse of this class of medicines, in several interesting cases.

In the relation of the few following cases, every practitioner may recognize, perhaps, many similar coming under his own observation, wherein the empirical efforts of the patient to relieve himself, have so complicated his primary disease, as to render the treatment very unsatisfactory to the physician, and ultimate cure almost hopeless.

Diuretics are that class of medicines, which increase the secretion of the kidneys, and the term owes its etymology to the two Greek
words  δια, by or through, and  ως, I pass the urine. All agencies which, directly or indirectly, exert an influence on the urinary organs, producing an increase in their secretion, may with propriety be termed diuretics; hence these agents have been classed under two heads, direct and indirect diuretics: the direct are those substances that produce a specific action upon the kidney through the circulating fluid, and which if injected into the blood in proper doses, would by selection, exercise their specific influence upon these organs; and secondly, the term is applied to any agency which under certain peculiar circumstances has in any way become the cause of diuresis; among these are diluents which by increasing the amount of the circulating fluid, will consequently produce an increase in the urinary secretion, any diminution in the amount of the cutaneous or pulmonary exhalations will, from the antagonism existing between these great depurators, result in a proportionate increase in the urinary secretion; in exemplification of this we see cases daily, many indeed have come under my own observation, wherein the patients had been subject to irritability of the bladder, and invariably on the advent of inclement wet weather the disease became aggravated, even producing haematuria, from the increase in the urinary secretion consequent upon the diminution of the cutaneous exhalation.

Depletion and other antiphlogistic means, under certain circumstances, become powerful diuretic agents; when there exists an inflammatory condition of the kidneys, interfering with their secretion, blood-letting, by removing this condition, re-establishes the normal functions of these organs; nauseants also act in this way beneficially by controlling the circulation in nephritis; indeed the means and circumstances which, in certain conditions of the system may induce an increase in the urinary secretion, are multifarious and innumerable.

While I have deemed it proper, thus at the beginning of this essay, to glance briefly at the normal modus operandi (if I may use the term) of this class of therapeutic agents, it would perhaps be superfluous to enter into further detail of such action; I will therefore now consider their improper application, and the morbid conditions in the urinary organs thus superinduced.

On a review of distinguished authors on urinary diseases, the abuse of diuretics stands among the first on the list of causes producing derangement in this set of organs, of which the proper exercise of the functions is so eminently important, and the morbid condition or im-
perfect action, so surely entail a life of misery upon the patient. M. Chopart, in his valuable treatise on the diseases of the urinary passages, has occasion more than once to deplore the sad havoc caused by the improper use of diuretics, and relates at length cases, wherein some of the most obstinate affections of the kidneys and bladder have been the direful result of the injudicious use of this class of remedies. He deprecates their abuse by empirics, and by patients themselves; indeed there is scarcely a disease of the kidneys or bladder reviewed by him, wherein he does not cite this as an occasional cause of that morbid condition of those organs upon which it depends. In his chapter upon the vices in the secretion of the urine, he mentions the abuse of diuretics first, among those causes which superinduce the diseased states giving rise to such vices. In nephritis it is often the cause of the inflammation, by too actively promoting the flow of blood to the kidneys, impeding their functions, and giving rise to ischuria and all its attendant evils. I have frequently found this a cause of simple retention of urine from the violent irritation of the neck of the bladder, producing either tumefaction or spasm at that portion of this organ; but what I have found, and this is the case in most of the reports on this subject, the most frequent result of the abuse of diuretics has been an irritable state of the bladder and kidneys, attended with incontinence of urine and hæmaturia; and it is more especially to this particular condition of the urinary organs that I wish at present, most respectfully to call the attention of the Society, adducing a few cases with the treatment found most efficient for their relief.

There is perhaps nothing more common, and yet nothing more trying, to practitioners in their intercourse with patients, than the empiric treatment to which they almost invariably subject themselves in venereal diseases, before submitting to the advice of a physician. More than two-thirds of the cases we are called upon to treat, have perhaps run the gauntlet of all the alleged remedies the patient has ever heard of, and when at length, application is made to a physician, the primary affection forms but a part of the difficulty to be surmounted.

Case 1st. Not long since, I was called upon to treat what the patient called a very obstinate case of gonorrhœa. Mr. K. said that notwithstanding the most active treatment, his disease had increased in violence, until he became alarmed and bought four ounces of balsam copaiba, and took the whole of it in two days, and in spite of all, the
burning and discharge continued, and when he urinated, (which was very often) he passed apparently all blood—and indeed he was in a deplorable condition: the bladder was so irritable as not to retain an ounce of urine; the hæmorrhage so abundant as to be rapidly exhausting his strength; and he at the same time complained of severe pain in the lumbar region—the discharge, it is true, still existed, but it was only of minor consideration in the sum total of his ills. He was treated with rest in the horizontal position, and a styptic powder of alum, kino and opium, to be repeated more or less frequently according to the amount of hæmorrhage, with demulcent drinks and an occasional dose of camphor water, to allay irritation at the neck of bladder. After the hæmorrhage was somewhat checked by this treatment, the buchu and uva ursi were steadily applied in the form of the compound syrup repeated three times a day, and the cure was complete in less than a week. The gonorrhœa was afterwards relieved by a lunar caustic injection followed by mild diuretics.

It is remarked by Dr. Willis, in his learned and concise Treatise on Urinary Diseases and their Treatment, "that, in certain morbid conditions of the kidney, the increase in the quantity of urine poured out by that organ, is followed by unusually frequent calls to relieve the bladder, and these calls have been observed to have this peculiarity about them, that they are singularly urgent when they supervene" —a remark that the following case, which is one like the above, of irritable bladder with hæmaturia, supervening upon the abuse of diuretics, will go in some measure to corroborate.

**Case 2d.** Mr. B—— A——, a young man, aged 18 years, contracted gonorrhœa, and applied to an apothecary, who furnished him with a balsamic emulsion, which he applied with all diligence, till he had the disease as he thought, pretty well subdued: as he had anticipated, while taking the balsam and nitre, his urinary secretion was very much augmented, but a short time before applying to me, these calls had become so frequent and required such prompt attention, that he could not go into company at all, being obliged to void his urine with scarcely a premonition, after which he also passed a few drops of blood.

When I saw him, he was not laboring under hæmaturia, but complained of a constant uneasiness in the perineum and a very frequent and painful voiding of scant, highly colored urine; he also had a dull pain in the lumbar region and a sense of fatigue in the thighs and knees. The gonorrhœa had ceased, but in its place, he had su-
perinduced a nephritic condition of the kidneys and an irritable bladder. Under the antiphlogistic treatment, with rest in the horizontal position, followed by the full exhibition of buchu and uva ursi, with occasionally a little camphor and opium, he slowly recovered the the tone of his urinary organs.

Case 3d. Simon, a boat hand, had had gonorrhoea for some time, and been treated with balsam copaiba, of which he says he has taken a great deal. The Agent of the Company, supposing that the disease was slight, as there was no discharge, and as he could not well define his feelings, referred him to me for examination, previous to sending him with the boat. When I saw him, he had a dull, fatigued look, said he felt tired and heavy, and when asked where he had pain, complained of a vague feeling of uneasiness in the region of the bladder and in the perineum, and said he felt bruised in the lumbar region. The discharge had ceased: the pulse and respiration were natural—urine scanty and attended with slight burning.

Treatment—I applied a tartar emetic plaster to the lumbar region and gave an active cathartie—after its operation, he took half an ounce of syrup of buchu and uva ursi, three times a day, under which treatment he recovered in a week.

Case 4th. Mr. M. Z——, aged about 35 years, had gonorrhoea, and took an emulsion of balsam copaiba, with oleum cubebae, oleum pimentae, and several other essential oils, making in all a very stimulating prescription;—this he had taken for a week, and the disease, though somewhat checked, was still very troublesome. When he applied to me, he was in the greatest distress, from the highly irritatied condition of his urinary organs, in consequence of the almost destructive diuretic course, to which he had subjected them; he complained of severe pain in the lumbar region, which evinced much tenderness on pressure; pulse rapid and full, respiration somewhat hurried; his whole appearance indicated intense suffering. He voided his urine about every ten minutes, in small quantities, and very pale—for an hour or two before I saw him, he was unable to sit, from the severe prickling sensation in the perinaem which that position produced—his bowels were constipated, and had been so for several days. Treatment.—The patient objected to being bled, and to relieve his immediate distress, I administered 3ij. of camphor water, with half a grain of sulphate of morphine; a short time after, four ounces of the compound decoction of buchu and uva ursi;—to relax the bowels I gave four comp. cath. pills. He afterwards continued to
use the decoction of buchu and uva ursi every three hours, with an occasional dose of camphor water. The effect was immediately and decidedly beneficial—he was well in three days. The gonorrhoea was afterwards successfully treated with the carbonate of potassa, dissolved in the syrup of buchu and uva ursi, to which was added a small portion of balsam copaiba.

The above cases I have adduced with the view of showing, as I have found them, the particular train of symptoms attendant upon that pathological condition of the urinary organs, superinduced by the improper use of diuretics, and also to offer my own experience, though limited indeed, in a remedy to which many ascribe but little specific influence over the urinary apparatus. With regard to the curative effect of uva ursi in urinary diseases, there exists among authors even at the present day, the greatest discrepancy; some claiming for it all the sanative power usually ascribed to a favorite remedy, while others contend that it is wholly devoid of any action whatever, save perhaps a slight tonic effect upon the system. Alibert, in reference to this article of the Materia Medica, says: "All that can be said of this remedy is that, its action is, under certain circumstances, manifestly diuretic," and he denies it any influence whatever over nephritic and other diseases of the urinary organs. Dr. Farriar speaks favorably of it, in some few instances, and reports twelve out of sixteen cases of urinary disease relieved by it, though the value of the deduction from these cases is somewhat impaired by the fact, that he combined its application with other acknowledged, and very efficient remedies for the same affections.

M. Biett, in his valuable contribution to the Dictionnaire des Sciences Médicales, on this subject, evinces but a feeble belief in the specific virtues of this plant, in diseases of the urinary organs, and advances in close relation with his own views, the experiments of Dr. Alexander, which tend to prove that it is scarcely endowed with diuretic properties, and coinciding with him, he further cites the high authority of Werlhof, Acrel and Dr. Fothergill, who, he says, contest the question of its efficacy with some degree of reason; and later, we have the opinion of Sir Benj. C. Brodie, who in his excellent Practical Lectures on the Diseases of the Urinary Organs, confesses with his wonted candor, his comparative want of success, with the remedy in question, in the following words: "The uva ursi has the reputation of being useful as a remedy for chronic inflammation of the bladder. I must say however, that this remedy has generally disappointed me
in these, and that I have not seen those advantages produced by it, which the general reputation of the medicine had led me to expect." And in another lecture, while he extols the other article in the combination used in the above cases of urinary disease, the diosma crenata or buchu, he again expresses his unbelief in the virtues of the uva ursi.

Indeed with such decided, adverse testimony, from the very exalted authority above quoted, it would appear even unscientific to hold an opinion very favorable to the specific action of uva ursi, in certain diseases of the urinary organs, could we not, on the other hand, adduce a weight of authority equally as respectable. Galen, it is rather suspected by Dr. Murray, in his treatise on this subject, recommended the uva ursi under the name of ἀρκους τραύλη, as a remedy against hæmoptysis. The physicians of Montpelier, and more recently De Haen, as M. Biett remarks, have singularly contributed to spread the use of it in these modern times, and since them we have the testimony of Model, Gerardi, Joseph Quer, and Dr. Murray—all of whom speak in the highest terms of its efficacy, and Joseph Quer more especially in his "Dissertation on the Nephritic Passion," published at Madrid, 1765, lauds it as "the veritable specific."

Although the majority of the above cited authors have valued the uva ursi, more particularly for its supposed virtues as a lithontriptic, a class of medicines which were since exploded by the chemical experiments of M. M. Vauquelin and Fourcroy, on calculus, and which now are but little esteemed by the profession; still I have deemed it expedient to adduce them, inasmuch as, in their hands, the remedy invariably exerted a decidedly beneficial influence over the urinary organs in certain states of disease. Later we have the favorable testimony of Dr. Farrair, Dr. Eberle, and Dr. Chapman, and lastly, we may quote Dr. William Prout, perhaps the highest practical authority on diseases of the urinary organs now extant. This author, in his justly styled "elaborate and profound" treatise on "the stomach and renal diseases," recommends it in terms of the highest praise for its astringent and tonic effect, in many diseases of the kidney and bladder, among which are the secretion of serous urine, suppuration and abscess of the kidney, chronic inflammation of the bladder, with cystorrhœa, &c.

In the cases given above, of disease of the urinary organs from the abuse of diuretics, the uva ursi has been administered in combination with buchu, which latter is rendered a very proper and efficient addi-
tion in such cases, from its demulcent and slightly balsamic character, which last principle is said* to act topically upon the secreting organs, as it passes through them, while it adds materially to the tonic effect of the bear berry upon these diseased surfaces. The forms in which I have applied the remedy most frequently, have been in that of the decoction of the uva ursi and infusion of buchu, given three times a day, in portions of two ounces each; but a preferable preparation is the syrup, prepared from the leaves of these two plants, with a sufficiency of sugar to prevent fermentation. This mode of administration, while it combines all the virtues of the two plants, is not obnoxious to the almost invariable objection made to their employment in substance, or even in decoction, their liability to nauseate: indeed Dr. Lewis complains that in all the cases wherein he has administered the uva ursi, it has produced the most distressing nausea.

I have used the buchu and uva ursi in one or two instances, in other affections of the urinary organs than those, the result of the abuse of diuretics, but with indifferent success; and its effect was only appreciable after a long continued administration; but in the above named cases, where there was but little organic lesion, and also in the dysuria and violent irritation, attendant upon the absorption of cantharides from a blister, their action has appeared to me, generally prompt and effectual in removing the most distressing symptoms.


ARTICLE IV.

A Case of Hydrocele twenty-three and a half inches in circumference and containing thirty-seven ounces of serum—cured by Iodine Injection. By Paul F. Eve, M.D., Professor of Surgery in the Medical College of Georgia.

In November last, as will be perceived by the following extract of a letter from my friend Dr. Wm. J. Johnson, an intelligent practitioner of Fort Gaines, I was consulted in reference to a case of hydro-scarcocele. "I write you this at the request of a friend of mine, Barnett Cody, of this (Early) county. He is a worthy citizen and most estima-
ble man, somewhat past fifty years old, and the father of several children. Some four or five years since a small tumour was detected at the bottom of the scrotum, which has continued gradually to enlarge to the present time. The old gentleman being very modest felt a great disinclination to consult a physician, and would doubtless have concealed his condition until now, or even longer, if he could, had not the tumour increased so much in bulk as to have attracted the notice of his friends and annoyed him greatly by its weight. Yesterday he visited this place for the purpose of consulting me, and I made a thorough and critical examination of the tumour. It is now quite large, and would weigh, I have no doubt, could it be extirpated without loss of blood, at least five or six pounds. It is attended as yet with no pain. It feels hard and unyielding. There is no discoloration of the integuments, no ulceration, no abrasion of surface. The veins at the bottom of the scrotum are quite enlarged, and appear turgid and full. The swelling within the last year has progressed upwards, towards the abdominal ring, and the spermatic cord with its tegumentary envelope are prodigiously enlarged. I should say the track of the cord was as large as my arm. Mr. C. informs me that he was many years ago a hernial subject. The hernia occupied the right side, but he has been radically cured of that affection for at least twenty years. The tumour which he now has, is confined to the right spermatic cord and right testicle—the penis and left testicle being perfectly healthy.

I cannot detect the presence of the testicle as a distinct body in the tumefaction. The tumour does not feel uneven or rough or knotty or doughy; but is quite even and possesses considerable elasticity. May it not be an hydro-scrocecele? I suppose it will require a surgical operation, and have advised my friend to visit you as soon as possible.”

In December last, Mr. Cody arrived in Augusta, and on the 30th of the same month, he was prepared for the operation. I found the case so accurately described by Dr. Johnson, that I have not a word to add to it. The tumour measured twenty-three and a half inches in its longest circumference, and having punctured it with the trocar, I drew off by the canula thirty-seven ounces of straw colored serum. The testicle on this (right) side, was now found to be twice the size of the other. My patient experiencing some pain and being threatened with syncope, was placed in the recumbent position, and drank some water. In from five to ten minutes I injected tr. iodine six drachms to eight ounces of water. The pain was felt to be increasing in a minute or two, and the injection was allowed to escape. Mr. C. suffered considera-
bly for two hours, to moderate which, morphine was given and a warm poultice applied over the scrotum.

Dec. 31st. Had not slept—the patient attributes it to the morphine. Very little pain was experienced. Diet, absolute.

Jan. 1st, 1845. Patient is doing well. A little more tumefaction, though no increase of pain in scrotum.

2nd. Ordered a dose of oil. Diet, gruel, tea and bread.

3rd. Patient doing well.

4th. Tumefaction of scrotum considerable; feels doughy. Punctured the cicatrix of the trocar with lancet, and it bled freely, nearly two ounces of venous blood. Swelling greatly abated.

5th. He feels well, and now thinks the operation will succeed. Diet increased. The patient up, dressed, and moving about the room for the past day or two.

6th. Started home (a distance of 300 miles,) by easy stages, in his carriage.

The following letter, addressed to me by Dr. Johnson, two months and a half after the operation, will give the result:

"Fort Gaines, 14th March, 1845.

"Dear Doctor,—I have purposely postponed writing to you in reference to the case of my friend, Barnet Cody, Esq., on whom you operated for Hydrocele, in order to ascertain whether the operation has been successful in effecting a permanent cure. I saw Mr. C. on last Tuesday, and made inquiries concerning the result of the operation. He informed me that his affection first made its appearance about five years ago. The tumour for the first two or three years enlarged gradually, but for the past two it increased rapidly, reaching nearly to the knees, and being so bulky and unwieldy as to inconvenience him in walking or sitting; and the deformity occasioned by its presence caused him to shun society and confine himself to his house. The swelling upwards towards the abdominal ring, along the course of the spermatic cord, commenced only a few months before he consulted me, and was very rapid. You know the shape, form, dimensions, &c., of the tumour, when he presented himself to you in December last, the amount of serous fluid evacuated, the treatment pursued, &c., up to the time of his leaving Augusta. Upon his return home, Mr. C. was under the fearful apprehension that the operation had been unsuccessful, but he is now thoroughly convinced that it has succeeded in effecting a radical cure. You wrote me that one of the testicles was enlarged to about twice the usual size; that enlargement continues, and I suppose
will be permanent. The cavity of the sac is entirely obliterated, and the scrotum is but little larger, if any, than in its normal state.

"I informed Mr. Cody that you had written me requesting to know the result of the operation, that you might make a report of the case for the Southern Medical and Surgical Journal. He expressed a desire to have it made out and published, even giving his name, residence, &c." * * *

I heard of Mr. C. a few days ago, and learned that he was well and attending to his ordinary business.

PART II.—REVIEWS AND EXTRACTS.

Some of the Diseases of the Heart. By C. J. B. Williams, M. D., F. R. S., Professor of Medicine in the University College, &c. London. (Concluded.)

Now, we come to a subject of much more frequent occurrence, and more important in a practical point of view:—Disease of the valves and orifices of the heart. We have hitherto considered diseases of the muscular fibres and of the membranes covering them, and we have now to attend to the lesions of the mechanism by which the circulating current is directed and conducted from the heart. We now come more especially to the diseases of what may be termed the hydraulic apparatus of the heart, in contra-distinction to that of the muscular structure, or the dynamic apparatus of the heart.

Now, it is desirable to divide the diseases of the orifices and valves into two great classes. First, there are the obstructive lesions—where there is more or less obstruction to the current of the blood in its proper channel; and secondly, those that occasion the blood to take a reverse direction, or a backward course, and these may be called regurgitant diseases. Now, the lesions that produce these different affections are very numerous, and I will describe the chief of them under different classes.

First of all, those which are allied to the affections we have already considered, as connected with endo-carditis. 1stly. Under this head may be mentioned a thickening of the endo-cardium, causing a similar condition in the valves. Sometimes this resembles a deposit of lymph, as in cases of recent endo-carditis—a sort of fibrous matter on the surface. This may occur in various parts. It is found at the semi-lunar valve, giving rise to a thickening of the margin of the valves, and often
taking a peculiar shape from the contact of one valve with another. It very commonly happens that there is a thickening of the membrane, deposited in the shape of a festoon, or what is called a scutiform thickening of the valve. The pressure of the valves against one another, modifies the appearance of the deposition; generally, the valves are thickened to a considerable extent, there being little vegetations round their margins: the orifice of the valve is also sometimes a little fringed. In one case that I witnessed, there were as many as eighteen of these fibrinous tumours, connected with the cords of the tricuspid valve. Another effect of this deposition is adhesion of one valve to another: this is a very common lesion. It is very common to find two of the aortic valves adherent to each other; so that instead of having three valves, you have but one valve entire, and the other two adherent, the intermediate portion forming a sort of projection between them. The effect of this is to cause an obstruction to the passage of the blood. The same thing may occur in the mitral, and more rarely in the tendons of the tricuspid valve.

2dly. There is another class of lesions included in some of the depo-
sitions I have already mentioned. Besides a deposition of fibrine on the endo-cardium, there is a thickening of the fibres and texture of the valve beneath this membrane, and the formation of a tense yellowish-white structure, so that the muscular portion becomes so altered as to a great degree to present that peculiar appearance which constitutes hypertrophy of the texture. This appears to be a deep-seated lesion, connected with a change in the muscular structure, besides an affection of the endo-cardium. Well, then, this probably arises from the formation of a sub-serous coat or texture, most commonly in the laminae of the valves, and the tendinous cords; and in connection with this hyper-
trophy, there is very commonly a sort of elongation in the fibres; and I have often found that where these deposits have taken place, there is an impaired elasticity, and a disposition to contract at one time, and to elongate at another; and, on that elongation, to break; thus producing great irregularity in the apparatus of the valves, and interfering with their proper functions. Sometimes this may lead to rupture of the heart. Frequently, in addition to this, there are small osseous deposits in the thicker portions of this fibrinous matter; and sometimes the tendons are quite thickened in this way. There may be various de-
greces of this. There may be a mere thickening—not interfering with the action of the valves, which is comparatively rare. Then there is a thickening with shortening of the valves, causing a partial closure of the orifice; and thickening with elongation, causing irregular enlarge-
ment of the opening. For instance, suppose thickening with elonga-
tion to take place, it has the effect of rendering the affected side of the valve quite loose, so that it never becomes tightened, and it cannot act perfectly at each systole; the blood gets behind it, and is forced by re-
gurgitation backwards into the different cavities. This will, eventual-
ly, produce lesions of the heart itself.

3dly. Another thing to be considered is that affection of the orifices,
in which there is an osseous or cartilaginous rigidity, especially at the aortic orifice, causing thus an obstruction to the circulation. Deposi-
tion is extremely common at the root of the aortic valves, causing ob-
structive disease, without any actual projection of these processes. The most remarkable form of deposition of osseous matter is a cohesion of the valves, causing almost a complete closure of the orifice, or so reducing it as to make it only capable of admitting a tube of the size of a crow-quinl. The same thing occurs with regard to the left auriculo-
ventricular opening. This adhesion of the laminae of the valves redu-
ces the orifice to one-fourth or one-fifth of its natural size, causing obstructive disease. This state is always combined with regurgitant disease. You seldom see this without some regurgitation into the ventricle, or auricle, through this narrow orifice.

4thly. There is another kind of thickening, attended with a sort of disposition to ulceration, or at least, to rupture. This usually affects the aortic valves, and is one of the most serious diseases to which the heart is liable; in which the valve is broken down, leaving only a rim or a sort of cord across the orifice of the artery; the other valves are here very much diseased likewise: it is generally the result of a de-
gree of acute inflammation, involving not only the membranes, but also the deeper-seated structure. Persons addicted to habits of intoxication are subject to this form of disease.

5thly. There is atrophy of the substance of the valves; this may take place simultaneously with thickening of their lower portions; and if it is extensive, it must produce serious results, leading to considera-
ble regurgitation. Shortening and atrophy of the valves is not a very common disease. It may, however, vary very considerably in extent, the laminae, in some cases, being much longer than in others. With valvular imperfection, there is generally hypertrophy, or dilatation of the heart, or both. I have already mentioned that this combination has been usually considered a great aggravation of the mischief; but I am quite sure, in many cases, it is so far from being an aggravation, that it is rather a compensation; and the effect of this, at least of hy-
pertrophy, and, perhaps, partly of dilatation, is a sort of counteraction to the imperfections of the valves. When there is obstructive disease, the blood is not forced with freedom through the orifice, and increased force is required to propel it with sufficient power. On the other hand, when regurgitation takes place, the same thing may be said. When there is obstruction to the passage of the blood from the auricle to the ventricle, dilatation is the morbid consequence. If there were no re-
ceptacle for the blood to regurgitate into, it would press on the affected parts, and rupture would be the consequence. The same sort of thing is found to take place, naturally, in diving animals. There is no doubt that hypertrophy is a great cause of evil in many instances, and it does not compensate for the mischief occasioned by the increased violence of the circulation. Dilatation, too, may be said to have a bad result in many instances, because it is accompanied by weakness of action. All the lesions I have been considering affect the left side of
the heart infinitely more than the right side, at least, generally speaking, and the reason for this has been variously ascribed. It has been attributed to the stimulating quality of the arterial blood. But there are several causes;—first of all, there is the more active function of the left side of the heart; this increased activity, therefore, predisposes to disease. 2ndly, there is the different structure of the left side of the heart; the left side is altogether stronger and thicker than the right; but this very strength and thickness offer a greater facility to the increase of disorder, when it is once induced in the walls. 3rdly. We must consider the more extensive relations of the left ventricle. You cannot disturb any part of the body, without the left ventricle bearing a portion of the disorder. Violent exertion, sudden chill, or any check to the circulation, all bear more on the left ventricle than on the right; and the result of this frequent exertion or interruption imposed on the left ventricle, renders it more liable to disease than the other.

The Physical Signs of Valvular Diseases.—These are highly characteristic. I have stated, that what are called murmurs, or abnormal sounds produced in the region of the heart, are most generally caused by some modification of the current passing through the orifices of the heart; and it is by these sounds mainly that we distinguish the character of the lesion and its seat. But we must observe that it is not every modification of the orifices of the heart, that will produce a murmur; it is only those that fulfil or complete the elements of sound, and give a vibrating resistance to the current as it passes. Hence you will understand, that where the obstacle in the orifice is very small, it does not interfere materially with the current of the blood, and it may give no vibratory resistance. With some pulsations, there is no murmur, but during strong pulsations there will be a murmur produced. Sometimes the aortic valves may be closely pressed together, so that the blood is forced out through a small orifice; in this case, the vibrating resistance may not be enough to produce a murmur. Again, the thin state of the blood in anaemia may produce a murmur, though rich blood may not. It may happen, if the valvular disease is considerable, that the murmur is not heard in the weak pulsations, but it will be heard when the heart beats more strongly. In the tricuspid orifice, there is frequent regurgitation, so as to produce pulsation, not only in the auricles, but in the great veins, as the jugular. This is not accompanied, in most instances, by any murmur; and the reason of this is, because the laminae of the tricuspid valve are placed flat against the direction of the current, and being rather light and yielding, they do not afford enough resistance for perfect vibration.

The murmur is then, generally speaking, a certain rule and indication of some valvular disease. But the amount and degree of murmur is far from being proportioned to the amount of the lesion. You may have a very loud murmur indeed produced by a very slight lesion; this is more particularly the case with those lesions that are called regurgitant. The loudest murmurs are what are called musical murmurs, where the vibrations produced by the current, are not only noisy but so
regular in utterance as to constitute a prolonged musical tone, the vibrations being equi-distant. The quality of the murmur is the best guide to the amount of the lesion, though even this is not a sure one. Those which are uniform, whether of the blowing or the whistling character, generally announce slighter lesions than the murmurs that are grating, or more deep-toned. This is a general rule. The musical sounds, when of a simple blowing or uniform character, are mostly caused by regurgitation through the smaller channels; on the other hand, the deep-toned murmurs mark the larger currents, and a harder kind of obstruction. Laennec, Drs. Hope, Wilson, and others, have thought the rough murmurs indicative of a rigid state of the orifices. Now the contrary is the case, for where this state exists, there is a great amount of looseness in the sound; and one of the harshest murmurs I ever heard, was in a case where there was no ossification at all. The breaking down of one of the valves caused a vibrating obstacle in the direction of the current. The intensity of the sound is not at all in proportion to the loudness, but it depends rather on the capacity of the obstacle for vibrating. There are, as I have mentioned, some obstacles which do not vibrate at all.

Natural sounds superseded by the murmur.—There is another character about the murmur, and that is the degree in which it supplants or supersedes the natural sounds, whether the first or the second. Whenever you have a murmur so intense and loud that you hear nothing at all of the first sound, you may be pretty sure that the lesion which produces it is very considerable, not merely as to the anatomical condition, but as to its effect on the constitution. On the other hand, when you have a murmur added to the natural sounds, there is a certain degree of proof that the natural actions are going on well; accordingly, when there is extreme disease of the mitral orifice, you find, towards the apex, that you can scarcely hear the first sound at all, but merely a prolonged blowing, not only obscuring by its loudness the first sound, but actually overpowering it. But if you apply the stethoscope over the right ventricle, you hear the sound. It modifies the suddenness and the character of the tension on which the first sound depends, and converts it into one which takes its character from the murmur itself. And it would appear in these cases, as if the vibrations naturally produced in the walls of the heart were converted into vibrations of the murmur—a conversion of the one into the other. We find these sounds arrested under various circumstances. If we throw a string into vibration, and while it is vibrating bring it near to another string also in vibration, and hitherto incapable of vibrating an octave, the octave sound will be very loud indeed; and you find that the second string, instead of responding a lower note, responds an octave; one vibration therefore supersedes other vibrations previously existing; and it appears that the murmur, to a great extent, not only muffles, but entirely destroys the natural sound of the heart, and converts the simple obtuse sound that naturally arises, into a prolonged blowing. Again, with regard to the second sound, the same thing is particularly observ-
ed. There is sufficient reason for this, for where the disease is considerable, you have not only the second sounds superseded, but the tension of the valves, on which the second sound depends, may be entirely destroyed. In the musical murmur I mentioned just now, the natural sound was not entirely superseded, showing that the amount of disease was limited. The patient did not die of disease of the heart, though there was a certain amount of hypertrophy of its walls; but he died of a fever.

The two chief classes of valvular disease are the obstructive and the regurgitant. The signs of the obstructive aortic being connected with the first sound, and the regurgitant aortic with the second sound: but regurgitant mitral is, in some measure, connected with the first sound. The distinction between the obstructive aortic and the regurgitant aortic is obvious. The mode in which it is distinguished, is by the manner in which the sound is propagated to the walls of the chest; the regurgitant mitral being transmitted most distinctly, and chiefly at the part corresponding with the apex and surface of the left ventricle; it is not heard so much in the upper part of the chest; whereas the sound of the obstructive aortic is above that, and is chiefly heard from the middle to the top of the sternum. Speaking of the symptoms produced by disease of the aortic valves connected with arterial excitement, there is almost always hypertrophy of the heart, and the arteries become the seat of an unusual impulse, a jerking kind of motion; and the symptoms, if the hypertrophy is considerable, are rather those of arterial excitement than of venous obstruction. On the contrary, mitral regurgitation and mitral obstruction produce especially the signs of venous obstruction in various parts of the system; in the vessels above the left auricle, and in the lungs, producing pulmonary congestion, pulmonary apoplexy, bronchial flux, sometimes hydrothorax, and bronchial congestion, with a liability to inflammation and congestion of all the other viscera, to a great degree. Thus the whole venous system is affected; the right side of the heart is dilated, and regurgitation takes place, and the veins of the neck and brain become congested. The regurgitation produces, sometimes, lethargy and stupor; and the other organs, more particularly the liver, are affected.

We find that a long continuance of this disease causes structural changes to take place in the different viscera; the lungs are more hypertrophied than usual; the liver, more especially, is enlarged, not merely under the influence of congestion, but a species of hypertrophy; and sometimes there is a transition to a state of subsequent contraction and degeneration. The same thing takes place in the kidneys; and thus diseases of other organs are superadded to the disease of the heart, and this superaddition of other diseases is really a common cause of the fatal termination of regurgitant disease. The different valvular lesions I have mentioned may be combined together; in some subjects you will have murmurs in both situations, referable to the mitral valves and the aortic orifice. The mode of distinction here, is by the loudness and the distinctness of character of the murmur in both situ-
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atons. Under these circumstances, you may have the aortic murmur heard in the middle of the sternum, and transmitted, as usual, to the arteries; but yet you hear also a loud distinct murmur at the apex, as loud as at the mid-sternum.

I have already mentioned that there are some cases of aortic murmur transmitted to the apex of the heart; but the character is usually different in this and in mitral disease. The sound of the latter is shorter than in the murmur which is produced at the aortic orifice. The aortic murmurs are never so superficial. The blowing or whistling sounds are likewise different in character in these two cases; there is a deep, grating, hoarse murmur in the aorta, whereas the murmur at the apex is loud, whiffing or blowing. This distinction is very useful in our prognosis, more particularly if these murmurs supersede the natural sounds. Then, you know, in conjunction with these, the other signs of the disease may be different; and the great reason why these signs of heart-affections are sometimes so complicated, that we cannot determine the position of the murmur at any one particular spot, is, as I before stated, because the enlargement of the different parts of the heart causes great displacements and alterations of position; and the only constant relation which is preserved, is with regard to the direction of the current into the arteries, or its direction backwards through the auricles.

The general treatment of a diseased heart, in the first place, is to be directed according as excessive or defective action predominates.—There are cases in which excessive action, connected with hypertrophy, is predominant, and the action of the heart and neighboring arteries very strong. Moderate sedative and depletory measures should be here adopted. The same thing is to be said in case of inflammation: the treatment must be more or less antiphlogistic, although we have not the same means of knocking down the inflammation altogether, as we cannot with impunity reduce the system to too great an extreme in these cases. Another class is that in which the action is altogether defective, as shown by faintness, weakness in the circulation, and irregularity of the heart's action. This is generally benefited by stimulating means; but remember, there are some instances of defective action, where the heart has already got such a load that it cannot propel it, and we shall here give more relief by taking away some of the blood. This is the congestive form of the affection; and in congestive affections, as well as in increased excitement, it may be useful to use deple- tion to a moderate extent, and as a temporary measure; on the other hand, where there is a deficiency of blood in the system, and a tendency to anæmia is obvious, from the pallidity of the countenance, and the extreme tendency to dropical effusions, this generally speaking, will be benefited by a treatment of a more or less stimulant character.

We must consider, likewise, the different kinds of lesions as modifying, in some degree the treatment. As a general rule, it may be stated (from which however, there are some exceptions), that diseases of the aortic orifice, connected with a considerable amount of hypertrophy,
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commonly require a great amount of depletion, and an antiphlogistic treatment. I question if the same treatment should be observed, with regard to medicine and regimen, in lesions of the mitral valves also. This is the general rule; but, still, all is to be done in a gentle way, not carrying the depletory measures to an extreme. The diseases connected with the mitral orifice are more commonly attended by weakness of the system and the circulation, by which the pulmonary organs may be greatly congested: and mild tonics should be administered at the same time, or subsequently to other measures. When the structural disease is considerable, these medicines should be reserved for the periods of intermission. We may divide the exacerbations into two classes: 1° They may take place from mere nervous excitement, mental or otherwise; attacks of violent nervous palpitation, referable to mental anxiety, or something disturbing the digestive organs. Here, palliatives, such as hydrocyanic acid and opium, with mild aperients, will often prove means of relief. There are effects produced by these exacerbations that require attention; when the heart is healthy, the effects will pass off without any remedies; but when the heart is diseased, we have not only to remove the immediate consequences of this excitement, but also the previous morbid effects; thus, if the lungs be congested, means should be adopted to act on the circulation, and keep up the action of the blood; if the liver is affected measures should be taken to act on its secretion, as doses of mercurial medicines. It is a very useful practice in all these cases, to give diuretics, combined with mercury, for a short time, after any attack of this kind. I do not know that any thing better can be suggested. In combination with blue pill, henbane and squill, with a little digitalis, if the action of the heart is not very weak, may be given; two or three grains of blue pill, the same quantity of extract of henbane, one grain of quinine, one grain of squill, and half a grain of digitalis, are the best constituents for a pill, and form one of the most useful combinations that I know of, not only for removing congestion, but also the low inflammatory states that are sometimes produced.

2° Besides these nervous cases, there are exacerbations of a sub-inflammatory character, produced by exposure to cold, over-exertion and the occurrence of rheumatic affections. Under these circumstances the chief remedies are: moderate antiphlogistic measures; generally local depletion at the region of the heart, by cupping or by leeches, followed by blisters, and mercury and opium are sometimes useful in these cases, but the pill mentioned before answers extremely well. Diuretics should be combined with these until the congestive and sub-inflammatory symptoms are removed. When the patient is extremely weak, so that we are afraid of withdrawing blood, dry cupping is often useful. This is not, however, so saving a measure as is generally supposed. I have found many physicians recommend dry cupping, under the idea that it saves the blood, but this is a great mistake. It causes extensive effusion of blood in the cellular texture, and the blood is decomposed, and is no longer useful; it is formed into a clot, and must be
absorbed again, in an altered state. The exhaustion from dry cupping is much greater than when the scarificator is used. Besides this remedy, plunging the hands in hot water rendered stimulant by mustard, or the application of a poultice is useful. If there is any thing like a rheumatic tendency, the best kind of remedies are colchicum, and iodide of potassium, as a means of acting on the secretions. When these temporary exacerbations have subsided, and the circulation is relieved, great benefit will be derived from tonics or mineral acids. The most useful is nitric acid. Gentian, too, is used with benefit. Mineral acids are serviceable where there is a disposition to dyspepsia. In cachectic states, where there is a deficiency in the quantity or quality of the blood, stronger tonics are employed, particularly iron in its various forms.

Complications of Heart Disease.—In cases of disease of the heart, we have likewise to consider the morbid conditions that arise from a defective state of the circulation. Dropsy is the chief of these conditions, and it has to be treated, generally speaking, with diuretics and purgatives. Those diuretics I have mentioned under the head dropsy, are useful; acetate of potass is serviceable in inflammatory cases, combined with digitalis or squills, and also sweet spirits of nitre, and spirits of juniper; tincture of cantharides is also allowable; but no diuretic has so good an effect, in such cases, as the pill I mentioned before. Measures should also be adopted to relieve the congested state of the kidneys, where their secretion does not go on. Cream of tartar, &c., is useful. Elaterium is an admirable remedy for getting rid of the dropsy, and improving the action of the liver. It, however, is apt to cause great sickness, and a tendency to faintness, and, generally speaking, cream of tartar, in large doses of from half an ounce, to an ounce, taken in the morning, produces free watery stools, to a great amount. It should be continued at the same time that tonics are given. After this, it may be useful to give tincture of digitalis, with the tincture of cantharides. When this dropsy continues, it may be necessary to combine these diuretics with tonics. Dr. Abercrombie recommends a combination of squills with sulphate of iron; but I am not so strongly impressed with its utility. Tartar emetic is very useful in cases where there is not too great weakness. Chalybeates and tonic medicines do much towards promoting the action of the excretory organs, as well as increasing the general strength of the system. The treatment of diseases of the heart is a very important subject. The chief object is to preserve a proper balance in the system; to avoid extremes; and to try to adapt the circulating powers to the existing defects, as well as to avoid all circumstances which overtask the organs of circulation. Gentle exercise, or friction, greatly promotes circulation, and it is also much benefited by the improvement of the excretory and digestive organs. As a general rule, in organic diseases of the heart, the diet should be as nourishing as the digestive organs will bear, without producing fulness or inflammation. The starving plan, in organic diseases of
the heart, is most prejudicial. I have seen many cases where this
plan has been adopted, and which, with scarcely one exception, were
invariably benefitted by a return to a moderate nourishing diet. The
diet must be proportionate to the digestive powers. There are some
few cases, it is true, in which the regimen must be abstemious.
These are when inflammation is present, and exacerbations arising
from inflammatory action; or else, where there is a great amount of
hypertrophy of the heart, and continued increased action, &c. Un-
der these circumstances, the diet must be extremely sparing for a
time. But by far the greater number of cases of heart disease pro-
ceed from nervous irritability. One great rule, in relation to the diet
of a patient afflicted with cardiac disease, is to take care that the
quantity of food taken is not too great in bulk, and, therefore, vege-
table food should be avoided as much as possible. This is one reason
why a moderate animal diet, in conjunction with farinaceous food, is
better than slops, or things of that kind, which distend the stomach
without giving it strength. It is necessary, therefore, to avoid any
large bulk of liquid. Many patients find out by experience the utility
of modifying their diet, so as to make it of as dry a condition as is
consistent, taking scarcely more than half a tumbler of liquid at their
dinner. If the system becomes encumbered with a great quantity
of liquid, mischief results. Further, it is important to avoid any-
thing that will tax the heart, and excite it to excessive and undue
action. In severe cases, this should be particularly studied, and the
patient should not even be allowed to go up stairs, or ascend to any
apartment not on the same floor; he should always walk on the same
level. Constantly lying down, or sitting in one position, should be
avoided: and walking about, now and then, so as to enliven the sys-
tem, is desirable. Friction of the extremities, if the patient is too
weak to move about, should be employed, two or three times a day, so
as to promote the circulation. In many cases, moderate exercise is
highly useful, not merely on account of promoting the circulation, but
also the action of the various functions of secretion and digestion.
Exercise in the open air, and on horseback, is highly desirable; gentle
riding answers very well. In this way I have seen cases, that had
gone on apparently to their last stage, completely recover. Mental
tranquillity is an important element towards recovery.

No absolute rule can be laid down with regard to stimulants.
They should be used in the smallest quantities. Malt liquors increase
the action of the heart to a great degree. Many persons are in the
habit of taking malt liquors, and a certain quantity in these cases is
essential to their common mode of diet; so this must depend very
much on the habits of the individual. Generally speaking, white
wine, with a little water, or weak spirits and water, are useful to act
on the kidneys.—Medical Times.
Case of Punctured Wound, followed by a remarkable train of Symptoms. By Luther Ticknor, M. D., of Salisbury, President of the Connecticut State Medical Society, (with remarks by the Editor of the New-York Journal of Medicine.)

Mrs. A., about the middle of November, 1844, in washing some small articles of dress, pierced the end of the middle finger with the head of a threaded needle which she supposed penetrated the ball of the finger to the depth of from one third to one half inch. The first sensation was that of numbness, instantly following the infliction, extending up the arm to the axilla and front part of the shoulder. This was followed immediately by numbness of the fingers of the other hand, and next with faintness and vertigo, which brought her pretty soon to her bed. Some mitigation of these symptoms was procured by laudanum, so that I did not see her until severe pain and febrile symptoms, oppressed respiration and gastric sinking, excited some alarm for her safety, about forty-eight hours after the injury. I found her with hurried anxious breathing, very frequent obscure pulse, a moist surface, with temperature but little increased, almost constant chilliness, and what the patient call faintness. These two latter symptoms continued with very little variation five or six weeks. A diffused swelling not easily defined occupied the upper portion of the "pectoralis major muscle," extending upward to the articulation of the shoulder; certain points on this tumefaction were excessively painful and tender to the touch. These tender points changed their location from time to time, so as to encourage the hope that some improvement was going forward.

The local treatment consisted of dry cupping, epispastics, fomentations, anodyne poultices, anodyne linaments, &c., with very little apparent benefit; and yet anodyne poultices did the best. Internally, opium, in some form, and in large quantities, was indispensable throughout her treatment. Profuse perspiration, subsultus and incipient delirium, pretty early suggested the use of tonics, of which sulph. quinine was preferred and freely used with advantage. About six weeks after the injury a slight fluctuation was felt under the edge of the tendon of the pectoral muscle, within the axilla. Forty-eight hours after it was discovered, a spontaneous discharge of at least eight ounces of rather thin purulent matter took place, and continued profuse from this orifice, and one made subsequently a little lower down upon the chest, for about two weeks, when constitutional and local symptoms gave place to returning health. Immediately after the fluctuation was discovered, Mrs. A. made free with London porter, it being the only stimulus of the diffusible kind her stomach would bear, and this it bore to good purpose. Mrs. A. is now entirely well, I believe, though perhaps the shoulder droops a little from the awk-
ward position in which the arm was kept for a long time, rather than from any imbecility of the muscles. A deep depression marks the site of the abscess, showing a pretty extensive condensation or loss of cellular tissue.

Now, sir, is or is not this rather an uncommon history of a punctured wound? Nothing like it has occurred within my field of vision, but that is no proof of anomaly. Is there not some analogy observable in this case, with poisoned wounds? Will you be so good as to furnish some remarks on this case.

Remarks.—We thank our old and honored preceptor, Dr. Ticknor, for the above very interesting case, and hope he will favor our readers with still further contributions of a similar kind. Although we cannot hope to elucidate the pathology of this particular case by any remarks of our own, still we feel obliged to comply with his request by stating such suggestions as its perusal has given rise to in our own mind.

The case is one of uncommon interest, both physiologically and pathologically. We shall first notice the physiological deductions which seem to flow from this accidental wound, which, for our present purpose, we will view as one instituted for experimental purposes.

The nerve which was punctured, was undoubtedly a branch of the median, which is formed by the two lower cervical and the first dorsal nerves; and is the largest of the brachial plexus, which latter supplies two or three filaments to the phrenic or internal respiratory nerve, and sends numerous branches to the external muscles of respiration, to the pectoral and deltoid muscles, and indeed to the whole external part of the chest and neck; and to the serratus magnus, a large branch is sent, called by C. Bell, the external respiratory nerve, which is also connected by a filament with the phrenic.

It appears that when the wound was first inflicted, a sensation of numbness was felt running up the arm to the axilla and shoulder, and immediately afterwards the same feeling was experienced in the fingers of the other hand; as no mention is made of spasms or convulsions, it is inferred that none were manifested, except subsultus, which occurred at a later period of the disease.

This, so far as our reading and observation extend, is a rare phenomenon, and one well worthy of consideration. According to Marshall Hall’s doctrine of the reflex function of nerves, which supposes that a nerve is compounded of sentient and excitatory filaments, and has probably two origins, one in the cerebrum, the other in the medulla spinalis, so powerful a stimulus applied to an incident or sentient nerve, ought to have excited contraction instead of pain in other remote parts of the muscular system. How are the phenomena of this case to be reconciled with the doctrine of the reflex function, as explained by Mr. Hall?

Again, Muller observes, that “the sensation produced by irritation
of a branch of a nerve, is confined to the parts to which that branch is distributed, and generally, at least, does not affect the branches which come off from the nerve higher up, or from the same plexus." In this case, however, we find a similar sensation experienced by the corresponding nerve distributed to the opposite side of the body; and not only this, but painful sensations in the region of the axillary plexus, and the parts which it supplies with nervous influence; and also distressing sensations in the epigastric region, which would seem to indicate irritation of the cœlial plexus and other portions of the ganglionic system of nerves. And yet Muller states that irritation is felt "only in the spot where the irritant is applied, and that it never reacts upon the brachial plexus, and on the other nerves which arise from it." One clear case, like the above, in contradiction of a statement like this, is as valid in physiology as a thousand. Sensation, we know, is generally transmitted from the periphery to the centre, from the surface of the body to the source of all sensation, the brain. In addition to this, we here find sensation transmitted from the brain to the extremities, as well as to the vital organs of the thoracic and abdominal cavities. Examples of radiated sensations, in the same limb, or region of the body, are not uncommon, as the extension of the pain of tooth-ache over the whole face, of pain in one finger to the hand, arm, and other fingers. In the London Medical Gazette for 1834, a case is related where, after amputation of the thigh, a swelling formed in the ischiatric nerve at its extremity, where it was also firmly united to the cicatrix and bone; after a short time the skin of the entire stump, and sometimes even distant parts, as the integuments of the abdomen, became affected with severe pain, without any inflammatory symptoms; but the trunk being amputated at a higher point, the pains did not return. Muller states that these sympathetic sensations do not occur in health, because of the isolation of the nervous fibres in their course to the brain; but there is no more isolation in health than there is in disease.

The following case, which we find in Mr. Swan's "Treatise on Diseases and Injuries of the Nerves," has many and close points of resemblance with the one reported by Dr. Ticknor. Mrs. E., aged 40, received a cut on the inside of the first phalanx of the left thumb. Immediately after the accident she felt a numbness in the arm, and a sense of fulness, as if the skin would burst; these sensations continued for a fortnight, and the wound healed very well. At the end of this time, violent pain came on, when a tremulous motion could be seen in the part which it occupied. The pain was termed startings or spasms, by the patient, and was felt in different ways, but the muscles were not affected. These spasms were felt all over the body, though they were by far the most frequent in the upper half of it. She frequently felt a great heat in the chest and abdomen, but most particularly in the latter, and the same startings as in other parts of the body. The sensations were sometimes as if the flesh was pinched with hot irons: sometimes a great heat, as if hot water was poured
down her back; sometimes she had frequent shakings of the whole body, which were unattended with pain, and were most relieved by drinking hot water. The spasms were not confined to the left arm, but she had them at the same time in the right, and frequently in the right when she had none in the left. The fore-finger was as painful as the thumb, and if anything touched either of them the spasms were produced, which continued many days. She had a good appetite, her bowels were confined and her tongue furred. But she had no thirst.

Sedatives and antispasmodics seemed to do her most good, though nothing was productive of much benefit. At the end of six months the spasms were less frequent, but were reproduced if the thumb or fore-finger was moved or touched. Succeeding years brought each some mitigation of her sufferings, but even after seven had elapsed, extreme susceptibility of any impression still remained in the thumb, and the fore-finger had not recovered its natural condition. Lifting a weight, or using the right arm much, always produced sensations as if needles were running into it, and attempting to use the fingers of the left hand, as in knitting, produced giddiness. She continued to be affected with spasms in every part of her body till her death, which happened nine years and six months after the occurrence of the accident, when she seemed to die worn out.

The following are examples of a similar kind. Dr. Wollaston states (Sir B. Brodie on Nervous Affections) that he ate some ice-cream after dinner, which his stomach seemed to be incapable of digesting. Sometime afterwards, when he had left the dinner table to go to the drawing room, he found himself lame from a violent pain in one ankle. Suddenly he became sick; the ice-cream was rejected from the stomach, and this was followed by an instantaneous relief of the pain in the foot.

"A gentleman consulted me," says Sir Benjamin Brodie, "concerning a pain in one instep. The pain was severe, causing lameness, so that he walked with difficulty; but there was neither swelling, nor, except the pain, any mark of inflammation. I prescribed some remedies, which, however, were of no avail. One morning he called on me, still suffering from the pain in the foot, and so lame that he could not get out of his carriage and walk into the house without the assistance of his servant. Now, however, he complained of another symptom, he had a difficulty of making his water, and a purulent discharge from the urethra. He had labored under a stricture of the urethra for many years, and had occasionally used bougies. Of late, the stricture had caused more inconvenience than usual; but he had abstained from mentioning it, thinking it would be better that he should (if possible) be relieved of pain in the foot before any treatment was adopted on account of the stricture. Under these circumstances I introduced a bougie, which penetrated the stricture, and entered the bladder. Immediately on the bougie having been used, the pain in the foot abated; and in less than a quarter of an hour he
left the house free from pain, and walking without the slightest difficulty! This happened some years ago, but I have seen the patient at intervals ever since; and from a most careful observation of his case, he and I are both satisfied that the pain in the foot is connected with the disease in the urethra, and we have never found any thing to relieve it except the introduction of the bougie."

The following may also, perhaps, be regarded as cases illustrating the tortuous or anomalous route sometimes pursued by sensation: as when pain is felt in the testicle, from the passage of a calculus along the ureter from the kidney into the bladder, on the same side; or pain on the outside of the hip, from inflammation of the testicle. The former may perhaps be explained, by the circumstance that many of the nerves of the testicle derive their origin from the renal plexus, which also supplies the kidney, and which is formed by branches of the great sympathetic nerve. Now the calculus operates, in the first instance, on the nerves of the kidney, by which its influence is transmitted to the renal plexus, and thence reflected to the nerves of the testicle.

In the latter case, the nerves which supply the scrotum and cord have the same origin, viz. the lumbar plexus, as the cutaneous nerves of the outside of the hip. The irritation of the former is thus communicated to the latter and referred to the parts to which they are distributed,—attacks of gout in the foot from the presence of acid or other irritating matters in the stomach, are also examples to prove that irritation in one part of the body may cause pain in another and remote part.

Instances are common enough where irritation at one extremity of a nerve is felt at the other, or at its origin: as when pain is experienced in the back, from injecting port wine, &c., into the tunica vaginalis testis, head-ache from irritating matters in the stomach (which is instantly relieved by an emetic).

Now, how are we to explain these facts from recognized physiological laws? Is an impression conveyed to the sensorium by one nerve, and transmitted by it to another nerve? Is it possible to determine, in particular cases, why a particular route is taken by sensation? Is it, in short, reflex action from the brain or spinal cord, at all? Muller has asked, whether a current, in such cases, passes from the cerebral or spinal extremity of the nerve in a retrograde course, to its peripheral extremity; or, if there is no current, but merely oscillation of a nervous principle? whether the impression conveyed to the brain by the nerve primarily excited, gives rise to a reflex oscillation in another nerve, from its cerebral to its peripheral extremity? It seems altogether improbable to us that either currents or oscillations are propagated in a retrograde direction from the brain; nor is it necessary, in explaining the phenomena in question, to suppose the existence of any such law, or mode of action; it is more rational, and certainly more philosophical, to suppose that the irritation is transmitted to the origin of the nerve, in the brain or spinal cord,
which supplies the part affected, and there affects the origin of other nerves, going to other parts, and thus giving rise to sympathetic sensations in those parts to which such nerves are distributed. As when a limb has been amputated, sensations are apparently felt in the limb that has been removed; and, in epilepsy, an aura is experienced in the lower extremities, although we know that the cause and true seat are not in those parts, but in the spinal marrow or brain; being, in fact, nothing more than the first symptoms of the affection of the spinal marrow and brain, which show themselves during the attack.

In affections of the spinal cord, moreover, the sensations are felt in the peripheral parts of the body, as in inflammation of the cord, we feel violent pains in the limbs. In this manner, we apprehend, are sensations sometimes radiated to different and remote parts of the body.

In the case of Mrs. A., the function of respiration and circulation was seriously affected, and that immediately upon the infliction of the wound. Our first inference from this fact is, the phenomena were manifestly the result of irritation, and not inflammation, as sufficient time had not elapsed for the processes of the latter to have been instituted. Hence, the opinion of some, that all phenomena that arise in consequence of injuries to the nerves are owing to inflammation, is erroneous, and should be abandoned.

The symptoms also indicate, that that portion of the spinal cord and medulla oblongata, that gives origin to, or is connected with, the par vagum, sympathetic, phrenic, and other nerves that minister to the functions of organic life, was profoundly affected; and it is a remarkable fact, that an impression of so grave a character was chiefly confined to that portion of cerebral or medullary matter that is concerned in sensation, and did not involve the tract concerned in motion. The cold and moist surface shows a suspension of capillary circulation—a function well known to depend on the integrity of the nervous power. The sensation of "faintness" may perhaps be referred to the deranged function of the nerves which constitute the cardiac and solar plexus. The sensation of "rigor," or constant chilliness, is an attendant upon local irritation, under a great variety of forms—expressive of a sympathy of the circulating with the sensorial organ—of the heart with the brain. It may arise from fear, from cold, from suppurative action, from a direct nervous impression, as syncope, from the prostrative character of severe irritation, as a severe shock or blow; and in general, perhaps, it indicates returning animation and reaction. Another remarkable feature in this case, was the formation of an extensive abscess beneath the pectoral muscle. When we take into consideration the state of the system at the time, the low state of the circulation, and the imperfect manner in which all the vital functions were performed, we are certainly forced to the conclusion, that suppurative inflammation does not, at least, always indicate a high grade of arterial action, and that it may be sometimes combatted most successfully by anodynes and tonics—remedies to
alleviate irritation and support the integrity of the vital powers. The effect of the remedies will, also, clearly lead to the same conclusion. May we not hence derive a useful lesson? and, when we meet with local inflammation, with deteriorated condition of the general health, and symptoms of irritation present, in one or more organs, whether it be the brain, the stomach, or the urinary apparatus, instead of general or local bleeding, resort, with advantage, to a cordial, supporting plan of treatment?

Mr. Travers, in his excellent work on "Constitutional Irritation," has pointed out with great clearness, the distinguishing marks between inflammation and irritation, which the reader may profitably consult in connection with this subject. This case proves very conclusively that much may be said as to the "constitutional origin of local diseases," much may also be advanced upon the local origin of constitutional diseases.

Dr. T. has inquired whether there is not some analogy in this case with poisoned wounds? So much so, we would say, that had the same symptoms occurred from a dissecting wound, few would have doubted that they were occasioned by the absorption of morbid matter. Mr. Lawrence thinks it very doubtful, whether "any thing that can be called virulent or poisonous, is introduced into the human frame by dissecting wounds," but imputes the effects to the mechanical injury inflicted. Such cases as the above would seem to lend considerable support to such an opinion. The instantaneous occurrence, however, of some of the gravest symptoms, may serve to distinguish such a case from one where poison has been absorbed, as, in the latter instance, some time would be required for the development of the disease. It depends, we believe, entirely on the state of the general health at the time, whether such accidents ever lead to any serious result; certainly in a very large majority of cases, no unpleasant symptoms whatever follow such wounds. During our apprenticeship in our younger years, as demonstrator of anatomy, we often met with these accidents in dissecting, but never experienced the slightest injurious effects, although we used little, if any precaution. In some instances, we believe the effects produced are such as would arise in wounds considered in themselves, without any reference to the absorption of morbid matter; in other cases it is more probable that a poison is introduced into the system, to which the subsequent phenomena are to be attributed. We here close our discourse, with many thanks to our friend who has furnished us with our text.

The facts which I am about to relate are not very important either for their rarity, or for the obscurity of the diagnosis, or for the deductions which might be drawn from a greater number of cases.

Sciatic neuralgia is an affection which if not always well determined as to its nature and the kind of lesion which causes it, is at least generally well known by its symptoms; and the rare cases in which it may be confounded with incipient coxalgia, or with neuritis, are the only ones in which the diagnosis presents some difficulty.

It is especially with regard to its treatment that this affection has arrested the attention of practitioners, and they have exhausted means of every kind in their attempts to remedy the cruel pains, of which it is the prolific source. Thus the number and the variety of the means employed, prove the great difficulty and uncertainty of the treatment, and are at the same time but little calculated to encourage new researches. In a therapeutic view, however, the following facts may possess some interest. Without extending the already long page of the treatment of sciatica, they will disclose the peculiar employment of a known remedy, and they will shew that there is a proper mode of employing topical applications, as well as of administering medicine internally, and that both fail, unless upon certain conditions, which ought to be well appreciated.

Case 1. A carpenter, aged 37, sent for me April 7th, 1844. He was of a strong constitution, and of a sanguine temperament, had lived at Lyons for ten years, and had never been sick—eight days before, while working in a shop exposed to currents of air, he experienced in the left thigh, a sensation of pricking, and of numbness, which attracted but little attention. During the night the pain became more severe, and the next day, and the two following days, it began to embarrass his movements, and although it seemed to be less acute during action, than when in a state of repose, the patient discontinued his work, believing that tranquility would be sufficient to restore the use of his limb. In this he was disappointed, as the pain became more and more developed. It occupied the posterior
part of the thigh, from the gluteal region, to the popliteal hollow, without extending below the knee. For two days, the patient employed frictions with camphorated oil, without any relief. On the fourth day, he applied a blister upon the thigh. The pain, instead of diminishing, increased, and extended below the knee, along the external margin of the leg to the external malleolus and the instep, following the course of the external popliteal nerve. The limb became very sensitive upon the slightest motion, so that the patient was obliged to send for a physician. I was called.

On the 8th of April, the ninth day of the disease, the pain was very acute—the patient had not slept, the face was red, the head of a burning heat, no appetite, intense thirst, the tongue white and the pulse hard and frequent.

Prescription.—Bleeding of about sixteen ounces; harley ptisan; gum syrup, with one grain of the watery extract of opium. Diet.

On the 9th, the patient having slept a part of the night, was free from cephalalgia, and asked permission to eat. He continued to complain however of pain, which was fixed—continuous, sometimes of a crawling, sometimes of a lancinating character, and which was occasionally aggravated; two cramps had occurred during the night—the leg was flexed, and motion impressed upon it caused acute pain. The latter extended from the hip to the foot where it was especially acute, and also in the gluteal region, but less severe at any intervening point. There was no redness, heat, or swelling, along the course of the nerve, but pressure at certain points increased the suffering.

The signs of acute sciatica being indubitable, I resolved to employ immediately the method of treatment by multiple vesicatories, which I had seen in Paris to be successful in the practice of M. Gendrin, and which had appeared to me to be most expeditious. I applied immediately three blisters, the first opposite to, and a little behind the trochanter major, the second upon the external side of the tibio-femoral articulation, opposite the superior extremity of the fibula, and the last upon the inferior extremity of that bone, so as to cover the malleolus externus, and the superior and external part of the dorsal face of the foot. These blisters were applied simultaneously, and were of the following dimensions: the first, six inches in diameter, the second, four inches, and the third, five inches, as I had seen practised by the physician of the Hôpital de la Pitié. In addition, the same potion and ptisan were renewed, and soup allowed.
April 10th. The patient has had fever; he has not slept; but the sciatic pain is obscured by that of the blisters. Same prescription.

The 11th. The sciatic pain is less violent in the thigh, but very acute in the foot. The blisters removed on the previous evening, after an application of 24 hours, had produced a circumjacent erythema, upon which were placed compresses smeared with an opiate ointment. Semi-regimen; the same ptisan; the opiate potion is suppressed.

Three days afterwards, (the 14th,) the blisters have ceased to be painful, the neuralgia is much less severe, and the patient complains only of a very uncomfortable sensation of numbness. Same prescription. The blisters shewing a tendency to dry up, are excited by an epispastic pomatum of cantharides.

The 17th. The patient, who had been previously unable to place his foot upon the ground, got up without any increase of pain; but the limb is weak, and scarcely able to support the weight of the body. From this time, I did not see him until the 23rd, when I learned from him that he could walk without difficulty, and without pain. I advised him to make dry frictions upon the extremity, every morning and evening, and to resume his ordinary occupation.

This is a case of acute sciatica, which presents nothing peculiar, except its rapid termination. The duration was about twenty days, and the cure was accomplished by the employment of blisters in the course of twelve days. The following case of chronic sciatica presents the same success.

Case 2. A plasterer, about 44 years of age, had been affected with sciatic neuralgia of the right extremity for two years, for which he had been treated from the beginning, at the Hotel Dieu of Lyons, by oily and aromatic frictions, by vapour baths, and sudorific drinks, whose nature he could not specify. This pain was very acute for a month, and ceased gradually during summer.

September 18th, 1844, he came to me with a new sciatic pain of the same extremity. The pain presented the peculiarity of having commenced at the foot, thence extending progressively along the fibular margin of the leg, without ascending above the knee. The general health of the patient is not good, his constitution is feeble, he is emaciated and pale. The pain of the leg is deep-seated, dull, and seems according to the expression of the patient, to occupy the marrow of the bones. Pressure along the course of the external popliteal nerve increases the pain, and transmits it to the hip, the
same result is not obtained by compressing the sciatic nerve near its origin.

**Prescription**—Two blisters, one upon the malleolus externus, the other upon the head of the fibula, with the respective dimensions indicated in the preceding case.

On the following day, the pain which had been fixed in the leg was experienced in the thigh, and in the gluteal and lumbar regions; the patient has not slept, the pain having kept him constantly awake, and it was with great difficulty that I could persuade him to permit the application of another blister of six inches in diameter on the gluteal region.

**Prescription**—Two pills with half a grain of opium; ptisan of the flowers of the orange tree; soup.

Sept. 20th. The patient suffers lancinating and lacerating pains in the thigh, which upon pressure or motion, are increased and propagated to the gluteal region and to the scrotum. He has slept but little, the suffering is greater during the night than in the day. The prescription is continued; the regimen is slightly increased.

The 22d. The pain has diminished; pressure not so painful, but every movement renews the suffering.

The 25th. The blistered surfaces are revived by a cantharides pomatum.

The 27th. The neuralgia has nearly disappeared; the patient can perform the movements of flexion and extension, without pain, but is still unable to walk or to get from bed.

The 30th. Pain is no longer experienced; the patient can turn in his bed, and begins to walk about in his room. Six days afterwards, he resumed his occupation, which has not been interrupted up to the present time. This was a case of sciatica, in which pressure disclosed with precision the extent of the phlegmasia. It extended upward along the course of the external popliteal nerve, as high as a point at which pressure ceased to be painful. We may here also observe the same fact which may be remarked in the preceding case, viz., the exacerbation of the pain, and its extension to the entire nerve immediately after the application of the blisters. This is a phenomenon which I have constantly observed, and which is explained by the vivid irritation caused by vesicatories applied to a large portion of the cutaneous surface.

**Case 3.** The employment of multiple vesicatories is not only very advantageous in cases of simple sciatica, as in those which I have
just reported, and which are the most common, but these powerful derivatives may also be very successfully used in chronic lumbago, which is sometimes accompanied by a double sciatica, as the following example proves:

One of my friends, aged 42 years, of a good constitution, and of a nervous temperament, has been subject from his infancy to headache of the most violent kind, and very frequently repeated. It is the only affection with which he has been troubled, except the one about to be described.

For about fifteen years, he has experienced almost constant pains in the lumbar region, which he attributed to the accidents of the chase, for which he had a great passion in his youth. He has successively employed every variety of treatment, shower baths, vapor baths, sand baths, sea bathing. He has visited Aix, Ceste, Balaruc; but nothing had been successful. The pain seemed on the contrary to have increased, and from the lumbar region, it had extended to the thighs, to the legs, and even to the plantar surface of the feet, which were particularly painful, so as sometimes to prevent walking or even standing.

I had frequently advised, but not very urgently, the employment of blisters on a large scale, being doubtful whether they would prevail against an affection of so old a date, and which I regarded with other physicians as an inflammation of the medulla spinalis. Tired of the means which had been previously employed without success, he determined in the month of September last, to try this last chance. I will not enter into the details of a treatment which continued for a month, and during which the patient remained constantly in his bed, or in his room. I will only state that at three different times blisters were applied upon all the joints of the inferior extremities, and upon both sides at once, and also that four different applications were made upon the lumbar regions. All these blisters had the dimensions which I have already indicated, and those upon the loins were even seven inches in length and eight in width; so that it might be said that the body was but one vast wound, judging at least by the enormous quantity of linen which was daily stained by the suppuration, by the excessive pains of the patient, and by the rigorous immobility to which he was condemned. From this extensive vesication, I had no accidents to combat, either with respect to the urinary bladder, or the genital organs, or the head; ptisans of barley and flaxseed, emollient injections, and some opiate potions, were the only internal remedies employed during the treatment.
Six months have elapsed since this treatment was adopted, and ever since the patient has remained in the possession of good health; the loins and the inferior extremities have regained their strength, and are competent for ordinary exercise. Long continued walking, however, or tolerably great fatigue, causes weakness, without re-exciting the pain.

I could take from my old notes of the clinic of M. Gendrin, many facts in support of the treatment which I have just detailed, but they would add nothing to the single inference which I wish to draw from the preceding cases, viz., that blisters in the conditions which I have indicated, having been successful in the cases just reported, and in a great number of analogous cases, we should hasten to employ a method which is so easy, and is preferable to others that have been more vaunted; such as the employment of morphine, incision along the course of the sciatic nerve, and the application at the bottom of the wound of a belladonna pill, a treatment which is imprudent and which I have seen to fail, and finally the worst method of all, the section of the sciatic nerve, advised in extreme cases by Galen, and practised without success by Mareschal, Louis, Sabatier, and more recently in 1828, by M. Malagodi, who is mentioned by Velpeau in his Operative Surgery.

If vesication, employed in the particular case which now occupies our attention, has been sometimes unsuccessful, these failures must be attributed rather to the mode of application than to the inertness of the remedy. Thus to speak only of the ordinary blisters of cantharides, they are employed most frequently singly, and of the dimensions of two or three inches, and applied only over the great trochanter. Some go so far as to renew them from time to time, in order to obtain a constant suppuration, but many abandon the essay after the first application. This mode of vesication has most frequently failed, for two reasons; first, because it is too limited to act efficaciously upon the affected nerve which is situated deeply in a case of sciatica; and secondly, because neuralgia, though sometimes limited, is most commonly extended along the whole nervous trunk, and it is not sufficient to act upon the nerve only at its origin, but it is necessary also to operate upon it throughout its entire course to its termination.

That this explanation of the insufficiency of a single small blister, is true, cannot be doubted; observation and experience testify this insufficiency, to be almost constant when the neuralgia is of some
extent and importance. This was perceived by M. Velpeau, when he employed blisters in strips along the entire course of the sciatic nerve, and of the external popliteal nerve. I know not if these strips were too narrow, or if the suppuration was not maintained sufficiently long, but it seems that this plan was unsuccessful, since it has been renounced by its author.

The method of vesication which I have employed, after the example of M. Gendrin, is not new; but the physician just cited has added some modifications to it. It is the method of Cotugno, and is also recommended by Hufeland, in his Manual of Practical Medicine, with this single difference, that the Italian physician and the physician of the Prussian king, gave to their blisters equal dimensions, and applied them only at intervals of one day, fearing doubtless to produce erysipelas, and a too vivid irritation of the cutaneous surface. But we know that if blisters have been able to fix erratic erysipelas, they rarely determine its production. As to myself, I have never seen the least inconvenience result from their multiple application. I conclude, then, that monstrous blisters, if they may be so called, though still larger are employed, are:

1st. The best mode of treatment for sciatica, whether dependent upon an inflammatory or upon a rheumatismal cause, experience having shewn that they succeed in both cases.

2d. That these blisters having the dimensions above stated, ought to be applied upon the three articulations of the inferior extremity, with this exception, that we apply only two when the sciatica is confined to the thigh or to the leg, but the third one is to be applied, if, as sometimes happens, the neuralgia invades the entire limb after the first application.

3d. That these blisters do not have the danger of the employment of morphine, whose effects cannot be calculated in the endermic method, because of the difference of its action upon different subjects. I heard, during my residence at the Hotel Dieu, that a patient had died with symptoms of poisoning, after the application of one grain of acetate of morphine, upon a denuded surface. While in the service of one of the divisions of the Ward Quatre Rangs, I saw a patient experience poisonous effects from the employment of half a grain of the hydro-chlorate of morphine, and nevertheless, authors counsel us to trust to the absorption of even two grains. Finally, as far as inconveniences are concerned, these monstrous blisters cannot be compared with the section of the sciatic
nerve, which in the case cited by M. Velpeau, was followed by a very slow cicatrisation, after the expiration of one year, and by debility of the limb which remained in a state of semi-paralysis.

4th. My fourth and last conclusion is, that blisters of large dimensions have not produced erysipelas, or other accidents, and that vesication, whose employment has been so frequently modified, and which has been regarded alternately as an inoffensive remedy, and as an heroic remedy, ought to be much used in sciatica, not with the view of endermic medication, but as an evacuant and a derivative.

N.

Considerations upon Ataxic Pneumonia with Delirium and its treatment by Musk—contained in a letter from Thibeaud, Professor of Clinical Medicine at Nantes, to the Editor of the Bulletin de Thérapeutique. (Translated.)

I have just read in the January number of the Bulletin de Thérapeutique, a case of peripneumony, accompanied with delirium during its course, and which terminated fatally on the eighth day. The disease had existed for five days before the patient was admitted into the hospital, when he was affected with so violent a delirium that he was unable to give any account of his condition. Pneumonia of the right side having been recognized, several venesections were prescribed without obtaining any amendment. Death occurred on the third day after the admission of the patient—the delirium persisted to the last, and so also did the signs of pneumonia; the pulse presented but a moderate degree of development.

To this case were appended the following reflections:

"The delirium, rather than the pneumonia, should have been the source of indications after the failure of the venesections, and we believe, after an attentive examination of the different elements which this case presents, that the use of musk would most probably have subverted the delirium which embarrassed the progress of the disease," &c.

It is with the view, Mr. Editor, of corroborating your opinion, and of insisting upon a therapeutic point of great interest, that I take the liberty of addressing you this letter.

Most certainly there are cases of peripneumonia in which the pul-
monary inflammation, if we may so speak, occupies only the second rank, and is eclipsed in importance by a superior element—the nervous element. Indeed the doctrine of elements developed by the physicians of the school of Montpellier is here eminently applicable. Delirium, the form assumed in these cases by the nervous phenomena, occurs under a peculiar aspect, and has been well appreciated by M. Recamier, Trousseau and Pidoux. In the majority of cases it is violent, accompanied by incoherent vociferations, and by unreasonable acts. The features bear the impress of affright, or of intense pre-occupation, the patient has not an instant of repose—sleep abandons him, and the room in which he is placed is disturbed by his threats and his cries—most commonly it is necessary to confine him in a straight-jacket. During this time the pulse is small, weak, frequent, and sometimes irregular. The general and local signs of the pulmonary affection undergo but little change; auscultation announces generally a stationary condition. It is not then in the extension or in the increased intensity of the phlegmasia that the danger resides. In such cases you have said, as has been also established by Sarcone, Recamier, and others, that musk produces marvellous effects. This is no exaggeration,—this medicine becomes under such circumstances truly heroic. If the diagnosis be exact, if we have not mistaken for this ataxic delirium, which I have just endeavored to describe, a sub-delirium without any particular character which occurs about the termination of certain cases of pneumonia, or indeed the delirium which, combined with other characteristic symptoms, announces the existence of cerebral meningitis, we are almost certain to triumph over the threatening symptoms which make their appearance. I am at the present time so well convinced of what I have just advanced, that in my clinic I have frequently predicted to my pupils the immediate and ulterior effects which were to follow the administration of the musk. Indeed after a dose somewhat large of this medicine, one scruple or more has been administered, the agitation is diminished, the delirium is appeased, the superior eye-lids become heavy, yawning and pandication occur, the patient seems under the influence of an imperative desire to sleep, and which he endeavors in vain to resist. This sleep soon supervenes, and is protracted for several hours, and during this time the pulse becomes slower and increases in force, a general perspiration breaks out, and when he awakes the patient is restored to consciousness. If the delirium returns it is only at intervals, and at length entirely disap-
pears. But although he has recovered his consciousness, the patient remains sometimes in a state of numbness which continues for several days. The senses are obtuse; audition, vision, and touch give but confused perceptions, and the answers, although correct, resemble those sometimes made by persons at the moment of being aroused from slumber. However the local symptoms of the peripneumonia, which until this time had remained stationary, change immediately. The resolution of the phlegmasia which had been suspended by the disturbance of the economy resumes its progress, and auscultation proves that the pulmonary parenchyma is becoming pervious to the air.

Ataxic pneumonia is not very common, and hence probably the astonishment which it causes in some practitioners, and the errors of diagnosis committed by even eminent men. The opportunities of giving musk as a specific medicine do not occur as frequently as is supposed. Here I speak only of those cases in which this substance produces evident effects, and which the most sceptical cannot deny. At the present moment I leave out of the question certain acute, and particularly numerous chronic affections in which musk has been recommended. In such cases, new researches are necessary, and it is perfectly legitimate to doubt. Thus, musk is one of those remedies which is employed by one practitioner or disdained by another, according to their different opinions or the nature of their studies; but this is not the case in the disease which we are now considering. I said that ataxic peripneumonia did not appear to me to be very common, thus in a service of more than forty beds, where the admission of patients is pretty frequent, I have not observed more than one or two cases of this kind each year; and even sometimes a greater interval elapses before such cases are received in my service. I give musk therefore but rarely, and only under the above-mentioned circumstances, being doubtful of its good effects in many other morbid affections.

I will also add, during the progress of pneumonia, with delirium, complications sometimes supervene and oppose an invincible obstacle to the good effects of the musk. Two such cases, which I cannot now report with all their details, and which were observed in my clinic in 1811 and 1844, were especially very remarkable. Independently of the hepatisation of the lung, as demonstrated by autopsy, there existed in both traces of acute pericarditis, and in one of them traces of cerebral meningitis. In both these patients the delirium which occurred during the course of the peripneumonia
presented the characters above indicated, and yielded completely to musk, which was given in a large dose. It was only secondarily that a new phase presented itself, and that symptoms of another nature occurred and occasioned the death of the patients. In one of these cases, the pericarditis was not recognised; in the other, a remarkable agony, and a great intermittence of the pulse, were the only signs which induced us to suspect its existence.

These cases, however, are of a particular kind, and cannot invalidate others now recorded in the annals of our science. Cases of the latter kind are now well known, and their number increases daily. In 1839, in the 7th volume of the Journal des Connaissances, Médico-Chirurgicales, we published ourselves such a case. The peripneumony had occurred under the influence of a cold temperature acting during the night upon a young soldier while on duty. It had reached the ninth day without any appreciable change; the most energetic treatment had been adopted; eight venesections had been successively practised, thirty leeches had been applied upon the thorax, and subsequently two blisters; kermes mineral also had been administered. After several apparent and temporary ameliorations, a violent delirium suddenly seized the patient, the pulse became small, feeble, and frequent, (115 per minute,) respiration frequent, (40 per minute,) the local signs of pneumonia persisted, the countenance was greatly altered, the features cramped, and the delirium so great that it was necessary to tie the patient to prevent his escaping from bed. In this state of things, musk was administered in pills in the dose of one grain per hour. Eight grains had been given, and already the delirium was sensibly diminished, and the pulse had lost its frequency. The following night, during which the musk was continued, a calm sleep supervened. The second day, after the administration of one scruple of the medicine, convalescence commenced, and during this time the signs furnished by auscultation, announced a free solution of the pneumonia.

On 13th May, 1844, M. Botte, a pupil of the Hotel Dieu of Nantes, selected ataxic pneumonia as the subject of his inaugural thesis. In the course of his researches, he reports several cases collected in the different services of the hospital, and particularly in the clinical wards. Two of these cases seem to me well calculated to demonstrate the incontestible efficacy of musk, and were prepared under my direction.

A patient was admitted into the Hotel Dieu on the fifth day, of a
peripneumonia, for which two venesections and an application of leeches had been made. On the third day he was taken with a violent delirium, which rendered it necessary to tie him, and in that condition he was brought to the hospital. During the day, after a third bleeding and the administration of a bottle of Sedlitz water, the symptoms were aggravated to the highest point, the eyes became brilliant, the expression of the countenance threatening, and the straight-jacket was used to prevent the patient from escaping from bed. His strength declined, tongue and lips parched, pulse frequent, concentrated, and depressible, the bladder distended with urine, and requiring the introduction of the catheter. During all this time, auscultation discloses posteriorly, and upon the left side a crepitant rale, a bronchial souffle, and bronchophony; the expectoration of a peripneumonic character. In the midst of this frightful array of symptoms, musk was prescribed in a large dose, and in thirty hours (counting from its administration) yawning and pandiculation took place, followed soon by a quiet sleep, with a gentle moisture of the skin, announcing the beginning of improvement. On the next day some vestiges of delirium still persist, but soon disappear entirely. The pulse loses its frequency, the signs of resolution are manifested, and five days afterwards the convalescence is confirmed.

Another patient was admitted into the hospital on the seventh day, of a peripneumonia, after having been bled three times, and after the application of fifteen leeches upon the affected side. The stethoscopic signs of pneumonia were recognised, and two additional venesections were practised the day after his admission. On the following day, delirium suddenly supervened, and attended for some moments by a kind of cataleptiform stupor. Consciousness is entirely lost—the eyes immovable, seemed fixed upon any object before the patient. The pupils are contracted; deglutition difficult; pulse very frequent (124 per minute) and very depressible. At the moment of the visit, this condition suddenly gave way to a violent paroxysm of delirium, with a disposition to escape and to seize upon the persons who approached him. After the administration of one scruple of musk, the delirium is replaced by a kind of profound torpidity, the pulse is pliant, of moderate consistence and less frequent (92 per minute.) A chill, without any known cause, supervenes during the day, and is followed by a return of the delirium. One scruple of musk is again prescribed, and after a calm night and refreshing sleep, the intellect becomes clear, signs of the resolution
of the phlegmasia are manifested, the appetite returns, and the patient is convalescent.

Thus in certain cases of pneumonia, there may occur new morbid elements of such a nature as to arrest the resolution of the phlegmasia and to threaten life. In such circumstances, appropriate remedies ought to be substituted for the ordinary treatment. Ataxic, or delirious pneumonia, furnishes an instance of this kind, and in the same way, that in pernicious fevers, although attended with phlegmasia, the sulphate of quinine constitutes the fundamental plan of medication; because a special element here predominates over the entire affection; so in like manner, musk is the heroic medicine to which we should promptly have recourse in ataxic pneumonia accompanied with delirium. Physicians have been so much fascinated by the doctrines of exclusive organicism, that they can hardly comprehend how very intense cerebral symptoms (such as those which we have indicated in this article,) can exist without meningitis, and how consequently any other than an antiphlogistic treatment can succeed in such cases. The same thing is true in many other diseases. But nevertheless, the accomplished physician, enriched by the knowledge of modern discoveries, tends each day to resume the route which has been too much abandoned, and to study morbid affections by means of clinical observation, in preference to any thing else, and not exclusively by the light of Pathological Anatomy.

PART III.—MONTHLY PERISCOPE.

*Venous Pulse.*—M. Martin Solon read a paper on the Nature and Causes of the Venous Pulse, which occasioned several animated and interesting discussions. The term venous pulse is generally applied to the pulsations which are observed in the jugular and subclavian veins, in cases of great repletion of the cavities of the heart, or of insufficiency of the tricuspid valves. The latter not closing when the ventricles contract, the blood is expelled, as it were, into a third artery, and venous pulsations ensue, more or less synchronous with the arterial pulsations. M. Martin Solon, having lately observed pulsations in the dorsal veins of the hands in two instances, in which it appeared to him that the pulsations were evidently transmitted through the capillaries, wished to draw the attention of the Academy to this phenomenon. The patients on whom he observed the venous
pulsations were both attacked with violent pleuro-pneumonia, had been bled several times, and had taken tartar emetic in large doses. The veins were prominent, rounded, of a bluish-rose colour, and presented a diastolic and systolic motion, easily appreciable by the eye, and synchronous with the pulse. On a careful examination being made, it was evident that this motion was not communicated by any adjacent vessels. When the fingers were pressed, the pulsations ceased, but when the wrists were pressed, they remained as before. When the brachial artery was pressed, the pulsations of the radial and cubital arteries, and of the dorsal veins of the hands, all disappeared together. In both cases the patients gradually recovered. In one, the venous pulsation appeared on the fifteenth day, and remained seven days, the cardiac impulsion being strong; in the other, the impulsion of the heart was weak, and the symptom was not of so long a duration. M. Martin Solon thought that the abnormal fluidity of the blood in these patients facilitated the passage of the blood through the capillaries, and thus enabled it to retain the impulsion communicated by the heart. The same phenomenon, he stated, had been observed by Dr. Ward, on a woman recently delivered, and attacked with pneumonia, and by Dr. Graves, on a woman labouring under peritonitis. In both instances the patients had been bled largely. This symptom was of great importance in a pathological point of view, as it indicated a state of fluidity of the blood which might render further bleeding unadvisable; he consequently thought that the attention of practitioners should be directed to its existence. In a physiological point of view, the fact of the arterial systole and diastole being thus communicated to the veins, was of great importance, as it proved that the entire circulation is under the influence of the heart.

M. Cruveilhier stated that he had several times observed venous pulsation in the veins of the bend of the arm, but never in the dorsal veins of the hand. He thought it most probable that such pulsations were the result of a shock conveyed to the venous column by the neighbouring arteries.

M. Velpeau had seen venous pulsation in all the superficial veins of the thoracic limbs, but attributed it to a kind of reflux, such as is frequently observed in the jugular veins.

M. Blandin admitted fully the explanation of M. Martin Solon. Harvey had stated that, in some cases, the heart was able to transmit pulsations to the veins, and the experiments of M. Magendie, which he himself had successfully repeated, showed that this was really the case. If, on the dead subject, a part of the circulatory system having been previously cleared by an injection, fluid is injected into an arterial trunk by successive jerks, it passes out in a jerk from an opening made in a corresponding vein. If an interrupted flow of blood from a vein can be produced in a dead subject through the capillaries, why should not the same phenomenon be possible in the living?

M. Dubois d'Amiens remarked, that when the circulation is exam-
ined with the microscope, it proceeds by jerks, until the blood reaches the capillaries, when its flow becomes uniform; it was, therefore, scarcely possible to admit the interpretation which M. Martin Solon had given.

M. Martin Solon replied, that he did not reason from experiments, but from pathological facts. He had been careful not to be misled by the proximity of arterial branches, and by the communication of their shocks to the veins. If the pulsation had depended on reflux from above, pressure above the veins ought to have arrested them, which it did not. The valves of the veins would prevent the jugular reflux from propagating itself far.

M. Poiseuille stated, that researches which he had recently made with reference to this subject, would enable him to throw some light on the question. When the capillary circulation of reptiles and mammiferous animals is examined with the microscope, its flow appears perfectly uniform; but this is not really the case; for although continuous, it is insensibly interrupted, jerked (saccadé), as is proved by the following experiment:—If a curved tube, containing a solution of subcarbonate of soda, to prevent the coagulation of the blood, is adapted to one of the veins of a thoracic or pelvic limb, so as for the opening to be turned towards its extremity, the blood enters the tube continuously, but not uniformly. The flow is interrupted-continuous, (continu-saccadé,) which would not be the case if the flow of blood in the capillaries was uniform. This experiment is the same on the living as the one described by M. Blandin on the dead subject, and the result is also the same. Careful examination of the jet of blood in ordinary venesection, equally demonstrates the truth of this fact. The amplitude of the jet is never identically the same, even when the openings of the skin and of the vein remain perfectly parallel, and the arm and its muscles are perfectly inactive. That this is the case may be perceived by observing attentively the spot where the blood falls; it will be seen to recede or approximate alternately. It is scarcely necessary to add that the greatest amplitude of the jet coincides with a contraction of the heart, or with an expiration, which increases the impulsive force of the arterial flow, and that the smallest amplitude coincides with the diastole of the heart, or an inspiration. If this normal state is exaggerated, it may give rise to the venous pulse, or uneven flow, which is sometimes observed in bleeding, and which is usually attributed to the communication of arterial shocks. In the mesenteric circulation of young rats and mice, no intermittence is at first visible; but if blood is lost in any quantity, the circulation becomes jerked (saccadé) both in the capillaries and in the veins. The heart losing its energy, a smaller quantity of blood is thrown into the arteries, which being less dilated, contract with less force, and thus lose their power of converting the intermittent flow into a continued one, as is normally the case. This accounted for the venous pulse having been observed by M. Martin Solon, Dr. Graves, and Dr. Ward, on patients who had lost much
blood. M. Martin Solon attributed the phenomenon to the greater fluidity of the blood. But his own experiments, as well as those of M. Magendie, proved that the more aqueous the blood became, the greater was the difficulty with which it passed through the capillaries, owing to imbibition. He thought it, therefore, more correct to explain the influence which loss of blood evidently had in producing venous pulsation, as he had done. M. Priory had seen jerks occur in bleeding patients who presented obstructions in the right heart, when a pound or a pound and a half of blood had been withdrawn. At the same time the blood became red instead of black, showing that the action of the heart had become momentarily, stronger.—Lancet

On the Periodic Discharge of Ova, and the Function of Menstruation.—The following propositions embody the most important conclusions that have been formed by the best authorities on this highly curious subject:

1. Menstruation commences at the period of the maturity of the ovules.

2. The final cessation of the catamenial secretion coincides with the abolition of the formative function of the germs. 3. The ovaries of women, who have ceased to menstruate, never contain the appearance of any vesicles that have recently burst, or that are about to do so (Negrier.) 4. At each menstrual period, the highly excited state of the ovaries induces in the female a decided propension to coition. 5. The aptitude for fecundation is greatest on those days that immediately precede the menstrual discharge. 6. In all the lower animals, the ovaria become tumid during the season of rutting. 7. Women, in whom there is a congenital absence of the ovaria, never truly menstruate, however perfect may be the structure of the uterus and other parts of the generative system. 8. The extirpation of these organs puts a complete stop to menstruation, in cases where this function had been already established. 9. Women, in whom there is a congenital absence of the uterus, but in whom the ovaria are normally developed, experience every month all the phenomena of menstruation, the sanguineous discharge alone excepted. 10. The catamenial secretion ceases completely in women, in whom the ovaria have become affected with organic degeneration. 11. It has been asserted by some writers that lascivious girls have—in this respect like the common hen—occasionally discharged ova from the vagina, and that a mere voluptuous thought will suffice pour ébranler these minute vesicles. 12. In very many women, the menstrual period is preceded by severe colicky pains, attributable most likely to the turgid and excited state of the ovaries. 13. In those who suffer much at these periods, the cavity of the uterus sometimes becomes lined with a soft focky membrane—a genuine membrana caduca—the formation of which is entirely independent of coition. 14. Lastly, in that singular case of monstrosi-
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ty—in which the two girls, Helen and Judith, were united to each other by the posterior and lower parts of the back—the catamenial discharge took place in different quantities and at different times from each subject, although there was a complete anastomosis between the abdominal vessels of the two. —Mémoire pour servir à l'étude des Maladies des Oeaires, par Achille Chereau. Paris, 1844. Medico-Chirurgical Review.

Epidemic of Erysipelas, in the Hospitals of Paris. Bulletin de Therapeutique, April, 1845.—The surgeons of the Parisian hospitals have had frequent opportunities of observing epidemics of erysipelas. At this moment, one of these epidemics prevails in several of the hospitals of Paris. At the Hopital de la Pitié, the service of M. Lisfranc is crowded with erysipelas patients; in 198 patients, 25 are attacked with erysipelas, occurring in the hospital and following operations which had been performed upon them. M. Lisfranc has never seen an epidemic more general and more intense. Six women, from whom he had removed the mammae were all of them seized with erysipelas, and with the bad consequences which thence ensue. A simple ligation of hæmorhoids produced in a patient a very serious erysipelas, which extended gradually over the whole back, and even to the nape of the neck. This patient is in danger. The disease has also been developed in patients who entered the hospital in consequence of accidents from vehicles, falls, &c. A simple application of leeches, the smallest operation, the slightest incision, are sufficient to excite the disease. Some of the cases are very serious, and have a tendency to terminate in a typhoid state; no patient, however, thus far has died. It appears that the same epidemic influence is equally felt at the Hopital Beaujou. M. Martin Solon has also several erysipelas patients under treatment. In presence of such an epidemic, surgeons who see farther than their bistouries, and who are governed by general principles, will admit in this fact the incontestable existence of a particular medical constitution which should influence their conduct. Under such circumstances, the prudent surgeon should abstain from operating or performing only those operations which are urgent.

N.

Corrosive Sublimate in Epilepsy.—In an elaborate article upon the Neuroses of the Ganglionic Nerves by M. Merat, Member of the Royal Academy of Medicine, we find the following remarks:

“Since the year 1810, I have been in the habit of administering the Corrosive Sublimate in the treatment of several nervous diseases,
and more especially of Epilepsy. I have witnessed decidedly successful results from its use in a good many—but certainly it must be confessed, not in the majority—of the cases of this malady. The formula, which I use, will be found in the Dispensatory of Bouchar-daut (ed. 1840, p. 394.) A pill, consisting of a sixteenth part of a grain of the Sublimate, one grain of Camphor, three fourths of a grain of Opium, and half a grain of Musk, is given daily; this dose is to be increased every eight days by an additional pill of the same ingredients. Some patients have been able to take one or even two grains of the sublimate in the course of the twenty-four hours. As a general rule, I have never wished to exceed half a grain at most; unwilling to run the risk of inducing a black colour of the skin, as has happened to some patients after a protracted use of the drug.

Revue Medicale.

Professor Corneliani on the Proximate Cause and Treatment of Chlorosis.—From an extensive experience in the wards of the Pavia Hospital—to which he is attached as the professor of clinical medicine—the author deduces the following conclusions respecting this not unfrequent disease:

1. The essential nature of chlorosis consists of two pathological conditions, both of them appertaining to the solids;—the first being an inordinate excitation of the heart and arteries, and the second a chemico-vital alteration of the assimilative functions of Chylification and Haematosis. It is not possible to determine which of these two conditions is the primary and causal one.

2. No plan of treatment is so certain and efficacious as the exhibition of steel in some form or another: the preparations of this metal acting curatively upon both of the pathological states now mentioned.

3. There is no very marked difference in the comparative efficacy of different chalybeate preparations, except in so far as relates to their solubility in the animal fluids, and perhaps also to their readiness to become disaggregated by the process of digestion.

4. The addition of an acid decidedly increases the efficacy of steel remedies.

5. Steel-filings become converted, in the stomach of chlorotic patients, into the lactate of iron.

6. It is useless—and not unfrequently it is unsafe—to administer very large doses of ferruginous preparations.

Professor Corneliani has examined with great care the state of the blood in chlorosis; and most of his observations go to confirm the accuracy of MM. Andral and Gavarret's statements respecting the diminution of the normal proportion of red globules and haematosine.


The Actual Cautery successfully employed in Gangrene of the mouth.—The case occurred in a female child, five years of age, during the convalescence from an attack of Typhus fever. The pecu-
Digitalis in Diseases of the Heart.

On the action of Digitalis and its uses in Diseases of the Heart. By Wm. Munk, M. D. (Guy's Hospital Reports, 1844.)—This practical paper is founded upon upwards of 400 observations, which were made during five years of dispensary practice. The tincture has been found the most successful form of preparation as regards the effect produced upon the action of the heart, while the infusion is incomparably superior as a diuretic; and, from want of attention to this distinction, discrepant opinions as to the utility of the medicine have doubtless arisen. The powder, used alone, Dr. Munk considers as worthless, and although in combination (with mercury and squill) it forms a valuable diuretic, it cannot be so employed as a sedative.

The action of digitalis upon the heart is manifested in two ways: by the exertion of a depressing influence, and as an antispasmodic. Hypertrophy of the organ, whether simple or complicated with other disease, causing increased impulse, may be benefitted by the depressing influence of digitalis, which is best obtained by giving the uncombined tincture, in tolerably full doses, at intervals of eight, ten, or twelve hours. The antispasmodic influence, acting so beneficially in the irritable condition of the heart manifested by palpitations, irregularity, &c., is that which is usually sought from digitalis. Dr.
Munk does not agree with those writers who state the action of the
digitalis upon the heart to be uncertain. Its operation is as certain,
in properly-selected cases, as that of other medicines, and may be
maintained with safety.

There are, however, circumstances under which this medicine
cannot be exhibited usefully or safely. Thus, in a plethoric state of
the system, its employment must be deferred until bloodletting or
other evacuants, for which it is no substitute, have played their parts.
An inflammatory, or sub-inflammatory condition of the gastric and
intestinal mucous membrane, seems to prevent the action of digitalis
upon the heart; and increased irritation results if it be persisted in.
Such complication of lesion of the heart and gastric derangement
is by no means rare, and in such cases prussic acid is the appro-
priate medicine. Quietude of mind and body much favor the action
of digitalis. The recumbent posture is very adjuvatory to its de-
pressed action; and Dr. Lombard truly observes, that it is rarely
efficacious in those who take much exercise, or whose attention is
much occupied during its use. Dr. Munk gives \( \text{m} \times \text{x} \) ad \( \text{xxx} \).
every eight, ten, or twelve hours, and is rarely disappointed. He
does not reduce the pulse, which is to be carefully watched. below
60 in the adult, and thus derives the beneficial without risking the
production of the dangerous effects.

Digitalis rarely acts as a *diuretic* when its influence upon the heart
is marked, and *vice versa*. The author quite concurs in the high
opinion Withering entertained of its power of increasing the flow
of urine, which is seldom accomplished by any other drug after its
failure. It is not to the robust, florid, or wiry-pulsed, but to the en-
feebled, shattered, condition of the system, that digitalis is applicable.
"If the pulse be feeble or intermitting, the countenance pale, the
lips livid, the skin cold, the swollen belly soft and fluctuating, or the
anasarco us limbs readily pitting on pressure, we may expect the
diuretic effects to follow in a kindly manner." These remarks were
penned, it is true, in reference to dropsy, from whatever cause
arising; but *mutatis mutandis*, they are equally applicable to all
cases in which the diuretic operation of foxglove is required. In
disease of the heart, a diuresis is frequently a valuable means of
preventing effusions by diminishing congestion, or of producing
their absorption if they have already occurred; but whether digitalis
be the appropriate remedy or not, depends in chief upon whether a
asthenic or asthenic condition of the system prevail. Thus in the
case of hypertrophy, it is seldom appropriate, while in dilatation it
is usually the best of diuretics. Valvular disease is that in which
digitalis proves most useful, except in cases in which this is compli-
cated with hypertrophy. The *infusion* is to be given in doses of
\( \text{3ss.} \) to \( \text{3j} \) every six or eight hours. With a view of preventing
the sedative operation of the drug, moderate exercise, short of
diaphoresis, should when possible be taken. A moderate quantity
of drink may be given, and the loins must be covered with a double
roll of flannel, or, as recommended by Lombard, a stimulating plaster may be applied to them.

Dr. Munk believes that untoward and fatal effects, resulting from the continued employment of this medicine, are "exceedingly rare," and cites the opinions of Drs. Holland and Pereira as confirmatory of his own.

"It has only occurred to me to see the slighter and less portentous of these symptoms as a consequence of foxglove; such as inequality or intermittence of the pulse, loss of appetite, and frontal headache: either or all of which have at once subsided on discontinuing the medicine. I believe that such symptoms will only occur when the drug fails to act in a normal manner as a sedative or a diuretic. If either of these effects are once obtained in a kindly manner, I then consider my patient safe from the poisonous operation of the drug. If on the contrary, it does not evidence its usual effects within a few days, the medicine, I believe, accumulates in the system, and the patient is in danger of experiencing its poisonous influence. I am therefore in the habit of prescribing it for a week: and, if within that period, I perceive neither sedative or diuretic effects, I then invariably desist from its administration. Let these effects, however, be once kindly induced and the medicine may then be continued with safety for a considerable period. In no one instance have I seen a bad effect follow the use of digitalis where the first consequences of its exhibition were the removal or material alleviation of prominent or distressing cardiac symptoms, whether this has been brought about by its operation as a sedative or as a diuretic."—Med. Chir. Rev.

**Neuralgia—Introduction of Medicated Fluid to the Nerve.** By Mr. Rynd. (Reported by Mr. Richard Gregory.*)—Margaret Cox, ætat. 59, of spare habit, was admitted into the hospital, May 18th, 1844, complaining of acute pain over the entire of left side of face, particularly in the supra-orbital region, shooting into the eye, along the branches of the portio dura in the cheek, along the gums of both upper and lower jaw, much increased in this situation by shutting the mouth and pressing her teeth close together, and occasionally darting to the opposite side of the face and to the top and back of her head. She states that about six years ago she fell from a wall, and, in the act of falling, a stone struck her in the temple; that twelve months after this she was much exposed to cold, and one night was suddenly seized with the most agonizing pain in the situations above described. "She thought her eye was being torn out of her head," and her cheek from her face; it lasted about two hours, and then suddenly disappeared on taking a mouthful of ice. She had not had any return for three months, when it came back even worse

*Meath Hospital and County of Dublin Infirmary.
than before, quite suddenly, one night on going out of a warm room into the cold air. On this attack she was seized with chilliness, shivering, and slight nausea; the left eye lachrymated profusely, and became red with pain; it went in darts through her whole head, face and mouth, and the paroxysm lasted for three weeks, during which time she never slept. She was bled and blistered, and took opium for it, but without relief. It continued coming at irregular intervals, but each time generally more intense in character, until at last, weary of existence, she came to Dublin for relief.

She had been salivated three times, and had been so much in the habit of taking laudanum that latterly half a drachm, three times in the day, had no effect in lulling the pain, and was the quantity she commonly took. She was a miserable, sallow-complexioned looking creature, had been sleepless for months, and her face was furrowed with constant pain.

On the 3d of June a solution of fifteen grains of acetate of morphia, dissolved in one drachm of creosote, was introduced to the supra-orbital nerve, and along the course of the temporal, malar, and buccal nerves, by four punctures of an instrument made for the purpose. In the space of a minute all pain (except that caused by the operation, which was very slight) had ceased, and she slept better that night than she had done for months. After the interval of a week she had slight return of pain in the gums of both upper and under jaw. The fluid was again introduced by two punctures made in the gum of each jaw, and the pain disappeared. After this the pain did not recur, and she was detained in the hospital for some weeks, during which time her health improved, her sleep was restored, and she became quite a happy looking person. She left the hospital on the 1st of August in high spirits, and promised to return if she ever felt the slightest pain again. We conclude she continues well, for we have not heard from her since.

Case II. R. Dolon, ætat. 28, a thin spare man, of middle stature, was admitted into the hospital 9th September, 1844, and came under Mr. Rynd's care on the 10th of November, complaining of acute pain in the right hip, thigh, and leg, to the sole of the foot, along the entire course of the sciatic nerve and its branches, but chiefly in the main trunk of the nerve. He is unable to sleep from the pain, and quite unable to walk. He is much emaciated, and the muscles of the limb are attenuated and wasted. He has been ill for three years, during which time he has been almost always confined to bed. He has been frequently treated for the disease with calomel, to produce salivation, cupping, blistering, leeching, &c., all without any salutary effect. Exposure to cold and wet is assigned as the cause of the disease.

On the 13th of November, the fluid was introduced, ten grains acetatis morphiæ to the drachm of creosote, one puncture behind the trochanter, and one half-way down the thigh. He was instantly relieved from pain, and walked steadily through the ward without any
pain or difficulty; before, walking increased the pain. For about half an hour after the operation he felt uneasiness from the puncture.

16th. Says he is perfectly well in the thigh, and feels only a slight pain in the course of the anterior tibial nerve. The fluid was again introduced to-day to the seat of pain by two punctures; it disappeared as before.

29th. Says he is perfectly well; has walked every day since; has slight stiffness in the knee from previous want of use.

Ordered, camphorated oil to rub the knee with.

December 15th. Left the hospital to-day, saying he felt perfectly free from all pain and uneasiness.

February 6th. He walked up to Dublin to-day (twenty miles), and says that since the last operation, on the 16th of November, he has never felt his old pain, and is perfectly well.

**ADDITIONAL TESTIMONY.**

Gentlemen,—I observed in the Medical Press, March 12, two cases of neuralgia, treated by Mr. Rynd in the Meath Hospital, by a new method of introducing morphine and creosote to the nerve affected; the result proved most satisfactory. It had been my intention long since to have sent you an account of some cases treated by me during the last summer in a similar manner, and with most happy results, but much occupation this winter prevented my doing so. I hope, also, on a future occasion, to send you some cases of other diseases, such as dyspepsia, hooping-cough, &c., treated with proto-iodide of silver—a remedy I believe hitherto little used.

**Case.**—Last summer, an elderly female, much emaciated, and with countenance indicative of much pain and suffering, was sent up by her medical attendant from the country for the purpose of sea-bathing. She had had severe neuralgia of the nerves on outer side of leg, shooting from her knee to her ankle and foot. She had been subjected to a variety of treatment, such as leeches, blisters, an incision down to nerve, and cutting it across, &c. She was quite lame when I saw her, and it hurt her much to put her foot to the ground; she suffered greatly at night, and could not sleep. She had been here some time, and had bathed without any benefit. I made several small punctures along the course of the nerve affected. I used a common lancet, armed with morphine, mixed in a little water, about the consistence of paste, and operated precisely as is done in vaccinating an infant; I did not use creosote with it. She felt slight stinging and uneasiness for a short time after, but that night she slept well, and next day stated that the pain, with the exception of one or two spots, was quite gone. I punctured in these places again. She again recovered.

On inquiring from her friends a short time since, I heard she has continued in good health ever since—a period of nearly nine months.

I adopted the same mode of treatment in a case of sciatica with similar success. In another bad case of neuralgia in the foot and leg in a man who had been subjected to a variety of most active
treatment in hospital, and with very little benefit, I determined on using creosote without morphine. I had not heard of its being used before until I read of it in the Press as used by Mr. Rynd, but in his case he mixed it with morphine. It was of decided benefit in my case, and the man has been able to go to his work, and has continued well to this time—a period of about seven months.

As neuralgia is a disease that so frequently baffles the skill of the physician, I think it is not unworthy of the profession to give this mode of treatment a trial, and I should much like to know whether it has as yet been much adopted.

I beg to remain, gentlemen,  
Your obedient servant,  
ARThUR GUINNESS.

Dublin Med. Press.

Caoutchouc as a Remedy for Tooth-ache.—Caoutchouc becoming very smooth and viscous by the action of fire, has been proposed by Dr. Rolfs as an excellent remedy for filling hollow teeth and alleviating the toothache proceeding from that defect. A piece of caoutchouc is to be put on a wire, then melted at the flame of a candle and pressed, while warm, into the hollow tooth, and the pain will disappear instantly. The cavity of the tooth should first be cleaned out with a piece of cotton. In consequence of the viscosity and adhesive nature of the caoutchouc, the air is completely prevented from coming in contact with the denuded nerve, and thus the cause of the toothache is destroyed.—Brailhwaite’s Retrospect.

Jaundice.—The Gazette Médicale (April, 1845,) contains a notice of M. de Lonjon’s researches on the diagnosis of Icterus, from which it appears that he has ascertained that, besides the usual yellow tint presented by the mucous lining of the mouth, this is strongly manifested, even in the slightest cases of this disease, in the soft palate, or velum pendulum palati, from its posterior margin to its juncture with the bony roof of the mouth.

D.

Febrile Periodicity, as influenced by the Sulphate of Quinine. By Thos. D. Mitchell, M. D., Prof. Mat. Med. and Therap., in Transylvania University.—But a few years ago, the therapeutical application of this invaluable salt of Peruvian bark, was exceedingly limited; and with some, even at this day, it is held to be competent, as a remedy, only to true intermittent fever, or ague and fever.

The doctrine, that all fevers and all diseases, are essentially intermittent, has long been before the public; and while we are ignorant of the nature and source of periodicity, the fact of intermittence is as well established, as any other in medicine. And although a late writer has asserted boldly, and without exception, that Therapeutics
cannot be based on Pathology, we aver as positively, that the direct opposite is true. We believe, especially in reference to fevers, almost without exception, that they are curable by sulphate of quinine, simply and solely, because it is a remedy, above all others, adapted to diseases of an intermittent and remittent character; their terms being substantially, and in fact, as to periodicity, the same.

In regard to the Pathology of Fevers, we know almost nothing, perhaps nothing at all, that is practically of the smallest value, save the naked fact of intermittence or periodicity. This is cognisable when we can scarcely fix upon another point, that is worthy of notice or remark.

We cure an ague and fever, by sulphate of quinine, no matter whether it be a true and open ague, or a masked intermittent. And we cure many diseases of genuine neuralgia, unattended by chill or fever, at all perceptible, by the same agent. These are common cases, with which all practitioners are familiar, and they clearly set forth the adaptation of the remedy, on the ground of intermittence.

But if we look a little further, we shall discover, that other fevers, called by different names, merely to subserve the interests of theory, possess one common property, which, confessedly under the control of the sulphate of quinine in the case of common ague and fever, is no less so in Typhoid, Typhus, Congestive, Yellow, and it may be, all the fevers named in the books.

The position I assume here, is plainly and boldly this: there is but one feature or element in either of the fevers named, that is essential to its pathology, and that feature or property or element boxes before the potent sway of the sulphate of quinine, and for this reason only, we cure the patient.—Western Lancet.

Tracheotomy, performed successfully in a case of ÒEdema of the Glottis—translated from the Bulletin de Thérapeutique.—On the 23d March, 1845, Sageot, while in the Hopital du Midi, into which he had been admitted on February 1st, was taken with a quinsey, appa-
rently slight, and which for three days caused only a slight difficulty of deglutition. On the morning of the 27th, an inconsiderable febrile movement occurred, with loss of appetite; soon dyspnœa supervened, and increased suddenly in the evening to a frightful de-
gree. The patient, in a sitting attitude, makes unheard of efforts to inspire air which penetrates with a whistling sound—the voice is nearly extinct—expiration is easy; on inspection, a slight tumefac-
tion of the arytaeno-epiglottic duplicatures, a soft tumour, yielding to pressure. This tumour is incised with the point of a bistoury, and from it only a few drops of blood escape. Suffocation becoming more
and more imminent, M. Ricord is sent for at 10 o’clock, P. M.; finding the patient with his face of a violet color, the extremities cold, the pulse very frequent and very small, and the pupils enormously dilated, that surgeon, after having again recognised the existence of the supra-epiglottic tumour, determined to perform tracheotomy. The incision was made in the crico-thoroid membrane and in the cricoid cartilage, the lips of the wound were kept separate by hooks fixed by means of a riband behind the neck. Respiration was immediately re-established, and in an hour the patient slept quietly. The pulse having risen three hours afterwards, M. Ricord prescribed twelve leeches, six on each side in the vicinity of the jugular veins. April 4th, the supra-epiglottic tumour presents but a very small volume, and the canula, which on the 29th March had been substituted for the hooks was withdrawn, and the patient was much improved after the extraction of the canula. On the following days the opening made in the trachea diminished more and more in extent, respiration and deglutition are performed without any pain or embarrassment, and on the 12th April the patient was perfectly cured.

M. Cazenave on the different sorts of Caustics.—The Powder of Dupuytren, is composed of one part of arsenious acid and 200 parts of calomel. It is a mild and very manageable caustic, that is useful in cases of lupus in women and children, when the ulceration is superficial and of limited extent. If the diseased part be dry, it may be necessary to denude it by means of a blister, and then to sprinkle the powder upon the raw surface. A certain amount of heat and painful swelling is usually caused by this application. When it falls off, there is generally observed a decided modification of the diseased surface. A few applications are sufficient to effect a cure in a great many instances.

The Vienna power and paste are remedies of great power in certain cases of lupous ulceration. They are composed of equal parts of powdered quicklime and potassa cum calce. In using it, we take a portion of this mixture, and add a small quantity of spirits of wine to bring the powder to the consistence of a paste. A piece of adhesive plaster, with a hole in it of the size of the intended eschar, should be laid over the diseased surface, and the paste is then applied on the exposed parts. It is to be left for ten or twenty minutes, according to the depth of the eschar that is wished, and the ability of the patient to endure the pain.

The chloruret of zinc paste is much used in the present day. It is made by mixing one part of this substance with one or two parts of flour, moistening the mixture with as little water as possible. The pain produced by this application usually lasts for several hours. A
greyish-coloured eschar is formed; and this, in most cases, remains attached for two or three weeks before it is separated. The surface underneath is generally not ulcerated. M. Cazenave very frequently has recourse to this caustic in certain cases of lupus, to destroy the non-ulcerated tubercles.

For this purpose he applies only a very thin layer of the paste, so as not to destroy the entire tubercle; and in this manner he often succeeds in effecting a complete resolution of it, without any scar being left behind.

In very many cases of long standing and deeply-corroding lupous ulceration, he gives the preference to the arsenical paste over the two others which we have mentioned: its action is twofold: local as a caustic; and general by becoming absorbed, and exercising a potent alterative or modifying influence upon the economy. The following is the formula which he invariably uses:

Take of White oxyde of arsenic, 2 parts.
Sulphate of mercury, 1 part.
Animal charcoal in powder, 2 parts.

When used, a small quantity of this powder is to be made into a thin paste by the addition of a few drops of water; this is put upon the denuded surface—which should seldom or never exceed in extent that of a franc-piece. This application usually produces not only very sharp pain, but also a severe erysipelatous swelling, which lasts for 24 or 36 hours, and is sometimes accompanied with grave constitutional symptoms. Generally these subside very quickly; and then there remains on the cauterized part a hard brown crust which often adheres for nearly a month, before it is detached.

Fluid Caustics.—M. Cazenave frequently makes use of a solution of the sulphate of copper for the removal of those small warts that often form upon the shoulders and back, also of certain pediculated horny productions, which occasionally appear upon these parts. A stronger solution must be used for the latter form of cuticular excrescence.

In the treatment of favus and tinea, he recommends a weak solution either of this salt of copper, or of the nitrate of silver, or of acetic acid.

Of fluid caustics, one of the most potent and useful is the acid nitrate of mercury. When used to the surface pure and undiluted, it acts as a mere caustic; but when considerably weakened, and especially when applied to a large surface, it is unquestionably absorbed, and then it acts on the system.

It usually causes a good deal of pain and inflammatory swelling. The cases most benefited by its application are those of lupus, in which the ulceration is extensive and not deep-seated.

The erysipelatous inflammation, which this as well as other caustics—more especially the arsenical paste—are apt to produce, need not be much dreaded; nay, the effects of the cutaneous phlegmasia seem sometimes to be decidedly salutary in the end.—Annals des Maladies de la Peau.
M. Gibert has recorded in a recent No. (Oct., 1844) of the Revue Médicale, a case of severe scrofulous lupus of the face, in which the progress of the disease was arrested and the extensive ulcerated surface became cicatrized under the employment, external as well as internal, of cod-liver oil. The use of this medicine was steadily persevered in for a full year and a half. During this time not only did the local malady become healed, but the general health—which had formerly been very weak and ailing—was very decidedly improved.

The patient was a young woman, and the disease had existed for nearly six years. On one occasion she had derived very considerable benefit from the internal administration of the deuto-ioduret of mercury, and the external use of the proto-ioduret ointment; but the benefit was temporary only. She had been subjected to a regular and protracted course of iodine treatment; but certainly with no advantage.—Med. Chir. Rev.

**Tubercular thickening of the Lip, successfully treated by Iodide of Potassium.** By Alexander Ure.—Mrs. H., aged 28, admitted the 16th Sept., 1844. The upper lip is greatly enlarged and prominent; its external surface is the seat of superficial ulcers, for the most part covered with crusts. The affection commenced six months previously, as a hard round swelling in the right side of the lip, unattended with discoloration. The swelling subsequently extended over the whole lip, and is always most conspicuous in the morning. Several indurated tubercles can be felt imbedded throughout its substance. States that her general health is good. Her tongue is clean, but the pulse is rather frequent, and she complains of thirst.

Ordered a solution of Epsom Salt and Tartar Emetic twice a day; and to pencil over the excoriated surface every morning with a lotion containing ten grains of Nitrate of Silver dissolved in an ounce of pure water.

23d. Sores are all healed, but the swelling remains as before.
To take five grains of Plummer's Pill, night and morning.
27th. No change in the condition of the lip.
Ordered five grains of the Iodide of Potassium, dissolved in water, twice daily.

Oct. 4. The swelling is considerably diminished; the tubercles much lessened in size.
To continue the Iodide of Potassium.
8th. Tumefaction quite gone; no tubercles to be felt.
The above case exemplifies, in a striking manner, the power of iodide of potassium in promoting the absorption of a variety of tubercular deposition, which seemed to bear some resemblance to elephantiasis in its primal stage.—**Med. Gaz.**

**Spasmodic Strictures of the Urethra.**—The 'Archives Médicales' for February, 1845, contains an able article on the subject of spasmodic strictures of the urethra, by M. Gosselin, one of the 'agrégés'
of the Faculty of Paris. M. G. arrives at the following conclusions: 1st, That anatomy forbids the belief that spasmodic strictures can exist in any other than the membranous portion of the urethra; 2d, That the arguments of authors opposed to this view, are very weak; 3d, That facts authorize their admission only in such cases where already exists an organic stricture, or gonorrhœa. D.

Medical Statistics.—It appears from the Medical statistics of France, published by M. Lucas Champoniere, that there are in that kingdom 18,800 Doctors of Medicine, or one to every 1810 inhabitants; besides 8,088 sub-physicians termed "officiers de santé." That the number of the latter class of practitioners is diminishing whilst that of the former is on the increase. In the course of the last nine years the Degree of M. D. has been conferred on 4,774 persons, and 2,616 "officiers de santé" have been licensed. D.

Gaz. Méd., April, 1845.

Instruction of Midwives in Paris.—According to the new regulations regarding the instruction of Midwives in Paris, it is required that they shall present testimonials of good character, be at least eighteen years of age, and be able to read and write correctly the French language, before they can be admitted to the clinical lying-in hospital. It is only after having diligently attended this institution for twelve months, and taken two full courses of lectures on the Theory and Practice of Midwifery, that they can present themselves as candidates for the Degree. D.

MEDICAL INTELLIGENCE.

Extract of a letter from John McLester, M. D., late Demonstrator of Anatomy in the Medical College of Georgia.

Paris, March 30th, 1845.

Longet's lectures on the Anatomy and Physiology of the Nervous System, with vivisections, are extremely interesting. He has devoted himself to this branch of science for several years, and at this time, is unequalled in it. His demonstrations are admirable, and by varying his experiments in almost every possible manner, he has made some discoveries, and exposed the errors of Majendie, Marshall Hall, Charles Bell, and others. I saw him demonstrate the existence of an electrical current in the muscular tissues in the following manner:—He stripped the skin off the inferior extremities of some frogs, decapitated at the moment, then cut the thighs off close to the body, separating them
from the legs, by carefully disarticulating the knee joint. Five thighs thus prepared, were arranged in a semicircular manner, with the lower end of one, stuck in among the muscles of the upper extremity of another, and so on. The battery being thus completed, he used bits of moistened paper, or wire for conductors, and by operating on the sciatic nerve of another frog, contractions were produced, precisely similar to those caused by galvanism. This current runs from the centre towards the extremities. These experiments, though cruel, are extremely interesting. Most of them are easy of performance, and with proper precautions, are highly satisfactory and conclusive. Longet's dissections of the brain, spinal marrow, and nerves, are superior to any I have seen. His work on this subject is the best extant. * * * * * * * Foville is publishing a work on the Anatomy, Physiology, and Pathology of the Cerebro-spinal System of Nerves, in three volumes, with an atlas of twenty-three plates. The first volume and the atlas are published. It is said to be an excellent work. * * * * * * * * * * * Ricord is publishing his clinique, accompanied by fifty or sixty plates, in quarto, colored. The work is said to be nearly completed, and will cost ninety francs. It is said he has changed his opinions in some respects, since the publication of his former work.

**Meteorological Observations.**

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**METEOROLOGICAL OBSERVATIONS, for May, 1815, at Augusta, Ga.**

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Fair days 11. Quantity of Rain, 2 8-10 inches.