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PART FIRST.

Original Communications.

ARTICLE IV.


CASE I. A Keloid or Fibrous Tumor of the Skin, with Neuralgic disorder of the Stomach.—Dilse, a negro woman aged about 24 years, was brought to me in February last. She had been taken with a very severe vomiting, about six months previous, while scouring; menstruating at that time, the discharge was suppressed. The vomiting which followed was so severe, that it became necessary to call in a physician, by whom she was temporarily relieved. The vomiting returned at intervals of two or three weeks, until I saw her; for which she had been cupped, blistered, &c., without any more than a temporary alleviation of the disease. I was told by the owner, that the physician, under whose care she had been, regarded it as a case of cancer of the stomach.

The patient presented no external appearance of disease; her countenance was not distorted in the least—the pulse was not excited, yet presented the characteristic pulse of a nervous female—small and weak. She was subject to head-aches—appetite very defective—no unusual thirst—bowels regular—complained of pain in the region of the stomach, which was aggravated by pressure. Over the region of the stomach was a large fibrous tumor (caused by the blister) about five inches long by three wide and one thick, which was very painful and increasing in size. Vomiting occurred very frequently, without any regularity. The matter vomited, consisted of food or
gastric juice, mixed with water, and was never at all offensive to the smell. There had never been the least trace of blood vomited. The catamenial discharge was irregular. A careful view of the symptoms led me to diagnosticate it, a case of Neuralgic Disorder of the Stomach, and I based my treatment upon that supposition.

I advised the removal of the fibrous tumor, which was readily consented to, and therefore, put the patient upon a tonic treatment to prepare the system for the operation.

April 19th. Assisted by Dr. J. Johns, I carefully dissected away the whole of the tumor; but before I could put in operation the plan I had devised to cover this large denuded surface, the patient was taken with a spasm, apparently affecting the diaphragm, the muscles of the chest, and the arms. The spasm continued about a minute, and subsided as suddenly as it occurred. During the spasm, the pulse was not more affected than the operation would have warranted. I made a counter incision through the skin on each side of the wound, sufficiently long to enable me to approximate the edges to within an inch of each other. Then by sutures and adhesive strips, they were retained in position, and the wound carefully dressed. For forty hours after the operation the spasms continued with increasing severity, regardless of all treatment, until the tincture of assafetida was given in very large doses.

As soon as it was convenient after the operation, she was put upon the use of the Tinct. of Nux Vomica, in doses of ten drops three times a day, for the relief of the neuralgic affection of the stomach. Under this treatment she has regained her health. The cicatrix is now (Nov. 19th,) scarcely one inch wide and three and a half long.

This case is interesting, as illustrating the liability which some of the negro race show to the formation of such tumors, after blisters or other wounds of the skin. I say some because all are not liable to it. I believe that whites are entirely exempt from it, at least, so far as a practice of twelve years will warrant such a conclusion. Moreover, I believe the nearer they approach the pure African race, the greater their liability to them.

The occurrence of the spasms during the operation, and their steady increase for 40 hours after the operation, is also an inter-
esting fact, when taken in connection with the gastric affection, and the beneficial effects of the treatment instituted for both.

Case II. Amaurosis successfully treated.—In April last, I was requested to prescribe for Mrs. P., aged 62 yrs., of very sanguine temperament. I received the following history of the case:

The lady had always enjoyed very good health, had a good appetite, and was fond of indulging it. Two weeks before consulting me, while taking a walk in the garden, she discovered that she could not see with her right eye; which appeared to be covered with a white cloud. When she applied to me, she could not distinguish the slightest object; scarcely day from night. I directed her to apply a blister above the orbit, and after it had drawn to remove the cuticle, and apply strychnine ointment to the denuded surface. The ointment was made with 25 grs. strychnine to the ounce of lard. She was directed to take a cathartic twice a week, and to live sparingly on milk and vegetables; as soon as the blister cured up, another was to be drawn and the ointment again applied, until some success followed. In two months the cure was complete, and at this date (Nov. 19th,) her vision is as good as ever.

Case III. Paralysis of the right side of the Face.—The patient, Mrs. S., aged 42 years, daughter of the lady referred to in the second case, of sanguine temperament and flushed face, although of very abstemious habits, has once before had paralysis of the face (some five years ago.)

She was attacked one night in the latter part of June 1849, and was not aware of her misfortune until morning. Was treated for some months by a physician without any benefit. In November, 1849, I was consulted, and advised her to be blistered over the angle of the jaws, to use strychnine ointment and to be purged as in case two. The amendment was more rapid than in the preceding case. The treatment was faithfully followed, and in less than two months she was perfectly well and remained so.

Case IV. Extensive Eruptive disease in a new-born Infant. The subject of the present history was the first child of white parents, a female of seven days old when attacked. At birth she appeared healthy in every respect, and nothing unusual was
observed about her during the first week, except a tumor about the size of a half walnut, situated under the scalp and over the posterior superior spinous process of the left parietal bone.

On Saturday the 7th of Sept. 1850, a small pustular eruption commenced appearing around the mouth, on the chin and neck. Being regarded by the parents as the hives, no anxiety was manifested about it. The eruptions progressed very rapidly, and from the size of a pin's head, they would attain the diameter of a half dime or less, in twenty-four hours. Then breaking and discharging a thin seropurulent fluid, and forming a scab and remaining so. Sept. 12th. Dr. J. Johns was called to see the little patient, and found it in the condition described above, with the exception that the eruption had made its appearance on other parts of the body, viz: on the fore arm, the back, the genitals, and the thighs.

Dr. Johns ordered the child to have a dose of sweet oil, the parts to be anointed with mercurial ointment, and afterwards to be powdered with pulverized starch. Sept. 13th. Being called in consultation, I arrived at the house of the patient at four o'clock, P. M., and found the child presenting a most frightful appearance. The face, all around the mouth and on the cheeks, was thickly studded with the eruptions, having on them scabs; some few points of the eruption were as high up as the temple, but none existed on the head. The neck and throat were almost raw; the forearms and wrists were also affected; the back presented some points of the eruption as large as a dime, the thighs and space between the vulva and the groins, were a perfect mass of pustulated points. I should have mentioned, that the whole inside of the mouth, now for the first time, presented a highly inflamed appearance. Tongue, gums and roof of the mouth almost purple.

The older pustules appeared to be stationary, and the great point of interest was now in the left hand. About 10 o'clock to-day, a small vesicle made its appearance at the root of the nail on the index finger. It progressed so rapidly, that at my visit (4 o'clock, P. M.) it occupied both the palm and back of the hand. The cuticle was raised so as to resemble a bladder; the fluid contained was of a dark color, as is the case in blisters preceding mortification. The vesicle was punctured and the fluid allowed to escape.
The pulse was so exceedingly rapid that it was impossible to count it, and the child cried almost incessantly. As an external application, we used the common wheat flour, freely sifted over all the ulcers, and internally gave one sixth of a grain of calomel and one drop of the tinct. opii. camph. every four hours.

As soon as the raw surface was thoroughly covered with the flour, the cries of the child ceased and it soon passed into a quiet sleep, which lasted two hours, after which, she partook freely of a sucking bottle, which she would not do before. 14th, 8 o'clock, A. M. Our little patient rested pretty well until 12 o'clock, after that time she became very restless and has continued so until now.

The large vesicle on the left hand has progressed very rapidly towards the elbow; each of the pustulated points on the left arm and wrist is surrounded by a red margin, which progresses very rapidly under the cuticle, and presents the appearance of a vesicle caused by fire, the serum being evacuated. These local inflamed spots very soon meet and form one extensive surface extending in every direction with undiminished speed. At daylight this morning, a small vesicle was first observed at the root of the thumb nail on the right hand, and by the time I arrived there it had extended so rapidly as to occupy the whole hand. The cuticle slipped about but contained no fluid; all the pustules on the arm, and in fact, on the whole body presented the same inflamed appearance, the same disposition to extend and to commingle. The child is scarcely able to swallow the blandest fluids; the mucous membrane of the mouth, is much darker than yesterday. The same treatment to be continued. 4 o'clock P. M. Little patient continues to grow worse. The pustules on the back have taken on the same inflammatory action, and will now measure an inch and a half in diameter each. There is one pustule on the breast below the left nipple, and this is about all there is on the anterior part of the body, unconnected with the pustules on the extremities. The pustules on the face and neck have disappeared and in their stead is an erysipelas, occupying all the neck and lower portion of the face, which is gradually progressing up towards the eyes. The eruption on the lower extremities occupies a much larger space than at the last report, so also that on the
Robert's Contributions.

upper extremities. Two new spots have made their appearance, one on each heel. Patient can swallow some better, and has nursed from the bottle. Continue the same treatment, and anoint freely with sweet oil.

15th, 8 o'clock, A.M. Patient worse, the spots which appeared on the heels spread over the whole of the feet by midnight last. The eruption at all the parts affected continues to spread over the sound skin. That on the face has spread over the eyes, and is worse, if possible; can scarcely swallow, slept very little last night; during the first part of the night its bowels became very open, the discharges were at first very dark and of sufficient consistence, but soon becoming watery, they were arrested by an anodyne enema. The respiration has become very hurried; for a few moments it is so, then there is an entire cessation of respiration lasting generally about 15 seconds; then, as if by a convulsive action, the respiration is resumed again for a few moments, to be interrupted as before.—Wherever the eruption makes its appearance, the cuticle becomes separated from the true skin, and very great care is necessary in handling the child to prevent detaching it. The eruption on its legs has become very dark. Four o'clock P.M. Little patient is fast sinking; the eyes are much affected by the eruption, one is closed and the other so much affected as to present a very bad appearance. Patient died calmly at six o'clock; no examination was allowed.

Remarks.—The object in publishing the foregoing case, is to call the attention of the profession to an anomalous disease; at least so far as my reading and observations extend. If not new to all, it may present points of interest to them.

First, we have a pustular eruption making its appearance on different parts of the body of a child seven days old; this state of things existing for six days, is followed by an erysipelatous eruption, if erysipelas it could be called, attacking the left hand and then the right, where there had been no former eruption, and finally invading parts previously affected with a pustular eruption.

So far as the treatment is concerned, I have but little to say. I did not believe it possible to produce effects upon the system of so young a child, sufficient to counteract such a disease.
ARTICLE V.

Remarkable Case of Amaurosis, illustrating the Anatomy of the Optic Nerves. By Henry F. Campbell, M. D., Demonstrator of Anatomy in the Medical College of Georgia.

The following very unusual case, we observed at Aiken last summer, in the person of a gentleman of about sixty years of age, and its history is as follows:—For many years he had been the subject of Myopia, which he thought was greater in the left than the right eye. His occupation being that of barrister, he had used his eyes perhaps imprudently, and for some time previous to our seeing him, he said that he had been led to think he was losing the sight of his right, or as he termed it, his best eye. At the time of our observation, he remarked frequently that he was very often unable to see at all with his right eye, and that when he caught a glimpse of objects they were such as were passing before him; but, as a general thing, vision was extinct in that eye. With the other eye, exactly the reverse obtained: here, the faculty, though much impaired in its distinctness, was still generally present, but occasionally he lost sight of objects for a moment, when they would reappear as they changed their position on the field of vision.

In order to test the correctness of his views in regard to his case, we passed the hand slowly before each of his eyes successively, the other being closed; on the left side, he could see the hand until it reached a certain point to the right, when it would suddenly disappear, but by continuing the movement it would become again visible. On the right side, the hand, on being passed as above, was not perceived till it had attained a point on the left exactly corresponding to the point on the right, at which he could not distinguish it. This experiment we repeated frequently and invariably with the same results.

To explain the very singular feature in this case, viz., that in the right eye vision was confined to a small portion of the retina, while the generality of this membrane was entirely amaurotic; and that at the same time the reverse obtained in the left eye, which had most of its retina sensible to luminous impressions, with only a small amaurotic spot, corresponding to the healthy spot in the amaurotic eye, we will review some of
the peculiarities in the anatomy of this important pair of nerves. Firstly, we know that the nervous filaments, which are to compose the optic nerves, arising on either side from the geniculate and quadrigeminal bodies, proceed through the optic tract to the chiasm. Here all of them, with the exception of a few fibres, cross over to constitute the optic nerve of the eye on the opposite side, into whose retina they are finally expanded, forming by far its greater portion; but the few fibres which do not cross and only approach the chiasma, pass on with those from the opposite side to expand into the retina on the side from which they originate, yet from their paucity, they can supply only a very small portion of this membrane. And, secondly, the retina of each eye is produced out of fibres from both sides of the brain—consequently the destruction or injury of either nerve behind the chiasm would affect vision in both eyes, though much more extensively in the eye opposite to the tract injured. This is the fact illustrated in the present case.

Cases of partial amaurosis, we find reported in treatises on diseases of this organ, but they were of an evanescent character, and did not, in all probability, depend upon any affection of the brain, but of the nerve—or perhaps only the retina itself. Dr. Wallaston’s case, which occurred in his own person, is more analogous to the present than any within the range of our information. There, in looking at objects, but half of them could be descried; he would see but half of a man’s face and could read but half his name on a sign: thus, “johnson” appeared “son”, and in like manner every object he looked at. The affection subsided in a short time, and there was no recurrence of it till twenty years subsequently, when he was similarly affected.

Dr. Todd* refers to cases of partial amaurosis, which he says are very unusual, but they were all of a temporary character and in none of them was the fact of chiasm so plainly illustrated as in the one under consideration. Here the disease was enduring, the death of the nerve, functionally, at least, complete for a very considerable time, and full opportunity was allowed for a correct observation. Certain pathological observations find an explanation in our case: for instance, it is known that when the optic

nerves of an individual who had been blind in one eye for a considerable time previous to his death, are examined, the nerve of the healthy eye will be of fully its natural dimensions, while the optic tracts of both sides will be wasted, because they both contribute to the formation of the perished nerve. Here both retinae are in a measure amaurotic, because both originate from a defective tractus opticus.

A reference to the following diagram will serve to elucidate our theory with regard to the extent and distribution of the amaurotic regions in each eye, as well as the probable locality of the disease from which it originated.

A figure illustrating the origin of the fibres from the two sides of the brain, and also their termination in the retinae. The dark parts of the cut indicate portions of the brain, nerves and retinae that are diseased.

1.1. The two optic nerves, a majority of whose fibres cross to the opposite eye.
2.2. The crossing fibres which ascend and expand, to form the greater portion of the retina.
3.3. Convergent fibres which are few and ascend to form a small portion of the retinae of their own sides respectively.
4. Amaurotic spot on healthy retina.
5. Healthy spot on amaurotic eye.
6. Left thalamus dark, to represent the disease of which it is the probable seat; from it arises the paralytic nerve.
7. Healthy thalamus from the geniculated bodies of which arise the sound nerve.
8. Quadrigeminal bodies: the left represented dark, the right healthy.
Now, when we apply these pretty well established facts to the observations made in the above case, we find the anatomical account and the condition of the retinae affording mutual corroboration. Thus the extensive amaurosis of the right eye corresponds with the extensive distribution of the paralytic nerve on that side; but the whole eye is not amaurotic, because the whole retina is not constituted by a diseased nerve, and therefore a sensible spot is found upon it. Nor yet, again, is the left retina wholly cognizant of rays, for a small portion of its extent owes its development to the few fibres that do not cross, but only approach the chiasm. Thus we find the distribution of the nerves accurately defined by the proportionate extent of the amaurosis in each eye. The cause of this condition we must necessarily infer to exist at some point in the optic tract or brain itself, posterior to the chiasma of these fibres.

Apart from the pathological interest investing the above case, it has importance in the relations it bears to the anatomy and physiology of this portion of the nervous system, which, even at this advanced state of science is still, in many points, the subject of some degree of doubt and uncertainty. Inasmuch as our means of studying the functions of these nerves are very limited, on account of the mutilation and disturbance of important superjacent parts necessary to arrive at their very obscure position, we are in a great measure deprived of the benefit of vivisections, and restricted in our investigations to post-mortem observations and pathological phenomena.

On a careful consideration of our case, we think the following facts in the anatomy of these nerves may be considered, in a great measure, corroborated by it: firstly, that the theory of the chiasm in the fibres of the optic nerves, is correct, and also that each nerve is engaged in the production of the retina of both eyes; secondly, that the fibres are very unequally divided, one eye receiving by far the greater number; and, thirdly, that in their distribution to the retinae the two sets of fibres, viz., the crossing and continuous, are not intermixed together, forming all parts of the retina, but are engaged in the production of separate and distinct regions of this membrane.
ARTICLE VI.

Case of Glossitis. By C. T. Quintard, M. D., of Roswell, Ga.

The following case, presents some peculiarities which call for its publication. On Tuesday, September 23d, was called in consultation, with Dr. P., on the case of J. F., who, I was informed, had been sick since the Friday previous. The following is the history of the case to date. About six weeks ago, a dentist, in attempting to extract one of the larger molars on the right side, broke off the crown, and left the root. For ten days a continuous pain was felt about the part; it then became intermittent until the 12th inst, when it ceased altogether. On the evening of the 10th, the pain returned,—the patient applied a few drops of ol. caryophyll, and went to sleep. In the morning the pain became severe, and the tongue was slightly swollen. During the day (20th) he complained of pain in the back, and general malaise. In the evening Dr. P. visited the patient, prescribed a cathartic, and applied a blister about the anterior part of the neck.

Sept. 20th. Tongue, sub-lingual and sub-maxillary glands much swollen; pain severe; the masseter muscles rigid, particularly that of the right side.

22d. Made my first visit at 10 o'clock, A. M. Patient, a wagoner, aged 28; fine ruddy complexion, light hair, weighs 175 lbs., and is five feet one inch high. This morning there is an aggravation of all the symptoms. Patient unable to articulate; tongue protruded between the lips—is tense, red and painful to the touch; his breathing laborious; his brow bathed in perspiration; surface in other places hot; pulse 100, and full; saliva flowing profusely. He had passed a restless night, tossing to and fro on his bed, without any cessation of pain. No dejection since the operation of the cathartic administered on the 19th. Blood was at once abstracted to the amount of 25 oz.; a large dose of sal. epsom administered, and a poultice of hops and meal applied to the neck. Patient experienced considerable relief from the bleeding, and was able, after some effort, to swallow the salts. Not being able to remain with the patient, I advised the application of C. cups ad nuchae, but no blood was drawn, as I learnt on my return at 6 P. M. Breath-
ing easier, tongue not so painful; salts have operated well. The pulse being about the same as at my former visit, again advised venesection, and twenty-five ounces more blood was drawn, together with six or eight ounces by cups under the clavicles. At 9 o'clock, there was a free discharge of fetid pus from an abscess at the base of the tongue.

23d. This morning found the patient sitting up, quite cheerful. No pain; tongue not so much swollen, nor so much lessened as was to have been expected from the discharge of pus which had continued through the night. It was still impossible to pass the finger back to the base of the tongue. Ordered only chicken broth. In the evening the discharge had ceased, but was renewed by using a probe.

24th. Patient slept well till towards morning, when there was a recurrence of pain. The right side of the tongue was now more swollen than the left, and as there was evidently another abscess forming, and the pulse again full and frequent, the patient was put on the use of half a grain of tart. emetic every two hours. 5 P.M. Has taken but two doses of the tartar, which acted freely on the bowels, as well as having produced the desired effect. At 2 o'clock the second abscess discharged an enormous quantity of offensive pus. Ordered a cup of strong green tea, and morph. gr. ss. to be taken at 8 o'clock.

25th. Patient better in every respect. Has some appetite, and considered convalescing. It is proper to state that scarification of the tongue had been attempted, but would not be submitted to by the patient.

Among the causes which predispose to glossitis are reckoned compression of the jugular veins, (Stahl); ptyalism, (Slegel, Frank, Hosack); rubbing the head with mercurial ointment, small-pox, &c., (Trincavalleus). Among the occasional causes, are wounds, laceration, and contusions of the tongue. The application of emetic to the organ, burns; while the most frequent is the action of acid or acro-narcotic substances on the tongue. "Such effects have been produced by the juice of the daphne mezereon, by tobacco leaves, and by the sting of wasps, bees and other insects." Dupont relates a case of a young man who, for a wager, "took two bites at a toad, and was speedily attacked with severe glossitis." (Vide Brit. and For. Med. Chir. Rev., July, 1850, p. 51.)
The treatment of this disease is generally simple, consisting of venesection, scarification of the tongue, or incisions made parallel to the raphe, the introduction of ice into the mouth, and if the patient can swallow, the administration of cathartics or laxatives. Emetics are highly commended by Dupont, Raggi, Wettengins and others, in the earlier stages.

ARTICLE VII.

Case of Puerperal Convulsions. By P. W. Harper, M. D., of the Shoals of Ogeeche, Georgia.

On the 12th of last November, I was called at 9, P. M., to visit Mrs. L., aged 18 years, complexion very fair, of a healthy and strong constitution, with her first child. Parturition had commenced some twelve or fifteen hours previously to my seeing her. I learned she had had two violent convulsions, and while I was conversing with her, one came on that lasted several minutes. I bled her while convulsed, until the pulse yielded, say from twelve to sixteen ounces. This composed her for an hour, then another convolution came on, though not so violent nor so long as the other. I opened the vein and took about eight ounces of blood. This reduced the pulse considerably, and I had hoped would put a stop to the fits. At twelve o'clock, she had another convolution as violent as any of the others. I opened the vein again, and took, say twelve ounces more of blood, pulse weak and 120 per minute. During all this time, labor steadily progressed, and at one o'clock in the morning, she was delivered of a very large child, though dead. This was what I expected. From the first to the last, she was the most ungovernable patient I have ever attended, and during her convulsions, it took several persons to keep her confined to her bed. After being composed for two hours, she had another convolution, though slight. I gave her a tea spoonful of paregoric which made her rest well for a while. At four o'clock, she had another convolution, though mild. I gave her a tea spoonful of laudanum, which composed her until eleven o'clock that morning, when she awoke perfectly in her senses, but not recollecting what had happened not even my visit and attendance on her. She had no other
convulsions afterwards. After giving the usual directions in such cases, I left her in the afternoon much better than I could have expected.

14th. Found that the uterus had not contracted, with great soreness extending from the pubis to the umbilicus. I directed a dose of castor oil, tepid injections into the uterus and emollient applications over the abdomen. 15th. No better, complains of great soreness in the abdominal region, much swollen and very hard. Applied a large blister which drew well.

16th. Swelling about the same, with great soreness, pulse weak and 120—opened the bowels with castor oil, and opium given at night to compose her. 17th. Rested well; swelling as great, soreness and hardness not so much as the day before; the same directions continued. 18th. Blister looks well; no change in the swelling, &c.; complains of numbness extending from the left hip down the thigh, leg and foot. Directed her bowels to be opened with the saline purgative mixture, composed of epsom salts, 2 oz; cream tartar, 1 oz; tartar emetic, 2 gr; water, 12 ounces. One wine glassful to be taken every three hours until the bowels are well opened. Tepid injections still continued, and one grain of opium at bed time.

19th. But little alteration in the general appearance of the abdomen, left leg and foot very much swollen and very painful, particularly to the touch, no pain in the limbs. Directed laudanum and spirits of camphor, in equal parts to be rubbed over, and sulphate of morphine at night. 20th. Swelling of the abdomen nearly the same, though not as much soreness and hardness; leg and foot pretty much the same. Directed the saline purge, the same external applications together with the tepid injections and morphine. 21st. Much better except her leg and foot, which are very much swollen and very painful. The same directions, with the omission of the purgative. 22d. The blister looks well and the case assumes a more favorable aspect. Directed a dose of oil, the same applications and morphine. 24th., Still improving; blister nearly well, with very little soreness and pain. Bowels opened with oil and the same remedies continued. 27th. Recovering rapidly; the same course continued. December 2d. so much improved as to discontinue my visits.
PART II.

Eclectic Department.


LECTURE II.

GENTLEMEN,—In my former lecture, I described, or rather demonstrated the diastaltic law of action of the vis nervosa of Haller, and the diastaltic nervous arc in anatomy.

I showed you, by means of experiments and diagrams, that though the action of the vis nervosa is from above downwards in all preceding experiments, yet, that in newly devised experiments, that action is first from below upwards, or from without inwards, and that it is then reflected by the spinal centre from above downwards or from within outwards, either along the same or other nerves, to the muscles of the same and other limbs, establishing another, or panthodic law of action of this singular vital power.

This diastaltic law of action of the vis nervosa is portrayed in these diagrams, to which I beg again to direct your attention:—

The action is in the direction of the spinal marrow and nerves, towards and to the muscles. It illustrates the facts and the Law of Haller. The action is first to, and then from the spinal marrow. It is the fact of Redi, Whytt, &c. The action is both. It is the demonstration of the identity of the principle of action in both, and of a new Law of Action of that principle.

From one and the same point of irritation or excitation in one limb or part of the frog, the stream of power may be sent in all directions, upwards or downwards, into all the other limbs, just as we observe in traumatic tetanus, wherever the wound may be, in the hand or in the foot, the muscles of the maxillae, of the neck, of the back and abdomen, and of all the limbs, are thrown into tetanic spasm in the human subject, as in animals. The action is panthodic.

This, gentlemen, is the nearest approach to a circulation in the nervous system. The course of the streams of nervous power is not a perfect circle, but it is an arc or arcs, very nearly approaching to the circle, and broken only by the minute space between the integument and the subjacent muscular fibre, when the same limb is affected by excitation and movement.

It is by the law of diastaltic action of the vis nervosa that the experimental facts of Haller are identified with those of
Redi, Whytt, &c. But, what is far more important, it is by
the discovery of this law of nervous dynamics that the vis
nervosa of Haller becomes capable of application, for the first
time, to physiology, to the functions of the animal economy.

Previously, the facts of Haller and of Redi, were mere ob-
jects of experimental lore or curiosity, sterile, and without ap-
lication or utility. I was persuaded, at a glance, that this
could not be. A dynamic must have its use. Nature does
not expend itself in the mere production of useless power.
Wherever a power exists its application exists, and that appli-
cation must be sought for. The vis nervosa, or the power or
dynamic in the spinal nervous system, is such a power. It was
without application. It is now of most extensive application.
It is the active or controlling agent in all the acts of exclusion,
of ingestion, of retention, of expulsion, in the animal economy!

What is the nature of this surprising power? Of this, at
present, we know nothing! But we know what it is not. We
know that it is not sensation or volition, and that it is not elec-
tricity in any of its known forms or modifications. We know
that its seat is the spinal or diastaltic system exclusively of the
cerebrum and cerebellum, and in a certain sense, of the gan-
glionic system.

The actions of this power are always in diastaltic nervous
arcs, consisting of an esodic nerve, the spinal centre, and an
exodic nerve in essential connexion and relation with each
other—a new fact and principle in anatomy, and represented
in its simplest forms, in this diagram of the Triton.

Each of these four portions of the animal presents the phe-
nomenon of a diastaltic nervous arc. In the first you have the
trifacial, in the frog, in essential connexion, through the spinal
centre with the facial; if you excite the border of the eyelid, the
eyelid closes; the other eyelid closes simultaneously. You have
therefore a double diastaltic arc—from the border of the eyelid
to the orbicularis, of the same and of the opposite side. Similar
facts and phenomena are traceable in this, the second portion
of the diagram, in reference to the nerves and muscles of the
anterior extremities, in this third, in reference to the lower ex-
tremities, and in this fourth, in the tail.

But I hasten to call your attention to the same, and other
similar phenomena in the human subject. In this beautiful
diagram you have the diastaltic nervous arc of the human eye-
lid. From the border of the eyelid, I trace a branch of the
trifacial to the medulla oblongata; from this last, I trace the
facial to the orbicularis. If, in a patient affected with coma
and a gaping eye, you excite the border of the eyelid, it in-
stantly closes. The action is produced through this diastaltic
nervous arc. This fact I have frequently observed in apoplexy, in hydrocephalus. The degree of diminution of the diastaltic action affords a measure of the degree of danger!

In this second diagram, I have represented the diastaltic nervous arc of the larynx. Along this superior laryngeal nerve the energy of the vis nervosa proceeds to the medulla oblongata; and thence along this inferior and recurrent laryngea, the same energy proceeds to the muscles which close the larynx. Every excited closure of the larynx is of this kind. If a crumb of bread or a drop of water falls on the border of the glottis, this organ is foribly, violently closed, by the diastaltic action of the vis nervosa, through this anatomical diastaltic arc.

Still more earnestly I beg to call your attention to the next diagram.

It represents, for the first time, the natures, cause, and mode of action in the vital function of Respiration.

The first inspiration, as the acts of inspiration in peculiar circumstances of asphyxia or syncope in after life, is excited by the contact of the cool atmospheric air with the origins of these the trifacial, or these the spinal nerves, in the cutis of the face and general surface. Rhythmic respiration is excited by an internal stimulus acting on the organs of an internal excitor of respiration—the pneumogastric. As the pneumonic circulation proceeds, the blood exhales carbonic acid in the air-cells of the lungs; this irritating gas excites the origins of the pneumogastric nerves in those cells, and inspiration and a concatenated expiration (as in sneezing) are effected. The same series of phenomena is repeated, and this with a rapidity in a direct ratio with that of the circulation.

This ratio is thus explained: during sleep the circulation is as slow as possible. The evolution of carbonic acid, and the number of respirations in a given time, are proportionately small. Let the circulation be rendered rapid by activity, by the acceleration of the motion of the blood in the veins by muscular action, and the evolution of carbonic acid and the excitation of respiration are proportionately augmented.

In this manner the ratio between the circulation and the respiration is strictly maintained. It is physiological. Whenever it ceases, the phenomenon is one of pathology—an event particularly apt to occur in diseases of the encephalon, in which with comatose affection, the respiration is apt to become morbidly slow, irregular, suspicious, stertorous, &c.

Such is the nature and importance of the Diastaltic Arc or Arcs of Respiration.

The actions of this power are distinct from all actions of volition or of emotion or pain, though they are frequently
mingled with, and modified by them, the first of these occupying the upper part of the cerebral system, the second the lower, and the third the lowest, with the ganglionic.

The dissection between the spinal system or the diastaltic nervous system from all these is absolute, though their union in the general nervous system is most intimate. It is only in the latter restricted sense that we can any longer speak of the cerebro-spinal axis. we may speak of the cerebro-spinal axes, for this structure embraces the cerebral and the spinal axes or centres.

Each diastaltic nervous arc is actuated by the vis nervosa; we must no longer speak in regard to the diastaltic action or closure of the eyelids, or of the larynx, for example, as even the late able and otherwise accurate Professor J. Reid has done, of the "sentient" and of the motor parts of this arc; or as Prochaska (of whom so much has been, rather malignantly, I fear, than ignorantly, and, at any rate, untruthfully, written) does, when he speaks of "impressionum sensoriarum motorias reflexio," stumbling at the very threshold.

You will still, gentlemen, hear much of Unzer and the author whom I have just quoted. The whole idea of "anticipation" by this author is a fiction and a falsehood, totally unworthy of further notice, and totally unworthy of our profession. Unzer did not proceed beyond considering the spinal marrow or centre as a "chord of nerves," excluding in one word, all that I have said to you; and his pupil, Prochaska, had not even the initiative idea of a diastaltic arc in anatomy, in vital dynamics, in physiology, or in any sense whatever. They and all who have followed them, remote or recent, have—the former ignorantly, the latter more culpably—erred at the very threshold of this new department of anatomy, physiology, and pathology.

But, to quit this discreditable theme I must proceed to state to you two important principles or facts:

The first, that the vis nervosa usually exists in the form of mere static equilibrium. It requires in every instance, a distinct excitant to rouse into dynamic force, action, or act. Its agency is therefore, unlike that of volition, never spontaneous.

The second, that, in the spinal centre, but not in the exodique nerves, and, I suppose, not in the esodique nerves, the vis nervosa, or the "excitabilité" of M. Flourens, admits of distinct augmentation and other abnormal conditions.

These facts are portrayed in a diagram, which will be given in the second part of this lecture.

The in-excitor property of the cerebrum and cerebellum; the excitor property of the medulla oblongata and medulla spin-
alirs, with its susceptibility of augmented excitability, and the excitor power of the exodic nerves, with in-susceptibility of augmented excitability, are all displayed, and placed, as it were, before the eye in this diagram in a manner not easily to be forgotten.

I proceed to discuss this important topic particularly.

**Condition of the Vis Nervosa: Static and Dynamic.**

The cerebrum and the cerebellum are insensible and in-excitor or a-staltic, on being punctured or lacerated, whilst their principle of action, the Χνχν, is spontaneous in its motor influences.

The spinal marrow, on the contrary, is essentially excitor, requiring the application and repetition of a stimulus for the development of each and every movement.

The natural condition of the spinal marrow is one of inaction, or of static equilibrium. It is by appropriate and successive stimuli that its dynamic force is made effective and manifest.

This statement is true in every condition of the spinal marrow. Even when its excitability is extreme, under the influence of strychnine, freedom from stimulus is freedom from all motor action.

Still more is this the case in the state of diminished excitability from shock, from chloroform, &c.

After the application of a stimulus and the phenomena of dynamic force, the spinal marrow again resumes its condition of static equilibrium, but with reduced excitability. The action of each stimulus is followed by this effect, and each second stimulus is accordingly less effective than the former one. The excitability is, on the other hand, restored by repose. And thus the static equilibrium and the dynamic force bear a certain relation to each other.

A frog, affected by shock, or placed under the influence of chloroform, may be deprived of voluntary movement, respiratory movements, and reflex actions, the circulation being also almost extinct. If it be now left at rest, respiratory movements return. If it be excited, they again cease. And thus repeatedly. The same observation applies to all other movements. Quiet is the restorer, excitement the exhauer, of the motor energies.

**The Spinal Marrow susceptible of augmented Excitability.**

The degree of Excitability of the spinal marrow is, in general terms (like irritability of the muscular fibre,) inversely as the degree of activity or of stimulus.
Augmented or restored during sleep, it is diminished during each day, by every act of volition, every act of the respiration, and by each meal.

But the excitability of the spinal marrow admits of intense augmentation and extreme diminution by therapeutic agents.—

That of the nerve admits of no such augmentation.

Exp.—The tenth part of a grain of the acetate of strychnine dissolved in distilled water, and applied over the cutaneous surface of the frog, induces the most extreme excitability, or hyperethism. The slightest stimulus induces violent tetanoid spasm. Meantime, the circulation, in the intervals of such spasms, remains unimpaired.

Exp.—On the other hand, if ten drops of chloroform be dropped on a bit of spong and attached to the upper part of a tumbler, and this be inverted on a plate of glass, so as to enclose a frog, this animal first ceases from voluntary movements, then loses its excitability, and lastly, its circulation.

Undue excitability is generally the effect of teething, of irritated esodic nerves in general, and especially in the case of a wounded nerve, as in tetanus.

The usual immediate effect of a convulsive seizure is augmented excitability; and therefore one seizure frequently succeeds to another. The remoter effect is diminished excitability, and the patient is frequently secure from other attacks until the excitability is slowly restored.

Indolence allows the excitability to become morbidly great; activity diminishes its degree or intensity. Hence the importance, in such cases, of restraining the excitability by daily exercise, limited only by approaching fatigue.

Relation of Irritability of the Cerebrum and Spinal Marrow.

We are naturally led by the consideration given in the last paragraph to the subject of the present one. Every act of an organ is followed by diminished energy or power. This is not only true of the nervous tissue, but of the muscular fibre.—Each contraction of a muscle is followed by a diminution of the irritability of the muscular fibre. If, on the contrary, all stimulus be removed, the irritability exists in its maximum degree.

But, for the perfect state of the muscular irritability, it is essential that the muscle should have remained in connexion through the nerves, with the spinal marrow. The spinal marrow is, so far, the source of muscular irritability.

If, in experiment or disease, the influence of the brain, that is, of volition, be withdrawn from a muscle, its irritability becomes greater, comparatively, than that of the similar muscles. In cerebral paralysis, or that paralysis in which the influence of
the cerebrum is removed from a limb, the muscles of that limb are more irritable, tested by the mildest galvanic influence which will produce an obvious effect, than those of the other limb.

But if the connexion between the spinal marrow and the muscle be severed, either in experiment or by disease, the irritability of the muscles of the paralyzed limb (and the excitability of the severed portion of nerve) is less than that of the healthy limb.

These conclusions are founded upon a vast number of experiments, most carefully made and observed.

The fact affords a Diagnosis between cerebral and spinal paralysis, or between the cases of paralysis in which the influence of the cerebrum or of the spinal marrow is severed, respectively—a diagnosis frequently of great importance. *

**Relation of Excitability and Irritability to Stimuli.**

The chief stimulants of the animal frame are the acts of volition, and what are in exact proportion to these, heat, food, and air. The excitability of the nervous system, and the irritability of the muscular, are inversely proportionate to these stimuli.

This Law of the Inverse Ratio prevails throughout animated nature, and is, perhaps, the most general of all. It was announced by me nearly twenty years ago, in the Philosopohical Transactions.

During activity, the stimuli are all augmented; the excitability and irritability are proportionately diminished. During sleep the reverse obtains; the stimuli are at their minimum, the excitability and irritability are at their maximum.

Exp.—Having removed the head of a frog, we separated every part of the animal, leaving only a portion of the spinal marrow in connexion with the denuded and separated lumbar nerves, and the lower extremities deprived of integument.—We passed a galvanic current through the nerve and limb, until the movements had nearly ceased. We then passed a very mild current equally along both lumbar nerves, excluding the muscles; and then a stronger current equally through the muscles of both limbs, excluding the nerves; we found that the excitability of the nerve and the irritability of the muscles had been alike reduced by the repeated action of the stimulus.

A frog, prepared so as to expose the nerve in connexion with the muscles, has been designated "galvanoscopic." Galvanism is, in its turn, the Test of the excitability of the nervous, and

* Vide the Medico-Chirurgical Transactions, vol. xxii. xxxi., and The Lancet and the London Journal of Medicine, for 1849.
of the irritability of the muscular, fibre. So tested, these properties are found to be greater as we descend in the zoological scale, whilst the quantity of stimulus—food, respiration, temperature—is known to be less, in the same ratio, but inversely.

These facts, these principles, are the foundation of the pathology and the therapeutics of the diastolic system. In various maladies, as epilepsy and tetanus, we have augmented excitability of the spinal centre; in all diastaltic actions of remedies, it is the principle of renewed excitant or of alternation which is our guide in practice. It is this principle, the principle of alternation in the application of temperature, of relative cold and heat, &c., which should be our guide in the treatment of asphyxia.

There is a third principle of action in regard to the vis nervosa, which I will merely mention in this place, for it still requires investigation. A patient, once the subject of epilepsy, is peculiarly liable to a return of the malady; augmented susceptibility seems to have been superinduced. But the patient who is liable to epilepsy seems to lose this susceptibility for a time immediately after each attack, as if the susceptibility had, for that period, been diminished or exhausted, the interval of comparative security being unlike in any two instances.

All attacks depend upon these principles of repetition of excitants and of alteration of excitability.

I now, gentlemen, proceed to illustrate these principles by experiment:—

I have here a frog from which the cerebrum and cerebellum have been extracted, and on the skin of which I have dropped five drops of a solution of the acetate of strychnine, or the eighth part of a grain of that terrific poison.

In five minutes the animal is brought under its influence.—Now, let us carefully examine the extraordinary effect. Whilst it is left alone, untouched, unshaken, absolutely unexcited, it lies tranquil, as if nothing had occurred to it. But observe the extraordinary effect of a jar given to the plate or the table. It is thrown into a state of rigid tetanoid spasm; all its limbs are violently extended and agitated. Now the paroxysm is over; it has sunk into a state of relaxation. It would remain in this state until, if previously unmutilated, it recovered, or, being mutilated by the removal of the brain, it ceased to live! No excitement, no tetanus!

A thousand ideas rush upon the mind on viewing and contemplating this extraordinary scene!

The first appearance which strikes the observer is the difference of position assumed by the anterior extremities of the male
and female frog; those of the former being arched over the thorax, those of the latter placed in straight lines along the sides of this region. These positions result from the difference of development of the nerves and muscles of these limbs in the two sexes, especially in the early part of spring. The fact displays the special action of the spinal system, so similar to design in various cases.

The second fact is of still greater interest. The animal remains perfectly motionless unless it be excited. The vis nervosa is in a state of static equilibrium, unless that equilibrium be disturbed and changed into dynamic force by some cause of excitation. But if I jar the plate, or the table, or the floor even; observe the effect—sudden rigid tetanus!

The animal has now resumed its relaxed condition. This it will retain until a fresh cause of excitation is applied.

All this is an effect of the spinal centre, the centre of the spinal or diastaltic system. The cerebrum has been removed. The viscera may be removed without interference with these phenomena.

But observe this singular fact: if the integuments be stripped from the foot, no irritation of the toe has any influence. The origins of the esodic excitor nerves have been removed, with the other cutaneous tissues.

The same effect results from dividing the nerve which proceeds from the foot towards the spinal centre in any part of its course.

Lastly, a similar effect is instantly induced by destroying the corresponding portion of the spinal centre itself.

This law is uniform, in pathology as in physiology. Destroy any part of the diastaltic arc, and its phenomena cease.

I have now a remark to make of great importance. You have seen that this tetanoid condition exists independently of the cerebrum and cerebellum, which were removed in the first instance in the experiment which I have laid before you. I have also shown you that, after the induction of the effect of the strychnine, all the viscera may be removed, without removing the effect. This condition exists, therefore, independently of the cerebrum and of the ganglionic system.

It consists in exaltation of the excitability.

Now this exalted state of the excitability, or vis nervosa, is limited to the centre of the diastaltic system, and is not extended to its nerves. As long as the femoral nerve remains attached to the spinal centre, in the tetanoid state induced by strychnine, the muscles partake of the rigid spasm excited by any irritation. But let the nerve be divided, and let its lower portion be irritated, and it is found to possess the normal degree of excitability.
The excess of this excitability, then, is restricted to the centre of the system, exclusively of its nerves.

The centre and the nerves—the exodid nerves at least—are both endowed with excitability, but the former alone is endow-ed with the power of taking an augmented or exalted excitability.

This principle doubtless prevails in disease. In teething, in epileptoid disease, in tetanus, in hydrophobia, the spinal mar-row is in this condition. Hence the value of sinapisms and liniments well applied along the whole course, and especially the upper part of the spine, in such cases.

The effects of strychnine present the type of hydrophobia. They consist of augmented excitability, originating, like hydrophobia, in a poison applied by the blood to the spinal centre, or the centre of the diastaltic system. Now, gentlemen, a frog so affected by strychnine—so made the subject of a tetanoid condition—recovers, if it be placed in a little cool water, and left, absolutely undisturbed, in a cool place! It dies speedily if continually stimulated even by the touch of a feather! Quiescence cures, whilst each excited tetanoid spasm exhausts the vital power!

Do not these facts present invaluable suggestions for the treatment of the class of diseases involving exalted excitability? Might not the hydrophobic patient even, who infallibly dies if exposed to sources of excitement, survive if it were possible to preserve him from all excitement absolutely? One thing is certain, the physiological facts and principles which I have unfolded suggest the principles on which all our treatment is to be conducted.

An interesting question presents itself. How are poisons eliminated from the system? or, on what principle do their effects subside? Some facts, which it would be out of place to detail on this occasion, lead me to think that some poisons, whilst they are removed in all the secretions, are especially separated by respiration. The subject is full of interest, and calls for investigation.

I may here ask another interesting question. What is the difference between the phenomena of hydrophobia, which is a poisoned condition of the blood, and tetanus, which results from injury of an esodic nerve? The origin of the two diseases is essentially different. Are the phenomena so too; and in what degree, and in what respect?

It has been shown that the tetanoid state induced by strychnine is one of poisoned blood, acting on the spinal centre, inducing there exalted excitability, but not necessarily, or without an excitant, a state of tetanus or spasm. The case is tetanode, a state full of tetanus, without being tetanic.
I have now to state that tetanus—traumatic tetanus—is more than a mere augmented or exalted excitability. There is, in addition, a constant excitant in the wounded irritated nerve. There is therefore constant spasm. But there is, also, exalted excitability, and this spasm is exasperated in paroxysms on the application of any other excitation.

The effects of strychnine, hydrophobia, and other congeneric affections resulting from poisoned blood, are inter-mittent; tetanus is re-mittent only!

Teething, and all those cases of epileptoid disease in which the chief exciting cause, though it be an excitant of the nerve, is intermittent, also leads to an intermittent form of disease.

Have I convinced you, gentlemen, by these observations, of the value of these investigations in practice? Have I not put into your hands the clue of Ariadne, to lead and guide you through this labyrinth?

In my next lecture, I propose to bring before you two most important pathological laws, to which I, at least, can detect no exception:

The first—that no disease of the cerebrum or cerebellum can induce spasm, except through excitation, by contact or counter-pressure, of the spinal system.

The second—that no disease of this system, wherever situated if limited to this system, can affect the cerebrum, except through the nerves, and muscles, and veins, of “The Neck”—that medical region to which I have recently, and earnestly, called the attention of the profession.

Before I close the present lecture, I beg to notice a remark which has been made to me, upon a statement made in my former one. It was said that I had done injustice to the late Professor J. Reid, when I stated that he had spoken of the action of the superior laryngeal nerve, in the excited closure of the larynx, as being “sentient.”

Nothing would grieve me so much as to misrepresent and depreciate the opinions of any of my professional brethren.—This I have never done. I cannot say that I have never been the subject of misrepresentation and depreciation; for, as I have already said, the race of the Primeroses and of the Parisanuses is not yet extinct amongst us. But most of all I should regret any such act on my part towards Professor J. Reid, whose memory I respect, and whose labours I place in the very first rank in physiology; for if they do not rise so high as to be entitled to the designation of discovery, they certainly present a series of new and invaluable results, and especially the papers on the pneumogastric nerve. But I will read to you the paragraph, which I quoted from memory in my last lecture. You will perceive
that the very term sentient, or at least "sensitive," is used as I quoted it.

"When any irritation is applied to the mucous membrane of the larynx, in the healthy state, this does not excite those contractions of the muscles that approximate the arytenoid cartilages, by acting directly upon them, through the mucous membrane, but this contraction takes place indirectly, and by a reflex action, in the performance of which the superior laryngeal act as the sensitive, or afferent nerves, and the inferior laryngeals as the motor or efferent nerves."—Dr. J. Reid's "Researches," 1848, p. 251-2.

The last proof that the phenomena in question do not depend on sensation, if such proof were required, which it is not, is afforded by the testimony of patients afflicted with paraplegia. When this malady is complete—when, as in a case which I recently attended with Mr. Edwards, of Queen Street, Cheapside, the spinal marrow is absolutely divided by the disease,—when all sensation and all voluntary motion are extinct—these diastaltic actions exist in their full force, the patient seeing the movements induced, but not having the slightest power to feel or to control them.

I have witnessed many cases of the same kind. The proof is absolute, and the lengthy controversy on this point may be considered as terminated.

I have been favored by another criticism from a fellow of this college, whom I beg leave to thank, both for the kind terms in which he has spoken of my former lecture, and for his able and learned suggestion. The latter relates to the term which I employed at that lecture. Of opinion that the term "diastaltic" is a happy substitute for the former term "reflex," this friendly writer suggests the use of other compounds of στελαςιν in the place of the terms esodic, exodic, &c. It would certainly be desirable to preserve uniformity in our nomenclature; and the kind suggestion, for which I beg to offer my sincere thanks shall receive my most mature consideration. But I think both terms must be preserved; for example I do not see how we could express by any compound of στελαςιν the idea conveyed by the term panthodic.


When a metropolitan surgeon, of such high reputation as Mr. Syme has earned for himself, comes before his professional brethren with a new plan of treatment for a frequent and important disease, his proposal calls for serious consideration; and it is with this feeling that we have taken up Mr. Syme's essay on strictures of the urethra and fistula in perineo. In the preface he remarks,

"That the method of treating obstinate strictures of the urethra recommended in the following pages was communicated to the profession, five years ago, through the periodical press, and again, two years ago, in a collection of surgical essays; but, so far as I know, it has not as yet been adopted by others, even in a single instance. Being deeply impressed with the importance of the subject, I feel it my duty to make another attempt, with the view of awakening attention to it, by publishing, in a separate form, full details of the procedure, together with its advantages, positive and comparative; and also further evidence of its efficacy, from cases in public as well as private practice. Having done this, I leave the matter to the profession, trusting that, whatever may be their decision, they will at least give me credit for an earnest desire to render the opportunities committed to me conducive to the improvement of practical surgery."

Mr. Syme commences his observations by remarking, that the occurrence in surgical practice of cases in which strictures of the urethra have existed for the greater part of a lifetime, notwithstanding the efforts to remove them by practitioners of the greatest skill and experience, evidently shows that the means of treatment hitherto employed must either be uncertain in their operation, or only temporary in their beneficial effect; and adds, that his object now is to explain and recommend a method of treatment which has been found an effectual remedy for the disease, even in its most inveterate forms.

In referring to the obstinate cases of permeable stricture, in which his new mode of operation is recommended,—for his observations do not at all apply to what are called, and, as he says, improperly, impermeable strictures,—Mr. Syme says:
"I do not here allude so much to the mere tightness of contraction, and the difficulty consequently experienced in passing a small instrument through the stricture, as to the unyielding disposition manifested by the constricted canal, and its tendency to contract, perhaps even more closely than before, after being partially or completely dilated. One other feature of such obstinate cases, of great importance to notice, is the strong and general sympathy of the system with every change taking place in the local disease; when rigors and febrile attacks, leading to various derangements in different parts of the body, more or less connected with the part locally affected, are apt to result from attempts, even of the most gentle kind, to pass instruments into the bladder."

The following is Mr. Syme's description of his operation:

"If the patient has a great deal of pain, and wishes to escape from the slight degree of it which attends the requisite incision, he should be placed under the influence of chloroform; not partially, so as merely to suspend his consciousness, or impede his recollection of suffering, but completely, so as to prevent any restlessness or unruly struggle, which would tend very seriously to increase the difficulty of the procedure. He should then be brought to the edge of his bed, and have his limbs supported by two assistants, one of them standing on each side. A grooved director, slightly curved, and small enough to pass readily through the stricture, is next introduced, and confided to one of the assistants. The surgeon, sitting, or kneeling on one knee, now makes an incision in the middle line of the perineum or penis, wherever the stricture is seated. It should be about an inch, or an inch and a half; in length, and extend through the integuments, together with the subjacent textures, exterior to the urethra. The operator then, taking the handle of the director in his left, and the knife (which should be a small, straight bistoury) in his right hand, feels with his fore-finger, guarding the blade, for the director, and pushes the point into the groove behind, or on the bladder side of the stricture, runs the knife forward so as to divide the whole of the thickened texture at the contracted part of the canal, and withdraws the director. Finally a No. 7 or 8 silver catheter is introduced into the bladder, and retained by a suitable arrangement of tapes, with a plug to prevent trouble from the discharge of urine.

"The patient has merely to remain quietly in bed for forty-eight hours, when the catheter should be withdrawn. The urine sometimes maintains its proper course from the first, but more frequently passes in part through the wound for some hours; no attention or interference is required on this account, but at the end of eight or ten days a moderate-sized bougie should be passed, and repeated once a week or fortnight, for two months."

Mr. Syme recommends the same perineal incision in cases of obstinate stricture, accompanied by fistulae in perineo, and gives two cases treated in that way.
He details eleven cases of permeable stricture, which he treated by external incision, and says:

"That of all the cases in which I have divided the stricture, only one has been followed by any unpleasant result; on that occasion the patient suffered from a formidable attack of erysipelas, which, commencing in the perineum, gradually extended over the whole surface of the body, accompanied by constitutional disturbance, so violent as to prove all but fatal, and productive of emaciation, with prostration of strength, to an extreme degree. During this illness, the wound, instead of healing as usual, remained open for several weeks, just as when first inflicted, and it retained its conical form after the process of granulating contraction began, so that when the cicatrization was at length completed, the urethra had a very thin covering at the seat of the aperture, which, therefore, was apt to open from time to time, and discharge a little urine. It may be added, that the combination of circumstances which gave rise to this untoward occurrence was so complicated and unusual that it can hardly by any possibility happen again."

Having reviewed the different methods hitherto proposed for the treatment of stricture of the urethra, Mr. Syme concludes the subject in the following manner:

"From what has been said in the foregoing pages, I trust it will appear established,

"First. That division of a stricture by external incision is sufficient for the complete remedy of the disease in its most inveterate and obstinate form.

"Second. That in cases of less obstinacy, but still requiring the frequent use of bougies, division is preferable to dilatation as affording relief more speedily, permanently and safely."

We confess that we were rather startled when we read the foregoing sweeping conclusions, at which Mr. Syme has arrived, in favour of the treatment of passable strictures of the urethra by external incision. That a free division of a cartilaginous stricture will enable the surgeon to pass a large-sized catheter on into the bladder, and thereby afford him an opportunity of finishing the treatment by dilatation, we at once admit; but we are at a loss to understand on what principle the mere longitudinal division of an adventitious texture, which very frequently surrounds the urethral canal, and the nature of which we know from experience to be that of having an extraordinary tendency to contract, can lead to a permanent cure. Mr. Syme says that no attention or interference is required, on account of the urine passing out through the wound for a few hours or days; but at the same time he states that at the end of eight or ten days a moderate-sized instrument should be passed, and repeated at intervals for two months; and, as if not
quite satisfied himself as to the permanency of the cure by external incision, he says at p. 43:

"In most cases the cure may then be deemed complete and lasting; but if the tendency to contraction should have been extreme, or if the patient's way of life should be such as to favour the reproduction of the stricture, it will be a prudent precaution to have the bougie passed four or five times in the course of a year, in order to avoid all risk of future trouble."

We must say, after a very careful perusal of Mr. Syme's essay, that we are far from being convinced of the advantages of the treatment by external incision over dilatation in cases of permeable stricture of the urethra; and as the permanency of the cure by the perineal incision is the great point on which Mr. Syme lays stress, we should have wished him to have followed out each case, so as to have proved the remote results of his operation; for, with the exception of two, all of his cases have been operated on within the year, many but a few months since; and his reports of the great bulk of his cases cease with their dismissal from hospital, or, in private practice, within a few days after the operation was performed. The following is a report of the last of Mr. Syme's cases, which will give an idea of the summary manner in which the cases in general are dealt with, and which we conceive has left the boasted advantage of Mr. Syme's treatment, viz., its permanency, unproved.

"Case XI.—A. S., aged 28, a book-binder, was admitted into the Royal Infirmary, on the 29th of July last, for stricture of the urethra at the bulb, complicated by a false passage, as stated in the recommendation of a medical man which he brought with him. The complaint was attributed to a gonorrhoea contracted ten years ago, and had been very troublesome for the last five years, impeding micturition so much, that the urine frequently could not be voided except by drops, and occasionally causing complete retention. It was through ineffectual attempts to afford relief during these attacks, by introducing instruments, that the false passage had been established.

"Having allowed the patient to remain quiet for a few days, I succeeded, on the 7th of August, in passing a bougie through the stricture, and thinking it likely that the treatment by dilatation would prove unsatisfactory, performed division on the 11th. The urine escaped partially by the wound for a few days, and the patient, who had been quite well for a fortnight, was dismissed on the 2nd September without any trace of the disease or its remedy."

But we are not informed as to the present state of the patient. Every hospital surgeon has sent out cases of stricture treated by dilatation, with as favourable a note as Mr. Syme's
of A. S., but that does not prove the *permanency* of the cure; and although in Mr. Syme's hands the operation by external incision has, he says, but in one case turned out unsuccessful, and which case. Mr. Syme has, as we would have expected from his high character, brought forward, still that one case is, in our opinion, quite sufficient to place the profession on its guard, the infliction of a fistula in perineo being a serious addition to a stricture of the urethra. In absence, therefore, of the proof of the permanency of the cure of a permeable stricture of the urethra by external incision, we are not at all surprised, as Mr. Syme expresses himself to be, that the profession has not adopted his treatment of stricture by the perineal incision, in preference to that by dilatation.

The great practical feature in Mr. Wade's book consists in his warmly advocating the treatment of stricture of the urethra by potassa fusa. After furnishing his readers with a history of the treatment of strictures of the urethra, Mr. Wade says:

"The severe effects occasionally produced by the nitrate of silver in the hands of Sir Everard Home, who used it very freely and boldly, naturally excited much prejudice against the method he employed; consequently, so formidable a weapon as the armed bougie of Sir Everard is seldom wielded by modern surgeons. The nitrate of silver is occasionally used in small quantities to irritable strictures with very good effects."

And after informing us that Mr. Whately recommended the employment of potassa fusa in strictures, in preference to nitrate of silver, Mr. Wade says that the practice of Mr. Whately has generally been regarded as ineffectual, from the extremely small quantity of potash which he employed; and tells us that it was the inefficient action of the nitrate of silver that first induced him to try the effects of potassa fusa in impervious stricture, more as a forlorn hope than with any confidence in its success; and he soon found it was necessary to use the potash in more efficient quantities, and more frequently, than recommended by Mr. Whately; and, encouraged by success in two or three cases, he has been induced to persevere in the use of that agent. The cases in which Mr. Wade recommends the use of the potassa fusa are the following:—Firstly, fibro-cartilaginous strictures, impervious to instruments, without the employment of injurious pressure; secondly, hard strictures of long standing, which, although admitting the passage of a small bougie, bleed freely on its introduction; thirdly, irritable strictures; fourthly, spasmodic strictures, not arising from acute inflammation of the urethra; fifthly, strictures which have a
marked disposition to contraction. Mr. Wade applies the potassa fusa by inserting a small portion of it into a hole made in the point of a soft bougie, and says that the eighth of a grain is the smallest, and a grain the largest quantity of the potassa that he ever uses. Mr. Wade refers to the Westminster General Dispensary, to which institution he has been attached for the greater portion of his professional life, for ample opportunities of witnessing the effects of different modes of treating strictures of the urethra; and the result of his experience, he says, is, that more can be done in bad cases of stricture by the judicious employment of potassa fusa, than by any other means. Any person taking up Home's work would be led to suppose that the treatment of stricture by nitrate of silver was the only safe and permanent one, and as innocent as Mr. Wade says his treatment by potassa fusa is; however, a careful perusal of Sir Everard Home's own cases at once proves that the treatment by nitrate of silver has been often followed by serious results. Notwithstanding, such was the influence of Home's name and writings, that for a time the treatment by nitrate of silver became the fashion; so much so, that the late eminent Professor Colles says in a clinical lecture, the notes of which we have by us, "I recollect when Dublin men, physicians and all, ran mad about strictures; it was just after Home's work came out, and every man thought he had a stricture, and nothing was spoken of at club-houses, &c., but strictures, and 'how is your stricture?' became a complete watch-word. But some of the most valuable lives were lost by caustic before sufficient experience was obtained, and many died, others got violent rigors, which they were pleased to call intermittents, but which, in fact, were urinary fevers; and after a short time we found to our mortification it was a most dangerous practice. Home's plan did not get into discredit till many of his patients returned to Dublin, and then we found out that they were not permanently cured.

We are of opinion that the use of potassa fusa, in sufficient quantity to act on the urethra, is open to all the powerful objections which experience has raised against the treatment by nitrate of silver. If there is danger in applying the nitrate of silver to the sound, instead of the diseased portion of urethra, how much must the danger be increased in applying so diffusible an escharotic as potassa fusa? And although Mr. Wade says that in only one case was this use of the potash followed by an untoward result, viz., by perineal abscess, even if the patient should escape from urinary fever, false passage, profuse hemorrhage, retention of urine, still we hold, that if the deliquescent potash be used in quantity sufficient to destroy an existing stricture, it will produce one of a more formidable character,
from the unavoidable loss of substance and the consequent contraction, one bearing, in fact, a considerable analogy to that form met with occasionally by every hospital surgeon at the orifice of the urethra, and which takes place at the former seat of a sloughing chancre, and is the result of the subsequent cicatriziation. If on the other hand, an insufficient quantity be used, as recommended by Whately, and to a certain extent followed up by Mr. Wade, no more advantage is gained by the application than would be obtained by the simple introduction of a bougie, the potash, under such circumstances, exerting no escharotic effect on the adventitious structure.—[Dublin Quarterly Journal.

Hemorrhage Arrested with Spirits of Turpentine.
(Translated for this Journal.)

Among the numerous therapeutic purposes for which the spirits of turpentine has been used, there is one which we do not find mentioned by any French writer. It is the use of this article in arresting hemorrhage. English physicians, such as Adair, Brooke, Chyne, Clutterbuck, Copland, Elliotson, Hunter, Thompson, Vincent, and others, consider it as an agent possessing the most certain hemostatic qualities.

The known rapidity with which it suppresses mucous fluxes, and its efficacy in the treatment of purpura hemorrhagica, might have led to the belief that it would be good in hemorrhages, and particularly those in which there is no reaction or inflammatory phenomena, that is, those of a passive or atonic character, and also those produced by an alteration in the blood or a peculiar diathesis. It is in the latter forms of hemorrhage, that this medicine has proved most efficacious.

In the London Medical Journal, Mr. Smith has reported facts, showing the success with which he used spirits turpentine in hemorrhages, and its superiority over other styptics and astringents.

It will probably seem surprising, to see this used in hematemesis and enterorrhagia; its action, nevertheless, is sometimes surprising.

In hematuria it is also used very successfully. It may suppress the hemorrhage by its astringent properties, in the same manner that it does fluxes and morbid secretions from the urinary passages. It remains to be seen, however, whether certain conditions of the kidneys do not contra-indicate its use; and on this account physicians should, perhaps, be more careful in its administration in this disease than in any other.

Mr. Smith says that in all the cases of hemoptysis in which
he used spirits turpentine, there were pulmonary tubercles in various stages of development. In the hemorrhagic diathesis, he used it with much success, and would check for a time the progress of phthisis.

In atonic epistaxis, such as is observed in the aged and cachectic, the internal administration of turpentine will arrest the hemorrhage in a very short time.

According to English writers, the use of spirits turpentine with care, will never be accompanied by any unpleasant effect. It will frequently produce purging, very seldom vomiting, and nothing particular about the genito-urinary organs. We believe, however, that this medicine should be used with great care, and its effects very closely watched.

The dose is 20 drops every three or four hours, but 4 grammes may be given every four hours when the hemorrhage threatens the life of the patient. The best vehicle for its administration, is water with the addition of some aromatic syrup. It is well to combine the turpentine with some other therapeutic agent according to the case. In epistaxis, and generally in passive hemorrhages when the loss is very great, it is well to add the muriate of iron. In hematemesis and intestinal hemorrhage, the addition of sulph. magnesia, iced water, tannic or gallic acid is advised, and so on with the other forms of hemorrhage.

The following are some of the formulae of Mr. Smith:

- Comp. infusion of roses, 225 grammes.
- Sulph. Magnesia, 250 "
- Manna, 16 "
- Spts. Turpentine, 6 "

Add according to circumstances,
- Tinct. Digitalis, 6 "

In hematemesis, enterorrhagia, hemoptysis, two table-spoonfuls of the mixture every four hours.

- Spts. Turpentine, 6 grammes.
- Comp. Powder Adraganth, 8 "
- Ext. Hemlock, 60 centigrammes.
- Tinct. Digitalis, 4 grammes.
- Camphorated Mixture, 250 "

In gastro-intestinal hemorrhage, dose same as above.

- Sulph. Magnesia, 30 grammes.
- Spts. Turpentine, 40 "
- Pulv. Uva ursi, 4 "
- Camphorated Mixture, 250 "
Pharmaceutic Notice of Coffee and Caffeine.

M. Vanden Corput has just published an article upon the chemical and medical properties of coffee, and its active principle, cafeine. Their febrifuge and anti-neuralgic properties are now well understood by the Belgian physicians. Numerous applications of coffee in the treatment of disease have been made, although the fact is but little known. Lanzoni says that he has obtained cures of obstinate diarrheas with the infusion of coffee. Nebulius employed it in headache. Baglivi used it with advantage upon himself in this disease. Alpin employed it as emmenagogue, anti-arthritic and anti-asthmatic. The females of Ethiopia have used it from time immemorial as an emmenagogue. Dufour, in the seventeenth century, gave it in phthisis, in fever, and in sick headache. Willis, in the fifteenth century, recommended it as an antidote for narcotics. This knowledge he obtained from the Turks, who use it to counteract the bad effects of opium. Grindel and Dorpat employed it as febrifuge. Musgrave, Pringle, Monin, Percival, Lawrence,
and many others, derived good effects from it in Asthma. In that portion of Batavia belonging to Holland, the inhabitants use the infusion of coffee, with a little lemon-juice, in their pernicious fevers. In Holland, this is preferred to quinine for intermittent fevers. M. Amati has used with advantage the vapors that are disengaged from it during its torrefaction in chronic diseases of the eyes. Martin-Solon has administered coffee in the adynamic form of typhoid fever. It has also been proposed as a disinfecting agent; and M. Guyot has recently recommended it in the treatment of hooping-cough.

Besides its medical properties, properly speaking, coffee possesses another that is very precious. This property M. Vanden Corput has forgotten to mention in his very interesting treatise. We will notice it, however, in order that it may be generally known among practitioners. It possesses the property of concealing the disagreeable taste of the sulphate of quinine, sulph. magnesia, senna, &c. We have already called the attention of the readers of this Journal (T. xxxiii., p. 131) to this singular property. The question whether or not the sulph. quinine preserved all of its medicinal properties, when it was mixed with coffee, or whether it lost some of them, was discussed, but not satisfactorily answered. Are not the febrifuge properties that it possesses, in favor of its administration in connection with sulph. quinine?

Another property of coffee that has not yet been noticed, is, that it favors and develops the action of certain remedies. Thus the effects of haschisch are rendered much more certain when administered with coffee.

According to M. Payen, coffee is composed of cellulose, fatty matters, glucose, an intermediate vegetable acid, legumine, caseine, chlorinoginate of potash and cafeine, free cafeine, an essential concrete oil, a fluid essential oil and mineral substances. Torrefaction produces a pyrogenous oil, that gives to coffee its peculiar taste and odour, and forms a certain quantity of tannin, which makes it tonic.

To what principle does coffee owe its medicinal properties? It certainly derives them from an association of different principles, but particularly from cafeine. We will therefore mention the mode of obtaining it, borrowing the process from the Traité de Chimie, by Liebig.

The best process for extracting the cafeine, is to infuse the coffee in boiling water, and to add to it acetate of lead whilst warm, and then a little finely powdered litharge. The liquid should be reboiled as long as any of the yellow precipitate remains that was caused by the action of the lead. After all the precipitate has been taken up, the mixture should be filtered,
and diluted sulph. acid added. The sulph. of lead should then be separated from it, and the liquid be evaporated, when the crystals of cafeine will be formed.

The preparation proposed by M. Vanden Corput is the citrate of cafeine. This salt is obtained by saturating a solution of citric acid with pure cafeine, and elevating the temperature to 32° R. The salt then crystalizes in long brilliant white needles, grouped concentrically around a central point.

It can also be obtained by placing pulverized coffee in a very weak solution of citric acid, agitating the liquid with an equal volume of sulph. ether, decanting and leaving the aqueous solution to crystalize. This salt is very soluble in water. The quantity of the tribasic citric acid that saturates the cafeine is but small, and hence the citrate solution produces but little precipitate by the addition of acetate of lead.

The citrate of iron and of cafeine is prepared by a combination of one part of citrate of cafeine and four parts of citrate of iron. The crystals formed are in radiated scales, that are very soluble in water. The lactate of cafeine is obtained by direct combination in dissolving cafeine in diluted lactic acid, and evaporating by gentle heat. It crystalizes with difficulty, and forms frequently an amorphous or half crystalized mass.

[ Ibid.]

Efficacy of Citrate of Cafeine in Sick Headache.
(Translated for this Journal.)

Our co-laborer, M. Dorvault, in one of the last numbers of the Bulletin, published the opinions of M. Vanden Corput upon the chemical properties, the pharmaceutical preparations and therapeutical effects of the active principle of coffee, and mentioned, among others, its previous property as anti- neuralgic. We will now mention the result of some attempts of M. Hannon, which tend to demonstrate that cafeine, and especially the citrate of cafeine, enjoy an incontestible efficacy in nervous or sick headache. It is in the idiopathic and not in the symptomatic variety, that it is so serviceable. In two cases of idiopathic sick headache that returned periodically, M. Hannon administered citrate of cafeine as follows:—The evening before the first paroxysm he administered 10 grs.; the evening before the second 20 grs.; thus increasing the dose at each attack. These diminished in intensity, occurred at longer intervals, and finally disappeared. A third case, in which the disease occurred twice a month with great intensity, the citrate of cafeine was given in larger doses (36 grs.), and at the end of six months a complete cure was obtained. In many other
cases that the author did not think necessary to report it has been invariably successful. At each prescription, the symptoms either diminished or disappeared. The citrate is the best of all the preparations, and has the advantage over pure caffeine, that it is not so irritating. These facts are not at all surprising, for there is no physician who has not seen in others, or felt upon himself, the power that coffee possessed in curing or alleviating an attack of sick headache. We have, ourselves, obtained good results in administering coffee combined with lemon-juice.

The following is the mode of administration that Hannon recommends. It has already been shown in what doses this remedy is given in some cases; they should vary, however, according to circumstances of intensity, obstinacy, duration, &c. If the disease produces intense pain and suffering, the dose should be from 30 to 72 grs. before, or from the beginning of the attack. In cases, where the interval between the paroxysms is very long, the dose should be proportionally large. When the disease is ancient, the treatment should be continued a long time; but if, on the contrary, it is recent, and occurs at short intervals, the dose should be small. M. Hannon is convinced, by experience, that this medication should be made use of, the evening before, or from the beginning of the attack, when it cannot be foreseen the evening preceding. He subdivides the dose into several parcels, and gives each parcel at equal intervals, except when the attack has commenced, and then he gives the whole at a single dose. A trial of this agent is very easily made, and but a short time is necessary to determine its true value. — [Presse Med. Belge.

Sick Headache cured by full Inspirations.

(Translated for this Journal.

When a medication is based upon the experiments made upon himself by an honorable professional brother, it is far better, in reporting it, to give his own words. We will then simply publish the communication of M. Tavignot upon the new therapeutic agent in the cure of this painful, if not dangerous disease.

"It was in the following manner that I discovered the efficacy of this new and apparently strange method for the cure of this affection. In October last I was attacked with pain and weight in the head, anorexia, a physical and moral prostration, &c. Experience taught me that I had to remain in this state for twenty-four hours. I concluded that this peculiar state of the nervous centres might depend upon a stagnation of blood in
the venous sinuses of the dura-mater, as M. Auzias Turenne supposes, or upon an imperfect aeration of this fluid. I immediately commenced resiping freely and fully during several minutes. I perceived a sensible relief, which induced me to continue, and in a short time I was cured. I got up and undertook my usual occupations, as I felt but a slight pain in my temples, which vanished in a quarter of an hour. This result was doubly agreeable to me, as it furnished me with a new and practical remedy. In ten persons, upon whom it has been tried, one half have found instantaneous relief, and in the others there has been an amelioration, or a complete failure. However, upon interrogating with care those who were not relieved, I am convinced that they did not have genuine sick headache; they had a neuralgic pain of the head, but it was not accompanied with that profound prostration and melancholy that I have mentioned as characteristic of the disease. It seems to me to be useless to search for the modus operandi of full and profound inspirations in the cure of sick headache. It is evident that by this means the venous circulation is accelerated, and the chemico-physiological act of hematosis is hastened. Then the explanation of the success of this new method is in one or the other of these conditions, or perhaps in both.

[L'Observation.

Spontaneous Tetanus cured by Inhalations of Chloroform.
(Translated for this Journal.)

When a new medication is proposed, the best means to test its value is to publish the results obtained by its administration. This is the fourth fact that has been published in your excellent journal upon the good effects of chloroform in tetanus.

The 1st August last, I was called to a young girl, 18 years old, of good constitution, who, two days before, had been taken, without known cause, with pains and contractions of the muscles of the neck, which gradually extended to those of the chest, abdomen and back. When I arrived, the masseter muscles, the muscles of the back, and particularly those of the abdomen, were considerably contracted. The head was drawn backwards, the lower jaw fixed and immovable, the skin covered with an abundant perspiration, the face red, pulse frequent and respiration accelerated. The girl groaned from the great pain, and could not move in her bed. Spasmodic movements occurred at intervals, and increased the pain and danger. I first administered calomel and jalap, which caused several alvine evacuations, and the expulsion of two ascaris lumbricoides. This, however, produced no amendment in the state
of the patient. I then prescribed 15 grammes (270 grs.) of chloroform. I recommended a few drops of this to be placed upon a piece of cotton and held to the nose every two hours, and also during the spasms, when they occurred. The inhalation soon procured repose, and arrested the paroxysms. The patient was not incommolod nor stupified by the anaesthetic agent. During three days the progress of the disease was arrested, though the muscles continued tense and she frequently bit her tongue. She could drink, but with great difficulty, and the urine flowed involuntarily. Stools, however, were obtained with great difficulty, even when injections were employed.

From the third to the sixth day the paroxysms diminished in frequency and intensity, except at night, when they continued strong. In the morning of the sixth day I administered the following prescription:

Distilled orange flower water, 120 grammes,
Chloroform, 2 "
Tinct. of Belladonna, 10 n.
Syrup of Gum, 30 grammes.

This was given by table-spoonfuls every two hours. A warm bath was also prescribed.

On the seventh day the state of the patient was more satisfactory—the pulse had improved, the skin was covered with a slight moisture, and the patient suffered much less; she slept well the preceding night, the jaw was more relaxed, the head had returned to its natural position, and the spasms had ceased. The chloroform was stopped except when the spasms threatened to return.

Between the eighth and ninth days the spasms showed a disposition to return, but were warded off by chloroform. The patient refused to take the internal medicine, and frictions upon the abdomen and along the vertebral column with chloroform and tinct. of belladonna in equal parts were recommended. The state of the case was much ameliorated on the tenth day: she spoke and desired to eat. Inhalations morning and evening, and at the moment of the paroxysm, were prescribed.

On the twelfth day the attacks were rare and very short. The patient consented to take a few doses of the portion above mentioned.

On the fourteenth day she sat up in her bed for the first time, took, without assistance, a few spoonfuls of milk, and was able to project the tongue from the mouth; the tongue was soft, moist, and wounded in several places; the muscles were less contracted; the head free, though the face was still red. She passed tranquil nights, but obstinate constipation existed during the last few days.
Convalescence was apparently commencing on the sixteenth day. She spoke easily and laughed with her companions. Liquid and foetid stools were obtained by the use of injections, and her appetite increased.

On the nineteenth day she was convalescent. The spasms had not occurred for four days. There was a little stiffness in the muscles of the neck, back and abdomen, but in a much less degree than the preceding days. All danger seemed to be over, as there was no appearance of a return.

This case, and those that have been reported in your journal, have evidently been cured by chloroform. It is well known how few cases were cured before the discovery of this precious remedy. I attribute little or none of the good effects obtained to the belladonna that was prescribed at the same time. The inhalations were not pushed so far as to produce syncope, and yet the spasmodic movements have been readily dissipated by their use. The portion taken internally seemed to have materially aided that inspired in producing a cure. I am satisfied that I owe my success in this case to the chloroform alone.

[Barth, M. D., Bul. Gén. de Therap.

Should not the above case be regarded rather as Hysterical than Tetanic?—Edr.

_Cauterization of the Nasal Fossae in Chronic Ophthalmia._

(Translated for this Journal.)

About twelve years ago, M. Morand of Tours, made known the good effects he obtained by cauterizing the nasal fossae in certain chronic ophthalmias, and particularly in the scrofulous variety. The idea of the practice, was suggested to him by the intimate relations that exist between the scrofulous affections of the eye, and chronic inflamations of the nasal fossae.—This practice has been most generally abandoned, yet according to Tavignot, it should not be neglected, but on the contrary it should be more generally resorted to. Since 1844, he and M. Aug. Berard have employed revulsives to the nasal mucous membrane in scrofulous and chronic affections of the eye, of another character. The results obtained by them have been very satisfactory. Sometimes they cauterized the membrane with a stick of nitrate of silver, in other cases they employed the ointment of nit. silver, made by rubbing up 180 grs. of lard with 18 grs. nitrate of silver. The first eight days the mucous membrane should be cauterized each day upon the side corresponding with the diseased eye. If both are affected, the side most diseased should be cauterized first. At the end of this
time the ointment should be employed. The best mode of applying this remedy, is to pass it into the nasal fossæ by means of a quill opened at both extremities, and after the introduction of the quill, the ointment should be pushed out by a stick.

M. Tavignot has changed this method, though he employs it in the young to whom he cannot apply his modification.—He has substituted for the cauterization, a powder composed of an inert substance to which he adds an astringent or caustic in proportions varying according to circumstances. The patient can snuff this with great facility. The best formula seems to be: sulph. zinc 36 grs. and pulv. camphor 18 grs. rubbed up together. This powder should be snuffed 5 or 6 times per day. A kind of erythematous inflammation is thus obtained, that will suffice in slight cases. If a greater effect is desired, the zinc should be increased to 72 or 144 grs. to the same proportions of ingredients. The following proportion is more active:—nit. argent 36 grs., pulv. camphor 18 grs., rub together. The different active substances in these powders may be increased or diminished according to the effects produced, or the results desired to be obtained.—[Ibid. Union Medicale.

**Good Effects of Camphor in Nervous Coughs.**

(Translated for this Journal.)

Camphor is evidently an antispasmodic. Experience has proved this, and our predecessors have employed it with advantage in many cases. Because very great abuse has been made of this agent, is it any reason why it should always be discredited by physicians? This is not our opinion, and we will continue to collect facts that will tend to make known its true therapeutic effects, and to regulate its use. After having a long time struggled against prejudices of this kind, M. Alquié of Montpellier, determined to employ camphor in obstinate nervous coughs, which had resisted the agents usually administered in such cases. The results he obtained are too remarkable to be unnoticed. The first opportunity he had to prove the prompt and decided influence of camphor in such cases, was in the case of a young lady, very nervous, who had been affected about a week with an obstinate and dry cough that produced great weakness and pain in the chest. He advised her to take 12 grs. of camphor. The next day the cough had almost entirely disappeared, and 10 grs. more completed the cure. A short time after M. Alquié was called to a lady affected with violent cerebral congestion and a strong cough in consequence of exposure. A large bleeding, sinapisms to the
feet, and a blister to the arm, promptly dissipated the cerebral symptoms but did not benefit the difficulty of respiration, or amend the nervous cough. The latter continued dry, painful, and was accompanied with a little fever. M. Alquié ordered camphor, as in the preceding case, and the following day the cough had disappeared. From these facts it would appear, that camphor rapidly dissipates not only simple nervous coughs, but also those that are dry, painful, produced by catarrhal irritation of the bronchi without any appreciable lesion of the lungs. No benefit, however, is derived from camphor when the cough has become humid and accompanied with expectoration of thick and yellow mucus, nor in cases where there is a material lesion of the lungs. The mode of administration is very simple. The camphor should be slightly pulverized or crushed, and a small portion swallowed at intervals of several hours.

[Rev. Therap. du Midi, and Abeille Medicale.

Pruritus of the Vulva of Infants, treated with Saltpetre baths.

Pruritus is caused by the presence of small worms in the genital organs and anus of little girls. These worms are called, by Rudolph, oxyurus. We give two cases by Dr. Vallez. The first was a little girl, ten years of age, who was brought to the doctor for an affection of the eyes. During the examination of the eyes, he found, by the frequency with which she carried her hand towards the region of the vulva, that she had been suffering from an intolerable itching in these parts for a long time. The itching was so great that it was almost impossible for her to remain quiet for the shortest time. M. Vallez advised lotions of sublimate, but at the end of a few days, no improvement having taken place, M. Vallez proceeded to an attentive examination of the genital organs. To his astonishment he discovered a quantity of small worms in the fossa navicularis and fourchette, which by their movements produced the itching. He prescribed tepid hip-baths, containing a quarter of a pound of saltpetre in each bath. Whilst the patient was in the bath, the lips of the vulva were kept separated so as to aid imbibition. After taking three baths the patient was radically cured.

The second case, was that of a young girl who had been suffering from continual itching about the vulva for two years. M. Vallez treated her with the saltpetre baths, and after taking two she was entirely cured.

Whilst recommending the treatment of M. Vallez, we must add, that in several cases which came under our observation, either in young girls or pregnant women, two or three frictions
made with mercurial ointment upon the seat of the disease caused the itching to subside.—[Gaz. des Hopitaux.

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Treatment of Varicocele.

To the Editor of the Boston Medical and Surgical Journal:

Sir,—The treatment of varicocele by the pressure of a truss over the spermatic veins, at the external inguinal ring, as first recommended, in my notice, by Mr. Curling, in the London Lancet for June 15, 1845, and since then approved by several others, does not seem, as yet, to have obtained so general a reception in practice as its merits deserve. The reason of the caution or neglect with which the suggestion has been received, undoubtedly is, the theoretical presumption that such a remedy would inevitably be injurious, by preventing the return of the blood from the spermatic veins. A single trial of the truss in a case of varicocele will remove that presumption. No danger, or inconvenience, or discomfort, will result. The proximate cause of the varicosity and of the suffering that attends it, is the pressure of the superincumbent column of blood, unrelieved and unsupported by healthy vein-valves. The truss, by its pressure, closes the vein, supports this column, and relieves the distended veins below: these then contract of themselves; the blood, sent into them by the spermatic artery, returns through the superficial veins, and the irritation, which results solely from the distending pressure, speedily subsides, and restores the patient to comfort, and after a few weeks or months, to health, or all the signs of health.

I first used this remedy four years ago. Then, and in several cases in which I have recommended it since, it proved harmless and effectual. If the remote cause of the disease be, as I suppose, a deficiency of the valves, it is, of course, beyond radical remedy. And, accordingly, I find that the complaint, sooner or later, is apt to return, if the truss be dispensed with, and to necessitate a second resort to that remedy. But if it may be said, on this account, that the cure is not radical, it is at least true that the treatment leaves the disease no more than an inconvenience.

The case, the worst, and at the same time the most satisfactory, of all I have treated, came into my hands in January, 1850. The patient, C. R., had himself brought to me, from his residence, twelve miles distant, on his back—a position that, with intermissions of not more than ten minutes, he had maintained for three months, if I remember rightly, and which he continued to maintain, as I will explain, as much longer. He was about 50 years of age, and had suffered from varicocele
since early puberty. For several years, so irritable had the parts become, he had been frequently obliged to confine himself; for weeks and months at a time, mainly to the "horizontal posture. At such times, as he informed me, the parts effected were inflamed, swollen, tender and unusually painful. As we often see in such cases, the pain had come to be, in a measure, of a neuralgic character. The patient's physical and mental powers were suffering under the constant irritation, and the superinduced hypochondriasis. Bad off as he really was, he thought himself worse, and had as little peace of mind as of body. He had long used a suspensory bag, but of late had found its relief very limited. Other remedies had been tried. He had consulted a good many physicians, and among them two professors of surgery, who, having (very justly) little inclination to recommend the common methods of seeking a radical cure, told him, "if he could not get along otherwise, he had better have the testicle removed." It was, in particular, for my opinion on this point, that he came to see me. I recommended a truss. This was altogether contrary to his theory of the disease. He had read a good deal on the subject, and perhaps was not the easier to manage on that account. I explained my notions to him, and he went away half convinced; consulted his books, and his favorite doctor in the neighborhood where he lived, and came back to me afraid to try it "for fear the veins would swell up and inflame." This course of proceeding was repeated several times, till at length I gave him my views in black and white, fully reasoned out, to all possible contingencies and results. With this memorandum in his pocket, for easy reference, he was able to keep his judgment steady. He got a truss and put it on; and the next time he came to see me, much to my gratification and relief, he came on his legs. In short, he now calls himself well, and insists that I shall "publish his case," or he will do it himself.

A single practical direction in regard to the amount of pressure: it should be quite slight, just enough to close the calibre of the vein. Any easy hernia truss will answer the purpose.

Middlebury, Vt., Dec. 24th, 1850. Chas. C. P. Clark.

Chloasma. By Wm. Gray, M. D., of Manchester.

This disease of the skin is also known by the names, Ephelis, Maculae hepaticæ, Pityriasis versicolor, Leberflectete, and Liver spots; and generally makes its appearance on some part of the chest or arms, and extends in very irregular patches to other parts of the body, some times covering nearly its entire
surface. As far as the disease spreads, the skin assumes a dull yellow or brown color, sometimes varying in tints. There is a very slight elevation of the cuticle in most cases, with a very fine eruption. Occasionally the itching is very annoying, though not at all constant. The patches are often covered with minute scales.

This disease is supposed to exist as a sequel to disease of the stomach or liver; but several cases have certainly come under my observation, where there was no perceptible functional derangement, either of the stomach or liver; and I am of the opinion, therefore, that it has no more connection with derangement of the stomach and liver than has impetigo, lepra or psoriasis.

My principle object in introducing this subject is to speak of the treatment which I think has been heretofore unsatisfactory, both to the physician and the patient. During the early years of my practice, the cure of this superficial disease annoyed me exceedingly. In 1844, I began to use the Sulphur Fume Bath as a remedy, and from that time have had entire success; and am now prepared to recommend this remedy as a specific for this disease, if there be any specific in medicine. In recent cases a few applications are sufficient; and in no case has it been necessary to apply it more than eight or ten times. If any member of the profession has a remedy as certain as this, and more easily applied, it would be highly gratifying to have it made more public.—[New Hampshire Jour. of Med.]

Microscopic Examination of the Discharges from the Bowels in Cholera. By R. S. Holmes, M. D., of St. Louis, in a letter to the Editor of the American Jour. of Med. Sciences.

I have examined (microscopically) the discharges from the bowels in six cases of cholera, and have found the cells of cryptogami in a greater or less degree in four of these cases, and *vibriones* very abundantly in one. The theory I think amounts to nothing. I have found in flour *every one* of the forms of cryptogami that I have been able to discover in cholera cells; one has a peculiar shape, which I have not seen described. I have had a bottle of flour and water on my table for some months, and I am confident I could show in the course of a few days every one of the forms of vegetable growth in it that are seen in cholera discharges, by a Ross one-eighth lens: I say in a few days, for these cells vary in the flour, and are sometimes not to be seen; the cell of the mould of flour precisely resembles that of the smallest of the cholera cells, which is not more than the one twelve thousandth of an inch in diameter,
although the peculiar *cholera cell*, so called, seems to have been limited by the English investigators to a much larger cell, with buds upon it.

I may mention that I discovered distinct crystals, having the exact forms of those of lithic acid, in one case where there was suppression of urine.—[Amer. Jour.

**Subcutaneous Punctures in articular Rheumatism.** By M. Guen.-Frequently joints which have become invaded by an attack of rheumatism long remain the seats of most obstinate pain. On a close examination we may assure ourselves that this pain is neither uniform nor general, but partial and localized at certain points. On handling the part we can even feel, opposite the immediate seat of pain, little knotty points which are exquisite to the touch. Such points exist even during the acute stage of rheumatism, but are much more easily recognised and isolated in the subacute stage. It is towards these points that the subcutaneous punctures should be directed, taking care, as in the ordinary application of the method, to raise a fold of the skin. The point of the instrument divides and liberates this tumefied and, so to say, indurated part; and the instant this is effected the pain ceases, and pressure can detect no trace of the nodosity thus destroyed. Whether a few drops of blood flow or not, the same result follows, so that the practice does not operate as an antiphlogistic. It is in fact only a liberation (*debride ment.*)—[Gaz. Méd. 1850, No. 22. British and Foreign Med. Chir. Rev.

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**On very Minute Doses of Tartar Emetic, in Phthisis and Asthma.** By M. Bernarbeau.—In vol. xxxi of the Bull. de Thérap., M. Bernarbeau gave an account of the great benefit he has seen derived from the administration of minute doses of tartar-ematic in the hectic of phthisis. Since that period he has used it in other stages of tuberculization, and in several cases of asthma, with excellent effects. He gives from three to six pills in the twenty-four hours, each containing 1-25th of a grain. By their use, the cough, dyspnœa, and inordinate action of the heart become calmed, and in fact all the good effects of morphia, without its inconveniences, seem to be produced. —[Bulletin de Therapeutic, vol. xxxiv, ii, p. 311. Brit. and For. Med. Chir. Rev.

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**Stethoscopic Sound attending the detachment of the Placenta.** M. Caillault relates in "l'Union Médicale" the discovery of a peculiar sound produced during the detachment of the placenta
after the delivery of the child. M. C., in making observations at the “Hopital Beaujou,” found that upon applying the stethoscope over the hypogastric region immediately after the expulsion of the fetus, he heard at first nothing but the sounds produced by the intestinal movements—but that, as soon as the uterus began to contract, a new sound was heard gradually increasing and diminishing in intensity with the increase and subsidence of the uterine contraction. This sound consisted of a series of rapid crackings similar to what might be produced by passing the finger nails over the straw bottom of a chair; and it was regularly reproduced at each contraction, until the placenta was expelled. M. C. has had ample opportunities to determine the uniformity with which this sound is produced in every instance—and has had his discovery confirmed by the other physicians of the institution. He is therefore disposed to deny the correctness of Velpeau’s opinion, that the placenta is usually already detached before the delivery of the child.

May not M. C. err in attributing this sound to the act of detachment, instead of regarding it as the mere effect of the compression of the placenta and to the consequent extrusion of a portion of its blood. It seems probable that this may account for the sound.

Caseine in the Blood of Nurses.—The blood of two women, whilst nursing, was examined by M. M. N. Guillot and F. Leblanc, and the serum, after being separated from the albumen, furnished an abundant white precipitate when it was boiled with a few drops of acetic acid. They discovered all the characters of casein in the solution. The quantity of this product seemed to be in proportion to the diminution of the quantity of albumen.

In experimenting with the blood of new born infants, no sensible traces of casein could be found.

The blood of men and women treated in the same manner, gave a light precipitate which was redissolved in a few drops of carbonate of soda. The precipitate was much less, and of a different appearance from that obtained from the blood of nurses.
On the Treatment of Sprains of the Ankle. By M. Baudens.

—M. Baudens observes, that judging by the frequency of the occurrence of this accident, its treatment ought to be well understood and successfully practised: but that this is in fact far from being the case, and he is therefore desirous of making his own plan of treating it, by the cold-bath and gum bandage, more extensively known.

The indications are, first, to prevent or remove inflammation, and then to secure immovability to the distended or lacerated parts, until they have recovered their power, the patient being at the same time allowed the use of the limb. For the purpose of subduing inflammation, numbers of leeches are usually applied, and then an emollient cataplasm; and M. Baudens feels convinced that it is in consequence of such treatment that degenerated sprains so often augment the number of amputations in hospitals. By free leeching of a joint, the seat of sprain, two mischievous effects are produced. In the first place, the pain, which is the first of the series of symptoms of inflammation after sprain, is increased by the leech-bites, in place of being mitigated; and, in the next, the increased afflux of blood towards the part is encouraged instead of being repelled. M. Baudens, on these grounds, strictly forbids the application of leeches in all surgical maladies attended with acute inflammation, while he often derives most excellent aid from their employment in chronic inflammations; thus, by the induction of a temporary congestion, giving a fillip to the too languid action of the part. When blood need be taken in sprain, he abstracts it by venesection, although probably both the profession and the public, from the force of habit, would tax with ignorance any one who neglected the use of leeches. As to emollient cataplasms, they favor in place of opposing the afflux of fluids to the part, while the long maceration the joint has been thus submitted to, deprives it of its elasticity, gives rise to a pasty engorgement, and predisposes to the formation of white swelling.

M. Baudens has pursued his own plan of treatment now for twenty years, and under it his patients have been enabled to resume their trying military duties in a very short time. He is not the first who has employed cold water in the treatment of sprain; but his originality consists in trusting to it alone, and continuing its application for so long a period. His plan of employing it, contrasted with that of his predecessors, may be thus summed up:—1. Period of the Application. Cold has usually been thought desirable only when it could be resorted to very shortly after the accident; but he applies it not only immediately, but also several hours or days after the occur-
rence, or even in chronic sprain—whenever, in fact, there is a morbid degree of heat to abstract. 2. The local bath has never been ordered by others for longer than five or six hours, although some practitioners, since his first publication on the subject, have ventured to extend it to twenty-four. In certain of his cases, however, immersion has been continued for eight or ten days, and, in one example, for fourteen days; while in no case has it been less than for two. 3. Mode of application. The vessel containing the water is brought to the bedside of the patient so that he can conveniently place his leg in it, having the heel resting on a sponge at the bottom, the leg and thigh being supported by cushions, so that the position may be maintained as many days as required. In the vessels used at the Val-de-Grâce the water reaches as high as the middle of the leg, and is changed about every three hours in order to keep it sufficiently cool. Spring water is usually employed, and if the inflammation is intense, ice is added. A purgative is given, and, if indicated, one or two bleedings are resorted to. 4. Effects.—One of the first of these is the cessation of pain, which sometimes occurs at once, and at others in an hour or two.—From the moment the foot is placed in the bath, the swelling becomes stationary, and soon after, with the heat and redness, decreases. About the fourth or fifth day the part becomes wrinkled like the hands of a washerwoman, and usually about the third or fourth day, the patient finds the water too cold, and then the limb is removed from it—the period for doing this being regulated by the patient, he being told to keep it in only as long as he derives comfort from so doing. Few of the patients suffer from any general reaction. Gangrene has been said to have resulted from this application, but the author has never met with such a case. The patient sometimes persists in keeping the limb in water after the dispersion of the heat and pain, and the consequence is the production of engorgement of the joint, a tense state and dark color of the skin, together sometimes with darkish lines—precursory signs of congelation in fact—on seeing which the joint should be enveloped in a fomentation of elder-flowers and poppy-heads at the temperature of the atmosphere. The objections which have been urged from the fear of producing repurcussion, are quite theoretical and unfounded. It is in fact only the excess of morbid caloric that is abstracted.

Gum-bandage.—When the inflammation has been subdued, all the depressions in the vicinity of the joint are filled with wadding, and a bandage carefully and equably applied. This is well moistened, by means of a brush with very thick gum, which in a short time imparts to it almost the hardness of wood. After this has been worn for twenty-five or thirty days, it is
removed and the joint slowly and gradually exercised; for want of which precaution many patients (especially those treated by leeches and poultices) suffer all the symptoms of a sub-inflammation of the white tissues of the joints, even for years.—[Gaz. des Hôp. Brit. and For. Med. Chir. Rev.


On the 29th January, 1848, Miss J. E. Kingsley, a school teacher, in Jefferson county, East Tennessee, in descending a hill, was thrown from a buggy, and had both bones of the left leg broken in two places; one three and a half inches below the knee, the other two and a half inches above the ankle.

It was six weeks before Miss K. began to sit up in bed, and four months before she was able to ride out. She came to Cincinnati in July of the same year. Ever since the injury, the leg had been considerably swollen, and there had not been a day without more or less pain, sometimes severe, extending from the upper fracture to the heel, back of the foot and toes, indicating lesion or compression of the fibular nerves.

Both fractures were firmly consolidated. The lower fracture was well enough, exhibiting no deformity—at the upper one, the leg was sadly bent, exhibiting a prominent external convexity, or angle, so great as to shorten the distance from the knee to the inside of the foot about an inch and a half; the plantar surface of the foot looking inward, and its outer edge looking directly downward. Of course, the limb was altogether useless in walking; any attempt to apply the foot to the ground aggravating the pain. It was impossible to place the sole of the foot down flat, or bring the heel within an inch of the ground. The limb was therefore left to swing, while Miss K. moved about upon the other leg, and a pair of crutches.

In September, 1848, aided by my son, Dr. Wm. H. Mussey, I operated in the following manner. A firm pad an inch and a half thick, was laid upon the inside of the knee, another upon the inside of the ankle, extending five inches up the leg. A splint of hard wood, one inch thick, and three inches wide, was laid, and secured by a bandage, upon these pads. A broad padded belt was placed over the angular projection of the fracture, and gradually tightened by a mechanical power, derived from Jarvis' adjuster, till the fracture was crushed, and the leg straightened.

Miss K. having been placed under the influence of Chloroform, was wholly unconscious of pain during the operation, and occupied herself all the while, in singing sacred songs, and
holding celestial conversation; and while a bandage and splint were being applied to maintain the new position of the limb, finding herself coming to earth again, she entreated most earnestly for more Chloroform, to prolong the ecstatic illusion. After the operation, the pain in the leg and foot were diminished, and in two months the fracture was consolidated.

Dec. 12. There is now no pain at the heel, and comparatively little in the leg and foot. The limb has its natural direction, is as long, and apparently as strong as the other. She can now walk with a cane, and limpingly without one.

Feb. 1849. Miss K. now walks very well without crutch or cane, and only now and then feels slight pain in the leg, the nervous injury having been almost repaired. Some months after the above date we saw Miss K. walking well in the street as if nothing had happened.—[Western Lancet.

The Difficulty of Breathing from an over dose of Opium, relieved by inhaling the Vapor of Water. By Charles W. Wright, M. D., of Cincinnati.

The difficulty of breathing which is commonly met with in cases of poisoning with opium, is generally ascribed to its producing paralysis of the respiratory muscles, and that asphyxia is thus induced, which is the immediate cause of death.

Having observed this symptom in several instances, and knowing the power which this drug has of arresting all the secretions, except that of the skin, I was led to suppose that the difficulty of breathing was not, in all cases, to be referred to paralysis of the muscles of respiration, but was to be accounted for, in part, at least, on different principles.

Now it is absolutely necessary, that the mucous membrane of the lungs should be kept constantly moist, otherwise it is impossible for oxygen gas to be absorbed, and carbonic acid eliminated. It is observed in some cases of poisoning with opium, that the mouth and fauces become so dry, that it is almost impossible for the patient to swallow or speak, and that if the dose is sufficiently large, this dryness may extend into the respiratory organs, and thus give rise to great difficulty of breathing. In these cases the patient is not so much disposed to sleep, as when this symptom is not observed.

Having seen this effect of opium in several cases, I had determined to try the effect of the inhalation of the vapor of water, in mitigating the unpleasant symptoms thus induced. This I was enabled to do in my own case, a short time since, from having taken by mistake an over dose of opium, which could not have been less than ten grains. In this instance, the first warning of the mistake I had committed was embarrassed res-
piration, which soon amounted to an agony, without the least symptom of narcotism. In this case much the same sensation was produced by each inspiration as is experienced by the inhalation of pure nitrogen gas, the air seeming to leave the lungs without having performed its functions, there being at the same time a sense of dryness in the fauces and larynx. In this condition I commenced breathing the vapor of hot water, which produced immediate relief. After this, having ejected the poison from the stomach, by an emetic, no unpleasant effect followed.

When it is remembered that the power which a membrane possesses of absorbing a gas, is in proportion to its moisture, and that a dry one is as impenetrable to gases as horn, it is not surprising that the above symptoms should be induced by opium, which above all other substances, has the property of diminishing the secretion of the mucous membranes. It should also be borne in mind, that by arresting the pulmonary secretion, the blood loses its attraction, for the mucous membrane lining the lungs.*

Probably the best treatment which could be adopted, where this symptom is observed, would be to allow the patient to inhale the nitrous oxyde gas, saturated with vapor, which would have the effect of restoring the moisture of the lungs, and presenting oxygen in a much more soluble form, than that which enters into the composition of the atmosphere.—[Ibid.

On Chorea. By Dr. Lee.—An analysis of various published cases of this disease, and of forty-two observed by himself at the Hôpital des Enfants, leads Dr. Lee to the conclusion that there are four principal varieties of it.

1. One which has been called sympathetic, coincides with the local lesions of the various viscera of organic life, and especially with disease of the gastro-intestinal system and of the heart.

2. A second, which is very common, depends upon a general disease, and especially rheumatism. So frequent is this variety, that it constituted seventeen out of the author's forty-two cases, and thirty of seventy-four he has collected. Rheumatism indeed may not only give rise to chorea, but to a variety of other nervous disturbances, as simple convulsions, contractions, tetanic convulsions, pseudo-meningitis, pseudo-myelitis, &c.; and, in fact, there is no symptom usually referred to lesions of nervous substance, which may not be dependent upon a rheumatic affection of the joints or heart, such affection

* See Liebig's late work on the motion of the juices in the animal body.
Influence of Salt Diet upon the Blood. [February,

being almost always marked by the nervous derangement, and giving rise to only very slight local suffering and febrile action, especially in a chronic neurosis like chorea. When, however, the febrile reaction is intense, the neurosis is usually only developed when the inflammatory fever has undergone some remission; and a reproduction of the febrile action always induces an improvement in the nervous symptoms; except in some cases in which the disease proves quickly fatal.

3. Another form of chorea quite independent of cerebral alteration, is the so-called essential chorea, in which no appreciable change of structure is recognisable either in the organic viscera or the nervous system; this, like rheumatic chorea, is a very common form.

4. The last form depends upon cerebral or spinal lesion, and is but the symptom of various cerebral and spinal affections.—[Bull. de l’ Acad. British and Foreign Medico-Chir. Review.

Influence of a Salt Diet on the Composition of Blood.—Poggagile has, moreover examined the blood of man, both at the time that the usual diet was taken, and whilst 154 grs. of salt were consumed daily. The following are the results:

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<thead>
<tr>
<th></th>
<th>During usual diet.</th>
<th>During salt diet.</th>
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<tbody>
<tr>
<td>Water</td>
<td>779·9</td>
<td>767·6</td>
</tr>
<tr>
<td>Blood corpuscles</td>
<td>130·1</td>
<td>143·0</td>
</tr>
<tr>
<td>Albumen</td>
<td>77·4</td>
<td>74·0</td>
</tr>
<tr>
<td>Fibrin</td>
<td>2·1</td>
<td>2·3</td>
</tr>
<tr>
<td>Fatty matters</td>
<td>1·1</td>
<td>1·3</td>
</tr>
<tr>
<td>Extractive and salts</td>
<td>9·3</td>
<td>11·8</td>
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</table>

From which it is evident that the proportion of solid constituents are increased; this occurs chiefly in the blood corpuscles and extractive, the amount of albumen being slightly diminished.—[Compt. Rendus, xxv.

Boussingault has also extended his observations concerning the influence of salt on the fattening of cattle. His earlier experiments had shown, that salt does not exert that beneficial influence on the growth of cattle, and the production of flesh, which is usually ascribed to it. His present experiments have been extended over a period of thirteen months, and have been made on a number of steers, some of which had their rations salted, while the others had not; in other respects they were treated in a precisely similar manner. The results have shown that the increase in the proportion of flesh does not pay
for the salt employed. Boussingault, however, remarks, that a saline diet exerts a beneficial effect on the appearance and condition of the animals; for the steers which were deprived of salt for eleven months, appeared sluggish, and of a languid temperament; their coats were rough, devoid of gloss, and partially bare; while those which had been fed with salt were lively, had a fine glossy coat, and were sure to obtain a considerable higher price at market.—[Ann. Ch. Phys., and Liebig's Report. Ibid.

Condition of Carbonic Acid in the Blood. Liebig remarks, that while water only takes up its own bulk of carbonic acid gas, serum has the power of absorbing twice its bulk of it.—Now as this cannot be dependent on the presence of neutral carbonates in the blood, Liebig endeavors to show that it is owing to the existence of basic phosphate of soda. This chemist finds that a solution of one part of dry phosphate of soda (2NaO, HO, PO₃) in 100 parts of water, absorbs, likewise, a double volume of carbonic acid. By shaking up with air, or by diminishing the atmospheric pressure, two thirds of the carbonic acid taken up are evolved at the ordinary temperature; the entire amount of carbonic acid gas is given off during simple evaporation in the atmosphere. When the blood absorbs carbonic acid, the soda of the former is appropriated partly by the carbonic acid, and partly by the phosphoric acid; but the phosphoric acid which has been expelled, remains and tries to reunite itself with all the soda; consequently the phenomena are different from what they would be if the blood really contained carbonate of soda as such.—[Liebig's Report.

Liebig states, that serum strongly concentrated by evaporation, does not evolve a trace of carbonic acid, on the addition of acids. Lehmann, on the contrary, asserts that blood contains a large quantity of alkaline carbonate. He has communicated the results of experiments, in which the free carbonic acid was expelled by hydrogen introduced into the blood, and the combined acid by means of acetic acid in a rarified space. According to his determinations, 1000 grains of fresh ox-blood yields on an average 0.132 grains, or 0.28 cubic inches of free carbonic acid, and 0.676 grains or 1.42 of combined. He mixed blood with an equal quantity of water, coagulated the albuminous constituents by heat, and evaporated the filtered fluid to dryness. The residue was incinerated at the lowest possible temperature; in 100 parts of ash there were found from 4.1 to 4.5 of sulphate of soda; 3.7 of phosphate of soda (3NaO PO₃); from 15.8 to 18.1 carbonate of soda; and from 74.0 to 75.0 of alkaline chlorides.—[Liebig's Report. Ibid.
Observations on the Growth of the Hair and Nails. By Dr. Berthold.—To determine the time required by the nail to grow to a certain length, the writer first made some experiments on himself, and found that the nail of the middle finger grew 11 millimètres in four months. Continuing his experiments, he found a great difference in the growth of the nail, according to the age of the person, and the season of the year. For instance, he found that the same nail, which would take 152 days in winter to attain a certain length, would grow to the same length in 116 days in summer. The growth also differs on different fingers, as also on the right and left hand. On the right hand the growth is quicker than on the left.

The hair of individuals, from 16 to 24 years old, grew in two years 12 to 16 inches, or 7 lines a month.

The growth of the hair is accelerated by frequently cutting it.

During the day, reproduction of hair goes on more rapidly than at night. In warm weather, the reproduction is greater than in cold weather.

The quantitative formation of nail and hair coincides with the peripheric secretions, perspiration, &c., in this—that it increases in summer, and decreases in winter; whereas, the development and nutrition of the body is decreased in summer, and increased in winter; so that the weight of a man is greater in winter than in summer.

The growth of hair decreases in the night, which coincides with the decrease of the secretions, perspiration, formation of carbonic acid gas, urine, milk, bile, &c.

On Cod-Liver Oil in Phthisis. By M. Duclos.—M. Duclos thus sums up the results of his experience with this substance: 1. The presence of fever is what we must chiefly attend to, relying more on this remedy when it is absent, and less when it is present. 2. The remedy frequently arrests the progress of the disease when only in the first stage. 3. It rarely arrests it when in the second stage, although it may retard it. 4. The third stage is not favorably influenced by the oil. 5. The oil should be administered for a considerable time; and, if a good effect results, it should be suspended awhile, to be again resumed. Thus, it may be given for two months, and then suspended for a fortnight, resumed for a month, and re-suspended for a fortnight again, so as gradually to reduce the length of the intervals during which it is given. 6. The clear, slightly smelling, nearly tasteless oil, is less efficacious than the brown, thick, strong oil.—[Bull. de Thér. Ibid.]
Common Salt in Intermittents.—Prof. Piorry, in reporting to the "Académie de Médecine" upon the proposed use of table salt (chloride of sodium) in intermittent fevers, states that if administered in doses of two table-spoonfuls, it will not only arrest the disease, but also exert upon the spleen as marked an effect as quinine does. In 12 cases of intermittent fever, the salt uniformly arrested the paroxysms and lessened very materially the size of the spleen. The spleen was also found to diminish when the remedy was given in cases of typhoid fever.

If similar results can be obtained in this country, the discovery will be one of great value. It is very desirable to find a cheap substitute for quinine,—we would like to hear from those who may try the salt.

Periodic Hemorrhage from the Face.—Dr. Chrestien, of Montpellier, relates the case of a young lady who had been sent to the baths at Rennes for the regulation of her menses which had never appeared through the genital organs, but through the pores of the skin of the cheeks. Drops of blood appear upon these parts, return very soon after being wiped off, and continue in this way until the loss amounts to about 100 or 120 grammes of blood per day. This hemorrhage has already appeared several times at intervals resembling those of natural menstruation, and seems to supply its place. He does not give the result.

Nephritic Amaurosis.—M. Landouzy announces the following facts:

1st. That an impairment of vision is an almost constant symptom of Bright's disease.

2d. This impairment constitutes a new form of amaurosis which may be called nephritic or albuminous.

3d. Amaurosis cannot be attributed to the deterioration of the strength.

4th. It frequently announces the disease before the appearance of the other pathognomonic symptoms.

5th. It disappears and reappears without following exactly the changes of the albuminous deposition in the urine or œdema.

6th. Albuminous nephritis should be considered as the result of an alteration in the nervo-ganglionic system.
New method of uniting Wounds of the Scalp.—We notice in the French journals the excision of encysted tumors from the scalp of a female, after which the edges of the wound were drawn together by platting the hair across it, and adhesion by the first intention obtained. The advantage of this method is obvious when it is desirable not to cut away the hair.

**Ethereal Solution of Cantharidine.**

Pulv. Cantharides, 1 part,
Sulphuric Ether, 2 parts.

Digest 3 days—and then separate by expression. By applying this solution to the skin with a camel-hair pencil, vesication takes place in one or two hours in children, and in three or four hours in adults.

**Cantharidine Ointment.**—This may be prepared by rubbing together equal parts of the Ethereal Solution and lard or mutton suet. Frictions made with this ointment induce vesication in a few hours. It is much used in Prussia.

**Cochineal for Hooping Cough.**—An anonymous writer, in the N. Y. Medical Gazette, recommends very highly the following prescription for hooping cough—to be given in teaspoonful doses, three times a day. He regards the cochineal as the active principle of the prescription, and hence gives it in larger doses than usual.

Cochineal, in very fine powder, 3ij.
Carbonate of Potash, 3j.
Sugar, 3j.
Tincture of Spear-mint, 3ij.
Water, ½ xiv.—Mix.

**Miscellany.**

"Surgical Report for the American Medical Association.—The committee is invited to meet in the Charleston Hotel, South Carolina, the evening of the first Tuesday in May next. All professional brethren, who have surgical facts connected with the improvement of this branch of the profession during the year, will please address them to the chairman of the committee by the first of April, at Augusta, Ga. As all cannot be reached by a circular, it is hoped no one will wait for a more direct application than this general invitation."
“By extending this notice, the medical periodicals of our country will advance the interests of the American Medical Association, and the editors will confer a favor upon their recent confrière.

PAUL F. EVE, M. D.,

“Prof. of Surgery in the Louisville University, and Chairman of the Committee on Surgery.

“LOUISVILLE, KY., Dec. 1850.”

Negroes in the Medical College at Boston.—We publish the following intelligence without comment, not doubting that Southern readers will duly appreciate the philanthropy of those who wish to furnish Liberia with “colored Doctors,” and our own country with “women Doctors.”

“Trouble among the Medical Students at Harvard University.—The following facts have been collected respecting some unhappy proceedings last week at the Massachusetts Medical College in this city. Among the students attending the medical lectures, are three colored young men. One of them is from Pittsburg, Pa., one belongs in this city, and we believe is a native, a son of the late Rev. Mr. Snowden, a colored preacher of much eminence for many years; the locale of the other is unknown to us. They are all, as we have understood, under the immediate auspices of the American Colonization Society, and by them are to be educated as physicians for the colony at Liberia. It was understood by the students last week that a lady was also to be added to the class. These departures from established rule gave offence to a portion of the members. On Tuesday morning the class held a meeting, and appointed a committee to draft a set of resolutions. The meeting was adjourned to the afternoon, when the students again assembled. The resolutions, respectfully remonstrating against the admission of colored men and white women were then taken up seriatim, and passed by a majority of the students present. We should here state, that the class attending the meeting in the morning showed a majority for sustaining the faculty in the course of admitting whom they pleased to their lectures; but not supposing any such resolutions would be presented, many of them did not attend the afternoon meeting. Those present who disapproved of the resolutions, immediately appointed a committee to present a minority report, sustaining the faculty, to be presented to the class at a future meeting. We regret exceedingly this little disturbance, and the course adopted by the class. We cannot but think that if they had any real grievances, it would have been better to have approached the faculty in some other way. It may be considered an innovation to admit colored men into our colleges; but when it is remembered for what purpose these were admitted, there really cannot be so much objection after all. But as to the propriety of admitting females to medical colleges in common with males, it is a matter in which there is a great diversity of opinion. We should most decidedly object to
the adoption of the practice, preferring to have all females, who wish to become disciples of the healing art, or otherwise assume the masculine professions, attend separate institutions for their education.

"Since writing the above, we learn that the faculty have announced to the class, that the lady in question, on hearing that there was a feeling against her being admitted to the college, has withdrawn her application. Respecting the colored men, they declined to reject them from the college, under the circumstances—as they have purchased tickets and thereby acquired a right of attendance during the present year."

[We clip the foregoing from the Boston Medical and Surgical Journal, and cannot refrain from expressing the opinion that the education of colored men as physicians and surgeons, for the service of the Republic of Liberia, on the coast of Africa, is a sacred duty, binding on our Medical Colleges in America. We deeply regret that either northern or southern students should any where object to this laudable work, and sincerely hope that the Faculty of Harvard may be sustained for better reasons than that "they have paid for their tickets, and thus acquired the right of attendance for the present year."

The claims of humanity are of paramount obligation, and we see not how any American can be indifferent to the necessities of our own colony in Africa, now emerging into a national existence under circumstances which challenge the admiration of the world. They must have colored physicians, for white men cannot endure the climate, and the want of medical men is one of the most pressing needs of the colonists.

We would respectfully suggest that the generous and magnanimous students now in large cities, should spontaneously meet, and express their readiness to welcome to their lecture-rooms all colored students whom their respective Faculties may see fit to educate for the service of the American Colonization Society.

They would thus do themselves honor, by recognizing the claims of humanity upon the profession of their choice, and at the same time give a gentle admonition to the misguided young men of Harvard, which is justly merited.]—New York Medical Gazette.

An appeal to the Medical Society of Rhode Island in behalf of Woman, to be restored to her natural rights as "Midwife," and elevated by education to be the physician of her own sex.—This is the verbose title of a very religious pamphlet, or rather Tract, "for the author," who is nameless, and ominously marked "READ AND LEND;" and strenuously recommended to be re-printed and published by subscription or otherwise, with the devout prayer of the author, that "God in his infinite goodness may reward such labor, for promulgating the mighty truth!"

The only "mighty truth" we can discover on reading the pamphlet is the following, viz:

"Dr. T. L. Nichols, of New York, a regular graduate of the Medical College of the University of that State, in a late periodical speak-
ing of his wife, Mrs. Gove Nichols, who is a thorough educated practising physician says: I am proud to say that she has taught me far more in connection with Obstetrics, than I could ever have learned in all our Medical Colleges and Libraries!"

This is a powerful testimony in behalf of CLINICAL teaching, and the tract, if reprinted and published to the extent prayed for, will be an admirable advertisement for this "Mrs. Gove Nichols, the eminent female physician," and her interesting pupil and husband, Dr. T. L. Nichols of New York.

As to the project of "restoring to Woman," any "natural right" of which she may have been deprived, we will go for such restoration in these days of "Women's rights," with all our might, although we confess to the private opinion that women, as well as men, would exhibit higher wisdom by inquiring more into their duties, than into their rights. Nor have we any objection to the "elevation" of woman, if such it be, to the office of Midwife, or the physician of her own sex, when educated as is here proposed; though if it be a "natural right" of the sex as here alleged, her education ought to "come by nature."

But of this pamphlet we must say that we have never read a more indelicate, immoral, indecent, filthy, and caluminous publication. We do not marvel that the author concealed his name, for that it has been written by a man, there is abundant internal evidence; nor, indeed, could any decent woman be found who would father or mother the dirty brat. We doubt whether any woman, worthy the name, will withhold from the flames, a moment after reading it, lest her sex should be polluted by its presence. And yet a certain class of editors have prostituted the press by commending it. Puh pudor! "It is enough to make one hide his face, and blush to be a man."—[Ibid.

Miss Blackwell, M. D.—The movements of this estimable lady, and intrepid pioneer in the cause of female education, will continue to be a subject of interest with the Medical Profession. A private letter has been transmitted to us by a mutual friend, which we are not at liberty to insert in full, by which we learn she has continued to prosecute her studies in Paris, up to July last. The disease of one of her eyes, contracted from a patient under her observation, has proved a serious calamity, the sight being nearly destroyed.

In July she was at Graefenburg, at the hydropathic establishment of Priessnitz, partly to try the effects of his system upon the numerous patients congregating there, with a view to ascertain what success is really attained, and to determine how much is to be attributed to the therapeutic action of water, and how much to the general hygienic conditions under which the patients are placed.

She states that she has received a courteous invitation to pass several months in London, every facility for attending the hospitals and schools having been promised; and that it is her intention to avail herself of this opportunity to institute a comparison between French and British practice.—[Buffalo Medical Journal.
New York reprint of the London Lancet.—We do not profess to understand the principle which guides the publication of this reprint. However much we would like to do so, one thing is clear, that we should expect in the usual monthly numbers, the matter which the original contained during the month preceding the day of ostensible republication at New York. But far otherwise is the case, and thus the reprint, far from keeping pace with the original, lags most fearfully behind, and treats its readers to matter months old. We were not aware of this until very lately, and having induced an intimate friend to undertake an analysis of the three or four last numbers, that gentleman has detected the following rather strange anomalies:—

The August number (N. Y.) contains papers from the March and April numbers of the original.

The September number (N. Y.) contains Guthrie’s biography of 15th June. No reviews at all; Macmurdo’s lecture on the eye, of May in the original, and Guthrie’s lecture for March.

The October number contains the biography of Marshall Hall, which appeared in the original of 27th July. Macmurdo’s lecture, number 7, of July 6. The review of Spencer Thompson, M. D., on Temperance, &c., 24th Aug., 1850, is entirely different from the original, with many omissions; and in fact many of the papers are so confused in the reprint, that it is almost impossible to compare the two.

Is this right, or is it wrong? If the latter, then is the reprint, not what it purports to be; and if the former, why these omissions, alterations, and delays in the republication of the papers. We say nothing of the entire omission of the Lancet editorials, which very frequently have important medico-political bearings. We ask again, why is this so?—[Brit. Amer. Journ.]

The Largest Liberty.—The trustees of the Memphis Institute, by way of conciliating and uniting all sects and parties in medicine, have adopted the following sage resolutions:

"Resolved, That this school of medicine is not to go under any sectarian or peculiar denomination; is not to teach any peculiar system of medicine; but all that is believed will throw light on the nature of disease, or contribute to its alleviation or eure,—and that it professes to be orthodox.

"Resolved, That each chair will be expected to inculcate the doctrines which its Professor holds to be scientific truth; and that Professor Cross will teach the Institutes of Medicine as his convictions present, past, and future, shall deem sanctioned by the light of science, and his own high reputation and exalted rank in the profession, and as most conducive to the well-being and character of the Memphis Institute. To each Professor should belong the right to teach his own views and opinions connected with the branch of Medical Science committed to his chair.

"Resolved, That in creating the new chair, over which Professor W. B. Powell is to preside, it shall be designated as that of Cerebral
Physiology, Mineralogy, and Geology, and in which Professor Powell shall have the privilege of treating of the external senses, and of so much of the nervous system in general, as he may deem requisite to a proper understanding of the functions and pathology of the brain."

Under the auspices of so liberal a board of trustees, and with such an exceedingly accommodating faculty, who can doubt for a moment the speedy and triumphant success of the Memphis Medical Institute! The school "is not to go under any sectarian or peculiar denomination," and is "not to teach any peculiar system of medicine," yet "each chair will be expected to inculcate the doctrines which its professor holds to be scientific truth." In other words, they may teach any thing or nothing, according to their taste or capacity. Dr. Cross may, if he is so disposed, teach medicine upon scientific principles, while Dr. Powell has equal right to teach humbuggery to his heart’s content. Verily this is a rare specimen of the largest liberty. But, seriously speaking, it is the lamest attempt that we have ever seen, to unite things which are as incompatible as light and darkness, and we are sorry to see Dr. Cross in such bad company.—[St. Louis Medical and Surgical Journ.

Remedy for Short Sight.—Dr. Turnbull thus describes a process for treating short sightedness. "In the first instance I applied the extract of ginger, which was rubbed for five or ten minutes over the whole forehead, with the view of acting upon the branches of the fifth pair of nerves. Afterwards I substituted a concentrated tincture of ginger, of the strength of one part of ginger to two parts of spirit of wine, decolorised by animal charcoal. The success of this operation was remarkable. In many cases it had the effect of doubling the length of vision. In some persons I found the iris was not much dilated, but very torpid. In these cases I applied the concentrated tincture of pepper made of the same strength, and in the same manner as the tincture of ginger. This I used until I observed that the iris had obtained a greater power of contraction and dilation, after which I had again recourse to the tincture of ginger. This plan of treatment has been attended with the most signal success, and persons who were extremely short sighted have very soon been enabled to lay permanently aside their concave glasses."—[Boston Medical and Surgical Journal.

Vaginal Speculum.—Mr. Haslam, of Harvard Place, Boston, is the inventor and manufacturer of an improved vaginal speculum. It is made of glass, and silvered on the outside; the silvering being covered over by gutta percha, makes it, of course, perfectly safe. The inside of the tube is a perfect mirror, and will reflect the light better than a metallic one; besides, there cannot be any danger of corrosion, either by the secretions or the substances used in medication. This speculum has been used by many of our best physicians for a year or two past, and has given the greatest satisfaction. Since the first
ones were manufactured, the proprietor has made improvements upon them, in form, size and covering, but can still afford them at prices extremely moderate.—[Ibid.]

Donation to the McLean Asylum.—Hon. William Appleton, of Boston, has given the princely sum of $20,000 to the McLean Asylum for the Insane, located at Somerville, near this city, of which institution he has for many years been a director, for the purpose of constructing additional buildings for the more perfect classification of the inmates of the asylum.—[Ibid.]

Remedy for Sterility.—Dr. E. Williams lately published in the London Lancet, some account of a Japanese remedy for sterility which he had used with success. In a subsequent number he states that the communication had brought him upwards of 900 letters requesting a supply! He says that he is unable to supply the demand, but hopes to make arrangements soon that will enable him to do so.—[Ibid.]

Operations for Cataract upon Bears.—Mr. White Cooper, of London, has been operating successfully for cataract upon the bears of the zoological gardens, having previously administered chloroform to them.

Professor of Chemistry in Harvard University.—Mr. J. P. Cooke, the Prof. of Mineralogy, &c., in Harvard University, has been appointed to the Chair of Chemistry in the same institution, in place of Prof. Horsford.

We learn from the N. Y. Med. Gazette, that two of the Students of the University School of Medicine have recently died of Erysipelas, and that several others are seriously ill of the same disease.

Dr. Alex. H. Stevens has been elected President of the New York Academy of Medicine.

Dr. C. G. Comegys, of Cincinnati, reports a case of obstinate Sciatica immediately relieved by cauternization of the ear.

We find it stated in the Western Medico-Chirurgical Journal, (published at Keokuk, Iowa,) that the Evansville Medical College offer to admit "Sons of Temperance" at half price—and that the "Sons recommend the School as in every way worthy of public confidence."