institutions is comparatively large. At the Royal Albert Asylum it has averaged 35 per 1,000 of its population during the fourteen years of its operations. Necropsies are always made when the consent of parents can be obtained; and we have occasionally found, when least expected, extraordinary defects in brain-conformation. I show you a photograph (by Dr. Ferrier) of the encephalon of a girl who died last summer of phthisis, from which you will see that she had scarcely any cerebellum, though she did not display during life marked symptoms of ataxy. Here is a brain from a paralytic imbecile, in which you will notice the defect called porencephaly—that is, a gap extending in the place of the right frontal convolutions, and leaving the deeper structures of the brain quite uncovered. Of course, these "coarse lesions" are exceptional; but microscopic examination will discover in many instances some abnormality of structure, such as the preponderance of simply formed brain-cells devoid of processes, denoting persistence of fetal structures; or, on the other hand, degenerative changes resulting from inflammatory atrophy.

I have already adverted to the numerous physical defects associated with imbecility. It may indeed be said that no idiot is physically sound; of course, amongst imbeciles of a higher grade there may be less bodily infirmity. The ameliorative treatment of this class entirely depends upon the principle, strongly insisted on by Seguin, that physical must precede psychological improvement; hence the importance of the skilled physician preceding, and indeed supervising, the operations of the schoolmaster. We have heard much lately of overpressure in elementary schools; I need hardly say that schools for imbeciles must be so organised as to render any sort of overpressure impossible. The training of the senses, and the regulation of the muscular powers, accomplished in as attractive a manner as possible, form the stepping-stones to the more familiar forms of tuition, which, however, must be aided by objective demonstration as much as practicable. I am not without hope that some of the plans adopted in the instruction of the feeble-minded may furnish useful hints to those interested in the education of normal children in accordance with physiological principles. You will see, in your inspection of the building, lessons in actual progress, both in school and in workshops; but I may direct your attention to the collection of school-appliances and educational and industrial work, for which a diploma of honour was awarded to this institution at the International Health Exhibition.

In conclusion, a few practical hints as to the mode of admission of children to this and other kindred institutions may be useful to you as medical practitioners. This is fundamentally a charity, and the majority of the inmates are elected by the subscribers; but we have also superior accommodation, and a separate boarding house, for payment cases. At present, every patient received here has to be certified precisely in the same form as is required for the admission of a lunatic to a lunatic asylum; that is, he must be described either as "an idiot" or as "a person of unsound mind." (The term "imbecile" is not statutory.) We think that the inclusion of such institutions as this—really training-schools for imbecile children—under the stringent provisions of the lunacy-laws is unfair, and often prejudicial to the educational interests of the feeble-minded; and it is probable that at no distant period an effort will be made to amend the law in this respect.

DONATIONS AND BEQUESTS.—The North Staffordshire Infirmary has received £1,000 anonymously, per Mr. C. Cooper, postmaster, Stoke-upon-Trent.—"J. B." has given £500 to the Charing Cross Hospital, and £500 to King's College Hospital.—The Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster, has received £500 under the will of Miss Hannah Goad.—Lady Rolle has bequeathed £100 to the Exeter Lying-in Charity, £100 to the West of England Eye Infirmary, and £100 to the Exeter Dispensary.—The North-West London Hospital has received £251, collected by Mr. J. M. Pritchard on the Stock Exchange.—The General Hospital, Birmingham, has received £100 under the will of Mr. Mayor Blanckensee, and £40 for the Samaritan Fund from the trustees of Mrs. Hollier's Charity.—The Children's Hospital, Birmingham, has received £100 under the will of Dr. Heslop, and £50 under that of Mr. Mayer Blanckensee.—Mr. George Sturge has given £100, the fourth instalment on account of £1,000, to the North-Eastern Hospital for Children, Hackney Road.—Sir William Rose, K.C.B., of Leiston, Suffolk, Clerk of Parliament, has bequeathed £50 to the Westminster Hospital, and £50 to the East Suffolk and Ipswich Hospital, out of the "residue" of his real and personal estate, after the death of his wife.—Messrs. Joshua Tetley and Son have given £100 to the Leeds Infirmary.—The Great Northern Central Hospital has received £100 (less duty) under the will of Mr. F. H. Windsor.—Mr. Joseph King (per Sir Joseph Lister, Bart.) has given 70 guineas to King's College Hospital.

A CLINICAL LECTURE ON THE SURGERY OF THE MALE PERINÆUM AND EXTERNAL ORGANS OF GENERATION.

Delivered before the Pupils of the Medical Department of the Yorkshire College, December 9th, 1885.

By C. G. WHEELHOUSE, F.R.C.S.,
Consulting Surgeon to the General Infirmary at Leeds.

GENTLEMEN,—There are certain regions of the body which, so far as their surgical aspects are concerned, are of more than ordinary importance. The surgical emergencies to which they are liable are apt to come suddenly on the practitioner, and are liable also to involve consequences of vital moment. Thus, if called upon to rescue the life of a child from impending suffocation, and tracheotomy is our only resource, it would ill become us to have to sit down, and on the moment to study and think out the anatomy of the parts concerned and the steps of the operation; for, whilst we did this, the patient would die, and our resuscitated skill would be of little avail for the restoration of the child.

In managing a case of hernia, the same observation holds good; for, to save life, our knowledge and our skill must be kept ever bright and ready, producible at a moment's notice, and that without either hurry or excitement, and yet with a precision that will not be daunted by trifling difficulties or unusual peculiarities, but will be ready and apt to meet and overcome either. And, on the other hand, there are cases which can only be dealt with in a perfectly satisfactory manner after their nature, causes, and probable results, have been thought out very seriously and from many different points of view, after the probable or possible effects of various methods of surgical treatment have been carefully considered and reasoned out, and the whole subject has been weighed and exhausted in the mind of the thinker.

How, for example, was John Hunter's method of treating an aneurysm arrived at? If, called to the help of a patient suffering from a popliteal aneurysm, he had acted on the former lines, he would promptly have amputated the limb; whereas, by proceeding on the latter, he was enabled to arrive at an operation philosophically perfect, and which, while it saved the limb, yet substantially cured the disease, and restored the patient to the full activity of life as perfectly as he had ever enjoyed it. To us, who see this apparently simple operation performed so often, its real physiological aspect and importance seem almost to have dropped out of sight; but with how different a significance does it bear upon our minds from that with which it must have pressed upon the imagination of its great originator! Where are the hours of philosophical deduction and thought which led him to a result so brilliant? Where the many experiments, whether of his own or of the immortal Harvey, which proved the possibility of its success? Where? They are stored in the archives of science, there to be used as the common property of every operator of to-day; and in the heart of every true surgeon they rise as a grateful incense of past sacrifice, and as a thankful remembrance of a splendid inheritance bequeathed to us by a noble ancestor.

For exactly a hundred years this operation has been before the surgical world. It was first publicly performed by Hunter in December 1785; and who can count the number of those who have benefited by it?

It was, I think, whilst revolving some such problems as these in my mind, that the subject of the clinical study of the surgical needs of the male perinæum came into it, and led me to the determination to address you in one of these clinical lectures upon that subject. In thinking the matter over, I remembered the many times I have been summoned suddenly, in the dead of the night, to this institution for the relief of cases of extreme retention of urine, in which I have been called upon, almost at a moment's notice, to decide as to what was best, in a given case, to be done; whether simply to relieve the distended bladder of its load, and await further consequences; to combine with this some much more serious procedure, which, whilst doing this, should also do more, and would enable me to strike for the producing cause at the same time; or it might even be to do all this and yet more still, by seeking to limit the evil consequences of mischief already done, of extravasation, of sloughing, and of sinking

vitality. And, whilst thinking of these cases, I have remembered others of scarcely less importance, in which the results of my personal experience may, as it has seemed to me, be utilised for your future advantage.

It so happens, that my thoughts have been led to dwell a good deal on the surgery of this region; and I think it may be possible, out of my past experience, to evolve something that may prove of service to you in your coming years. Let me take, for example, first of all the simple operation of amputation of an epitheliomatous penis.

If the disease be confined to the glans, and be not far advanced, the old operation, completed by one stroke of the knife, and followed by the old and tedious method of healing and dressing, might even now be sufficient. This simple operation, so long as we were unprovided with anaesthetics, was undoubtedly the most merciful procedure; but when, with anaesthetic aid, time and suffering were subjugated, it behoved us to leave no stone unturned in the improvement of our method; and then came the plan of cutting through the corpus spongiosum and urethra at once, and through the corpora cavernosa at another level, and of providing the raw end of the stump with a covering of skin, as carefully as we should have done had the member amputated been a finger or a thigh.

This operation you will, doubtless, very often see performed; but, from time to time, cases of return growth will present themselves, or cases in which, from various motives, the disease has been permitted to run on unchecked until it seems, at first sight, almost hopeless to interfere, or to attempt its removal. But, gentlemen, in this institution you will as rarely see, I fancy, as I in former times saw frequently, such cases dismissed as hopelessly too late, and beyond the pale of surgical help.

I had often been struck in my younger days with the sadness of the sight, when I had seen return growths, sometimes in the body of the penis, sometimes in the inguinal glands or in the testes, or even in all these situations together, condemned as hopeless, and have wondered if they ought really to be so; and, little by little, I have watched the broad mantle of surgery spread over them, until at last I have seen them all included in the ever widening and lengthening list of remediable cases.

First, I noted the increasing frequency with which return growths alone were removed, and the closeness to the pubes from which they were removed with success; next, I saw masses of secondary growth in the inguinal glands taken beneficially away; then I saw the testes, after invasion by similar return growth, also swept away, with the result of prolonging life, and adding vastly to the sufferer's comfort; and, lastly, I have lived to complete, with my own hands, a proceeding more perfect in its result than all these when individually and separately done.

Let me relate to you the case. On March 20th, 1879, a labourer, aged 50, presented himself, during my hospital-visit, with disease of the penis. He was perfectly free from any syphilitic taint, but showed a large, malodorous, fungating swelling in the region of the penis. About six years previously, he had received a somewhat severe kick over the genital region. He thought little of the injury at the time, and, when its immediate effects had passed away, he dismissed all thought of it from his mind. Gradually, however, the penis became indurated and painful, and an intractable sore, apparently of an epitheliomatous character, developed around the glans. This was removed by amputation in the ordinary way, a short stump only being left; and, for a while, he was rendered comfortable again.

At the time he was admitted into the infirmary under my care, his condition was as follows. The stump of the penis was again indurated and painful; the urethra was so far closed that micturition could only be performed by drops; the glands in the groins were swollen and tender, but were not ulcerated; and both testicles were indurated, swollen, and had open fungating sores upon them.

Here, then, was an extreme case, one in which, a few years earlier, I should have felt that there was nothing to be done, that the disease had passed beyond the domain of surgical help. I brought the case before my colleagues for consideration, and even then they were all agreed that it was so, and that he and I had better accept and bow to the inevitable. But, fortunately for this man, I had noticed in my reading (in the BRITISH MEDICAL JOURNAL, I think it was), a few weeks previously, a short paragraph under the head of "Surgical Memoranda," describing an altogether novel method of dealing with such cases; and, rather than leave him to so miserable a fate as was before him, I determined that I would try whether it was capable of affording him relief. The operation aims at the total removal of the entire body of the penis, and is performed as follows. A vertical incision is made through the skin of the mons Veneris, and, sweeping around each side of the root of the penis, is carried onward into the

raphé of the scrotum. The skin being then held well away on each side, the body of the penis is drawn fully out of the wound, so as to expose the organ to its very root. A twitch is then placed upon it as far back as possible. This is so tightened as to act as a tourniquet, and then the organ is severed from its connections immediately in front of the triangular ligament. The dorsal artery of the penis and any other bleeding vessels are then secured; the tourniquet-twitch is removed, so as to expose the part freely, and any portion concerning which any doubt can be entertained is carefully clipped away. The body of the penis is thus entirely removed, and the first stage of the operation is completed.

Next comes the question, what is to be done with the urethra? This, as you know, is one of the great difficulties of the old operation—perhaps the greatest; the passage in that operation is simply slit along its under surface, and the edges of the mucous membrane are stitched back to the edges of the skin, and the after-diminution of the canal by the double cicatricial action of its own tissues and of the skin remains, *par excellence*, the evil to be contended with.

In the new operation, we deal with it thus. As a second stage is proceeding, the patient is placed in lithotomy position, the perineum is laid open in the centre, and the urethra, into which a sound has been passed from above, is carefully dissected from its connections for about an inch, or an inch and a half, and is then brought down into the perineum, is brought out through the wound there, is laid open on its under surface for half an inch or so, and its margins are carefully stitched to the edges of the perineal wound at a little distance in front of the anus. There it is permanently fixed; a soft rubber catheter is introduced into the bladder, and is kept there for a few days. Both wounds are then carefully stitched up, and, when they are healed, no trace of the penis can be found. Henceforward, the patient is obliged to micturate in the sitting position; but, as he retains perfect control over the bladder, this is a matter of but little inconvenience.

The glands in the groin should now claim attention. It may be that they are swollen, enlarged, and in a state of sympathetic irritation, and yet are not infiltrated with the germs of the specific disease. They were in this condition in the case of which I have been speaking. If we can be tolerably confident that such is their condition, they should be, by all means, left alone. The source of irritation having been removed, they will, probably, quietly return to their normal state, and the less injury inflicted on the patient the better. But if, on the other hand, they be already implicated in the disease, I would strongly advocate their removal as part of the operation; for, though their ablation may seem to add materially to the primary risk to the patient, it will, in reality, very greatly help to insure the permanence of its protective influence, and may retard the return of the disease by many months.

Since the above operation, which I consider a memorable one in the annals of my surgical life, I have seen my colleague, Mr. Jessop, in a case which seemed really desperate in its extent, sweep them all away with the happiest and most perfect result.

Then, with respect to the testes, you may perhaps conceive that a little more deliberation should be exercised before they are removed. In a case in which, only a very short time previously, I had performed a somewhat similar operation, these organs were in no way implicated; there appeared to be no reason for interference with them, and they were allowed to remain. In the one I have just detailed to you, they were distinctly involved in the disease, and without hesitation I removed them. The result, in the two cases, was as marked as it was different. The two patients lay in contiguous beds, were constantly comparing notes, and never failed to give me the benefit of their discussions. The removal, though it added greatly to the severity and danger of the operation, did not prevent the patient from making an excellent recovery, and he has many times since spoken to me with the greatest gratitude and thankfulness for the complete relief I had afforded him in every way. In the case, on the other hand, in which I did not remove them, they became from first to last a cause of trouble and distress. Soon after the operation, they became swollen, and remained tender for a long time; they were there as a possible seat for the return of the disease, and, by their physiological action, they were a constant source of annoyance. To a patient otherwise completely mutilated, you will easily understand how and why this should be so; and many a time that patient volunteered the assertion that he wished that, while I had been about the business, I had made a complete sweep of everything for him as well as for his neighbour. The one patient was, so far as is possible in such a case, completely relieved, the other was only partially so; the one was freed from physiological as well as from pathological discomfort; while the other remained a prey to desires which could never be gratified; and the eventual condition of the former was certainly more satisfactory and perfect than that of the latter.

When, therefore, you feel compelled to resort to the more sweeping measure of total ablation of the penis, I think the consideration of the patient's condition in the future, should he recover from the operation, should be laid fully before him, should be carefully explained to him beforehand, and, should he determine to submit to the removal of the testes, as well as of the penis, I should not often hesitate to make the operation complete. So long as any portion of the penis is left, this question will never, of course, arise; but, when that organ is completely and entirely removed, it becomes a very essential part of the consideration to be placed before the patient.

Pray, gentlemen, remembering what I said to you in my last lecture on the unwisdom of claiming priority in any surgical proceeding, bear in mind that I claim no precedence as to this; I derived it from a German source, and, whilst I find that my own countrymen are nearly as tenacious of their claims to priority and inventiveness as is possible, I fear our foreign colleagues are just a little more so.

As concerns the next operation to which I desire to draw your attention, I might, I think with safety, be a little more venturesome in this respect, without running any very serious risk; for, without any attempt on my part to claim originality or priority in the method of performing perineal section or external urethrotomy, as you will see it performed in Leeds, my colleagues first, and the profession generally afterwards, have done me the honour to call the operation mine, and to assign it a high rank among surgical proceedings. Certainly in our hands it has proved a very successful one, and, I think I may say without fear of contradiction, has enabled us to find the correct and safe way into the bladder in many cases in which, by any other, it would have been impossible to do so. I do not claim for it anything in the way of originality; it has been entirely a matter of observation, and is, after all, only an improvement on former methods of operating in certain points, at which, when I have either been myself, or have seen others, met by unusual difficulty, I have set myself to think how those difficulties might best be overcome. It happened to me, in my early days, to see so many mishaps in attempting to reach the bladder from the perineum without any actual guide, that I resolved, if possible, to find or to invent some better method than the old operation. But perhaps I had better describe that to you first, then the earliest modifications of it that I saw, and, lastly, my own operation, as the result of my observations.

Given a case of stricture which, by reason of long continued neglect has at last become practically impervious, or, so nearly so that, though a fine catgut or whalebone bougie may sometimes, and at others may not, be capable of being passed through it, the patient's life is endangered by the mischief arising from backward pressure upon the bladder, the ureters, and the kidneys. It has manifestly become necessary that the stricture must, in some way, be overcome if your patient is to be saved. Already his life is rendered burdensome, for day and night alike he is answering repeated calls to micturate; and, on very trifling provocation, a little indulgence at table, a little imprudence in exercise, a trifling exposure to cold and damp, complete retention comes on. This, so long as a catheter cannot be passed, involves hours of agonising suffering, and can only be temporarily relieved by long continued medical and topical treatment, hot baths, antimony, opium, and so on, and, even with the aid of these means, is only too likely to be followed by such irritation around the stricture as will end in the formation of local abscesses, and, in process of time, by fistulæ with which the perineum eventually comes to be riddled.

Such, then, is the case to which you may at any time be called, and for the relief of which you ought to be prepared to act; and I will endeavour to show you how I am able, notwithstanding all difficulties, as a rule, to reach the bladder along the true track of the urethra, and with safety. In the old operation, the knife, guided by the forefinger in the rectum, was passed steadily onward from the surface until it entered the urethra somewhere in the neighbourhood of the prostate; and, once relief was afforded to the distended bladder, and the risk of extravasation was avoided, the surgeon was content, and the stricture was henceforward disregarded. Upon this procedure, Mr. Cock, of Guy's Hospital, was the first, I believe, to introduce a great element of precision. Having ascertained two pathological facts—(1) that the portion of the urethra which lies immediately in front of the apex of the prostate is never strictured, and (2) that it is usually dilated—he made it a *sine quâ non*, in operating, that this point should first of all be clearly defined by the forefinger of the left hand in the rectum; next, that the knife, entered half an inch in front of the anus, should be plunged deeply into the perineum, and be then carried steadily and unflinchingly onward until it was felt by the left forefinger to have penetrated the urethra at that point. Then, the knife being withdrawn, it was followed by a catheter to

the same spot, which catheter was then passed through the prostate into the bladder, and there retained. Retention having been thus relieved, and the danger of extravasation prevented, he would, as circumstances seemed to dictate, either rest content with having effected so much, or would make a further attempt to divide the stricture also, attacking that from behind, and making the healthy but dilated portion of the tube, which he had already found and opened, his new starting-point. You will see at once how much more likely it is that a fine probe will follow even a tortuous urethra in the natural line of outflow than in opposition to it; and by this manoeuvre Mr. Cock was, I believe, almost invariably able to succeed in accurately incising the stricture, as well as in relieving the distended bladder. But it is not given to all men to possess the hands of Mr. Cock, and skill such as he possessed is only attainable by few; and hence, notwithstanding his almost invariable success, some simpler and more attainable method for the many remained a desideratum.

(To be continued.)

THE PREMONITORY SYMPTOMS OF INSANITY.

Read before the South-Eastern Branch.

BY HENRY SUTHERLAND, M.D., M.R.C.P.,

Lecturer on Insanity at the Westminster Hospital; Physician to Blacklands House and Otto House Asylums.

It will be my object, in the time I have at my disposal, to describe as briefly as possible the most important premonitory symptoms of insanity, and to conclude by making a few remarks upon their treatment.

Esquirol recognised three distinct stages of insanity. In the first, there is a change of habits; in the second, perversion of the affections; and the third constitutes true insanity. The first set are usually seen only by the relatives of the patient; the second, by the family-physician; and the third, by the asylum-superintendent, when they are now so far advanced that any attempt at prophylactic treatment is out of the question.

It is almost impossible to say from the premonitory symptoms what form the insanity will assume, unless, indeed, the patient have suffered from a previous attack. Almost all authors agree, however, that insanity rarely commences with excitement. As an exception, may be mentioned the mania which is produced suddenly, after a moderate amount of alcohol, in a person who has previously sustained an injury to the head, or has had a sunstroke. But the majority of cases are preceded by a stage of depression, which has been called by Guislain the "stadium melancholicum."

To estimate the duration of these premonitory symptoms is, as a rule, impossible, as the relations of the patient, either from deficiency of experience or from a wilful perversion of the truth, only throw obstacles in the way of the practitioner, who is trying his best to get at the real etiology of the case.

From a long experience of such matters, I have no hesitation in saying that, in my opinion, some eccentric act on the part of the patient, done many years before the actual outbreak of the mental disease, can be detected in the majority of cases, if the early history of the patient be only carefully investigated. For instance, in 1856, a schoolfellow of mine stole some money from another boy, although he was at the time, comparatively speaking, well off. In 1870, fourteen years afterwards, this same schoolfellow, who was then a clergyman, was admitted to Bethlem Hospital, suffering from a first attack of insanity.

Again, in 1868, I was acquainted at college with a student who had the insane temperament strongly marked, as indicated by unnecessary outbursts of temper and abnormal conduct. In 1880, twelve years later, he committed suicide on board a steamer, his conduct for some days previous having been noticed to be very peculiar.

Again, in 1874, a friend of mine sent to me to rescue him, as he said, from an action-at-law. He had taken lodgings near a line of railway, and the trains, in passing, kept him awake at night. He had not the moral courage to leave without my assistance. I paid the landlady a week's rent, and took my friend back to his house. In 1881, seven years later, he had an attack of mania.

Now, in all these cases there were, to my certain knowledge, other acts of eccentricity committed between the first of them and the actual outbreak of insanity; and I have every reason to believe that, if these patients had chosen some quiet pursuit in life, and if their conduct had been closely watched by their relations, much trouble and expense connected with their mental diseases would have been prevented.

Sometimes a large pecuniary interest depends upon the evidence