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"Je prends le bien où je le trouve."

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ORIGINAL AND ECLECTIC.

ARTICLE IV.


In the preparation of an article published during the past summer in the Atlanta Medical and Surgical Journal, captioned Diseases of the Bible, &c., I had frequent occasion to refer to the ancient historians, Tacitus, Herodotus, Thucydides and Josephus, for the purpose of substantiating certain conclusions at which I arrived in the course of my investigations upon that subject. In examining those works, I found a great deal of very interesting medical matter, and I have since concluded to give a condensed account of it to the Profession. I conceive that it presents many points of very great interest, and also demonstrates most incontestibly the antiquity of a number of our remedial appliances. I am not ignorant of the fact that works have been published upon this subject—Ancient Medicine; but as such works possess but little interest for the generality of medical men, they have but a limited circulation, and a monograph upon the subject would therefore, from its very brevity, be far more interesting.

The earlier lights of the Profession were few in number, and with some of them we are sufficiently well acquainted to need no notice in this place. The practitioner's of Medicine in early times
were undoubtedly as numerous, in proportion to the population, as they are now. "Every great family, as well as every city, must needs (as Herodotus expresses it) swarm with the faculty." The medical men of Egypt were renowned in those early times; Cyrus had a physician sent him from Egypt, and Darius always had Egyptian physicians with him. But of all, I propose to give a sketch of one only—Damocedes. "He was a physician of Crotona, and the most skillful practitioner of his time." Damocedes, it is presumable, lived in Crotona during the earlier portion of his life, but was induced to remove thence by "the austere manner of his father, which becoming insupportable, he left him and went to Ægina. In the first year of his residence at this place, he excelled the most skillful of the medical profession, without having had any regular education, and indeed without the common instruments of the art. His reputation, however, was so great, that in the second year, the inhabitants of Ægina, by general consent, engaged his services at the price of one talent (nearly one thousand dollars of our currency). In the third year, the Athenians retained him at a salary of one hundred minæ (about sixteen hundred dollars); and in the fourth year, Polycrates engaged to employ him at two talents. His residence was then fixed at Samos; and to this man the physicians of Crotona are considerably indebted for the reputation which they enjoy; for at this period, in point of medical celebrity, the physicians of Crotona held the first, and those of Cyrene the next place." (Herodotus 3. 181.)

We have made the above quotation from Herodotus, not only for the purpose of sketching the character of Damocedes, but also to add more evidence in demonstration of the fact that physicians were quite abundant in former times.

Herodotus mentions two cases in which Damocedes was engaged with success, and which are of much interest. The first was in the person of Darius, who, in leaping from his horse on one occasion, "twisted his foot with so much violence that the ankle bone was quite dislocated." This was a dislocation of the ankle-joint,—or, to be more surgical, it was a luxation of this joint. Darius had some Egyptian physicians with him at the time, who, however increased the evil by twisting and otherwise violently handling the affected part. He was in very great pain, which indeed was so extreme that he "passed seven days and as many nights with out sleep." And on the eighth day Damocedes was mentioned t
him as being a skillful physician, for whom he sent immediately; “who applied such medicines and strong fomentations as were customary in Greece, by which means Darius, who began to despair of ever recovering the entire use of his foot, was not only enabled to sleep, but in a short time perfectly restored to health.”

The second case occurred in Atossa, the daughter of Cyrus, and wife of Darius, who “had an ulcer on her breast, which finally breaking, spread itself considerably.” Damocedes succeeded in curing it, but by what means we are not informed.

While upon this subject, we may introduce also the following two cases:—Miltiades, the Athenian general, in getting over a fence, in some way dislocated his femur, and never recovered from it. It mortified, and growing worse, finally killed him. (Herodotus 6. 134–136.)

The following case may be believed or not, as the reader likes; I give it as I find it:—Hegeiestratus was in prison, in Sparta, and bound in irons. He was threatened with death, and preferred any means of escape to such an event. Therefore, procuring a knife, he cut off as much (one-half) of his foot, as would enable him to extricate himself from his irons; after which, he dug out of prison, and made his escape to Tegea. “When his wound was healed he procured himself a wooden foot, and become an avowed enemy of Sparta.

Of the Practice of Medicine, Herodotus gives us a very complete although concise account. He says, that among the Babylonians they had no distinct profession of medicine, but in cases of sickness, pursued the following course. Such as were diseased among them they carried into some public square, and every one who passed by, had to interrogate the sick as to the nature of their disease, and if he had either been afflicted with a similar disease himself, or seen its operation upon another, he may communicate the process by which his own recovery was effected, or by which, in any other instance, he knew the disease to be removed. And one was allowed to pass by an afflicted person in silence, or without inquiry into the nature of his complaint.

Among the Egyptians, medicine was practised as follows:—One physician is confined to the study and management of one disease; there are of course a great number who practice this art; some attend to disorders of the eyes, others to those of the head; some take care of the teeth, others are conversant with all diseases.
of the bowels; whilst many attend to the cure of maladies which are less conspicuous." Our author says that the Egyptians used "purges, vomits, and clysters, for three days successively every month," as a matter of health, under the impression that the diseases of the body are occasioned by the different elements received as food. He offers himself the opinion that, "changes of all kinds and those in particular of the seasons, promote and occasion the maladies of the body."

Herodotus mentions but two cases in which the special senses were affected—one the son of Croesus, affected with dumbness; the other, a soldier named Epizilus, who was suddenly and inexplicably struck blind in the midst of a battle.

Josephus makes frequent mention of dumb and blind persons, but does not give any particulars. He says that when David besieged Jerusalem, the citizens of the place, in contempt, placed upon the walls of the city, in full view of David's army, all their lame and dumb and blind, from which we may justly infer that their numbers were considerable.

Tacitus introduces a very interesting case of blindness, which I am inclined, from the description, to think was Pterygium. It also falsifies the assertion of Pettigrew, that the royal gift of healing originated in England with Edward the Confessor. I will quote the case in Tacitus' own language. Vespasian, the Roman emperor, was spending some months at Alexandria, when "a man of mean condition, born in that city, had lost his sight by a defluxion on his eyes. He presented himself before Vespasian, an falling prostrate on the ground, implored the Emperor to administer a cure for his blindness. The request was, that the Emperor with his spittle, would condescend to moisten the poor man's face and the balls of his eyes. Another man, who had a paralytic hand, begged that the Emperor would tread on the part affected. Vespasian smiled at a request so absurd and wild. The wretched objects persisted to implore his aid. He dreaded the ridicule of vain attempt; but the importunity of the men, and the crowd of flatterers, prevailed upon the Prince not entirely to disregard the petition. He ordered the physicians to consider among themselves, whether the blindness of the one, and the paralytic affection of the other, were within the reach of human assistance. The result of the consultation was, that the organs of sight were not injured, but that, by removing the film, or cataract, the patie
might recover. As to the disabled limb, by proper applications and invigorating medicines, it was not impossible to restore it to its former tone. Accordingly, in the presence of a prodigious multitude, all erect with expectation, the Emperor advanced with an air of serenity, and hazarded the experiment. The paralytic hand recovered its functions, and the blind man saw the light of the sun."

In regard to Obstetrics, Herodotus is not so full as upon other subjects. He merely mentions three cases— one a case of still-born child; another, a case of twins; and the third, a case of abortion from violence. It occurred in the person of the sister and wife of Cambyces, and was produced by violence he used towards her.

Tacitus mentions a similar case to the last, and which was likewise fatal. It was Poppæa, the wife of Nero. When she was advanced in pregnancy, for some trivial cause he gave her a kick on her womb, from which she died. We presume that abortion was the result in this case, and was the cause of her death, although we are not informed that it was so.

We may gather from a remark of Tacitus, that abortive remedies were quite common in ancient times. It appears that Octavia, the wife of Nero, was much addicted to adulterous commerce. "Nero issued a proclamation, declaring the guilt of Octavia, and added, that by the use of medicines to procure abortion, she had thrown a veil over her adulterous connections, and the facts were aid to be clearly proved."

Josephus mentions only that abortion could be produced, and dds, the punishments that were inflicted by law upon any one who procured the abortion.

We may, while upon this part of our subject, introduce the following from Herodotus, in proof of the existence of hysterical affections. I believe that obstetricians consider that these affections are the result of our modern refinements; but this opinion is refuted by Herodotus. The Budini were a rude and barbarous people. In their country there was a "large lake, with a marsh surrounded with reeds. In this lake are found otters, beavers, and other wild animals, who have square snouts: of these the tins are used to border the garment; and their testicles are esteeem-

useful in hysterical diseases."
ARTICLE V.

Inverted Toe Nail—Treated without Operation. By ROBERT CAMPBELL, M. D., Demonstrator of Anatomy in the Medical College of Georgia.

On page 45, of our last number, we have inserted an article under the above heading, from the London Lancet. The suggestions of Dr. J. Broke Gallway, therein conveyed, have, it is true, the merit of novelty, and moreover of affording some slight amelioration of the barbarous practices so long in vogue, for the relief of this painful affliction.

Dr. G.'s recommendations and the ordinary mode of procedure, are alike subject to several considerable disadvantages; of which, the most prominent are, the extreme severity of such an operation, and the inadequacy of the same, to the securement of permanent relief—as after repeated divisions and disruptions of a portion of the nail from its exquisitely sensitive matrix, it may repeatedly be reproduced, the part generally remaining exceedingly tender on pressure.

Always dissatisfied with the various modifications of the operation that contemplates evulsion of the nail, which we have long deemed an unwarrantable measure of torture, in the treatment of this most excruciating trifle,—in the year 1851, having an opportunity of experimenting in a severe case of this affection, we endeavored to devise some expedient, which might answer the indication, (of keeping the nail apart from the irritated flesh,) by affecting the position and condition of the flesh itself, by pressure, as a substitute for the only plan we had ever seen proposed in the journals, or in systematic works on Surgery, whereby an operation was involved.

From the entire success of this experiment, we have treated all the cases which have fallen in our way since, in the same manner—some of which were very unpromising in appearance—and have never had occasion to abandon it in any one case, or seek it modification. The condition of the part results, most probably from the use of too narrow a shoe, which contracts the toes into so small a compass, as necessarily to force the flesh at the margin of the great toe above the nail, from the lateral pressure of the inner side of the shoe, from within, and the other toes from with
out. The difficulty occurs most frequently, we believe, on the outer side of the great toe nail, from the fact, that the second toe becomes depressed habitually, from this cause, and is impacted against the lower portion of that side of the great toe, and being pushed upward by the pressure of the ground from below, in walking, together with the lateral pressure, forces the flesh against the nail, (which has not, necessarily, more than its normal breadth,) until it becomes irritated, sore and swollen, the inflammation often resulting in a fungous growth, (see cut, p. 74,) which is sometimes so sensitive as to disable the limb entirely.

The indication is to adapt an apparatus of counter-pressure, at the same time training the second toe to such a position, that it will be available afterwards, as a natural, permanent compress, for the prevention of a repetition of such an obtrusion.

This apparatus is formed of a bandage somewhat broader than the length of the nail—say \( \frac{3}{4} \)th of an inch and \( 1 \frac{1}{4} \) yards long, having a roll at one end about \( \frac{1}{4} \)th of an inch thick, to be used as a compress, to which the last turn of the bandage is tacked, to prevent the disposition, otherwise, to unroll on traction. This compress is applied in the groove, between the flesh (which is generally much enlarged) and the nail. The margin of the compress, at which the last turn of the bandage is sewed, must present always upward and opposite to the direction in which the pressure is to be exerted—i.e., if the outer border of the great toe on the right side is affected, the seam should be directed upwards and towards the left side of the patient. Thus applied, the bandage will become somewhat wound around the outer side of the compress, which is to be pressed, at first, very gradually and tenderly, but somewhat forcibly, downwards and outwards, until secured in that position by several turns of the bandage around the great toe, carrying it first down, between that member and the second toe, and around several times. The great toe is then to be depressed and forced outwards, under the second, which is placed upon the compress, and lightly bound in that position by a few turns of the bandage. (The following wood-cut will exemplify its mode of application.) The projection beyond the compress, in front of the toe, is intended to represent a fungous growth or enlargement of the lateral ridge.

The advantages of this treatment over the operation, will, no doubt, be apparent to every one—as substituting a practice as
shocking to the operator as agonizing to the subject; which considerations, in many instances, rendered the art a perfect nonentity in reference to these cases—deterring the Surgeon, as well as the patient, from all attempts at relief, and entailing upon the latter months, perhaps years, of comparative indolence or of unmitigated suffering; and upon the former, the opprobrium of incompetency—on account of the frightful nature of the only alternative.

This bandage should be re-applied, at least, as often as once a week. If the prominence of flesh, against which the compress is to rest, is very irritable, a layer of lint, anointed with simple cerate, should intervene. At the first impression of the compress to the sore flesh, the patient experiences some degree of pain or soreness; but the very prompt abatement of suffering following the relief of the inflamed tissues from the irritation of the sharp nail, and also the diminished turgescence of the part, induced by the uniform pressure of the compress and bandage, will prove an ample recompense. The comfort of the patient and celerity of recovery are much enhanced by keeping the limb in an elevated position. It is a matter of surprise, bordering upon astonishment, to see the great diminution of sensitiveness in the part, at each succeeding application of the apparatus. Six or eight weeks
is time sufficient for relief, generally, or for such an improvement as to render it safe to entrust the case to the care of the patient.

We have been thus minute and comprehensive in the above detail, in order that we might be comprehensible—hoping that the suggestions which, confiding in our experience, we have ventured to advance—though contrary to "written law," may not fall into disrepute through inefficiency of application.

ARTICLE VI.

A Lecture on Traumatic Tetanus, with Notes of Cases—Delivered to the Class, at Jackson-street Hospital, by Henry F. Campbell, M.D., Professor of Surgical Anatomy, etc., in the Medical College of Georgia.

Gentlemen,—There are some diseases, fortunately but few, about the pathology of which, there exists so much uncertainty and whose manifestations are wrapped in so much mystery, that we are left for the present, but to observe and to record what we see, without daring to attempt the perilous task of interpretation. Hydrophobia is one of these diseases, and Tetanus is another. Both evidently diseases, when considered according to all rational symptomatology, of the nervous system, closely analogous to each other in their general bearing, but differing most widely in many of their most prominent manifestations. It is not my intention, to-day, to discuss before you the differential relations of these two terrific maladies, or to present a full account of even one of them in all its bearings, but to present to you the history of the case of the boy Cornelius, with that of another recently treated by us, and to make such comments upon them as I may deem useful to you hereafter in the management of such cases.

The term Tetanus from the Greek verb Τετάνω, to stretch, or Τετανωγ- stretched, refers to a most prominent, and what is considered by some, the pathognomonic symptom of the disease, viz: the permanent and unbending rigidity of the muscular system, or at least the voluntary muscular system. Trismus, another term of Greek origin, signifying to gnash, relates to another symptom not quite so constant as the rigidity, but which has for a long time supplied the popular name for the disease, viz: lock-jaw, though properly, this is but a partial tetanus, confined principally to the
elevator muscles of the lower jaw, causing inability to open the mouth.

Tetanus has been distinguished, 1st, relatively to the causes which have produced it, into traumatic and idiopathic or spontaneous; 2ndly, relatively to its locality, into general and partial; 3rdly, relatively to the character of the contractions into straight and curved, perfect and imperfect tetanus.

Traumatic tetanus is that which succeeds an injury of any kind, the introduction of a foreign body into sensitive parts, such as the foot or head, a lacerated wound, the bite of a dog, or other animal, a bruise or a surgical operation. That tetanus termed idiopathic or spontaneous is that which manifests itself, not indeed without cause, but under the obscure influence of predisposing or occasional causes, such as great and sudden elevations of temperature, excessive cold, the suppression of habitual evacuations from the system, or strong emotions—these last two, however, I will remark in passing, occur almost invariable in the case of females, and are doubtless spurious cases of tetanus, but genuine cases of Hysteria, that notorious "mimic of all diseases."

The various preparations of nux vomica also produce symptoms strongly simulating tetanic spasms, the first approach of which are always anticipated and regarded as an indication to abandon or modify their exhibition.

Some authors lay much stress on the temperature of the atmosphere, and especially in relation to cold as a cause of tetanus; to this I cannot give an assent, but it is certain that particular localities and also certain unexplainable conditions of the atmosphere, do seem more favorable to its occurrence than others. If I mistake not, it is the opinion of the Profession in Savannah, that the disease is of more frequent occurrence in that city and vicinity, than in most other parts of the State. In the summer and autumn of 1855, Dr. J. J. Robertson, of Washington, related to me the sketch of an epidemic in the neighborhood of that place which he and I both thought presented many of the prominent characteristics of tetanus. It was confined to the negroes of a few plantations in Wilkes county, of this State, and was marked by great fatality. It was shortly after the disappearance of the affection in that region, that there appeared in this place an unusual number of cases, and among them, three or four of the white population, which is almost unheard of ordinarily in this region.
It is the opinion of Professor L. A. Dugas, that it is much more fatal among negroes in this climate, and if I state him correctly, he has never seen a white patient die here of it. According to M. Chomel, the form of tetanus termed trismus nascentium is very common among the negro infants in the Antilles, and he attributes it to the fact that but little care is taken there to guard against the vicissitudes of climate, and the little attention paid to the umbilicus during the first few days after the birth of the child. This form is very fatal on the rice plantations below Savannah among negroes, and has been variously accounted for: Dr. J. M. Sims' theory in regard to it is, that the position of the infant, viz: on the back, with the occiput impinging up a resisting surface favors the occurrence of the disease. I forbear from making any suggestions for the treatment of this form of the disease, it is sufficient to say, that it is generally fatal in a few days, and treatment, generally, but hastens the denouement and adds to distress of the patient.

As a case well calculated to illustrate the course of traumatic tetanus, I will read to you the following, which I have just translated from the Revue de Thérapeutique Médico-Chirurgicale—Paris, December 1st—for the Southern Medical and Surgical Journal; it is entitled "Traumatic Tetanus cured by Chloroform," and demonstrates the efficiency of a remedy which I think is rapidly gaining favor with the profession, in all parts of the world, in the treatment of this truly fearful disease: it is reported from the notes of M. Busquet, of Bordeaux.

"Case I. A little girl, aged nine years, fell and received a lacerated wound of considerable extent on the lower and external part of the left thigh. This wound was almost healed on the thirteenth day, when there occurred a stiffness of the jaws with opisthotonos, pain in the back of the neck, in the region of the trapezius and splenius muscles. Of the following mixture, prescribed one teaspoonful every two hours:

\[
\text{B. Chloroform, } 3\text{ ss.}
\]
\[
\text{Extr. opii. gum. } \text{gr. } 1.
\]
\[
\text{Aqua laur. ceras. } 3\text{ iii.}
\]
\[
\text{Aqua flor. tiliae, } 3\text{ xiv.}
\]
\[
\text{Syr. Acacia, } 3\text{ iss. Mix.}
\]
Towards evening, her condition being unchanged, M. Busquet added to the mixture one drachm of Chloroform.

On the second day, the tetanic stiffness of the posterior muscles of the neck and of the jaws was increased; the head bent backwards; pain in the region of the upper dorsal vertebrae; inability to separate the teeth more than the 8th of an inch; deglutition easy; jerking in every part of the body on the least irritation. Prescribed the same dose as the day before.

Third day. At four o'clock in the morning, at the time of the spasm, the elevator muscles of the jaws contracted, the tongue was held between the dental arches and it was impossible to return it. Prescribed inhalation of chloroform for half an hour; about one drachm of it was used. To his great satisfaction, M. Busquet saw then that the inferior maxilla was depressed: the tongue withdrawn, the patient smiled; speech returned; the head, which had been fixed for two days, moved—indeed the patient complained of no pain, the left leg only continued a little stiff.

During the three following days she continued better; but the left leg remained in the extended position by the contraction of the triceps femoris. Prescribed continuance of the inhalations and doses of chloroform; also a bath during the course of the fourth day.

Sixth day. Pleurosthotonos on the left side; pain towards the base of the thorax, with difficult respiration. Prescription: Tepid baths each day until the tenth, whenever the patient was calm enough.

Tenth day. The whole left side more and more bent upon itself—it and the left leg forming together, a curved line, with a very decided arch. The child can stir the great toe a little, and very slightly, the flexors of the foot; the left leg in forced abduction, the right rigid; the feet in forced extension. In the evening: The teeth are more closed, deglutition of liquids less easy, abdomen more tender, abdominal parietes harder. At this time there appeared on the left lower extremity an eruption of Herpes cir-cinatus.

From the tenth to the twentieth day, the incidents of the case presented many variations; in short, the rigidity diminished. Prescribed tepid baths, and then vapor-baths. Gradually she got to moving both the diseased limbs.

Thirty-sixth day. She can be raised, but complains of cramps.
Thirty-eighth day. She walks with a crutch on the left side, and a cane on the right.

Forty-sixth day. She walks without either crutch or cane, but the left heel is constantly raised, as in club-foot (*Talipes equinus*). The limping lasted three months more. Even three years after, this young patient presented a slight deviation of the vertebral column towards the left side."

I will now give the notes on the case of the boy Cornelius, transcribed from our book, and you will perceive how purely empirical the treatment of this disease is; for it is not without authority in the records of Medicine, and may be considered fairly illustrative of the management of such cases by most of the Profession at the present day, though I must confess I would not repeat it, in every particular, did the opportunity offer. I have some doubt as to the utility of the large quantities of quinine given in this case, although he lived too long after it was abandoned, to admit of any suspicion that it had any influence in the unfortunate result. His intemperate habits, worn-out constitution and uncared for course of life generally, I think had more to do in bringing about the fatal result, after he had passed through the acute and most dangerous stage of the disease, than any incident either in the disease or the treatment.

Case II. Cornelius, a negro man aged 40 years, of very intemperate habits, was employed as a fireman, by the Georgia Rail Road Company. On the 6th of January, 1855, while engaged in coupling two cars, received injuries of the right hand, which made it necessary that the amputation of portions of two of the fingers be performed; the other fingers of that hand were also in a lacerated condition. We performed the operations immediately after the receipt of the injuries, and the wounds on the other fingers were carefully dressed at the same time. The case progressed regularly, without any remarkable incident, the wounds suppurated abundantly, more particularly the fingers which were injured and not amputated, while in the usual time the stumps healed firmly, leaving us the task of dressing only the others. On the 12th February, only twenty-four days after the injury, these wounds had been replaced by the peculiar white cicatrices of the tissues of the negro, and the healing was complete.
During the whole time of treatment, this patient, without doubt, continued to pursue his irregular and intemperate mode of living, for he was subjected, during this time, to less control by his owners than at ordinary times.

On the 13th February, he complained of pain and a sense of constriction about the fauces, and also in the pit of the stomach, which circumstance induced us to examine his cicatrices; and while thus engaged, he was attacked with opisthotonos so decided-and so violently that he fell from the chair upon the floor. He, however, quickly recovered sufficiently to walk the distance of nearly two hundred yards, to his place of abode. The convulsions soon returned violently, and the jerking was incessant. Prescribed quinine 10 grains, every two hours till 60 grains were given; in the intervening hours, portions of an emulsion containing in each dose—

R. Chloroform . . gttæ. 20  
Tr. Camphor . . " 15  
Sulphate of Morphia, gr. ¼

A large blister was applied over cervical and dorsal regions, and hot poultices kept constantly to the injured hand. At night, the convulsive movements had been somewhat controlled, and under the influence of the morphine he slept at short intervals.

15th. Convulsions less frequent. Bowels constipated; suffering from retention of urine. Prescription: Emulsion to be continued, the morphine being omitted, and only given on the approach of spasms. Catheterism was applied, and a large quantity of urine evacuated. In this operation, a firm spasmodic stricture at the neck of the bladder was found. Calomel 20 grains, to be followed by oil and turpentine, in the evening. Quinine to be continued as on previous day.

16th. Convulsive movements less violent and less frequent; great rigidity of the muscles about the neck, and also in those of the inferior extremities and back—patient somewhat cheerful notwithstanding. Calomel and oil had produced no evacuation. Prescription: Injections of warm water and salt. We were present during their administration. After the second injection, the rectum and abdominal muscles contracted with such violence as to project the fluid from the bowels to the distance of six feet. This was followed by an ample faecal evacuation, affording much relief to the patient.
From the 16th to the 20th. Convulsions less frequent than at first. Prescription: Emulsion to be continued.

B. Quinine, . . . . grs. v.

Every three hours during the day. Catheterism twice daily.

From 20th to 25th. Condition of patient much improved—convulsions appearing only at night. Prescription: Omit emulsion, except on approach of convulsion; omit quinine and precipitated carbonate of iron. Prescription: Laudanum, 40 drops, each night at bed-time; oil and turpentine, pro re nata, to evacuate the bowels; Brandy, in liberal quantities, frequently during the day. Daily catheterism still necessary.

25th to 27th. Patient able to go to the fire—but the pulse very feeble; he appeared cheerful; convulsions disappeared; he complained of bed-sores. Prescription: Brandy during the day, with laudanum at bed-time. Nourishing diet.

28th. Did not rise from bed—extremely feeble. Prescription: Brandy and nourishment.

29th. On our visit this morning, we are told that Cornelius "died in the night suddenly with a fit." No autopsy.

It is not at all unusual, in our Profession, for reputation to be made and much credit claimed for the management of unsuccessful cases;—this, in a certain degree, Gentlemen, we feel inclined to do, in default of better grounds, in the case of the boy Cornelius. I must at least call your attention to the fact, that by the treatment, or haply in spite of the treatment, he had been conducted through the most dangerous, viz. the acute stage of his disease, and had ceased to have any convulsions whatever: but starting with a constitution worn out with drunkenness, this shattered wreck had to sustain the storm of a fearful and most exhausting disease, and what with bed-sores (you will remember, that the Tetanus came on after he left this institution) and the many evils which, under the most careful management, a protracted case of Tetanus must suffer, it is not surprising that he should have in the end, "died cured."

Among the remedies which appeared to us, to have most power in arresting his disease, we consider that in the early stage, the chloroform was invaluable, while later in the disease, brandy did much to sustain him and keep off the paroxysms.
In the case next presented, you will find that anaesthetic inhalation constitutes a more prominent part of the treatment, perhaps, than in either of the others just read in your hearing. I would call your attention to the mixture used in this case—viz: Chloroform and Sulphuric Ēther; and also to the immense quantity of it consumed during the progress of the case, without permanent injury to the patient, although a part of the time—a fact which I perceive has been omitted in the notes—he was often for hours in a profound stupor from its effects.

Case III.—June 17th, 1855. E. C., a young man, a native of Ireland, aged about 22 years, of sanguine temperament, regular habits, applied at our office for advice. He complained of pain in the region of the fauces, and experienced much difficulty in deglutition on account, as he affirmed, of a stiffness in the muscles concerned in that act. The neck was stiff, and an habitual slight strabismus was much increased, giving him a strange and unusual expression of countenance. Our city, at that period, had been the region of Epidemic southward, marked by exacerbations of a paroxysmal nature, and as, about three weeks previously, this young man had been under our care as a case of the above kind, we naturally concluded he was laboring under the hebdomadal return of his former attack. On examination of the fauces, there was found decided redness, and during the examination he complained of inability to open the mouth freely. Prescription: Application of sinapism to the back of the neck; a gargle of pepper-tea and alum—and 15 grs. of quinine, divided into three doses, to be taken on the following morning, at intervals of two hours.

18th. He came again to the office in the afternoon of this day: said that he had been much relieved of his symptoms during the morning, but was now suffering from a return of all of them in a much enhanced degree. On attempting to examine the throat, we find that the difficulty of opening the mouth is increased, more on account of the pain in throat, than from the rigidity in the muscles of the jaw. There was considerable increase in the pulse both as to volume and number, with other evidences of fever. The bowels were constipated. Prescription:—Blue mass, 20 grs. at bed-time; castor oil, 1½ oz. next morning, and quinine and gargle as on the day previous.
19th and 20th. Symptoms neither increased nor diminished in severity—cathartics had acted slightly.

21st. The patient is still able to apply at the office for advice. He presents great rigidity of the muscles, especially of those about the neck and throat, the strabismus increased to a most remarkable degree and the face presents a truly sardonic expression—he walks with extreme difficulty. After being seated upon a chair, favorable to the light, we attempt to explore the condition of the fauces, but find it impossible for him to open the mouth. Upon placing the hand upon the face with the view of steadying the head during the examination, and turning his face towards the light, we find he is seized with a spasmodic twitching in the muscles of the face, accompanied with a slight jerking of the head backward, upon which, our suspicions, before aroused, that his affection, (notwithstanding its slow progress and the absence of any wound, partook of the nature of tetanus,) became confirmed, and we now insisted upon treatment being pursued under more favorable circumstances, viz: with the patient in bed. Up to this time, he had been able to remain in his store, and in some manner to attend to his sales. Visiting him in the afternoon, we apply cups freely to the nape of the neck and afterwards a blister to the same region. We now subject the patient to a most rigid examination in order to detect any wound to which we may refer the origin of his disease. About the middle of the right leg in front, near the spine of the tibia, we find a narrow scab covering a cicatrix nearly an inch long; the result apparently of a scratch which had entirely healed. Upon inquiry we are informed by the patient that this was caused by a very superficial cut with his razor, which, while upon the dressing-table, had been dislodged, and in falling, the edge had touched this part of the leg. The condition of this very slight wound was such as to give the certain conviction, that it had healed by the first intention, and had certainly never suppurated. It could not be re-opened without actual violence, or the use of an instrument; to this we did not deem it advisable to resort. The opisthotonos now very constant, almost without remission, and attended with great pain along the spinal column and at the pit of the stomach. The rigidity much greater on the right, than on the left side. Laudanum in large doses failing to arrest the convulsive movement, we prescribe the following:

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Of Chloroform, 3 ss.
Syrup Gum Arabic, 3yiiss.
Mix well. Dose, one teaspoonful every two hours.

After repeated doses, this was found to afford but little relief, and in the interval of doses, we administered by inhalation, the following mixture which, with us, has superseded in a great degree, the use of pure chloroform as an anaesthetic during surgical operations, the author of the formula we cannot at this moment recall.*

Of Chloroform, 3 j.
Sulphuric Æther, 3 iiij.

Quantity applied, two drachms, to be increased or diminished according to the effect produced. During the inhalation, and for 30 or 40 minutes after, the convulsive action was much diminished, and by this means the patient obtained a certain amount of sleep.

22nd. Morning visit.—We find the symptoms but little amended. Opisthotonos almost incessant. After consultation with Dr. H. H. Steiner, of this city, the inhalations were continued and a cathartic of castor oil and turpentine administered. From a general tepid bath at this time, the patient experienced very decided, but temporary relief. The following was also administered—

Of Extract Belladonnae, grs. iv.
Syrup Gum Acaciae, 3 iv.
Dose, one tablespoonful every two hours—to each dose, ten drops of laudanum were added, when the convulsions were not otherwise controlled.

23rd and 24th. Condition unimproved—treatment continued—repeated enemata followed by free evacuation of the bowels, and the discharge of scybalous matter. Great flatulence and forcible expulsion of wind per anum.

25th. Prof. L. A. Dugas, Dr. H. H. Steiner, and my brother,*

* In the American edition of Erichsen's Surgery we find the following note:—"See Rangine's Abstract, Nos. 17 and 18, and also the Medical Examiner for Nov., 1853, in which Dr. Betton, of Germantown, Pa., reports a case of Tetanus resulting from a wound of the foot by a nail. A mixture of chloric Æther and Chloroform was freely administered, and the patient recovered. Dr. Betton says, 'to the Anaesthetic alone, I attribute his recovery, and its influence appeared almost miraculous. May it not be equally valuable in Hydrophobia?'" [Here the mixture was made with chloric Æther, while we used sulphuric. This is the nearest we can at present lay our hands upon a mixture like the one used in our case.]
Dr. Robert Campbell, in consultation. On examination there is discovered great tenderness in the right iliac and lumbar regions of abdomen, and on pressure here, the spasmodic action in the muscles is much increased. Prescription: blister over this region, and to continue the treatment otherwise, lessening the amount of anaesthetic mixture which the patient now calls for incessantly. The tepid baths were also less freely applied for fear of weakening the patient.

From 25th to July 1st. No improvement: during this time, the patient appeared, once or twice, to be on the point of dissolution from exhaustion, after the more violent attacks of convulsions, which now were invariably general. If any improvement was observed it was in the longer interval between the spasms. The treatment consisted now, mainly, in the inhalation on the approach of the attack with Brandy and Laudanum, at intervals of three or four hours. Nourishment: beef-tea, soups, &c.

July 4th. Convulsions less frequent. The patient, on the approach of the paroxysm, calls for the anaesthetic mixture, and frequently by this means the attack is rendered much less violent or altogether aborted.

I continued to visit my patient, in company with Dr. Steiner and Dr. Robert Campbell, till about the 20th of July; during this long interval, the improvement was very gradual, and towards the latter part of the time, the convulsive movements were confined to the muscles about the neck. The inhalations were resorted to, pro re nata. Brandy regularly taken, and laudanum in sedative doses at bed-time of each night. The most nourishing diet was also now recommended. The muscular rigidity continued long after the subsidence of the convulsions, and for months after he was able to go into the street. During the convulsive stage of his disease there was used in the inhalations over two quarts of the anaesthetic mixture above referred to, and of brandy and laudanum, an untold and untellable amount.

A few words now in relation to the nature of the disease, and I will close these rather desultory remarks about Tetanus.

Since the valuable discoveries of Dr. Marshall Hall, Mr. Grainger, and Mr. Newport, in relation to the reflex function of the nervous system, it has been a matter of possibility to reason about the character of the phenomena presented by a case of Tetanic
Spasms, and the result has been, that in the extreme impressibility of the sentient surface on the one hand, and the extreme motility of the muscular system on the other, we see nothing more than two of the normal endowments of the cerebro-spinal nervous system, in a state of exaggeration or permanent exaltation.

The excito-motory function is, so to speak, a privilege granted to the true spinal system which it ever exercises in a subordinate and subsidiary manner, and momentarily subject to the mandates of the Will, which can at any time call the nerves out of the exercise of this function, and make them act directly under the influence of volition, and then they no longer respond to those external influences and excitants with which they were so lately entirely engaged; but there are conditions of the nervous centres, constituting a part of this excito-motory apparatus, in which they no longer attend to the indications of the will, but act independently of it. Tetanus is just one of these conditions, and Tetanic Spasms are but the automatic movements of this true spinal system, submitted to the sport of mere external influences, and deprived of that safety which is naturally conveyed to it, and to the muscles it governs, by the influence of the will, which Will, may in this relation, be looked upon as the protector and guardian of the whole frame; which, when once its dominion is upset, leaves the muscular system to be racked to pieces, by the uncontrolled excitation of the true spinal system, goaded on by every impression, whether from without or from within.

I hope you will excuse me, gentlemen, if in my ardent desire to impress a doctrine indelibly upon your minds, and in my earnest endeavor to simplify that which is of acknowledged intricacy, I bring into relation things never meant to have relation, and perpetrate in parting with you this evening, what might at first sight appear, truly "a far-fetched" analogy.

The Persian Empire is indeed remote from us, both in time and in space, but with your permission I will place it in juxtaposition with some of the different bearings of the subject under consideration, and perhaps as a mnemonic exercise, if in no other way, it may serve you as a reminder in this rather obscure pathway of your studies.

This vast region, now of so little importance in the world's affairs, was once, as you remember, under the dominion of a single king. Stretching away in every direction from the capital, Susa
it became in time, too unwieldy and too cumbrous for the efficient personal administration of a single monarch; the detail, in particular, had of necessity to be entrusted to provincial governors, called Satraps. These Satraps were allowed ordinarily to rule independently in their subsidiary capacity, and to perform certain acts according to their own will, or as dictated by circumstances; but even in these acts, they were amenable to their sovereign, and when his attention was called to them particularly, they were performed in accordance with his supreme will. Now these Satraps would occasionally, in times of excitement from accidental causes, get up rebellions, become independent, and even dethrone the monarch, and it was by a process somewhat similar to this, that this splendid empire fell into anarchy and was finally destroyed.

From what I have heretofore said in relation to the brain, the excitomotory system, and the tetanic phenomena, you are already well prepared to make the application. The human organism is a realm then, over which presides the brain, endowed with volition, judgment, reason and caution; for convenience, certain portions of the nervous system are invested with the excitomotery endowment, by means of which they govern particular regions of this dominion by a kind of vicarious authority, but which is at all times liable to be supplanted, in the normal state, by the more authoritative determinations of the will. An "accidental cause," that is, a wound, in some manner which we cannot explain, destroys this wholesome equilibrium in the nervous powers; a "time of excitement," that is tetanus occurs in which the true spinal nervous centres, the Satraps, obtaining the advantage, rebel, and no longer obey the prudent and conservative behests of the will, but urge the muscular system into action independently of it, and under the stimulus of every external impression, however trivial;—a motion of the bed, the slightest noise, a sudden gleam of light, a touch upon any part of the sentient surface, or the mere attempt of the will to re-assert its sway, as in the contraction of a muscle, will initiate a convulsion of the most exhausting character; until volition becomes finally null throughout every part of the muscular system. And thus from day to day, do these alienated nervous centres, now literally brainless functionaries, rack to pieces the distracted human organism—a domain richer than Persia at the acme of her grandeur and once more exquisitely governed than Persia, even in the palmiest days of the mighty Cyrus.
Let us review our cases and see how much of all this, they will be found to illustrate:

You will observe that in all three of our cases, the tetanic state was preceded by a wound; that in Case 3rd, the ordinary stimulus of light produced a fixed contraction in the motor muscles of the eye, causing strabismus, afterwards on turning the face to the light, twitching of the facial muscles occurred, and on touching lightly the cheek, violent jactitations in the muscles of the neck ushered in the characteristic opisthotonos; while in Case 2nd, on carefully raising the affected hand to examine the cicatrix, the patient was so violently convulsed that he fell from the chair upon the ground. The presence of the urine causes spasmodic stricture at the neck of the bladder, while in all these instances the authority of this will is ignored, and a universal automatism holds empire over the muscular system. How is this brought about? you ask. The wound probably excites, and in some manner, permanently exalts this excitomotory function of the nerves, but in what way, we cannot at present safely answer.

As to treatment, I think we may safely say that our cases seem to favor the opinion, that in the early stages of Tetanus, sedatives and revulsives are beneficial, while in the latter stages, stimulants should claim the first place. Chloroform, in heavy doses, will produce, in our opinion, all the sedation we could devise from any one remedy, while in the latter stages, we can still recommend it, but in smaller doses, or in the manner in which it was applied in Case 3rd, viz., in combination with another anaesthetic of a more stimulating character. We have great reliance in this combination.

In regard to revulsives, the idea just now occurs to me, more from a consideration of the nature of the disease, than legitimately from a review of the above cases, that I would not recommend you to apply them as a prominent part of the treatment, for I think they are more calculated to enhance and exalt peripheral excitability without materially improving the condition of the disorder ed nervous centres. Although we have generally applied them freely, I must confess that I cannot recollect at present, any instance wherein marked benefit has accrued from their use, and sometime I have seen decided injury follow their application.

There are many other ways of viewing the pathology of this disease, scattered every where throughout the books and through
out the journals, and also many other modes of treatment. Amputa-
tion of the entire part, or a section of the nerve, are both rational,
the last especially, and should be considered, in every case of the
disease; Indian hemp (cannabis indica) has, it is said, done much
in many cases; and Dr. R. B. Todd recommends a long bag of ice
to the spine. I would probably use one or all of these remedies
in certain cases, but at present, and from the few cases I have had
the opportunity of comparing, I would never allow Chloroform or
Brandy to be excluded, except under very peculiar circumstances,
from the medication.

ARTICLE VII.

New Parisian Instrument for Amputation, &c. By Professor
A. MEANS, M. D.

The progress in almost every department of human knowledge,
which has characterized the last half century, has been signally
manifested in the numerous and invaluable contributions made to
the Healing Art. Even within the range of one of its branches,
the civilized world has been laid under a debt of lasting gratitude
to the scientific intelligence of the age, for those wonderful Anaes-
thetic agents, which so promptly and efficiently obtund the nervous
sensibilities of suffering humanity, and prepare it to submit, in
utter unconsciousness of pain, to the successful application of the
knife, the saw, the ligature, or the forceps.

Chemistry stands pioneer in the progressive movements of the
present century. She has already discovered many new elements,
produced many new compounds, revealed the existence, and
 traced the action of mysterious laws, and evolved a host of interest-
ing and astounding facts from the hitherto unexplored treasures
of the natural world. Nor can it be that our time-honored and
scientific profession, should not share in the wealth of her gener-
ounous disclosures. Nay, no other profession is likely to reap such
large harvests from her toils. Her resources are exhaustless, and
will still submit to be largely taxed, in time to come,—to carry
out the benevolent purposes of the enlightened physician. And
even while this article is under the pen, French mind, ever pruri-
ent, penetrating, and active, has, in the ardor of its experimental
research, levied upon one of her most common gases, for the per-
formance of a new function, and carbonic acid is now employed in the hospitals of Paris, to produce local anaesthesia, in some of the most painful maladies, and with the most gratifying results.

Heretofore, this Binary compound was mainly characterized by its capability to form salts by combination with bases—to extinguish combustion—and when inhaled, to produce spasm of the glottis, asphyxia, and ultimately death. Now, in the Hôpital Clinique, and the Hôpital la Charité, under the direction of such minds as Velpeau, and Nélaton, the most excruciating neuralgia, and spasmodic affections of the bladder, uterus, and other accessi-
ble organs, and even the pain of abraded and inflamed surfaces, yield to the soothing effect of a topical bath, supplied by this invisible anaesthetic—the atmospheric air (in the mean time) being wholly excluded, whose oxygen, when present, and allowed to combine with the elements of the tissues, must ever evolve heat and augment the nervous excitability of exposed surfaces.

But chemical discoveries, aided by the power of genius, are rapidly advancing the Arts, and appropriating the richest results to meet the utilitarian demands of our enterprising, galloping age. The French surgeons—unless, indeed, they are to find their rivals in the cis-atlantic branch of the confraternity—are scarcely equal-
ed by those of any other nation, in the construction of instruments, and the adaptation of scientific and mechanical appliances, for securing greater ease and safety in the performance of important operations. The most recent projection which has yet met our eye, in surgical dynamics, I beg leave to extract from a letter just received from my son, Dr. T. A. Means, now in Paris, and the practical application of which he witnessed while “attending the service” of Maisonneuve and Chaissagnac. The apparatus and mode of operation seem to find great favor with the leading sur-
geons of the French school, and whether likely to be generally adopted by English and American surgeons, or not, challenge, at least, their impartial consideration, and a fair trial in suitable cases.

The objects proposed to be accomplished by these new mechani-
cal appliances may be thus enunciated, viz:

1st. To complete amputations without the use of the saw.

2nd. To substitute adhesion by first intention, for the ordinar-
and more tedious supplicative process.

3d. To prevent hæmorrhage.
4th. To preclude entirely the use of ligatures.
5th. To avoid the occurrence of phlebitis, and
6th. To effect a rapid adhesion, and a perfect cure of the tran-
cated extremity, in about one week's time.

A transverse fracture of the bone or bones of the arm, forearm,
thigh or leg, is preferred to a separation by the saw, and obviates
the necessity of its use. The limb to be amputated is, therefore,
surrounded above and below the point at which the force of lever-
age is to be felt, by two broad, strong, semi-cylindrical clamps,—
each divided lengthwise into halves, and moveable upon a hinge-
like arrangement, so as to allow of an easy accommodation to the
circumference of the limb. These are gradually and closely
screwed on to tightness. From the opposite sides of each clamp,
and at an angle of 90°, there protrude two short, strong axes, per-
haps one inch in length, and some two or three inches, longitudi-
nally apart, to allow the attachment of a strong bifurcated lever,
with its forked extremities curved upwards, to fasten the more se-
curely upon the axes referred to. An assistant slips the open
lever over one of the clamps, so that the upper part of the fork,
when the lever is pressed toward the limb, rests upon two of the
above named projections, and the lower, curved ends pass under
the other two,—thus allowing the action of strong lever power,—
the axes nearest the hand of the operator constituting the fulcrum.
When both levers are adjusted, above and below, and pressure
uniformly made upon the handles by the surgeon and his assist-
ant, the intermediate portion of bone is readily snapped asunder,
and a laceration of the surrounding soft parts entirely prevented.
An incision, some four inches below the point of fracture, is now
made to the bone, the entire integumentous and muscular tissues
separated, and the included four inches of bone drawn out, with
the exsected extremity. The Ecraseur of Chassaignac, a new in-
strument invented by that distinguished surgeon, is now brought
into requisition. Derived from the French verb, "ecraser"—"to
 crush or bruise," it is intended as its name imports, by compressive
force, to bring into juxta-position, the interior surfaces of the mus-
cles of the stump, to supply the place of the removed bone, pre-
vent hemorrhage, effect early adhesion, &c. The chain-loop of
the Ecraseur,—to be described hereafter,—is made to include the
soft extremity, and is then gradually tightened by drawing the
chain back, along the grooves in the canula, through which it
passes; so as to strangulate the vessels;—entirely arresting hæmorrhage, preventing suppuration, and allowing, in due time,—as Chassaignac asserts,—the degeneration of the rugged end of the bone, followed by a rounded, smooth surface and a rapid cure.

The latter instrument is already used extensively, among the Parisian surgeons, and, in accordance with the recognised claims of its inventor, found to effect admirable results, not only in amputations, but in the removal of tumors, whether vascular, steatomatous, or cancerous,—uterine polypi, hæmorrhoids, &c. Indeed, Chassaignac himself, but a few weeks since, fearlessly advocated its use, in ligating the largest arteries, as the femoral, and the carotid, and without the apprehension of after hæmorrhage; and in the presence of his class, tested the practicability of his views, with entire success, by ligating the aorta of an ox.

An article in the December number of the London Lancet, announces the use of this latter instrument, and its adoption in the English hospitals, for the removal of tumors, etc., by strangulation, without predicting, however, what may be its future success. Chloroformation generally precedes the extirpation of tumors, piles, etc., by the Ecraseur. Its first application in the London hospitals, says the Lancet, was “by Mr. Stanley, at St. Bartholomew’s, in July last, who removed a singular-looking, horny growth, a warty exudation from an epithelial, chimney-sweeper’s cancer of the serotum.” “Mr. Lawrence, some days after, removed a very large cellular tumor, weighing nearly a pound and a half, and in size, equal to a small child’s head, from one side of the generative organs of a young woman, aged thirty. Seven minutes served completely to detach it; it was followed by no bleeding—no ligatures, and the parts were brought together by sutures.”

In the University College Hospital, Mr. Erichsen is reported, by the Lancet, to have operated on the 22nd of October, in the removal of “some piles from a man, under chloroform, which were partly internal, by means of the Ecraseur of Chassaignac. The piles were elevated with a pair of hooked forceps, and the chain applied around the tumor, and in the course of five minutes and a quarter, the mass was completely cut off, without being followed by the slightest bleeding whatever.”

The description of this novel compressor and extirpator may be given in the language of the article referred to in the Lancet. "The Ecraseur consists of a handle, and steel canula within which
are grooves for the passage of a jointed chain, like a chain-saw, but without any teeth, or perhaps more like the chain used in watches, the edge being blunted, but not serrated. From the extremity of the canula, projects a loop, as long as may be required, which is passed around the tumor, and gradually tightened, the handle being moved, once in fifteen seconds, when a little click is heard, and the chain tightened by the drawing into the groove of one of the links. This process continues till all the links are drawn into the canula, and the tumor is cut off."

This slow method of producing strangulation and division of the growth, entirely prevents any hemorrhage. A contused wound is produced, and the orifices of the vessels are thus closed.

New York Pathological Society. Reported by E. Lee Jones, M.D. Secretary.

From other interesting matter, we select the following cases, illustrating the liabilities of this portion of the alimentary canal, and the serious nature of accidents occurring here.

Ulceration of Appendix Vermiformis.—Dr. McCready presented a specimen of ulceration and perforation of the appendix vermiformis, from hardened feces.

On Wednesday, June 4th, he was called to visit a slight, somewhat delicate boy in appearance, though habitually enjoying good health. Two days previous, immediately after dinner, he had eaten a large piece of cocoanut. From that time he had suffered colicky pains in the bowels. He had vomited slightly, and a dose of castor oil had been administered, which had acted freely. He was found with a cool skin, and a tranquil expression of countenance; the tongue clean, the pulse about 100, and without tension. The pain complained of was aggravated at intervals, and was located in the epigastric and right hypochondriac regions. He complained of tenderness on pressure; but when it was made gradually, he bore it well. A dose of calomel and Dover's powder was ordered, to be followed in the morning by a mixture of rhubarb and soda. The medicine operated freely, but without affording relief. Morphine in full doses was now prescribed, and the pain was for a time alleviated, and the pulse reduced in frequency. The pain, however, returned, and the pulse rose to 116. The abdomen was slightly swollen, and the tenderness referred to, in the same region as before, was somewhat increased. He complained that it hurt him to rise, or to turn in bed. This, however, was not constant, since he, on
different occasions, turned and raised himself to a sitting posture, at my request, without complaint. The decubitus was natural, generally on the side; legs were not drawn up; the countenance was natural and the skin soft. He was put on the use of calomel and opium: two grains of the former, with a half grain of the latter, being ordered every three hours. The opium, as is frequently the case, diminished the secretion of urine, and also produced slight retention; the patient passing it but once in twenty-four hours.

On the morning of Sunday, June 8th, Dr. Gurdon Buck saw the child, in consultation. The symptoms had not materially altered; the pulse ranged from 116 to 120, and was soft, and of moderate fulness; the tongue clean; the skin, countenance, and decubitus natural. As the bowels had not been moved for nearly three days, a large enema, with a spoonful of castor oil was ordered, and warm fomentations to the abdomen, which had previously been applied, were continued. On visiting the patient at 1 P. M., his countenance was sunken, and pulse very frequent and scarcely perceptible. The skin was bathed in perspiration, and there was some coldness of the extremities. The pain was gone, and the little patient moved freely in all directions. Soon after the administration of the enema, he had a large watery evacuation, and had passed urine freely. This was followed by vomiting of a quantity of dark, green-looking fluid.

During the afternoon and evening, the vomiting recurred several times; and acute pain in the abdomen was complained of. The child became exceedingly restless, tossing about in bed; the extremities colder; the countenance more livid and sunken, and finally expired at about 3 o'clock on the morning of the 10th.

Post-mortem examination, 14 hours after death. Abdomen.—On opening the abdomen, it was found filled with a considerable quantity of sero-purulent fluid. The intestines were universally glued together by soft adhesions, which were readily broken up. In several places where two folds would be adherent, there would be at the place of adhesion a dark brown, circumscribed patch, with a well-defined margin, resembling so closely the appearance of gangrene after strangulated hernia, as to be at first taken for gangrene by Dr. Buck.

The intensity of the inflammation was evidently greatest about the hypogastric region, and raising the intestines from the pelvis, the effused fluid was found there of a darker color, having a brownish tinge. There was, however, no feculent odor.

Amid the mass of large intestine which dipped down into the pelvis, the appendix vermiformis was found intensely inflamed, much enlarged, and having a flattened appearance. It contained a concretion about the size of a swollen white bean. No perforation was noticeable. On being laid open, the mucous membrane of the appendix was intensely inflamed; the inflammation extending to the neighboring large intestine, the follicles of which were enlarged
and prominent. The concretion consisted apparently of a small feculent mass which had formed itself around two or three minute whitish bodies about the size of strawberry seeds. The appendix, with the caput coli, was removed, and after maceration one hour in water, several minute ulcerations were evident; one of which, about the size of a pin's head, had perforated into the abdominal cavity. The other organs were not examined.

**Perforation of the Appendix Vermiformis.**—Dr. Gobrecht gave the particulars of a case of perforation of the appendix vermiformis.

"The patient aged 21, a carpenter engaged in making and setting heavy joists, was muscular, of average height, and had been apparently in good health. He was not originally under my own care, but according to the statement made when he took charge of the case, at 11 o'clock on the night of Sunday, Feb. 10th, the first symptoms occurred at about 5 A. M., on the previous Thursday, consisting of abdominal pain, but no purgation, for which some 'cholera medicine' was taken, but without relief, vomiting supervening at about 11 o'clock. During the day, and on Friday, the symptoms increased in severity, and on Saturday and on Sunday, cups and poultices were applied to the abdomen, and internal remedies were employed, which, however, failed of their purpose; the pain continuing until Sunday noon, when it ceased suddenly and entirely, but the vomiting was unabated. For the first time since the attack the bowels were moved that evening by a clyster, but the passage, which was copious, had no fetid odor.

"At this time, when Dr. G. first saw him, there was no abdominal tenderness, the belly being soft without tympanites, and the patient lying at length in the bed. Voice was good, respiration natural, pulse frequent, cool skin, moist clean tongue; but there was great general exhaustion and constant rejection from the stomach, of a dark liquid like black vomit. He supposed, from the detailed symptoms: 1. That he might have had enteritis resulting in gangrene. 2. Or internal strangulated hernia terminating in gangrene. 3. Or that he might have had peritonitis."

Lime-water and ice internally, and counter-irritants externally, were used to combat the obstinate vomiting, while a stimulating and nutritious diet and stimulating applications to the body and extremities, were prescribed to combat the symptoms of exhaustion. Under this treatment the patient rallied somewhat until the after part of Monday, when the vomiting increased again, and the mind wandered a little.

"On Tuesday morning I found that his physical powers had been slowly failing since the previous evening, and when left perfectly quiet there was some disturbance of intellect, but he returned intelligible answers when addressed. It was evident that death would occur before many hours had elapsed, though not immediately, and being of perfectly clear mind, it was thought best to apprise him of his actual condition, which was done in the gentlest manner
possible. It was found that he had no apprehension of his extreme danger, and his life seemed to have been prolonged by the hope of recovery, for when informed of his real situation he asked anxiously, "Can you not try to do more?" then turned on his side, became restless, and had himself propped up in the bed; his mind wandered, breathing was labored, vision became indistinct; he was insensible to those around, and died at half-past ten o'clock, within a half hour after being informed of his hopeless condition.

"Autopsy.—On examination twenty-four hours after death, cadaveric rigidity being complete, extensive peritonitis was discovered. The great omentum was thickened, vascular, and bound firmly to the right iliac region. All the coils of the small intestines adhered. The cul-de-sac between the bladder and rectum, by the agglutination of the sigmoid flexure, small intestine and upper fundus of the bladder, was completely shut off from the general peritoneal cavity, thus forming an abscess lined by very thick false membrane, containing more than a teacupful of purulent fluid. Several small circumscribed collections of purulent fluid formed in a similar manner were found in the vicinity of the ascending colon, which was drawn down and attached to the caecum and appendix vermiformis so firmly that some force was required to separate them.

"The removal of the colon revealed the appendix, which was quite capacious, perforated at the bottom of a large ulcer, situated at about one-third of its length from its extremity, the portions surrounding the ulcer being gangrenous. Just below the orifice of communication between the appendix and the caecum, was found impacted, a seed or stone with its exterior much softened, which appeared to be that of a large cherry or small plum.

"At the time of death there seemed to have been no communication between the intestinal and peritoneal cavities; the adhesions of the perforated part to the colon preventing it.

"The stomach contained a fluid similar to that vomited; there was no noticeable lesion of its paretites.

"The mucous coat of the intestines was not involved in the inflammation, and contained, nearly throughout, only mucus colored by bile. The lower portion of the ileum and colon contained fecal matter.

"The bladder was empty.

"The specimen presenting the lesion described, was exhibited by Dr. Gobrecht."

"Several of the Fellows referred to similar cases that had fallen under their observation. Dr. Griscom mentioned one in which the foreign body was a watermelon seed; and Dr. Keating referred to one reported by Dr. Meigs, where a collection of fig seeds in the appendix had occasioned the attack. A case was also reported by Dr. H. Hartshorne, in March, 1851, and another in April, 1845, by Dr. Pepper. In the former, a mass of hardened feces, and in the latter, a grape seed, was the offending body."—Med. & Surg. Rep.
Physiology and Pathology of the Supra-renal Capsules and Bronze Disease of Addison. By Professor Trousseau. (Translated from the Archives Générales.)

In an important communication, made to the Academy of Medicine at its session on the 26th August, 1856, M. Trousseau adduced some new facts and added some reflections which form a valuable complement to the work already published in the Archives, upon the diseases of the supra-renal capsules. A literal copy of the note is here subjoined.

The supra-renal capsules have been nearly forgotten by anatomists, physiologists and pathologists. The researches of Addison and of Brown-Sequard prove that they merit consideration in respect both of their physiology and pathology. We subjoin the principal facts discovered by M. Brown-Sequard, relative to the physiology of these organs, which were submitted to another learned society:

1st. These capsules are endowed with great sensibility.
2nd. They increase in weight and in volume from birth until adult years; hence they can no longer be regarded as special organs of embryonic life.
3rd. The extirpation of the two organs as rapidly and as certainly destroys life, as the ablation of the kidneys. M. Brown-Sequard operated on sixty animals of different species and found death supervene after an average interval of eleven and a half hours.
4th. The duration of life, when but one of the organs was extirpated, did not exceed seventeen hours.
5th. In not a single instance could the death be attributed to either hemorrhage or peritonitis, nor to lesion of the kidneys, the liver or other important organ in the vicinity of the capsules.
6th. When the semi-lunar ganglions were accidentally injured in these experiments, the heart’s action was accelerated; but this could not be assumed as the cause of the rapid death of the animals.
7th. After the extirpation of these capsules, there follow with almost perfect constancy an excessive weakness, at first an accelerated respiration, then becoming slow, jerking and irregular; an acceleration of the heart’s action, a depression of the temperature and various nervous phenomena, such as vertigo, convulsions and coma, superimposed on the near approach of death.
8th. When but one of these organs was removed, the same symptoms were exhibited, but less rapidly and after an interval of apparent restoration; when convulsions occurred, they were manifested only on the side of the extirpation, and the animal performed pectoral rotations, much as when the middle cerebellar peduncles have been divided, rotating from the injured toward the sound side.
9th. There occurred among the haras of Paris an entozooty or an bizooty, characterized by an inflammation of the supra-renal cap-
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su]es, which give rise to the same symptoms as the extirpation of these organs.

10th. The blood of the diseased animal, when injected into other hares, produced similar morbid phenomena to those resulting from the ablation or inflammation of these capsules.

11th. Wounds of the spinal cord determine an active hyperæmia of these organs, resulting in an hypertrophy or an acute inflammation, and speedily proving fatal. A fact established by Brown-Sequard in 1851.

The preceding facts, says Brown-Sequard, lead to the following conclusions, viz.:—1st. That the supra-renal capsules are absolutely essential to life. 2nd. That their ablation or morbid change disturbs the economy, either by interrupting the functions of the organs as blood-vascular glands, or by irritating the nervous system and giving rise to convulsions limited to one side of the body.

If these experiments were exact, (of which there can be but little doubt,) or perhaps we should say, if the conclusions deduced by M. Brown-Sequard are legitimate, then the functions of these organs in the animal economy is infinitely more important, than we have previously been led to believe.

Let us now consider their pathology. Some months since, my excellent friend Dr. Lasègue published in the Arch. Gén. de Med. a very good abstract of the labors of Addison and other British physicians upon the diseases of the supra-renal capsules. They have established that certain individuals are affected with a peculiar cachexia, with an anæmia analogous in many respects, among other anæmias, to that resulting from hæmorrhage, and very unlike that special anæmia known as leucocytæmia, (this name is not mine, and God forbid that I should forge a similar one,) a disease in which the blood contains globules analogous to the globules of pus.

In the cachexia described by Addison, the debility experienced was out of all proportion to the lesions that could be discovered for those lesions, at least those known before the labors of Addison were insignificant, and simultaneously with the debility a deep bronze-like coloration of the skin was remarked, particularly on the face, the internal surface of the lips, in the axillæ, on the penise and many other points; pigmentary matter was deposited under the epidermis and under the epithelium, giving the patient the appearance of a mulatto; the hands and the penise sometimes present a hue as deep even as that of the negro. Addison moreover prove that the disease is always fatal, and the autopsies performed by himself, as well as several other physicians, furnished invariable evidence of the presence of grave lesions of the supra-renal capsules, viz., cancer, tubercles, fatty degenerations, purulent collection, hypertrophy, &c.

Since these labors have become known in France, two cases the bronze disease have been observed in the hospitals of Paris, or at St. Louis, by M. Second-Ferréol, the other in my ward at t
Hotel Dieu. The patient that fell under my observation, was a coachman of the Minister of the Interior, aged thirty-seven years, apparently in good condition and well nourished. During the past five or six months his skin has acquired a peculiar and persistent sallow hue. At the same time he grew weaker progressively; he ate little, and had an especial aversion for animal food. He stated that he had lost three-fourths of his weight, which, exaggeration apart, was equivalent to stating that he had been fat and had become lean. The symptoms presented by this man were very striking, and the more so as we recollected the details furnished by the abstract of Lasègue, and I diagnosticated a disease of Addison. The patient was soon attacked with a profuse diarrhœa, to the extent of eight or ten dejections in twenty-four hours, yet without the special character of cholera; the body became cold, and he speedily succumbed to the disease. The autopsy revealed no lesion of either the brain, lungs, heart or intestines, that could explain the symptoms or cause of death; the kidneys presented but a slight hypertrophy, and, according to Brown-Sequard, who examined the case, a few tubercular granulations and fibrous filaments, but the supra-renal capsules contained numerous tubercular masses. The apex of one of the lungs contained a very small tubercle, but none in either the bronchial or mesenteric glands. The blood, examined by M. Robin, presented no other alteration, but such as exists in hemorrhagic anaemia.

We here see a man, yet comparatively young, suddenly attacked with a cachectic and cachochymic disease, of which the data furnished by the previous condition of pathology yielded no explanation. We recognized in it the disease of Addison. He died, and the autopsy revealed abundant lesions of the supra-renal capsules, and no other.

The other case of the bronze disease was more carefully observed and reported by M. Second-Ferréol, interne of the hospital. The patient was a waiter and thirty-five years of age. He was addicted to all kinds of excesses, and had contracted a gonorrhœa a year before admission into the hospital. He had previously been admitted into the hospital Necker, and treated for some serious difficulty of the digestive organs; he then presented a deep coloration of the face, which varied in intensity with the condition of the digestive apparatus. He took at that period l’Eau d’Enghien, probably for an incipient pulmonary lesion. Towards the close of the year 1855 he presented himself at the hospital St. Louis with evident signs of tubercle in the apex of the lungs, yet the debility was greater than occurs in phthisis. He left the hospital and returned, and at last died there.

The autopsy, carefully observed by M. Second-Ferréol, revealed very important lesions of the supra-renal capsules; neither cortical nor central substance could be recognized; a fatty mass of an intense yellow color, as if from bile, was alone visible; filamentous tracts
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resembling fibro-cartilage traversed the bodies of the capsules. M. Robin found pus globules, but no tubercles in the midst of the fatty mass. M. Ferréol adds that the hands presented the characters of that from the hands of the negro, and that pigment granules were abundant in it.

Let us remark that in the negro race the capsule supra-renales are of large size; on the other hand, the accidental development in excess of the pigmented matter is connected with an augmented size or morbid change of structure of these organs. We might hence infer their connection with the production of pigment in the system.—[Peninsular Journal of Medicine.

Lectures on the Varieties of Continued Fevers and their Discrimination. Delivered at St. Thomas's Hospital, by THOMAS B. PEACOCK, M. D., Assistant Physician to St. Thomas's Hospital, etc.

Lecture.—General Principles of Treatment.—It was not my intention in these lectures to have spoken of the treatment of the disease, but as the subject would be incomplete without some allusion to this point, I shall very briefly refer to the general principles which should guide us in our practice.

The first question which arises is, can we arrest or cut short an attack of fever? This question must be regarded as a purely practical one, to be decided by experimental investigation. We have sufficient proof that those forms of febrile affection which follow the most definite course—the eruptive fever—may be cut short—as variola;—by vaccination, and, in some cases, by vaccination practiced after the receipt of the variolous contagion; and, though the cases are not precisely analogous, there seems no reason why similar results should not ensue from the employment of remedial agents; and in typhus and typhoid, as well as in other forms of fever.

I. The means by which the arrest of fever has been attempted have been, 1st, Cold affusion; 2ndly, Remedies acting upon the secretions; and, 3rdly, Specific remedies.

1. At the time when Dr. Currie's work had attracted much attention, the plan of employing cold affusion was very much had recourse to in the treatment of all forms of fever—more especially in the early stage—in the hope of arresting the progress of the disease, and there is reason to believe that the remedy was occasionally, at least, successful. The prostration of strength which it occasioned, was, however, sometimes so serious, that the risk more than counterbalanced the advantage, and the practice was abandoned. Cold bathing is still, I believe, used by the hydropathic practitioners as a means of checking the course of fever, but I know not with what result.
2. Remedies which act upon the secretions have been employed for the arrest of fever, under the idea that as the subsidence of some forms of the disease is attended by so-called critical evacuations, such remedies may be the means of eliminating the poison from the system. Thus, as one of the most common symptoms which attends resolution in some forms of fever is profuse sweating, diaphoretics have been exhibited to promote perspiration, and so to bring about resolution. This is, however, an entirely erroneous view. In many cases the occurrence of sweats during fever, especially when only partial, so far from causing the subsidence of the disease, is followed by serious or even fatal prostration of strength. On the other hand, in cases in which the perspirations are most profuse, as in relapsing fever and sometimes in typhoid, the occurrence of the perspiration, so far from eliminating the poison, does not prevent the occurrence of the future paroxysms in the one case, or cut short the progress of the disease in the other. We can, therefore, only regard the occurrence of perspirations in these cases as indications of the resolution of the fever and not as its cause. Again, we sometimes see febrile attacks subside on the occurrence of spontaneous vomiting or purging; but it by no means follows, that the occurrence of these symptoms is the cause of the subsequent resolution; and even were sweating, vomiting or purging proved to be the means by which nature endeavors to eliminate the poison from the system, it would still not follow that it is sound practice for us to imitate.

Of the remedies of this description upon which the most reliance has been placed as useful in arresting fever, emetics occupy the first place. It is quite possible, that, exhibited quite at the commencement of an attack of fever, before the chain of diseased action has been fully established, they may, by exciting powerful reaction, arrest the further progress of the disease. In the employment, however, of these remedies, great caution should be exercised; the more depressing emetics, such as the tartarized antimony and James' Powder, are of very doubtful usefulness, at least in the low forms of fever which we are called upon to treat in this metropolis. They may excite irritability of stomach, which is often a troublesome symptom, as in relapsing fever, and which it may be difficult afterwards to check; or they may cause great depression, if given in cases which are attended with much prostration, as in typhus; or they may excite diarrhoea, if given in typhoid. The objections do not, however, apply to the milder emetics, as ipecacuanha, or, at least, not to the same extent.

In the exhibition of purgatives yet greater caution is needed. In typhoid, diarrhoea is often present from the commencement of the disease, and at all times it is very prone to occur—and active purgatives may excite very undue action; indeed, I have seen them give rise to uncontrollable diarrhoea and so occasion death. During the progress of typhoid it is always necessary to exercise
the greatest caution in the exhibition of aperients; and in cases
where the bowels have been confined for several days, and where
some interference becomes unavoidable, the action of mild aperi-
ents will sometimes prove injurious. In taking into consideration
the propriety of having recourse to any of these remedies, with the
view of cutting short an attack of fever, it must be borne in mind,
that, at the commencement of an attack of fever, when only they
could be exhibited with the probability of accomplishing that re-
sult, it is impossible to know what will be the character of the
disease, and, consequently, to decide as to the special applicability
of the remedy to be used.

3. Mercurials were much employed in the treatment of fever a
few years ago, under the idea that they might destroy the poison
existing in the system or assist its elimination; and also with the
view of preventing what was regarded as a complication of the dis-
ease,—the inflammation and ulceration of the mucous glands of
the intestines. It was even contended, that if the system could be
brought under the influence of mercury, the patient always recov-
ered. While, however, there is little doubt that in fever the in-
fluence of the mercurial remedies is resisted, there is no proof that,
where the system is brought under their influence, they produce
any beneficial effect; and practically, their use has been almost
abandoned, except for the relief of accidental complications of an
inflammatory character.

4. The only remedy which has recently been regarded as pos-
sessing any specific power in arresting fever is bark, and especially
its alkaloid, quinine. This power has been supposed to be exerted,
when quinine is exhibited in large and frequently repeated doses,
so as to produce a sedative operation on the nervous system, indi-
cated by well-marked symptoms,—vertigo, headache, tinnitus
aurium, and depression of the force and frequency of the heart
and arteries. To this condition the term cinchonism has been
applied. During the last autumn, I entered into an investigation
of the claims of quinine thus exhibited to its asserted power of ar-
resting fever. I found that the reports of the different practition-
ers, who had made trial of the remedy were so varied that they
could not be referred to as affording any satisfactory rule for prac-
tice. In our own Hospital, I ascertained that of 35 cases of fever
of all kinds treated during two years with quinine, in doses of 8
to 10 and 15 grains, repeated three, four, six, eight, and twelve
times daily, the mortality was somewhat greater, and the duration
of residence in Hospital of the cases which recovered was very
nearly the same, as in the other cases of fever treated by the ordi-
nary means. I further found that, in trying the remedy in large
and frequently repeated doses, in particular cases of fever of as-
certained character—typhus and typhoid—in some, while the
physiological effects were fully manifested, no remedial influence
was exerted; in others, the use of the remedy added greatly to the
prostration of strength, and was obviously injurious; and in one only, out of five cases, did it exert any beneficial influence; and in that it operated only in assisting the favorable progress, not, certainly, in arresting the disease. From these facts, I inferred that quinine, thus exhibited, did not possess the asserted power of arresting the progress of fever. An investigation of this kind is one of much difficulty; for it is evident that, if the remedy to be tested be not applied at the commencement of the disease, it is not likely to check the progress of the attack; and, if so applied, as we cannot \textit{à priori} with certainty ascertain the form of disease which is commencing so we cannot decide, if the attack subsides rapidly, whether it has done so in obedience to the natural law of the disease, or as the effect of the remedy employed. We, consequently, are in many instances left in doubt as to whether the remedy has, or has not proved beneficial. It is only by repeated trial and careful observation that we can arrive at a satisfactory conclusion.

Practically, in the treatment of fever, we may dismiss from our minds the endeavor to arrest the progress of the disease, and must be contented to \textit{aim at conducting the cases to a successful issue}.

II. In this endeavor we should be guided by the principles so philosophically laid down by Dr. Allison. We must remember that the different forms of fever are dependent on poisons, which can operate on the system for a certain length of time only, and consequently, that they will terminate favorably, provided the strength of the patient can be upheld for a sufficient length of time, and the occurrence of local applications be averted.

The modes in which death may occur during fever are by coma, apnoea, and asthænia.

1. The most common mode of death in all forms of fever is coma. It is that which we have especially to guard against in typhus, where it is caused partly by the presence of the morbid poison in the blood, and partly by the impure condition of the blood, from the imperfect mode in which all the secretions and excretions are performed. It is also a frequent cause of death in typhoid, and in relapsing fever, from the presence of the elements of the bile, or of urea in the blood; and, in all the forms, it may supervene from congestion or inflammation of the brain and its membranes.

2. Death from apnoea is of common occurrence in the acute stages of all the forms of fever, depending either upon diphtheritic inflammation of the fauces, extending into the larynx and trachea; on bronchitis, and especially on capillary bronchitis, or on pneumonia; or lastly, on collapse of the lung, from want of power during the latter stages of the disease. It may also occur from any of these causes, or from pleurisy or pericarditis, during convalescence, and especially is apt to do so in typhoid.

3. Death from asthenia is seen to occur in the simplest form
when it results from inanition, in consequence of the inability to get the patient to swallow the full amount of food required, as in typhus, and especially in prolonged cases of typhoid. The food which is taken may also be rejected by vomiting, as in some cases of typhoid, and especially in relapsing fever; or the patient may be exhausted by profuse diarrhœa, during the course of typhoid especially, but occasionally in typhus; or he may be worn out by long continued diarrhœa, when the discharge is never very profuse, as in the atonic stage of typhoid. Profuse sweating in relapsing fever, or copious discharges of blood from the nose, much more frequently from the bowels, in typhoid or relapsing fever, may occasion the same result. Death from asthenia may also occur from the supervention of acute peritonitis, dependent on perforation of the bowel, in the active stage, or during convalescence from typhoid; or when extensive sloughing occurs on the back, or, as occasionally happens, when the extremities become gangrenous in typhus or typhoid. And lastly, the fatal termination may be caused by sudden syncope, from allowing the patient to sit up in bed or leave the bed, during the active stages of any form of fever, or even at too early a period during convalescence.

Our practice, then, in the treatment of all the various forms of fever, must consist in guarding against their various tendencies to terminate in death; and we must bear in mind, that it is not against one only of these sources of danger that we must be on our guard, but that we consequently have to contend with the several threatening symptoms at the same time, or find them occurring at different periods of the attack.

1. It is essential that _stimulus and support_ be exhibited in doses apportioned to the prostration of health, and in the mode best calculated to assure their ready assimilation.

In the early stages of the disease, the patient should only take light and easily digestible food—milk, arrow-root, sago, panada, broth, and soups, or light puddings; with the advancing weakness, the food must be given in a more concentrated form—beef tea, jelly, chicken-broth, etc.; and at a still later period, or when there is greater prostration of strength, stimulus must be had recourse to; at first, of a milder character, as wine, and subsequently, or when the depression of power is greater, brandy, ammonia, etc. must be given.

It is impossible to lay down any rules as to the quantity of stimulus that may be required. In some cases a few ounces of wine may be sufficient, in others it is impossible to give the support too freely, or in too concentrated a form. I have seen a young lady take, during twenty-four hours, a full bottle of brandy, together with compound tincture of bark and ammonia, etc. And again, I have known a child take a full bottle of wine, with brandy, and other stimulus and support during the same period, an this, too, without producing any symptoms of intoxication, or a
accomplishing more than the mere maintenance of life. Indeed, in many cases, the hope of recovery rests entirely upon the con-

tinued exhibition of stimulus and support, and these must sometimes be constantly given, at intervals of a very few minutes. It is often, in the low stages of typhus or typhoid, and especially in children, very difficult to get the amount of nourishment which is required to be taken.

The stimulus should be exhibited in conjunction with food, and this should be prepared in the most concentrated form, and be ex-
hibited in the liquid form so as to be readily swallowed and equal-
ly readily assimilated. It should be given every hour or half hour, or even every few minutes, and often it can only be exhibited in teaspoonfuls at a time; indeed, I have seen life sustained by the more constant wetting of the lips with wine. The diffusible sti-

mulus should, in cases of this kind, be frequently varied, so as not to satiate the patient; sometimes wine, then brandy, or tincture of bark, or the sesquicarbonate of aromatic spirit of ammonia, in de-

coction of bark, or with some stimulating infusion, as the serpent-

aria or senega. Generally, stimulus is required at the earliest pe-

riod, and in the largest quantity, in the treatment of cases of ty-

phus; but it is often necessary to exhibit it most freely in the other forms of fever, and especially in children; and while the prostration of strength is of comparatively short duration in ty-

phus, it is in typhoid often very prolonged, and requires the per-
sistent use of stimulants for many days. It is also very necessary after the exacerbation in relapsing fever. In the employment of alcoholic remedies in fever, we must, however, bear in mind that they may occasion the comatose tendency, which it is one of our most important objects to prevent, and we should, therefore, be on our guard against their too liberal exhibition.

2. Bark and Quinine.—I have before alluded to the employ-

ment of quinine in large doses, with the hope of arresting an attack of fever. When so exhibited, the remedy operates as a sedative; but, in smaller doses, it acts as a tonic, and is often a valuable ad-
junct to other treatment; but, even when exhibited only in doses of two to four grains, three or four times daily, it is apt to excite headache, restlessness, vertigo, excessive dryness of tongue, and other unpleasant symptoms. Its use therefore requires great cau-
tion.

It is often very beneficial in accelerating convalescence when exhibited towards the end of an attack of fever, especially of ty-

phus. It is very useful in cases of typhoid, which, in some local-

ities and in some seasons, have a great tendency to assume a remit-
tent character, having a marked exacerbation each evening, or to relapse. I have also been in the habit of employing it more freely in relapsing fever; but on the usefulness of quinine in this form of fever practical writers are not agreed. Quinine, exhibited in moderate doses, is also very beneficial in a form of typhoid which
is not of uncommon occurrence, where the fever, without being very intense, is very prolonged, and day after day elapses without any material progress towards convalescence. In these cases the use of the remedy is often productive of very striking effects, and greatly accelerates recovery. I am generally in the habit of employing, during the active stages of fever, the infusion, decoction, or tincture of bark, in preference to quinine, believing these remedies to possess, in a greater degree, the tonic properties of the drug—while the quinine seems rather of use as an antiperiodic, and in strengthening the appetite at the end of an attack of fever.

3. Remedies which have been supposed to exert a specific influence in checking decomposition have also been employed in the treatment of fever. Of these, that most frequently used has been the chlorate of potash; and it has been much had recourse to since Chomel advocated its use in the typhoid fever of Paris. I have been constantly in the habit of employing the chlorate in all forms of fever in doses of about ten grains dissolved in water, or in decoction of bark, slightly acidulated with hydrochloric acid, in all forms of fever, and with good results; but using it in combination with other active remedies, it is difficult to say what amount of credit is to be assigned to its asserted powers.

4. Anodynes are most useful in the treatment of all the various forms of fever. They may be exhibited to calm agitation and procure rest during various stages. Thus it is not very uncommon, in cases otherwise of mild fever, to find the patient wholly incapable of sleep, and thus the disease is kept up; in other cases there is active delirium, the patient being constantly talking, and endeavoring to get out of bed; and, in yet others, there is much tremor, agitation, and nervous excitement. In these cases an anodyne may at once break the chain of diseased action, and dispose the case to advance satisfactorily to convalescence. The exhibition of anodynes in fever requires, however, the greatest care; they may occasion the coma which should most cautiously be avoided, and in some cases, when they do not produce their anodyne effects, they give rise to distressing restlessness, and increase the delirium and excitement which may be present. Generally speaking, they may be exhibited more freely in the early stages of fever than at later periods; and, in typhoid and relapsing fever, more largely than in typhus. In some cases, where there is reason to suspect inflammation or congestion of the brain or its membranes, their use must be preceded by, or combined with, antiphlogistic treatment, cupping, leeches, ice, or blisters. In others when there is great prostration of strength, they operate most beneficially when combined with diffusible stimulus, as wine, brandy, ether, or ammonia, or can only be safely employed when so combined.

Opiates are also very useful in checking diarrhoea, and they may be more freely applied under such circumstances; they are espe
cially useful in this way, and also in relieving the abdominal pain, in cases of typhoid; and, when there is any suspicion of a tendency to perforation, they should be freely exhibited; when perforation has already occurred, their use in large doses, offers the only possible means of relief. In the early stages of typhoid, and also during convalescence from that disease, it is a good plan, when there is pain in the abdomen and the bowels are confined, not to exhibit an ordinary aperient; but rather to give a small dose of calomel with a full proportion of opium, and to repeat this in two or three hours, if the pain be not relieved. A small quantity of castor oil may afterwards be given, and the bowels are then generally soon relieved without further inconvenience. I have thus seen attacks threatening perforation of the bowels, readily relieved.

5. Astringents.—In cases where there is diarrhoea, or discharge of blood from the bowels, astringents must be employed. For the relief of slight diarrhoea, the milder vegetable astringents, as kino catechu, may be used in conjunction with the compound chalk mixture. In more severe cases, the gallic, and especially the tannic, acid, or the acetate of lead with opium, may be used; and these remedies must also be had recourse to in cases of hemorrhage from the alimentary canal, or other mucous membrane.

When the discharge, whether simple diarrhoea or hemorrhagic, takes place from the stomach or bowels, the tannic acid, having stronger local action, is probably the preferable remedy; but in discharges of blood from other organs, the gallic acid, being more readily absorbed, is probably more to be depended upon. I believe, however, in all such cases, that the acetate of lead exercises a much more powerful astringent action than any other remedy.

6. I have already alluded to the employment of mercurials, as a means of arresting the progress of fever. These remedies are also exhibited for the relief of the hepatic complications of different forms of fever, more particularly of typhoid and relapsing fevers. When, during the course, or at the commencement, of those diseases, there is more or less jaundice with pain or tenderness in the region of the liver, I have usually had recourse to the employment of the milder mercurials, as the hydrarg. c. creta; and as, in such cases, there is also generally diarrhoea, it should usually be combined with astringents and anodynes, as Dover’s powder, or the compound chalk powder with opium. This plan I believe to be preferable to the attempt at once to check the diarrhoea by the use of the more powerful astringents.

7. Remedies employed to check vomiting, etc.—Ice, hydrocyanic acid, effervescent, soda-water, with brandy, etc., must be had recourse to as circumstances require; and they are especially needed in cases of typhoid, more particularly when assuming the remittent form, and in the various stages of relapsing fever.

8. Counter-irritants may be employed for the relief of local com-
plications in all forms of fever, but they are especially useful in the comatose affections of typhus or typhoid, and especially in the latter disease, in children. In such cases the free application of blisters to the neck or to the scalp is of the greatest use. It is not by the discharge that they excite that their application seems to be beneficial, but from their powerfully arousing the patient. I therefore prefer the application of a succession of blisters, to the continuance of the discharge from the same surface. As a general remark, the liq. vesicatorius produces this effect much more decidedly than an ordinary blister, and I have certainly seen the lives of children saved, under the most unfavorable circumstances, by the free application of the blistering liquid to the scalp; nor did I ever know any unpleasant effects result from the practice. Sinapisms applied to the calves of the legs or feet, or hot mustard and salt baths may also be used in cases of cerebral complication, or as the means of arousing the patient when greatly prostrated. The continued use of warm poultices, or turpentine and other fomentations, is of the greatest use in cases of severe abdominal disturbance.

9. *Antiphlogistics* may be employed for the relief of the inflammatory complication of the different forms of fever; but, in modern practice, blood-letting is only practised locally by cupping or leeching. Either of these means may be employed for the relief of symptoms dependent on inflammation of the brain or its membranes; or the patient may be cupped on the chest or between the shoulder-blades in cases of pneumonia or bronchitis; or leeches may be applied on the abdomen, and especially in the right iliac region, in cases of typhoid, where there is pain, and other symptoms of unusually active abdominal inflammation; or on the right hypochondrium in cases of inflammation or active engorgement of the liver, especially in relapsing fever; but in all forms depletion is only applicable in the early stage, and requires the greatest caution. Antimony judiciously exhibited, and in combination with other means, is occasionally useful in the bronchitic or pneumonic complications of the different forms of fever.

10. Lastly, the greatest attention should be paid to the *hygienic management of the patient*. His hair should be cut short or shaved at the commencement of the treatment, according to the urgency of the cerebral symptoms. He should be kept clean; and free ablution of the hands and face, and of the body generally should be frequently practised. Though, indeed, cold affusion has been abandoned in the treatment of fever, ablution is still most usefully employed. Sometimes the patients prefer to be sponged with cold water, at other times with tepid or warm water; and in the latter stages the employment of warm vinegar and water is often very beneficial. Ablution of the whole surface can rarely be borne at the later periods; but the head, face, hands, and feet may usually be sponged, several times in the day, with the greatest advantage.
and often patients obtain great relief in the early stages from keeping their hands in cold or tepid water. The bed and body linen should be frequently changed; and the room should have a free perforation of air through it, care being taken not to allow the air entering to be too cool or damp, or the patient to be exposed to a direct draught. In making the requisite changes the patient should be disturbed as little as possible; and he should, on no account, be allowed to rise from the bed during the active period of the disease, to make use of the close stool, or for other purpose, or leave his bed at too early a period during convalescence. I have known neglect of these precautions attended with fatal effects, in cases otherwise progressing favorably.

During convalescence also the regulation of the diet is of the greatest importance and especially in typhoid, in which a long period may elapse before the mucous membrane of the bowels recovers its healthy condition. The food should be light, simple, and easy of digestion; and should be taken in small quantities at a time and at frequent intervals. As the appetite returns, the stimulus should be diminished, and replaced by more nutritious food, the liquid should be gradually changed for the solid form, and the intervals allowed to elapse between the meals should be longer. The friends of the patient are apt to transgress in these respects, giving food in too large quantities, too frequently, and of too stimulating a character. This should be carefully avoided. So far from convalescence being accelerated by such a course, it is apt to be protracted; and in typhoid, especially, serious or permanent evil may result. When during convalescence, the exhibition of stimulus materially quickens the pulse or gives rise to flushing, heat, or dryness of the skin, it cannot be beneficial, and should only be given in smaller quantities, or be entirely abstained from.—[New Orleans Med. News and Hosp. Gaz.


In consequence of the prevalence of dysentery among our brave troops during the late war, and the generally intractable and often fatal character of the complaint, any new suggestion with reference to the treatment, however insignificant in itself, assumes a degree of interest and importance which otherwise could not be claimed for it. It is under these circumstances that I wish to call attention to a remedy in the chronic form of dysentery which has proved very useful in my hands, but which requires more extended observation to establish its utility than I can expect to have the opportunity of giving to it.

In dysentery, the large intestines are very often the principal parts affected, and in all cases they are very much involved in the
disease. The discharge in the early stage consists of a slimy mucus and of a more serous portion mixed or streaked with blood; subsequently pus is discharged, still streaked with florid blood, epithelial débris, &c.; and now and then small portions of imperfectly-formed faeces will be observed with the stool. The calls to stool are frequent and distressing, on account of the tenesmus that accompanies the least evacuation; there is also uneasiness or tenderness in one or both flanks.

Now, when the functions of the colon are performed in a healthy manner, the faeces are figured, of a firm consistence, and of the well known color. In dysentery, or, as it is sometimes called, colitis, this function is completely in abeyance; but whether this is produced by the relaxed state of, and consequent want of tone in, the muscular coat, or from the extreme irritability of the mucous membrane of the intestines, or of the character of its contents, or all combined, I cannot determine. The compound tincture of benzoin I have found, when administered in this disease, particularly useful in restoring, and that in a very short time, this function of the colon. Whether it also acts beneficially by protecting and sheathing the ulcerated portions of the gut, or by its stimulating qualities induces just as it does in chronic ulcers of the surface, the reparative processes to go on more rapidly, I am unable to determine. The tincture of benzoin, I need scarcely say, consists of benzoin, styrax, tolu, a small quantity of aloes, and spirit. The dose generally given is from fifteen to twenty minims. The following cases I have extracted from my note-book, as being the most striking instances that I have met with of its beneficial effects:

Case 1.—C. S., aged fifty, female, married, the mother of several children, has suffered for years from diarrhea, with tenesmus and discharge of blood per anum; no piles. Has been in the habit of taking drops of the tincture of sesquichloride of iron, as prescribed for her by a physician, and with benefit. Has suffered from her complaint in an aggravated form since last Christmas, and has lately taken a great deal of medicine for it without relief. At present (May 29th, 1855,) she passes a great deal of blood by stool; pain great; bowels loose; blood mixed with the stool; breath short; lips very pale; countenance exsanguine. Ordered twenty drops of compound tincture of benzoin, to be taken on sugar three times a day.

June 1st.—Has not passed any blood since the third dose; feels better; is stronger, and has more appetite; lips rosy; more color in checks, and expresses herself as "wonderfully better."

3rd.—Ordered twenty drops of the tincture of sesquichloride of iron, one ounce of the infusion of columba, to be taken twice a day; one grain of compound calomel pill, every night.

July 24th.—Still continues much better; the pills act gently on the bowels.

Case 2.—M. E., aged thirty, female; ill ever since March
8th, with looseness of the bowels, pain in the left flank, and a discharge of purulent, fetid matter streaked with blood, per anum; emaciated, and has a hectic blush on cheek; skin muddy, and of a dirty yellow tinge; cries, and feels thoroughly miserable with her condition, and disgusts others by the smell which the discharge, which passes involuntarily, gives her; has piles; has taken nearly all the medicines enumerated by Dr. Copland as useful in such cases, with but little benefit.

May 14th.—Ordered, compound tincture of benzoin, twenty minims, three times a day.

June 8th.—Nearly well; motions natural. To take, tincture of sesquichloride of iron, ten minims; infusion of columba, one ounce, three times a day.

Case 3.—S. M. age not ascertained; aborted four weeks previously; after which she suffered very much from hemorrhage. Having attended her for this, and finding her again weak, faintish, complaining of pain and loss of blood, she was treated at first for loss of blood per vaginam, and took some pills of acetate of lead and opium. Two days after, finding her no better, I made a more minute inquiry into her case, and found that the loss took place by the rectum. She was now ordered the tincture of benzoin, and, three days after, I found that the discharge had ceased, and the motion had become quite natural.

Case 4.—July 28th, 1854. John W. aged two years; bowels loose; discharge of blood and matter; pain. Ordered, a mustard poultice. Mercury-with-chalk, two grains; compound ipecacuahna powder, one grain, every four hours.

July 30th.—State of bowels not relieved; drowsy; pain severe. Ordered, a warm bath. Mercury with-chalk, two grains; ipecacuanha powder, half a grain, every three hours.

August 1st.—Much better; no blood by stool; no pain.

7th.—Relapse; considerable pain; powder as last prescribed again tried; also a chalk mixture, with ipecacuanha, etc., but without benefit. Ordered, compound tincture of benzoin, one drachm; tincture of opium, ten drops; peppermint water, three ounces; two small spoonfuls, three times a day.

10th.—Nearly well; felt relief shortly after taking the medicine.

15th.—Cured. [London Lancet.]

Marriage between Relatives considered as a Cause of Congenital Deafness. Read before the Academy of Medicine, 29th of April, 1856, by M. Meniere, Fellow of the Faculty, Physician of the Imperial Institute for the Deaf and Dumb. (Translated from Gaz. Méd. de Paris.)

A person is deaf and dumb, is it possible to determine the causes which have produced this fearful calamity? Such is the problem which we would endeavor to solve; but thus stated, and in its vast
extent, it admits of expansion far out of all proportion which the Academy accords to physicians desirous of making known the result of their researches. I shall, then, confine the subject within bounds, by elimination, in order to arrive at the principal causes—at those which have, so to speak, a specific character, and which may become the source of efficacious preventive measures.

Let us take, at hazard, a number of one hundred deaf mutes, from the ages of ten to fifteen; let us select the intelligent, those instructed, and furnished with papers containing positive information on all points of their history; we shall find that two-thirds of these children heard up to a more or less advanced age, and that they belong to the great class of deaf-mutes arising from accidental causes. We need not occupy ourselves with them here, as the reasons which have destroyed their hearing belong to the department of ordinary pathology.

The remaining third—that is to say, deaf-mutes, having never heard, those who may be regarded as affected with congenital deafness, and, as a consequence, with dumbness—are not deaf to the same degree; there are those among them who are accessible to certain sonorous concussions—who perceive some noises, and even sounds. These slight differences do not affect their general condition: they are the deaf and dumb, whom no medical art can cure; at least hitherto, it has not beneficially modified this state of being. But if therapeutics are insufficient, it is not, therefore, necessary to abandon these unfortunate persons; art may intervene efficaciously in seeking to prevent the evil, and it is the attainment of this desirable end that gives such deep interest in the study of the causes of this malady. There, where therapeutics are at fault, hygiene offers remarkable resources; let us, therefore, endeavor to show that congenital absence of hearing belongs more especially to this great division of the art of curing.

When the parents of a child deaf and dumb from birth are carefully interrogated, so as to ascertain the probable causes of this infirmity, we find the same accidents almost always indicated. The vivid impressions felt by the mother during gestation play the prominent part; but if the knowledge of these facts is insisted upon, in order to appreciate their value, their unimportance is soon comprehended, arranged as they are, for the most part afterwards. The human mind easily creates circumstances capable of explaining phenomena; it accepts more readily those which are of a mysterious nature, and it clings to them the more closely the less they are to be explained.

We have no reason to deny, absolutely, that the very vivid impressions experienced during pregnancy may exert an unfavorable influence upon the fetus; but as nothing in science has demonstrated to us that causes of this kind have a specific action upon the sense of hearing, we shall not allow ourselves to dwell longer on this point of the controversy.
After the moral impressions come the physical accidents, and mothers often invoke them as the cause of the infirmity of the child. Falls, blows acting directly upon the distended uterus, producing the cessation, during a longer or shorter time, of the movements of the infant, may have a direct influence upon it; but in what way can this action be injurious to the ears? Why should deafness be the result? Hitherto, nothing has led to the appreciation of such a fact; therefore we are not authorized to take it into account. Hereditary transmission remains; for we are naturally led to believe that the loss, or rather the absence, of an organ like the ear, is the consequence of a primary congenital state, and it is asked if the parents have not themselves a similar infirmity. During a long time, researches, made with a view of throwing light upon this point of the history of deaf-mutes, have furnished a negative result—that is to say, it has been found that children deaf and dumb from birth were born of parents who had the faculty of hearing. But statistical truths are rarely absolute,—figures have ceased to favor this opinion; new facts, closely observed, demonstrate that deaf-mutes have given birth to children deaf and dumb; but I hasten to add that these few facts only constitute an exception to the rule previously indicated.

Observations, instituted with the greatest care, show that the infant during the intra-uterine life, may be affected with cerebral lesion; those who survive these serious maladies, hydrocéphales, microcéphales, are ordinarily idiots, or paralytics; in some of them there is a want of hearing, but it is less the ear than the brain which is injured,—intelligence is wanting rather than the sense of hearing, in such a way that it is difficult to establish the diagnosis of deafness. However, facts of this kind, although small in number, have a real importance; they show that, in certain cases, the absence of hearing may be the consequence of an organic disease developed before birth. We may even admit that infants totally deaf upon coming into the world, owe this infirmity to cerebral accidents supervening during the intra-uterine existence, and analogy suffices for this; but in many cases no trace of such lesion exists, consequently there is no sufficient reason for recurring to this supposition.

When a pregnancy has, however, been disturbed by serious accidents,—when the movements of the foetus, before regular, have suddenly made considerable and unusual variations, or have ceased for a long time, we should be authorized to think that the child had been attacked with some serious evil; and if, after birth, the want of hearing should be promptly proved,—if the head should present some anomalous malformation,—or if nothing analogous should be found,—we might regard deafness as a direct consequence of these accidents; and I know not that the most severe judgment could make any serious objection to this manner of viewing the subject.

In the greater number of cases, those born deaf and dumb can not come under any of the preceding categories. The most careful
and persevering researches fail to find, in any of these causes, materials adequate to legitimize the results. It is necessary, then, to go still farther, to mount yet higher,—to the human organism,—and see if there do not exist circumstances calculated to modify it in such a way that certain morbid conditions should manifest the power of these primary causes.

Invincible arguments exist to support the following proposition: Man, or rather the human species, deteriorates under certain appreciable conditions. All the world feels that this is true; the history of all ages and all countries is full of facts, which are of public notoriety; all have seen and known of races of men degenerated, debased,—of families becoming extinct; and science cannot answer, at the present time, the question, to what causes these public and private calamities are to be attributed.

The influence of climate has been more generally cited than any other, because it involves not only the physical, but the moral nature, the diet, and the education, the form of government, and all that constitutes the organization of society.

Let us, however, abandon these speculations, in order to come simply to the statement of certain facts, adequate to furnish legitimate argument; let us examine the statistics of authenticated documents, and find, for, example, what countries in Europe contain the largest number of deaf and dumb. Since the commencement of this century, the greater part of the governments, stimulated by the zeal of some generous souls, and at last by public opinion, have sought out calamities in order to afford relief; they have made an inventory, as it were, in this particular; and, by successive examinations, the number of deaf and dumb in each of the central states of the Old World has been ascertained. Official statements have been published in various works. I have indicated some of the principal results in a book printed more than fifteen years ago, and I may add, that since that period they have not sensibly altered.

One general fact is apparent from those documents,—the number of deaf and dumb vary much in each country; sometimes there are one in every three thousand inhabitants, sometimes one in two thousand, and in certain localities one in two hundred, and even more. These great differences can not be attributed to the inaccuracy of official statements; only want of precision in determining the infirmity can be taken into account. Very often idiots are confounded with the deaf and dumb, but this cause of error is not sufficiently great to vitiate the results of approximate statistics.

If there are countries where there are ten times more deaf and dumb than others, it is impossible not to believe that there exists some local causes capable of producing such a result. Now, these regions so sadly circumstanced are those also which contain the greater number of cretins—those in which the human race manifests the characteristics of the most profound deterioration. Let us endeavor, then, to reach the true source of this public calamity.
The average duration of life is not the same in all the countries of Europe. If it attains thirty-eight and forty years among the most hardy nations, and the best provided with all the necessaries of existence, it falls to thirty and to twenty-eight in countries less favored in this respect. There, also, the greater number of children die in infancy; there, also, youth is less rich in healthy subjects; and among the adults the number of individuals fit for military service diminish in a considerable proportion. Wherever there are many cretins, wherever the children commonly die before the fourth year, wherever the cases of exemption among the conscripts are numerous in consequence of infirmities, it is there also that we can count the largest number of deaf and dumb. It is impossible to avoid establishing a connection between these facts: they are harmonious; they are all the expressions of a like condition—namely, the deterioration of the species, the diminution of the vitality of individuals.

We thus reach the culminating point of this important question: the determination of the general causes which exercise an unfavorable influence upon the human organism. Among these causes is one which plays a prominent part; it is in some measure recognized by all the world; it forms one of those traditional ideas which time consecrates, which certain laws confirm, which everybody accepts, and which, nevertheless, are not clearly enough defined to give rise to official prescription. I speak of marriage between relatives—consanguinity between husband and wife.

It would not be difficult to discover, in the most ancient, literary, or religious records of nations, traces of this idea. Former legislators have given rules for the civil constitution of families, and these ordinances are founded upon the consideration of the evils which result from the union of individuals springing from the same origin. The crossing of races is the natural consequence of these practical views; and it must have entered, gradually, into the intelligence of nations, that to intermarry with strangers was a guaranty of the preservation of the human species. But between these vague beliefs and a law there is a wide difference; and it became necessary to place this rule under the protection of Christianity, in order to insure for it all the development of which it was susceptible.

During a long succession of centuries, marriage was absolutely interdicted between all persons related in any degree whatever; the church alone reserving the right to infringe the rule she herself imposed, in rare instances, the value of which she could appreciate. But these rigorous measures were subject, like many other things, to deplorable relaxations, and at this time all trace of these interdictions has disappeared. If ecclesiastical dispensations are still solicited, it is very well understood that there no longer exist any invalidating circumstances, that civil marriage out of respect for individual liberty is authorized to all degrees of consanguinity, and that, with the single exception of his mother or sister, a man may
marry whom he will. Religious law must follow the civil law—it bestows the consecration necessary to an act already accomplished; and whatever difficulties it opposes to this union, it must ratify what the civil state has permitted. The consequences of this liberty are deplorable—more deplorable than would be believed, for it is easily demonstrated that here is to be found the principal cause for the deterioration of races. Experience has abundantly proved, that in the work of the reproduction of living beings, whatever place in the scale of nature they may occupy, there are useful conditions which favor the result, insure the vitality of the productions, not only for the present, but the future; for the duration of the species is guaranteed in proportion to the perfection of the individual. Do we not know that in agriculture all the vegetables we plant and cultivate are subject to laws based upon centuries of experience? Is it not the same in domestic economy for the reproduction of all animals useful to man, and do we not know, in these cases, habits which establish the absolute value of the crossing of the races?

We cannot deny the analogy of functions between all living beings. It is not necessary to be a great physiologist in order to comprehend that wheat, hemp, maize, all alimentary and textile plants, etc., deteriorate when their seeds are not renewed, and their distribution varied. The most common experience demonstrates that in the animal races the productions, to be healthy, should be the result of the introduction among the herd of foreign blood. Now, why should it not be the same in the human family? If our pride shrinks from such comparisons, we must, nevertheless, submit to them, for they are necessary, and the title of nobility inscribed upon our foreheads does not destroy the tie of parentage which connects us with the rest of creation. Thus man is subject to the same fatal law which imposes upon all living beings; he can continue in time and space only by the aid of usages which he has in common with all who breathe; and the law of general preservation is for him as for others—the crossing of races, the renewal of the vital agencies.

Those who live in flagrant contradiction to these universal rules will, sooner or later, feel the punishment of their faults, and suffer the disastrous consequences of a practice in opposition to the precepts of experience. Marriage between blood-relations is nowhere of such frequent occurrence as in the localities where are born the greatest number of deaf and dumb. I have before described certain valleys of the canton of Berne, the inhabitants of which, collected ir masses, and living almost without any means of communication with neighboring countries, offer all the conditions favorable to these unions between relatives. There, the men marry very young, in order to avoid the troubles and cares of a celibacy without compensation. They marry their cousins, and all the families have beer allied for a long time. The children of two brothers, of a brother and of a sister, marry as a matter of expediency, and thus preserve
the inheritance intact; consequently, the new family is founded in physical conditions than which nothing could be more injurious. It is in the midst of these isolated populations that we find, in all its hideousness, the degradations of the species, the corruption of the race. There reign cretinism, idiocy, and congenital deafness, to such a degree that the demonstration of the fact I have advanced blazes forth with all its brilliancy. The experiment has been made a long time; it is practiced among the masses; the consequences which flow from it are as clear as they are afflicting; and, finally, it would be to reject all evidence not to recognize in these results the condemnation of such abominable customs.

That marriage between relatives is one cause of the deterioration of the species is certain; but it may be asked, how can congenital deafness be considered as a proof of the degeneration of the offspring of these unions? I do not pretend to clear up all these mysteries, only it may be said, as a general rule, that the nervous system, which holds the first rank in the human organization, is also that which suffers the most serious injuries: shortness of stature, slowness and imperfection of development, infancy prolonged far beyond its ordinary limits, as M. le docteur Baillarge has so fully proved, and, finally, obtuseness of the senses, and more particularly feebleness, or even want, of hearing, are the disasters which are to be observed in the brain and its dependencies. It is man reduced to a merely negative condition, manifesting only rudimentary traces of intelligence, a sorrowful object of disgust to all except to the unextinguishable tenderness of maternal instinct.

If we are reproached with coloring too highly the features of this picture,—of attributing to a single cause this degraded organism, while it may be the result of a rare combination of exceptional circumstances,—it would be easy to prove that it is in nothing exagerrated, and that the practice of marriage between blood-relations is the most important of those which can be invoked in such a case. There exists, in truth, families who, living in the midst of luxury and abundance, watched over with the most enlightened care, offer, nevertheless, the sad spectacle of these infirmities of body and mind. These families, instead of seeking a new element adequate to revivify their exhausted organism by making foreign alliances, obstinately persist in contracting marriages with branches issuing from the same trunk, perpetually contract the circle instead of enlarging it, concentrating in these intimate unions the double influence of an origin already debilitated, and suffer the laws of degeneration imposed upon all those who walk in this path of perdition. If, in the confined and isolated localities I have mentioned, a man marries his own cousin,—if the uncle marries his niece, because the scarcity of matrimonial elements renders the thing necessary, other considerations dictate the same practice among those especially who occupy the most elevated stations in the social scale. Royal families, environed by motives of policy, subjected to the exigencies of govern-
ment, or restrained by incentives of a different order,—as the dominant religion of the people over whom they hold sway,—can only select their alliances within a very narrow circle; and thus, in spite of the best-directed care, the royal races become enfeebled under the fatal influence of these intermarriages among themselves. Some of these unions remain absolutely sterile; others produce miserable offspring, destined to premature death; the intellect is weakened, or imbecility reveals itself, and even idiocy pierces through all the privacy of a respected seclusion; and the people, who willingly believe that all the miseries of life are reserved for them, see with secret contentment that the throne is not exempt from the most cruel sorrows, and that all the happy privileges are not the portion of those who are the sovereigns of the world.

The history of all ages contains terrible lessons of this kind; it is not necessary to recall them; whoever will reflect upon this subject will find in his memory many celebrated examples to the support of this argument, and will rest convinced that in marriage there exist natural incompatibilities: and that in transgressing the law of dispersion of races, the lessening and even the destruction of the species is involved.

In stating thus distinctly this precept of public hygiene, we have for an end the prevention of the development of one of the most deplorable infirmities; we would wish to exhaust at its source the cause of these organic deteriorations, whose secret reveals itself to the attentive observer. Pathological anatomy of the nervous system, with whatever care it may be exercised, does not always show the lesion which determines congenital deafness; but, in taking counsel from experience, we may destroy one of the most prolific causes of this organic imperfection, and we may diminish the number of those unfortunates to whom the most enlightened and conscientious medical science has not hitherto been able to afford the slightest relief. We prevent formidable evils, which would be better still than to cure them; and, finally, families would have no longer to deplore the existence of these imperfect creatures who will rise up in judgment against the improvidence of their authors.—[American Journal of Insanity.

Cases of Tetanus. Reported by J. G. Sewall, M.D., Physician to the Northwestern Dispensary.

Case 1.—Tetanus (idiopathic).—Thomas McAndrew; a native of New York; of Irish parents; aged 10 years. When taken ill, resided at 122 Perry street, in the basement. Owing to the unkinc treatment of his step-mother, he was removed to the shanty near 9th avenue. He was often forced to sleep in wet clothes, and turned into the streets at night to find shelter where he could. Abou
Sunday, September 7th, was seized with what seemed a bad cold; had sore tongue and throat.

September 9.—Tetanic symptoms set in, the muscles of the head and neck first becoming rigid; afterwards those of the shoulders, trunk, and lower extremities. Through the whole course of the disease, the upper extremities were but slightly affected.

Sunday evening, September 14.—First tetanic spasm. Tuesday, 16th, had two. 18th, one; and so on every day one or more.

September 16.—Was first seen by physician. Up to this time had received no treatment save a blister applied to throat within two or three days of the attack. At first it was difficult to decide whether the blistered surface or the disease occasioned the most suffering. General condition was good; pulse 80 to 90, strong; skin natural; is devoid of pain; articulation intelligible though imperfect; muscles of head, neck, and trunk, rigid; head thrown back; bowels constipated; swallows with difficulty; throat slightly inflamed, filled with mucus, giving a rattling sound to respiration.

An ounce and a half of castor oil was ordered, with dressing for blister, and mild liquid diet.

September 15.—Condition the same; bowels freely opened. Ordered tr. assafet. 3 i. every three hours, with liniment containing chloroform to spine.

September 20.—The same. Takes beef-tea and broths. Continue same medical treatment.

September 21.—Consultation was held. General condition the same; pulse 88; skin cool; has had several severe paroxysms, with marked opisthotonos; continue assafet. and apply ice to whole course of spine. This was tried for one day without marked effect.

September 22.—An enema of oil of turpentine and castor oil, to relieve constipation. Continue other treatment.

September 23.—Arms somewhat rigid; jaws less movable; surface cool; pulse 90; strength slightly diminished. At this time the violence of the paroxysms were much abated, being limited subsequently to sudden twitchings of the body, brought on by movements or attempts at swallowing, or even unexpected changes in position, or remarks of attendants; occasionally marked by considerable energy, yet always without pain.

September 27.—Pulse 96, intermittent; bowels freely opened. Omit assafet. to take chloroform, fifteen drops every four hours. Considerable mucus rattles through lungs.

September 28.—Slept well; has had no spasms; did not get his medicine; appears and reports better.

September 29.—Pulse 99; three spasms reported since yesterday, P.M.; little sleep; no pain, although constant expression of anguish; tongue coated with thick yellowish fur, cannot be protruded; moves imbs freely; muscles of neck and abdomen rigid; swallows freely. Beef-tea and punch.
September 30.—Pulse 84; slept well; did not get chloroform till to day; takes two quarts milk per diem by report.

October 4.—Chloroform discontinued, and tr. cannabis indica, 20 drops three times a day, ordered. Pulse 96; has had three or four dejections after oil; spasms reported occasionally in night; appetite good; improves rapidly.

October 6.—Pulse 84; sleeps well after medicine, which he now takes but twice a day. Yesterday, at one o'clock, had a slight spasm with protrusion of tongue; perspires freely; gets out of bed now and then.

October 13.—Pulse 92; has improved in all points. All medicine has been discontinued for a few days past, and may now be altogether laid aside. Appetite is strong; muscles much less rigid; sleeps well and reports very favorably generally.

October 22.—Has been up and dressed for a few days past; walks about the yard barefoot, and without coat or hat, by holding on to the fences; muscles of neck and abdomen very much relaxed; bowels regular; appetite strong; sleeps well.

November 1.—Cannot be kept in the house; moves about rather stiffly, walking on his toes in part; says he cannot run, yet can climb about with ease. Discharged well.

Case 2.—Tetanus (traumatic).—Felix McGill; æt. 35; Ireland. First seen, Saturday, October 4.—Eighteen days previously, fell with a scaffold six or eight feet high upon a pile of stones, sustaining an incised wound of the chin and of forehead, the edges of both of which were united by sutures. Both now appear to have kindly healed. Was well and about till yesterday, when he experienced a sense of constriction about fauces, with a stiffness of the lower jaw, and inability to protrude tongue, with a fear that if he did so he might bite it off. Accompanying these symptoms was a severe pain between shoulders. Has had several paroxysms, when mouth was drawn to one side and neck very stiff. These attacks resemble, in part, epilepsy, the patient lying on the floor; foaming at the mouth; great rigidity of muscles of neck and face, with strong facial contortions and a drawing of the facial muscles to the left side, the right appearing palsied. One of these lasted ten minutes without loss of consciousness. Tongue partially protruded affected the left side, the right commissure of mouth being shut while the left was raised and in motion. This condition was permanent; no pain in spine; sight and hearing both equally good on either side; mouth cannot be opened above one quarter of an inch; pulse 60, soft and natural; face flushed with an anxious expression. Can sit up or walk, though with difficulty.

Blister between shoulders. Cathartic of oil, also tr. cannabis in dica, gtt. xx. every fourth hour.

October 5.—Much the same; sleeps after tr.; has had no paroxysms; oil operated.
October 6.—Was seen by two or three doctors, who used opiate enemata. While one was being administered in evening he suddenly died.

Case 3.—Tetanus (traumatic).—John McG., æt. 9½.

July 16.—Sustained a slight wound of left foot, between second and third toes, from a rusty nail. Went to school in two or three days after, having suffered no inconvenience beyond a trifling lameness.

Tuesday, August 1.—Complained of soreness of throat, which attracted no attention till Thursday the 3rd, when his mother walked with him to the dispensary, to be treated for it. The physician in attendance noticed, on inspection, an inflammatory blush about the fauces, with some tumefaction, and ordered a stimulating poultice, giving internally spirits mindererus. The boy walked home, and was about the house the rest of the day. Next day, by report, had a high fever, with increase of stiffness and soreness of throat.

August 5.—Found him in bed, tongue hot and dry, countenance anxious, pulse about 90. Complains only of throat, on seeking to examine the tongue, found patient unable to open mouth more than one-fourth inch, through which space its tip was protruded. Thinking the stiffness of the jaw arose from the supposed quinsy, I gently endeavored to depress it, preparatory to the introduction of an instrument, for the inspection of the fauces, when the boy, for the first time, was seized with tetanic convulsions. In lifting him from the bed, the anterior and posterior muscles of the trunk and lower extremities, so counter-balanced each other, that he preserved the stiffness and straightness of a board. Great dyspnœa ensued for a few moments, and the countenance assumed a livid hue, probably from spasm of the glottis. Consciousness was preserved during the convulsions, the boy asking in their midst, that his tongue, caught between his teeth, might be liberated, he being unable to do so for himself. In a few minutes he was returned to bed, the tetanic rigidity continuing, being aggravated, at intervals at from ten to thirty minutes, by strong convulsive movements of various degrees of severity, lasting from one to five minutes, accompanied with severe dyspnœa. Thus he remained during twenty-four hours, without sleep, consciousness, with the power of deglutition and articulation, remaining intact. The only voluntary muscles that appeared to be unaffected were those of the arms, and partially so of the face; no medicine was ordered save a calomel purgative.

August 6.—Continues much the same; no effect from medicine. Compound powder of jalap was ordered. Pulse 92; cannot now protrude tongue at all. While the convulsions seize him, he requires to be raised entirely from the bed. In this act, the body moves upon the feet as a fulcrum being, together with the lower extremities, extremely rigid. Four, P.M.—Free operation from medicine, with relief. Ordered Hoffman's anodyne and tincture hyosciamus in drachm doses, every two to three hours.
August 7.—Much as before; no sleep as yet, much thirst, and drinks freely, holding the cup himself; urinates also very freely. Has no pain in wound, which is barely perceptible, nor has had at any time, save when exercised by the convulsive movements. Omitted anodyne of yesterday, ordered tincture cannabis indica, fifteen drops every two hours, terebinthinate liniment to spine, and poultices to abdomen. Four, P.M., slept one and a half hours, the first for more than two days; rigidity less, can sit propped up at an obtuse angle, lower extremities bend upon knees by his own effort, can open mouth one-fourth inch, paroxysms fewer. Continue cannabis indica every hour, if paroxysms are more often; beef tea.

August 8.—Has had two or three severe convulsions, rigidity now very marked; pulse 120; mind clear; no more sleep; did not get medicine, but three times in night; continue it, twenty drops every hour; takes beef-tea freely; tobacco poultice to abdomen.

August 9.—Has slept perhaps one hour, all told; paroxysms continue at the intervals, before alluded to; some last longer, and are more severe; complains of no pain, save during convulsions, and now and then in right thigh and foot. For two days has had a cramp-like pain, confined to right foot, occurring frequently, and relieved by slight flexion of foot upon the leg; muscles of face quiet, save in the paroxysms, when they are strongly contorted; mind clear, talks and swallows freely; left arm paralyzed, moves right readily, still holding his cup; is not apt to have a paroxysm directly after swallowing; which has been noted from the first. Medicine has been very irregularly given; continue it. Two, P.M., gave chloroform by inhalation, was kept under its influence for five or six hours, during which time he slept; during sleep relaxation of all the muscles ensued.

Thursday, 10.—Pulse 130, very small; countenance has expression of great exhaustion; rigidity as great as before; body more strongly inclined to left side. Chloroform was omitted after nine last evening, as child refused it; commenced giving it this morning. When patient was partially narcotized, a frightful convulsion ensued, lasting from five to ten minutes, giving a strong feeling, as if dissolution were impending; chloroform was discontinued. Father reports that since midnight, he had two or three paroxysms, more severe than the one just alluded to. At two, P.M., patient died, no more paroxysms having ensued. Two minutes before death, he was conversing with his parents.—[N. Y. Jour. Medicine.

Nitric Acid as a Remedy in Pertussis—with Remarks on its Modus Operandi. By CHARLES WITSELL, M. D., of Cheeha, S. C.

Pertussis made its appearance upon Mr. S. C—’s plantation about the first of June. June 17th, I was requested to visit the place: I found six children quite sick with complicated hooping-cough; and I learnt that a negress, about a year old, had died in
convulsions the night before I was called. The disease was very violent in its form; the paroxysms of cough were frequent, long, and painful; and of those I had under treatment, one had inflammation of the brain, a second a discharge of pus from the right ear, (which I think was caused by the disease,) and a third, a girl about eight years of age, had a discharge of blood from the nose during each paroxysm of the cough, and was much debilitated. The remaining three were affected with infantile remittent fever.

The children upon the plantation sick with Pertussis, at that time numbered about twenty; and each stage of the disease was present. Alarmed at its violence, I was induced to give Nitric Acid a trial; and I used it as recommended by Dr. McNelly, of Tennessee, sweetened and diluted so as to resemble lemonade; and I directed the nurse to give the patients as much as they would drink.

The disease has passed through the plantation; and of twenty-seven patients only three died: two before I commenced with the Acid, and one after. (An infant was found dead in its bed; and died, I presume, of suffocation.) The patients used Roche's Embrocation from the commencement of the disease; but it continued severe until the Acid was used, when a marked abatement took place in its violence. The patients were also properly nourished. Great attention should be paid to this point in treatment. The diet of the sick should be simple and nutritious: but it is highly important that they should receive nourishment frequently, and in small quantity; for where they are fed but seldom in twenty-four hours, they eat voraciously. A full meal always excites a paroxysm of cough; vomiting follows; they are thus deprived of nourishment; their systems sink for want of nutrition; and they die of inanition. The negro constitution is naturally weak, and if not carefully husbanded, it readily succumbs under disease. Hence the awe with which the approach of Pertussis is viewed by the Southern planter. If the disease visits his plantation in summer, one in four cases usually fall victims to it. It is more fatal in summer, because at that season of the year children, residing in a malarious district, are extremely liable to infantile remittent fever; and when sick with the one disorder, and attacked by the other, they readily sink under the combination.

The next point that I will allude to, is the modus operandi of Nitric Acid in Pertussis. It is not without some embarrassment, that I attempt to show the manner in which Nitric Acid is beneficial in hooping-cough, as the pathology of the disease is still debatable, for it is only by ascribing to the disorder an inflammatory disposition, that I can account for the efficacy of the Acid. I have, however, good authority for so doing. Dr. Watt describes the appearances, on examination of several bodies, dead of Pertussis, as distinctly showing an inflammatory affection of the pulmonary mucous membrane; and he goes on to conjecture that
“hooping-cough consists in some eruptive disease of the air cells and bronchi, so minute as to escape ordinary observation, yet so considerable as to excite inflammation.” Professor Dickson, in writing of the disease, says: “It is, I conceive, in the first instance, a specific irritation of the bronchi, nervous and spasmodic, but readily becoming phlegmasial.” I therefore believe that Nitric Acid owes its efficacy in hooping-cough to an alterative power; for daily observation teaches us that Eutrophics place the system in a condition inimical to inflammation. So well is the fact known, that M.M. Trosseau and Pidoux, in giving the definition of an alterative, says: “they are agents that change the character of the blood, render it less adapted for interstitial nutrition, and for furnishing elements for acute or chronic phlegmasia; these take the name of alteratives.” The “specific irritation” of Pertussis, caused by the contagion, being prevented by the alterative, Nitric Acid, (by its producing certain changes in the blood,) from passing into inflammation, it soon ceases, and the disease ends. Nitric Acid seems to be peculiarly applicable to Petrussis, in-as-much as, in this disease, we frequently require a tonic influence upon the system; and Nitric Acid is both tonic and alterative.—[Charleston Medical Journal and Review.

EDITORIAL AND MISCELLANEOUS.

MEDICAL SOCIETY OF THE STATE OF GEORGIA.—We do not deem it at all too early, to call the attention of the Profession to the meeting of this Society next April. We most earnestly hope that the Profession will give this cause that consideration which, as Southern men and laborers in the field of a progressive Science, it deserves at their hands. To become a member of the Society, it is only necessary to attend, and apply for membership through some member of the body. Our last meeting at Macon, although rather thinly attended, was a most interesting and improving one to the members of the Society, and there is not one who attended at that time, but will join us in saying, that the enjoyment he derived from his visit to Macon, more than amply repaid the trouble of the journey.

Committees have been appointed to prepare essays upon many important subjects relating to the Science and Practice of Medicine, but voluntary contributions are ever looked for with great eagerness, and receive much attention from the Society. The next meeting will be held in April, at this place (Augusta), and the Profession here extend to their brethren at a distance, a most cordial welcome.
The North American Medico-Chirurgical Review.—The first number of this able periodical is before us, and it affords us much pleasure to call the attention of our readers to its valuable pages. In its present garb, the Review may be called a new comer to our sanctum; but in it, we recognize the spirits of two of our valued friends: the Philadelphia Medical Examiner and the Louisville Review recently departed, but now merged into one and embodied in this enlarged form, they come to greet us, and to claim from the Profession, the respect and patronage they so well merited and so long enjoyed in their former individual existence.

The present work is edited by Prof. S. D. Gross, of the Jefferson Medical College, and Prof. T. G. Richardson, of the Medical Department of Pennsylvania College, both gentlemen, too well known to need any endorsement from us. It is published in Philadelphia, by the long established house of J. B. Lippencott & Co. The style and execution of it, well sustain their reputation in their particular department.

We have none other than the most cordial greeting to give this new Bi-monthly Journal, for while as a Review, we think that it will do good service to the Profession; we do not feel that as a competitor, its success can diminish that of works like our own, devoted as we are more particularly to another branch of journalizing, viz., the early promulgation of Medical news for the daily supply of the Profession.

A Review, in our opinion, stands in a somewhat different relation to its readers, than do the other scientific Journals. It is the selector of their reading, and the ordeal in which each new production is tried and each new opinion submitted to critical examination, before it is commended to their adoption. At the present day, when books are so multiplied and many of them so voluminous—and on the other hand, when time is so important to the active practitioner, these mentors and condensers are of great value to the Profession, and are becoming daily, more and more useful. The work now under consideration, however, contains several original communications, and will be found interesting in this phase as well as in that of a Review.

The monthly Journals we regard as a necessity to their readers. They supply the practitioner with new principles, new precepts and suggestions, as well as new experiences, at the earliest moment of their bringing-forth, and these serve to guide him and to sustain him in the every-day perplexities of his career, affording to the isolated, nearly all the advantages which would accrue from the frequent intercourse of minds and a diversity of ideas.

In order to carry out this important object efficiently, the entire space must be occupied with practical matter, devoted to the end in view, leaving the fuller criticisms and more extended reviews to works issued at longer intervals and which make this important branch, a principal object of their labors.
Our sixty-four pages, we find barely sufficient to elaborate the monthly accumulation of valuable matter which the daily progress of the science is crowding upon us, and which duty impels us to lay before our readers. We have held it an object very near to our hearts, to keep the Southern Medical and Surgical Journal, as it has ever been, the conservative exponent of sound Medical Doctrine, steering clear, if possible, of any involvement in the many vexatious jarrings which too often destroy the symmetry and dim the glory of periodical literature, both Scientific and Polite; rendering the life of the Editor truly, but a "vanity and vexation of spirit;"—a vanity, because it fritters away, in small things and personali- ties, time and labor which should be earnestly devoted to the high and important objects of his calling; and a vexation, because "grievous words ever stir up anger," and "an angry man stirreth up strife."


This truly excellent little work comes to us from a source in which we have great confidence. Dr. T.S. Powell having been long engaged in the Practice of Medicine in the Southern country, knows well how to appreciate the wants and also how to smooth down the rough places for the young practitioner in the same field. The title of his work should have been "The Young Physician's Friend and Pocket Counsellor," for it indeed contains much friendly advice and many suggestions, where impromptu action is necessary, which can with difficulty, be found any where else. The author has labored to make the work efficient and comprehensive, while at the same time, it is not encumbered with a bulk which would render it inconvenient.

The detail of daily intercourse between Physician and patient is well portrayed, and suggestions are made for his guidance under all circumstances; to the old and experienced Practitioner, we know, that these are not necessary, but to the novice, in his first entrance—on his debut in the battle-field of life—these very details, and the manner in which they are performed by him, make up the sum total of his success, and stamp him in the beginning, either as the promising aspirant or the awkward blunderer. There are many things connected with the Practice of Medicine, which require experience in the daily matters of ordinary life; persons out of the Profession are more or less familiar with them, and capable of passing judgment upon them; but the recent graduate devoted, up to his entrance into the Profession, either to study or to some solitary occupation, is unfamiliar with these very things, makes a faux pas, and his fate is settled in that
circle. On these points we think Dr. P.’s suggestions are very happy. The work contains also many useful formulae and prescriptions which will enhance its value to the junior members of the Profession.

Dr. Powell, we think, deserves the thanks of the Profession, and especially in his own State, and we take great pleasure in giving our recommendation to a work which possesses so entirely our approval.

Medical Department of the University of Louisville, Ky.—We regret to have to chronicle the burning of this fine edifice. It appears that little has been saved—College building, Library and Museum, all consumed in the devouring element. Loss estimated at over one hundred thousand dollars. The Trustees and Faculty have our sincere sympathy in their severe calamity.

_Burning of the Medical Department of the University of Louisville._—The Medical Department of the University of Louisville, including the library, laboratory and museum, was destroyed by fire on the 31st ultimo. The loss is estimated at $100,000, with insurance for $50,000. The building in which the “Old Medical School” was held, was donated by the city for this purpose in 1839, and since that time the Trustees and Professors of the Institution have been constantly adding to its usefulness and interest, by appropriations from their personal profits, for books, apparatus and medical curiosities; Professors Silliman, Gross and Flint having each, at different times, visited Europe for the purpose of procuring for the Institution instruments and books. Its library of French works, relating to the various branches of the profession, was, probably, the most complete in the Union. Some books, a few retorts, and jugs of acid, and a desk or two, was all that was saved of the contents of this interesting and useful Institution. In one hour all was destroyed. There were between two and three hundred students attending the lectures.—[Boston Med. & Surg. Jl.

We, not without some hesitation, introduce the following from a daily secular journal; but the statements so well corroborate what would be a rational theory in such cases, and at the same time are so suggestive in the treatment of Tetanus from this, and even from other causes, that we lay it before our readers to let them give it what importance they think it deserves. The chloroform, of course, did not act as an antidote, in the proper sense of the term, but only served to control tetanic action till the noxious substance was eliminated from the system.

"Chemical Poisons and their Antidotes.—The employment of subtle poisons in many remarkable cases of poisoning by intelligent criminals cognizant of their efficacy, has awakened a spirit of dread among the reflective portion of the community—as it is generally believed that science has discovered but few, if any, antidotes to the working of these destructive agents. This is particularly the popular prejudice with respect to strychnine; but we glean from the Rochester Democrat a case of a remarkable character, in which a complete recovery from the effects of this deadly poi-
son has been wrought by the application of most simple antidotes. The narration of this case we deem of such general interest as to authorize epitomizing its features.

A policeman having accidentally swallowed a large quantity of strychnine, which he used for dog-killing, at once struck upon the idea of attempting to neutralize its effect, by swallowing an emetic. This operation he twice repeated, before the services of a practising physician were called upon.

When the son of Galen arrived, he found the policeman laboring under severe spasms; his body was bent in the form of an arch, and his teeth were convulsively closed. The physician immediately placed the subject under the influence of chloroform, which appears to have entirely negatived the power of the spasmodic action, and continued the administration of powerful emetics; and thus, at the end of some twenty-four hours, the sufferer was found not only to be relieved of every particle of the poison, but entirely free from the spasms and convulsions which had seized upon him. At the last accounts the man appears to be rapidly recovering, he having retained consciousness during his period of treatment. We have now indisputable authority that chloroform, when correctly administered, acts as an antidote to poison; and the very simplicity of the remedy should place it within the reach, as well as remembrance of every individual."

Substitute for Cod-Liver Oil.

New York, Nov. 26, 1856.

To the Editors of the New York Journal of Medicine:

Gentlemen:—I wish to direct attention to the oily substance taken from the cavities in the head of the spermaceti whale, known in commerce as the head-matter. In summer, it presents the appearance of oil with a copious white fleecy sediment; but in winter, when chilled, resembles imperfectly frozen ice-cream or beef-drippings. It may be obtained from the manufacturers of sperm candles, and should be used while fresh (in its crude state as landed from ship-board), becoming rancid by long keeping. Ol, ethal would be an appropriate name for this substance as being composed mostly of oils and ethal, the peculiar base of spermaceti. "The spermaceti itself consists of two atoms of margaric acid, one atom of oleic acid, and three atoms of ethal. The ethal is remarkable for its analogy, in composition and properties, to the bodies of the alcohol group."—Kane's Chemistry.

It is preferable to the cod-liver oil, on account of being more agreeable to the taste, leaving a pleasant flavor in the mouth, and also being more nutritive and soothing. It is also less apt to disagree with the stomach, and does not cause offensive eructations. The patient may take it either pure, in coffee, or with bread, boiled rice, potatoes, etc. When required, tr. opii. camph. and syr. ferri iod. may be added.

Yours respectfully,

G. P. Cammann.

Messrs. Editors,—Will you publish the accompanying card in the New York Journal of Medicine, and oblige,

Yours respectfully,

G. P. Cammann.

A Card.—The Double Self-adjusting Stethoscope.—Being informed that Dr. Marsh, of Cincinnati, complains of my having infringed the patent of his double stethoscope, I would state that,
1. Dr. Marsh's instrument and mine differ essentially one from the other both in principle and construction.

2. I wholly disclaim any intention of interfering with the rights and interests of Dr. Marsh. I have never received any advantage from the sale of my stethoscope, but presented it free to the profession. Dr. Marsh has remained perfectly quiet for two years from the first appearance of the double self-adjusting stethoscope, and now, when the period has elapsed within which I might have secured myself by patent, if so inclined, his aim and endeavor seem to be not to dispose of his original patented instrument, but to avail himself of mine with all its improvements and adaptation to practical purposes. Is the Profession, then, prepared, on the ipse dixit of Dr. Marsh, to sustain him in the sale of my stethoscope under restrictions, when he has not taken the usual course to establish his legal right so to do. He certainly cannot acquire the moral right to receive the benefit of other men's labors.

3. Dr. Marsh's stethoscope appears to be but a modification of other instruments long known in Europe and now in my possession.

The above statement, including the opinion that my stethoscope is not an infringement of Dr. Marsh's patent, is made under advice of eminent counsel.

G. P. CAMMANN.


[N.Y. Jour. Med.]

Nutmiment in Sugar.—The nutritive properties of sugar are much underrated in this country. As an aliment, Dr. Rush, of Philadelphia, maintains that sugar affords the greatest quantity of nourishment, in a given quantity of matter, of any subject in nature. Horses and cattle were fed wholly on it at St. Domingo for some months, when the exportation of sugar and importation of grain were prevented from want of ships. During the crop time in the West Indies, all appear fat and flourishing. The cattle fed on the cane tops become sleek and in fine condition. The negroes drink freely of the juice, and become fat and healthy. Sir George Staunton observes, that many of the slaves and idle persons in China hide themselves among the canes, and live entirely on them for a time. In that kingdom the emperor compels his body guard to eat a certain quantity of sugar every day, that they may become fat and look portly. Sugar and rice constitute the common food of the people, and every kind of domestic animal is fed on sugar. Plagues, malignant fevers, and disorders of the breast, are unknown in the countries where sugar is abundantly eaten as food. The celebrated Dr. Franklin used to drink syrup every night before he went to bed, to alleviate the agonies of the stone.—Vir. Med. Jour.

Phosphate of Lime in the Treatment of Fractures.—We notice in a late number of the Gazette de Hôpitaux some cases of fracture, in which the union of the bones appeared to be promoted by the administration of the phosphate of lime. In one of these cases, of fracture of the humerus, there was union in forty-five days without the phosphate. The patient, a fortnight afterwards, fractured the arm in the same place, by a fall from a horse. The phosphate of lime was then prescribed, and the arm was placed in splints as before; the bones united in thirty-five days. The man had the ill-luck to break the callus a third time, and, under the use of the lime, the fracture was consolidated in twenty-five days. The remedy in
question has long been employed by M. Piorry in the treatment of rickets, mollities ossium and Pott's disease, but it appears to have been only recently suggested by M. A. Milne Edwards as a useful remedy in cases of fracture. We are surprised that no allusion is made to its employment in ununited fracture; whether it has been tried in these cases which are often so difficult to cure, we do not know; it would seem that it could hardly fail to be of service.—[Boston Med. Jour.

Iodoform.—A new preparation of iodine, discovered by Sevillas, and more especially brought to notice by M. M. Dumas and Bouchardat, possesses properties which promise to make it a valuable addition to our means of employing, with benefit, this important therapeutic agent. It presents itself in a solid state, in the form of small pearly particles, of a sulphur-yellow color, friable, soft to the touch, and with a very enduring aromatic odor. It contains more than nine-tenths of its weight of iodine. It is sweet to the taste, and is not corrosive.

It destroys animals in a smaller dose than iodine, after having produced more or less depression, and rarely produces vomiting. This depression is followed by a stage of excitement, convulsions, contractions, etc. Iodoform does not produce the least local irritation, not producing the slightest increase of vascularity of the mucous membrane of the stomach and bowels.

Its therapeutic properties are thus arranged:—1. In consequence of the large quantity of iodine which it contains, it can replace iodine and the iodides in all the cases in which these are indicated. 2. It is absorbed with the greatest facility. 3. It has the advantage over all other preparations of iodine of never causing any local irritation, or any of those accidents which render the suspension of iodine necessary in certain cases. 4. In addition to the properties it enjoys in common with iodine, it has advantages peculiar to itself: it allays pain in certain neuralgic affections, and produces a sort of local and partial anaesthesia of the rectum, when introduced into that organ. 5. It may be given in doses of from five to fifty centigrammes a day. 6. The principal diseases in which it has been employed with advantage are endemic goitre, serofula, rachitis, syphilis, certain affections of the neck of the bladder, or of the prostate, and certain neuralgic affections. 7. It forms, with the greatest facility, most important pharmaceutic preparations.—[Arch. Gén. de Méd. New York Jour. of Medicine.

Lobelia in Erysipelas.—Dr. Livezey recommends the saturated tincture of lobelia as a local application in erysipelas. He applies it by means of fine linen or muslin cloths, saturated and frequently renewed, and believes it will prove more satisfactory than other applications, acting on this inflammation especially, as it does upon the inflammation induced by the rhus toxicodendron, which he considers a similar disease to the other, each alike being capable of being arrested by this local application; the gastro-enteric affection being always attended to, not only in these, but in all affections.—[Memphis Med. Recorder.