Part Second.

REVIEWS.

The Diseases of the Ear: their Nature, Diagnosis, and Treatment.
By Joseph Toynbee, Esq., F.R.C.S.E., Aural Surgeon to, and Lecturer on Aural Surgery at, St Mary's Hospital, etc. London, 1860. Pp. 422.

This is altogether a satisfactory book; and in those days of much unnecessary medical literature—if, indeed, it be worthy of the name—it is refreshing to come upon the results of a long experience, and earnest, honest work. For the last twenty years Mr Toynbee has been known to the profession for his endeavours to elevate the subject of diseases of the ear to its due position as a branch of professional knowledge, based upon clinical observation and scientific research. During that period he has, from time to time, published in the various medical journals upwards of fifty original papers on the structure, functions, and diseases of the ear, in addition to two courses of clinical lectures delivered at St Mary’s Hospital, and published in the Medical Times for 1853–6. He has made, he tells us, upwards of two thousand dissections, more than one-half of which were diseased ears, the history and degree of deafness of a large number of these cases having been either previously known to himself or communicated to him by others. He has also formed a museum, containing nearly nine hundred specimens, illustrating the anatomy and pathology of the organ of hearing. He has evidently worked hard, and worked, too, in the right direction; and we congratulate him on the result he now gives us of his twenty long years’ experience. The book is worthy of the profession to which it is addressed, and is an exceedingly valuable addition to medical literature. It contains nearly one hundred exquisite illustrations. It is written in a clear, concise, simple style, and it is very practical; and, to any one accustomed to the examination of the ear, it is impossible not to admire the faithfulness with which the various cases and descriptions of disease are given. He has, indeed, no new and infallible cures for deafness to propound; but, like Mr Wilde before him, he has attempted, and with much success, to lay down just principles for an accurate diagnosis of diseases of the ear, and to found them upon the well established laws of modern pathology, practical surgery, reasonable therapeutics, and common sense.

The profession is not generally aware of the great advance that has been made within the last ten or twelve years in the diagnosis and treatment of diseases of the ear; and it is almost entirely to the
labours of Mr Wilde of Dublin, and Mr Toynbee, that we are indebted for the progress that has been made in this branch of our art, for our Edinburgh school has contributed little towards aural surgery. And now that there are two such excellent monographs on the subject—as the works of Toynbee and Wilde—it is to be hoped that medical men, at least, will no longer continue to assert that nothing is absolutely known about the ear, and that its diseases are still one of the opprobria of medicine; for, it is the experience of every one accustomed to the examination of the ear, that its diseases are not more difficult to diagnose, nor are they less within the reach of scientific treatment, than those of the eye, the joints, or any other organ whatever.

For in what consists the ordinary routine treatment for deafness in most parts of the country at the present time? In the first place, there is generally no examination whatever made of the ear with the speculum; and, for the purpose of a correct diagnosis, or indeed of any diagnosis at all, the use of the speculum is just as necessary in aural as in uterine disease. Beyond a good syringing to begin with, whether there be anything in the canal or not, the treatment generally consists in either doing nothing, and recommending the patient not to quack, or some harmless remedy is prescribed, such as almond oil or glycerine, or a mixture of the two, and for the time the patient is got rid of. If discharge is present, he is told to let it alone; and if there is tinnitus, like to drive him mad, he is comforted by the opinion that his stomach may probably be at the bottom of it, and that it will go off; or there may follow a course of blind blistering, or else, especially with the older practitioners, a more dangerous class of remedies is prescribed, with the view of stimulating the ear, as the phrase is—such as the essential oils, oil of turpentine, cantharides, strong tinctures, etc., which are poured, without remorse, into the ear, till the patient is reduced to the state so graphically described by Hood in his “Tale of a Trumpet:”

And yet the almond oil she had tried,
And fifty infallible things beside,
Hot and cold, and thick and thin,
Dabb’d and dribbl’d and squirted in.
But all remedies failed; and though some, it was clear,
Had made a noise in the public ear,
She was just as deaf as ever, poor dear!

We have again and again seen severe inflammations of the ear produced by these stimulating applications. In several cases diffuse inflammation of the meatus was the result, ending in the destruction of the membrana tympani and complete loss of hearing. Cases like these occurring in the hands of intelligent surgeons and honest men, who would never dream of treating an inflamed urethra or an inflamed rectum by injections of turpentine, can only arise from their having had no opportunity afforded them of seeing or having their attention directed to ear diseases during their student days. But
are things any better yet? Our students are still taught, in their most popular text-books, that earache is a true neuralgia of the ear, and have no opportunity given them of making themselves practically acquainted with ear diseases; and of the large annual number of our Edinburgh graduates, are there any who, at the time of their graduation, have ever seen the membrana tympani through the speculum, or who are capable of conducting properly the examination of the simplest form of aural affection?

Mr Toynbee’s book is throughout very practical, for into the anatomy and physiology of the organ he does not enter unless when necessary for the elucidation of its pathology and treatment. One of the first of the series of tables, of which there are many throughout the work, gives an analysis of 165 cases, showing the effect produced on the hearing by the removal of an accumulation of hardened cerumen. Contrary to what most people would expect, in only 60 of these was the hearing power restored to its natural standard; the undue accumulation being, in the others, symptomatic of deeper seated disease, and showing, therefore, the importance of making a careful examination after the removal of such collections, because, if the hearing power be not wholly restored, some other disease is present which will require attention.

Three varieties are given of that very common affection of the meatus, polypus. It is impossible to reconcile the different descriptions given by Mr Toynbee and Mr Wilde of these polypi. We believe, however, that all the varieties of polypus are originally the same, but that they become modified by circumstances according to the duration of the disease, state of discharge, condition of the patient, etc. At all events, when present, they must be got rid of; and, for this purpose, various instruments are described. For the removal of most polypi our experience is in favour of Wilde’s snare; though, for the destruction of smaller growths, or where they spring from near the membrana tympani, Mr Toynbee’s favourite instrument, the lever ring forceps, is very useful and convenient. Who the inventor is, is not stated, but it is certainly a most ingenious instrument; and it is surprising what a large and firm growth such a slender looking thing will sometimes remove. We cannot understand Mr Toynbee’s objection to the use of the solid nitrate of silver in removing small polypi or in destroying the bases of larger ones. We have never found it to occasion the inconveniences which he ascribes to its employment. A far more simple and effectual way of doing, however, is to touch the base, which is often left, with the galvanic cautery.

Many interesting cases follow of relief from the use of the artificial membrana tympani—an invention, the sole credit of which belongs to Mr Toynbee. The relief sometimes afforded is immediate and wonderful; and we know of some cases where they have been worn with immense benefit for four or five years. Most patients, however, will not take the trouble to use the artificial membrane if the
The drum is destroyed but in one ear, and if the hearing in the other is at all good. The cases in which we have seen the greatest benefit derived from their employment are those in which the membrana tympani has been almost entirely removed. The older remedy of the moist cotton, however, seems to answer often quite as well.

One of the most common causes of deafness, and one generally easily removed, arises from obstruction of the faunal orifice of the Eustachian tube. Mr Toynbee has done much to simplify the diagnosis of this affection by the use of the otoscope, which is simply the stethoscope in another form. As a means of diagnosis of occlusion of the Eustachian tube, its employment is, for all practical purposes, quite sufficient, and superseded, as we have long believed and practised, the use of the Eustachian catheter. As a remedial agent, however, the catheter is occasionally of great value; its indiscriminate use, especially as a means of diagnosis, is unnecessary, and may be very mischievous. We are glad to find also, that Mr Toynbee has no more than Mr Wilde, any faith whatever in injecting any substances, gaseous or fluid, into the middle ear of patients—such proceedings, like much Eustachian catheterism, being useless, and generally practised as a means of humbugging them.

He has shown that the Eustachian tube remains always closed, except during the momentary act of swallowing, when its muscles—the tensor and levator palati, which are attached to its orifice—cause it to open. This is explained in the following way:—"If the cavity of the tympanum be partially distended with air, by making an attempt at a forcible expiration through the nose when the nostrils are held closed, a sensation of fulness or pressure is experienced in the tympanum, arising from the pressure of the air against the inner surface of the membrana tympani—a sensation, however, which does not disappear as soon as ordinary respiration is carried on, but remains until the act of swallowing is performed, and the air thereby allowed to escape. Again, if the mouth and nose be held closed during the act of deglutition, the same sensation of pressure in the ears is felt; for, during that act the air, which is slightly compressed by the muscles of the fauces, passes into the tympanic cavities. As in the former experiment, the feeling of distension is not relieved until the act of swallowing is repeated, with the mouth and nose open. A third example, proving the Eustachian tubes to be opened during the act of deglutition, and closed when the muscles of the fauces return to a quiescent state, is afforded by a person descending in a diving-bell. It is well known that, during the descent, the compressed air, filling the external meatus, produces a sensation of weight, and often of pain, by pressing the membrana tympani inwards. This sensation can, however, be at once eased by an act of swallowing, whereby the condensed air is allowed to enter the tympanum through the Eustachian tubes, and thus afford support to the inner surface of the membrane. A further proof is obtained by the inspection of the membrana tympani in the living person, by means
of a strong light, during the two operations: in many instances the membrana tympani is seen to be pressed slightly outwards by the first act, and to return to its previous state during the second."

The most valuable part of the whole book is that which treats of the cavity of the tympanum. First of all, it is demonstrated that the functions of the ossicles are analogous to those of the iris of the eye, modifying the access of sonorous vibrations, as the latter does the undulations of light, attuning the labyrinth for the reception of either loud and harsh or very low and very delicate vibrations. The diseases of the tympanic cavity are next considered at great length, as revealed by the dissections of upwards of a thousand diseased ears. These diseases are numerous and most important. Perhaps the most common affection to which the organ of hearing is subject is a greater or less degree of thickening of the tympanic mucous membrane, with or without catarrh, through the membrana tympani. Besides this affection, a simple accumulation of mucus in the cavity is of great frequency; and, finally, ankylosis of the stapes to the fenestra ovalis is a most common disease. For an account of these very interesting chapters, and of those which follow on the diseases of the mastoid cells and nervous deafness, we must refer the reader to the work itself. And with this brief notice we now conclude, being fully persuaded that Mr Toynbee has not laboured in vain, and that his book will be a most useful one. We trust that it will have the effect of encouraging medical practitioners to look more into the subject than, as a class, they have yet done, to perceive that something may be done for ear cases as well as for others, and to recommend to their patients, who are already finding this out for themselves, an early application for relief in the case of slight and incipient diseases of the organ. And we hesitate not to assert, that, were diseases of the ear as well understood and as early attended to as diseases of the eye, there would be found an equally large number of satisfactory cures amongst them.

Transactions of the Pathological Society of London. Volume X.
London, 1859.

We have on former occasions expressed our high sense of the services rendered by this Society, and of the value of the materials which are stored up in its Transactions. We shall, therefore, merely say, that the present volume is in no respect inferior to its predecessors, and that it contains a large number of important pathological observations. Amongst so much that is interesting, selection is difficult; and we are constrained to choose, almost at random, a very few subjects to which to direct the attention of our readers.

Dr Peacock describes an interesting case of idiocy connected
with very imperfect development of the brain. The subject of it was a boy, who, at the time of his death, was nearly eleven years of age. He was born at the full time, but was then scarcely half the size of other children. His head at birth was very small, and the anterior fontanelle closed; it was found out soon afterwards that he was blind. He was never able to walk; cried or moaned incessantly, and required to be carried in the arms: he could not utter any articulate sound; and was subject to severe convulsions. When about five years old, he was found one morning comatose, and with the left arm paralyzed; the limb was ever afterwards powerless. His intelligence was very limited, but he recognised his parents, and the servant who attended him; with the exception of sight, the senses seemed perfect. When nearly eleven years old, he was attacked with scarlet fever, and died on the tenth day. It should also be mentioned that he presented, from birth, the symptoms of well-marked cyanosis. On post-mortem examination, the body was found to weigh only twenty-one pounds and a-half. The heart was healthy, except that the right side was considerably dilated. The brain was very small, weighing only twenty-one ounces three drachms and a-half, avoirdupois; the cerebral hemispheres were especially small; and the cerebellar lobes in consequence projected considerably beyond the posterior lobes of the cerebrum. The right cerebral hemisphere was much less than the left, which no doubt explained the paralysis of the left arm which existed during life. The optic tract was wanting at the part where it passes over the crus cerebri on each side, while the other parts of the optic apparatus and of the brain were fully developed in proportion to the small size of the organ. The specific gravity of the cerebral matter was much lower than natural. Dr Peacock adds, "It rarely happens that, when the nervous system is so imperfectly developed (as in the present case), the patient survives for many years; but when the defect is less marked, life may be prolonged to the average, or even to the full period."—(P. 21.)

Another case, of a somewhat similar character, but where the atrophy of one side of the brain was probably the result of an old inflammatory affection, is carefully described by Dr Ogle.—(P. 38.)

Considerable interest has attached of late years to the so-called syphilitic deposits, consisting of fibrinous matter, and found, in some cases of the constitutional disease, in various of the internal organs, but more particularly in the liver and brain. In the present volume, Dr Bristowne describes a case of the kind; we quote his description of the morbid appearances:

On removing the calvaria, the dura mater over the greater part of the upper and lateral part of the left anterior cerebral lobe was found to be thickened, rough, and a little congested—the corresponding surface of bone being also rough, congested, and slightly softened. The surface of the brain was generally healthy, though a little injected; but the dura mater in the situation before indicated, and in an area of some eight square inches, was firmly adherent to it by means of the intervening layer of fibroid tissue, in which, and partly
in the brain itself, were embedded two or three tough opaque-white fibrinous masses, from the size of a hazel-nut downwards. The brain substance corresponding to the adhesions was to some little depth softer than natural; and in places the grey matter had wholly disappeared. In the anterior part of the left corpus striatum was an imperfect cyst, apparently apoplectic, and about as large as a hazel-nut. The anterior half of the right corpus striatum was congested and much softened. The rest of the brain substance was somewhat injected, but otherwise healthy. The lateral ventricles contained only a small amount of serum. The vessels at the base and their contents were generally healthy; but the left internal carotid and its branches, for a length of about an inch, presented externally a buff-colour and looked atheromatous. On splitting them up, however, they were found obliterated by adherent cylinders of tough old coagulum.

The liver was attached to the diaphragm by numerous old adhesions—the adhesions corresponding for the most part to fissures on the surface of the organ. It was of usual size, and generally healthy; but presented numerous fissures, more or less deep, corresponding to cicatrix-like formations of fibroid tissue in the subjacent liver structure, embedded in some of which were small fibrinous masses or knotty tumours. Spleen of usual size, pulpy, with distinct Malpighian bodies. The remaining abdominal viscera were healthy.

Under the microscope the fibrinous masses connected with the brain were found to consist of imperfect fibrillated tissue, with large numbers of nuclear bodies and much granular matter."

Several interesting cases, illustrative of the morbid anatomy of diphtheria, are recorded. There has been some difference of opinion with regard to the nature of this disease; for while most pathologists have been of opinion that the exudation is simply of a fibrinous nature, similar to what is found in croup, others have maintained that it is a parasitic growth, consisting of the spores and fibrils of a species of fungus. We have long been convinced that the former opinion was correct, and that those who maintain the vegetable nature of the disease have confounded it with a totally different affection. It is well known that, on microscopic examination of the spots found in the mucous membrane of the mouth in children suffering from thrush, they are found to consist of the spores and fibrils of the oidium albicans, mixt up with numerous epithelial scales. The circumstances under which thrush occurs, are also well known; it scarcely ever appears in healthy children, but is limited almost exclusively to the ill nourished, and is particularly frequent in those who have been brought up by hand, or who have been suffering from some chronic disease. The affection occurs with peculiar facility in children, as in early life the mucous membrane of the mouth has an acid reaction, a circumstance very favourable to the growth of the parasite. The same disease may manifest itself in adults, but never, we believe, as an independent affection; it occurs in the course or towards the termination of exhausting diseases (particularly phthisis), where the powers of the constitution are much lowered, and where the secretions of the mucous membrane have taken on an acid reaction. In such cases the pharynx and upper part of the oesophagus may be found covered with a whitish coating, consisting of vegetable growths and epithelial scales. This is not diphtheria; it is thrush (or muguet) occurring in an adult; and the local affection is merely
an indication of the constitutional state. In illustration of the justice of this opinion, we may quote a few remarks from the volume before us. Dr Peacock describes the appearances found on examining an aphthous exudation, removed from a young man in the last stage of phthisis:—

The mouth, tongue, and fauces became rapidly covered by specks of white-coloured deposit, which rapidly coalesced, forming a continuous coating, fully an eighth of an inch in thickness. When this was removed, the subjacent mucous membrane was found red, glazed, and excoriated; and the deposit quickly re-appeared on the denuded surface. When examined under the microscope, the deposit was found to consist of "buccal epithelium, with the mycelium of a fungus interlacing in every direction, with sporidia forming in parts, and multitudes of free sporules."

In contradistinction to this case, Dr Peacock describes a case of true diphtheria, occurring in a boy six years of age, who died on the twelfth day of the disease. The exudation displayed—

Blood corpuscles, held together by a rust-tinged matrix, with slight traces of fibrillation in places; small granular cells about the size of blood-cells, some showing a nucleus rendered larger and clearer by the addition of acetic acid (pus); together with epithelium from the fauces in different stages: no vegetable growth could be detected in any portion of the deposit.

Regarding these cases, Dr Peacock remarked that,

In the first class of cases, he believed the deposit to consist essentially in a vegetable growth; but, in the latter, he regarded it as an ordinary fibrinous exudation, and thought that the vegetable growth, when found, was only accidental. He had examined the deposit in another case of diphtheria, and found only the usual characters of fibrine, without any traces of vegetable growth.

Dr Bristowe, in describing the morbid anatomy of diphtheria states, regarding the exudation—

On microscopic examination, appears to consist chiefly of epithelium and coagulated lymph. The epithelium, which is that belonging to the affected subjacent membrane, seems generally pretty healthy, but sometimes more or less granular and breaking down. Nuclear bodies, in greater or less abundance, are also frequently present; these being probably either the transformed products of the mucous crypts, or the abortive epithelial formations of the mucous membrane itself. The coagulated lymph essentially resembles that poured out on serous membranes, and consists of a close network, the trabeculae of which are refractive, and various in size and shape, but comparatively thick, and the interstices of which are minute, and irregularly polygonal in form.

And again,—

I have always observed that the free surface of the false membrane is made up chiefly of epithelium, the deep almost exclusively of fibrine; from which fact it may be assumed that the morbid process taking place at the mucous surface consists essentially in the effusion of coagulable lymph; that the first effused portion entangles the epithelial cells, and that the subsequent ones accumulate between the true epithelial layer and the basement membrane, becoming successively more and more free from entangled cells, and more and more purely fibrine. It may be added, that the free surface becomes generally mixed with extraneous matter, such as starch, milk, and muscular fibre; and may form a nidus for the development of lowly organized cryptogamic plants.
Much interest attaches to cases of bronzing of the skin, connected with disease of the supra-renal capsules—Addison’s disease, as it is termed. Facts are still wanting to prove the exact connection subsisting between these conditions. The volume before us supplies us with several additional observations. The results are as follow:—

In three cases there was well-marked discoloration of the skin, associated with disease of the supra-renal capsules; in four cases the capsules were found diseased, while there was no bronzing of the integument; and in one case there was well-marked bronzing, while the capsules were found healthy. These facts sufficiently indicate the obscurity in which the pathology of the disease is still involved. It is evident that the discoloration of the integument does not depend directly and exclusively upon disorganization of the capsules, for the one condition frequently exists without the other; on the other hand, the two conditions co-exist too frequently to warrant us in believing that the connection is merely casual; it is probable that both may depend on some more deeply seated lesion, the conditions of which still remain to be ascertained.

We can do little more than direct the attention of our readers to an interesting paper by Mr Hutchinson on malformations of the teeth as indicative of diathetic affections. Mr Hutchinson lays great stress upon hereditary syphilis as a cause of such malformations. The temporary teeth in children inheriting the diathesis are frequently unaffected, although the central upper incisors, in particular, are often affected with caries from an early age, and the canines are liable to a peculiar kind of wearing away, in which a sort of peg or tusk remains in the centre of each tooth. It is in the permanent teeth that, according to Mr Hutchinson, the effects of the constitutional taint are best marked. The most characteristic appearances are stated to be the following:—The upper incisor teeth are short, narrow, their angles rounded off, and their edges exhibit a broad, shallow notch. Usually one or two teeth converge towards each other; in other cases, they stand apart with an inter-space, or they even diverge. The single broad notch, of greater or less degree of depth, is hardly ever wanting. The teeth are almost always of bad colour; they may, however, in some instances, be of very fair whiteness. On looking carefully at the surface of the notch, there is almost always evidence of wearing—that is, the enamel is not perfect at the scooped-out border of the tooth. The upper lateral incisors in general deviate but little from the normal type. The lower incisors hardly ever show notches in their borders; sometimes their central lobes are peculiarly elevated, and by an excessive development of their tubercles and serrations, they come to resemble the teeth of certain fishes. After a time the foliated extremities break away, and the teeth are left shortened and peg-like. In syphilitic mouths the canines, as a rule, show blunted extremities, in the centre of which are seen single little tubercles. Mr Hutchinson’s descriptions are accompanied by two well-executed plates;
and if further observations confirm his views, an important point in constitutional diagnosis will have been established.

The only other case to which we can allude is one recorded by Dr Bristowe, in which tubercle and cancer are described as having co-existed. A priori, it seems improbable in the highest degree that these two diseases, in many respects dissimilar, should co-exist in the same individual; and, accordingly, very few, if any, altogether satisfactory cases of their co-existence are on record. When we speak of satisfactory cases, we mean cases in which both diseases were evidently advancing. Nothing is more common than to find cancer in connection with retrograde or stationary tubercle; but such cases are not in point, as the tubercular diathesis has been recovered from before the cancerous was established. Dr Bristowe's case is by no means unexceptionable. The subject of it was a woman, æt. 40, who died from a uterine affection. The morbid appearances are thus described:

_Chest._—Pericardium and heart healthy. Both pleurae presented numerous firm adhesions. These were most abundant on the left side; and on the anterior surface of the right lung was a little recent lymph. The lungs were of moderate size, and heavy, sparingly crepitant, and thickly studded with distinct tubercular deposits. These latter were chiefly of the grey variety, but were frequently as large as tares, and of an opaque white hue. Some were solitary, but the majority were clustered, the clusters varying in size, and being characterized, as usual, by a periphery of tolerably distinct tubercles and a centre of blackened, indurated fibroid tissue. The disease was most advanced in the apices, and diminished thence towards the bases. In the left apex was a cavity about as large as a hen's egg. Larynx, trachea, and bronchial tubes healthy.

_Abdomen._—Peritoneum healthy. Liver, spleen, pancreas, stomach, and intestines, kidneys, and supra-renal capsules, quite healthy. The ovaries, Fallopian tubes, and upper half of the body of the uterus, were also healthy; but the lower portion of the body was infiltrated with an opaque white material; and the os and cervix uteri, with the upper third of the vagina, were excavated by a deep, irregular, and almost sloughy-looking ulcer. On making vertical sections through the diseased tissue, the base of the ulcer was found to consist of a white, opaque, tolerably firm growth, looking like cancer, but yielding no creamy juice, which infiltrated the surrounding structures, and varied in thickness from three-quarters of an inch downwards. Neither the rectum nor the bladder was perforated by it, but the mucous membrane of the latter was, in two or three situations, adherent to hemispherical projections of the growth.

_Microscopical Examination._—The growth forming the base of the uterine and vaginal ulcer was found to present all the microscopic characters of epithelial cancer. It displayed numerous more or less complex laminated capsules, many of the thick-walled cells, which have some resemblance to ova, together with the ordinary oddly-shaped epithelial scales, degenerated cells, and nuclei. The tubercle-like deposit in the lungs presented the appearances commonly observed in such formations. It consisted of imperfect and broken-down nuclear bodies, and abundant granular matter, embedded in a greater or less amount of fibroid tissue, which displayed distinct traces of the original lung structure. But there were no appearances that could be looked on as cancerous; and certainly not the least trace of that form of cell-growth which characterized the uterine disease.

Dr Bristowe, 4th of January 1859.

Regarding this case, we would merely observe, that, in the first place, the tubercle appears to have been stationary; and, in the
second, that the cancer was evidently of the epithelial form, which, it is well known, is to a great extent a local disease, and implies far less constitutional affection than either encephaloid or scirrhus. We would gladly have quoted various other interesting cases, but our limits compel us to conclude; and it only remains for us to express our best wishes for the continued prosperity of the Pathological Society.

Part Third.

PERISCOPE.

MEDICINE.

ON THE EMPLOYMENT OF CHLOROFORM INTERNALLY AND EXTERNALLY IN THE TREATMENT OF SPASMOMATIC CONTRACTIONS OF THE EXTREMITIES. BY M. ARAN.

Spasmodic cramp of the extremities, which is sometimes also named idiopathic contraction, intermittent tetanus or tetanie, is a disease little known in its essential nature. Its appearances are very irregular; sometimes it does not occur for months or years, at other times it spreads, as it were, epidemically. This affection is painful in the highest degree; and, in some cases, is frightful by its extent and severity; it arises either apparently idioptically, or supervenes on other diseases, without however changing in any way their character. Formerly believed by practitioners to depend on some grave lesion of the brain or spinal cord, this disease was treated by the most active measures; in the present day, since the prognosis is known to present usually nothing serious, physicians still have recourse to antiphlogistics, blisters, etc.; but the treatment of the affection yet remains uncertain, and often ineffectual. In an epidemic of these spasms or cramps, formerly observed by the author, he found no treatment at all satisfactory, except the prolonged extension of the contracted limbs, and revulsive applications to the affected muscles. Observing, however, the good effects which had resulted from the inhalations of chloroform, in a case of severe and truly tetanic cramp, as well as from topical applications of chloroform to the limbs in some other cases, and reflecting on the clearly spasmodic nature of the affection, the analogy to rheumatism which it often presents, and the acute pain which accompanies it, M. Aran was led to believe that chloroform might exert a very advantageous influence over these spasmodic contractions, a conjecture of which the following case showed the correctness:—D., aged seventeen, shopman to a wine merchant, entered the Hospital Saint Antoine, on the 12th March. He is of a good constitution, well developed for his age, but of a lymphatic temperament; he has never been ill, but is exposed, by his occupation, to sudden variations of temperature, and for several months past has had his hands continually in water cleaning out bottles. The disease commenced three days before admission, with stiffness in the hands; and, on the following night, the rigidity appeared in the lower limbs. From this time the cramps have never entirely ceased; occasionally the rigidity and pain have diminished; but, from time to time, the stiffness became more marked, and the pains very acute in the limbs. When examined on March 13th, he was seated in bed, complaining of cramps in the upper and lower extremities. In the latter, the foot was forcibly extended, the point strongly depressed, and the toes bent; and this position, exactly the same in both feet, was maintained by the state of