does not always write even the English of the gentlemen who do the Fires and the Murders for country journals. On his Latinity I will discreetly keep silence. Hence I fear that we are not only changing our methods, but losing sight of our standards, and of this we have said we are to beware; we may well desire, nevertheless, to see not only change but even a revolution of the methods of teaching in public schools as well as in our own classrooms—methods now hopelessly astray. Hopelessly astray, I say, because I know that far cleverer men than I am set themselves this problem: to find what specific subject or what rudiments of a specific subject has the ordinary boy soundly learned after ten years' teaching at a public school? No general formula has been obtained, I am told, for the solution of problems of this kind.

Yet one of my colleagues in the last medical and surgical examinations said to me: "A physician should be a kind of poet"—a hard saying, but a saying of deep wisdom. For to their patients what are the most scientific physicians, if they be *διανοητικὴν πνεύμα μὴ ἔχοντες*, if they know all things save the human heart? "On ne connaît jamais parfaitement que celui que l'on devine." How in Cambridge are we to endow young men with these riches of experience and to give them this faculty of divination, save by literature? We will repeat that a method is an economy; a true method is a path leading us directly into the centre of the experience of the world, leading us, early in life and with ease and pleasure, whither millions of weary travellers have never come, giving us what millions of hearts have yearned after but yearned in vain. Our disciples must come to us not only for mental furniture, not only to learn a gainful craft, but to breathe here the spirit of disinterested knowledge and of wide humanity. They shall find here that sound learning is no mere decoration, but is the flower of the experience of the world, and be taught that earnest study and serenity of life are not narrowness or asceticism, but that in them lie the conditions of the highest complexity, the ideal evolution of our nature, which, putting aside the temporary and accidental, shall attain to that which is best and most beautiful in the humanity common to us all; helping one another, for, as St. Bernard said, "if you are of the wise virgins you are necessary to the congregation, if of the foolish the congregation is necessary to you."

Once more. If in some directions we are led to fear lest we be losing ground, on another side of our studies we have changed our methods with brilliant success. In the new laboratories of the positive sciences we have brought into our teaching not only new sources of beneficence which are of inestimable value and have trained the eye and the mind to a closer accuracy, to a acuter observation, and to a larger order of conceptions—which qualities are also inestimable; but the spirit in which these laboratories are conducted by the great teachers who labour in them is a disinterested spirit. They realise fully Bacon's precept: *Experimenta lucifera, non frugifera, petenda sunt*.

It cannot be true that in Cambridge the work of these departments is regarded by anyone with grudging. I will not hesitate to say that not only has the work of these laboratories been in itself profitable and inspiring, but that its indirect uses have been no less. The example of this work has carried a like movement into other studies—into many studies far remote, has illuminated them, breathed into them new life, brought them back to touch with the actual and with the practice of life, and has given to the handling of them a new accuracy of definition and a new clearness and breadth of imagination. In a word it has renewed their methods, which were tending to fixity.

I, who came from without, bring you this message, that had not Oxford and Cambridge of late years thus revolutionised their methods both in positive science and philosophy, even their great traditions would not have saved them from decay. Neither for medicine, then, nor for other callings are the universities primarily professional schools. Any opportunities for gaining professional knowledge here are adventitious, and might even become means of danger did we not always bear in mind that the chief function of a university which is true to her trust must be to promote a harmonious development of all the faculties of man, knowing that the rest will follow in due season. In this trust let us exhort ourselves to stand fast.

Members of the University of Cambridge, generously you

have welcomed me home; gladly and thankfully I find myself once more in these streets and in these colleges, so well remembered and so well beloved.

If to you who have never left this home the roaring of the great loom of the labouring and sweating world without has become at times even inaudible; if at times you have been tempted to become a little too fine for common things, a little too high for low things, it is well that some of us, who have fought hard in the ranks of the Philistines, and learned to love them also, should return to you with hands perhaps somewhat rougher, opinions somewhat ruder than your own.

For may we not help you to draw still closer our bond of brotherhood with strong and earnest men of all conditions of life, and to see more clearly that between ourselves in Cambridge and these millions of labourers who toil and sweat in the dust and din of our great cities there is this at least in common, that we are in conflict together not with primitive men, with rude men, nor even with violent men, nor yet, again, with the men who repudiate our methods or strain after ideals which we call false, but with selfish and faithless men, wheresoever they are found, who are animated by no purpose and inspired by no ideal?

COURSE OF LECTURES

ON THE

SURGERY OF THE KIDNEY.

Delivered at the Middlesex Hospital.

By HENRY MORRIS, M.A., F.R.C.S.,

Surgeon to, and Lecturer on Surgery at, the Hospital.

LECTURE II.

ON CONDITIONS SIMULATING RENAL CALCULUS AS VERIFIED BY SURGICAL EXPLORATION IN TWENTY-EIGHT CASES.

GENTLEMEN,—In the first lecture I detailed to you the chief features of seven out of the twenty-eight cases, and in this lecture I will review the next four groups. You will remember that I grouped the cases under the following headings:

1. Tuberculous nephritis and pyelonephritis.
2. Abscess of the kidney—scrofulous or otherwise.
3. The effects of former perinephritis caused by sprains or other injuries to the back.
4. Movable kidney.
5. Abscess of prostate.
6. Calculus of prostate.
7. Calculus in the lower end of the ureter.
8. The effects of a stone which has passed along the ureter.
9. Renal calculus simulated by disease in neighbouring organs, such as the cæcum and stomach.
10. Spinal disease which had caused perinephric suppuration.
11. Undetected renal calculus.
12. No sufficient cause discovered.

The third group in the above list now claims attention.

3. *The Effects of Former Perinephritis Caused by Sprains or other Injuries to the Back.*—Four cases are assigned to this cause. Of the four patients, two were females, two males. In two there was a history of distinct injury, and the symptoms commenced immediately afterwards. In the other two the occupations of the patients had exposed them to frequent strains of the back, but no definite accident was remembered as the starting point of the illness.

One patient was a young gentleman, aged 21, whom I saw in consultation with Dr. Nash, of Lansdowne Road, and Sir James Paget. After a slight strain of his back whilst playing lawn tennis in May, 1888, he had an attack of hæmaturia, with pain in the left loin. In August of the same year, whilst in bed with hæmaturia, he had a severe attack of pain, and his "left kidney swelled." At this time, as I was informed, there were fulness and tenderness in the left loin and a considerable degree of constitutional disturbance. It was supposed his ureter had become blocked and his kidney distended in consequence. After recovery from this attack he remained well for five months; but from March, 1889, there

had been blood in his urine most days, the longest intervals without hæmaturia being three or four days.

I saw him on April 4th, 1889, when and for a few days before the hæmorrhage had been of a bright colour, but previously it had always been of a light brownish coffee tint. The family history was phthisical. The urine was carefully searched for tubercle bacilli, but without success. Blood was the only abnormal constituent of the urine. Rest, tonics, and astringents produced no effect; so on May 3rd, 1889, I explored the left kidney through the loin. The upper half of the organ was much harder and tougher than normal, and the perinephric tissues were toughly adherent to it. He made a good recovery, and the hæmaturia ceased. He has since married, and remains perfectly well up to the present time.

A consideration of the beginning and ending of this case points to the conclusion that some damage was done to the upper part of the kidney itself, possibly some subcapsular laceration, perhaps only a contusion; but whatever the exact damage was, free hæmorrhage from the kidney resulted, and induration and condensation of the upper part of the kidney and the cellulose-fatty tissue surrounding it ensued.

The second case was that of a woman, aged 51. Pain about the right kidney, with vomiting and frequent micturition, came on immediately after "straining her back" in carrying a water bucket in 1886, three years before she came under me. Pains, chiefly about the right loin but radiating to the right groin, recurred at first at long intervals, then for a time every week; then again in 1888 she was free for several months together. The attacks lasted two or three days, and were accompanied by vomiting. The urine frequently contained a small amount of blood. There was tenderness in the right loin. On March 4th, 1889, the kidney was explored; the perinephric tissues were much matted together, and so much thickened and condensed that they proved to be the cause of another symptom which was very noticeable in the case, namely, an apparent enlargement of the kidney. The kidney was freed of its surroundings with great difficulty, and turned out on to the loin, when it was seen to be quite small in size, barely 3 inches in length, but otherwise perfectly healthy. The wound healed rather slowly, but completely; the patient left the hospital quite relieved of all symptoms, and Dr. Lucas has since informed me that she was keeping perfectly well.

The probable explanation of this case is that, in consequence of the changes produced in the tissues around the kidney by the strain, the nerves and blood vessels of the kidney were unduly compressed and disturbed, under various conditions of circulation, secretion, posture, and movements. The operation, by completely detaching the tough adhesions, set free the nerves and vessels, and so terminated the disturbance and compression to which they had been subjected.

It appears from the history of such cases that for weeks or months together, under favourable conditions, the patients may feel quite well, but that sooner or later symptoms recur and tend to become persistent. In further illustration of this fact I may refer to another case which I saw in May, 1884. A robust-looking, well-developed man, aged 50, was sent to me by Dr. James Glover for symptoms supposed to be due to stone in the kidney. He had consulted Sir Henry Thompson, and had tried a variety of treatment prescribed by different medical men. The account he gave was that, after straining his left loin by lifting "a heavy, awkwardly-shaped" weight when 20 years of age, he had hæmaturia without pain, lasting for several days. Attacks of hæmaturia with lumbar pain followed, at first at long intervals, or only after exercise, but at length became constant, so that he could neither stand nor sit without suffering. The pain always affected the left loin, and was always followed by a sensation of fulness and swelling of the left kidney. Lying on his back quite still was the only panacea he had discovered, and in this position he took his meals. As far as I know, his kidney has never been examined, so that one cannot be sure that no stone was present. When I last heard of him he was trying the effect of an infusion of *Alchemilla arvensis*, which had been prescribed for him by Sir Henry Thompson. But in the light of the above cases it is most probable that the symptoms were the result of changes about the kidney produced by the injury of thirty years before, and that an exploration through the loin might have entirely relieved him, even though no stone had been discovered.

Of the other two cases in which the illness was not attributed to a definite injury, one was a gentleman who came from Delagoa Bay for the purpose of being operated upon for stone in the kidney. He was a thick-set man, aged 35, rather too fat, with a somewhat pasty complexion. He had spent some years in the diamond fields, and had roughed it very considerably. He was explored on August 26th, 1890, and, though there was no stone found, the perinephric tissues were dense, tough, and firmly adherent to the kidney. The after-course of this case was complicated by the formation of an abscess beneath the scar some two months after the recovery from the operation. This was brought on by continued over-exertion whilst visiting his friends in Scotland and the North of England. On November 28th, 1890, he was quite recovered, and started on his return journey for South Africa, where, in spite of long rough journeys and long walks, he remains well, and writes to me that he is in better health than for several years past. The only inconvenience he complains of is numbness in the course of the last dorsal nerve which was divided in the operation.

The fourth was a woman, aged 33, employed in the swimming baths at Lewes. She was explored on April 1st, 1891. A puckered scar was found at the lower part of the convex border of the kidney, and the perinephric tissues were indurated, condensed, and toughly adherent to the kidney surface. She had had hæmaturia and other marked symptoms of renal calculus for over two years. She left the hospital well on May 4th, 1891, having lost all her symptoms after the operation. She has been heard of since as remaining quite well.

It is impossible to say what the precise lesion really is in such cases as these; probably they differ in each. In one case a strain or tear of the cellular tissue, with or without blood extravasation outside the kidney, may be the starting point of perinephritis; in such we should expect to get pain at first, and slight hæmaturia or pyuria as a secondary effect, after an interval of days, or weeks, or months.

In another case a slight laceration of the surface of the kidney is followed by slight extravasation of blood, or urine and blood, around the kidney, and from this, as a focus, cellulitis starts. Nephralgia, with some hæmaturia or pyuria, follows quickly and gives rise to the diagnosis of stone, more especially if the injury has been so trivial as to be overlooked or forgotten by the patient. When hæmaturia and pain occur immediately after the receipt of an injury, the kidney itself must be involved in the damage; but in time, when the irritation has spread to the perinephric tissues, the inflammatory changes excited therein will keep up persistent nephralgia, though the hæmaturia has long since ceased.

In other cases an injury by causing the deposit of a small clot of blood within the kidney may lead to the formation of a stone, with the clot as its nucleus.

Again, an injury may detach a stone which had been previously embedded in the calyx of the kidney, and when thus free to roll or shift about, the calculus may give rise to pain, hæmaturia, pyuria, and disturbances of micturition. I might refer to several cases about which I have been consulted for symptoms of renal calculus dating from some such injury as a fall from a garden hammock, an injury during a rough sea voyage, a fall from a horse, or a kick in the loin, and after a month or two, or a year or more—the symptoms continuing the while—a stone has been expelled from the urethra.

When a laceration extending into the cavity of the kidney is followed by a free escape of urine, or urine and blood, a large tumour in the loin and corresponding side of the abdomen may form.

Traumatic hydronephrosis is another kind of abdominal tumour which may follow soon after an injury. In these cases the cause of the obstruction may be a bloodclot, a displaced calculus, a movable kidney, or an injury to the ureter. When these large swellings occur, however, the diagnosis is not difficult, neither is the line of treatment doubtful. They are not cases, therefore, that come within the category of "conditions simulating calculus," and for which an "exploratory" operation will be undertaken.

4. *Movable Kidney*.—This was met with twice when there was no other pathological lesion to account for the symptoms; and in three other cases complicated with other conditions. In four of them the mobility of the kidney had not been detected before the exploration. In one it had. It is not diffi-

cult to understand why some kidneys are very mobile and yet are not detected to be so at the bedside examinations. There are two distinct forms of movable kidney. First, those the mobility of which might be described as the "cinder sifting" movement, that is a shifting in any direction, up and down, inwards and outwards, behind the peritoneum and upon the posterior surface of the kidney. This occurs when the perinephric tissue is very lax, and the peritoneum is not dragged forwards into a long loose sac. Secondly, those kidneys which spring forwards or rise away from the wall of the loin towards the anterior abdominal wall. This movement can only occur when the peritoneum is loose and sac-like, or when, as very rarely happens, there is a distinct mesonephron. The kidney in this second form of movement is often easily detected, as a movable or "floating" lump or tumour, the moment the hand is placed on the front surface of the abdomen; but the cinder sifting movement may be very free and yet when the patient is lying quietly on his back the most careful examination may fail to detect movement, especially in persons with a long thorax, a thick trunk, or fat abdominal walls. The idea that a movable kidney could give rise to distressing symptoms has been met by the argument that there was no such thing clinically as a movable kidney, and that several kinds of morbid swellings have been mistaken for movable kidney. Whilst it is true that other tumours are occasionally and wrongly regarded as movable kidneys, what is very much more common is that movable kidneys are present and their mobility overlooked.

In two of the cases in my list (the spinal case and the one treated by nephrorrhaphy) the range of movement was so great that with the index finger kept fixed in the operation wound the kidney could be passed in its entirety, above, below, and to the inner or outer side of the finger tip. I mean that the kidney could be moved upwards till its lower edge was well above, and downwards till its upper edge was clearly below the finger; and similarly the outer border could be carried inwards, and the inner border outwards beyond the finger tip. These movements were of course observed before any disturbance of the perinephric tissue was allowed.

The first case was operated upon on January 4th, 1882. A man, aged 35, for eleven years, at long intervals, had suffered pricking pains in the left renal region. For eighteen months prior to the operation he had been constantly under treatment in the medical side of the hospital, chiefly under Dr. Fowler, and he was transferred to me as he was believed to have stone in his kidney. I explored him on January 4th, 1882, and found the kidney freely movable in the "cinder sifting" manner I have described. I regret it did not occur to me then to stitch his kidney in the loin as I should do at the present time. His wound healed well, and it was hoped that in the healing process the kidney would be securely moored to its proper place. No improvement however followed, but he subsequently grew very stout, and then a hernial bulging formed at the cicatrix. This is the only instance I have met with where there has been any tendency to hernia after the lumbar incision. I have long lost sight of him.

The other case, a man aged 34, was sent to me from Grays by Dr. Kirby. For three years he had had pain in the right loin, with occasional vomiting and some pain and difficulty in micturating. For five months these pains had been very much worse, shooting along the abdomen into the testicle. The urine was turbid from pus, specific gravity 1015, acid, and contained numerous crystals of oxalate of lime. On one occasion only, namely two months before coming to me, he had passed blood in the urine. On December 19th, 1888, the right kidney was explored and thoroughly examined. Its mobility was excessive, but it was healthy in structure. Nephrorrhaphy was performed by means of three silk sutures passed through the kidney substance and the edges of the skin. The wound healed rapidly, the urine ceased to contain either albumen or pus, and the man left the hospital well on January 9th, 1889.

In the third case, a solicitor, aged 37, a patient of Dr. Verdon, of Brixton, with a history pointing markedly to renal calculus, no stone was found when the kidney was explored on April 30th, 1890, but there was a sacculated calyx in the upper part of the organ, covered only by a thin layer of renal tissue, and the kidney was also freely movable. Another element in this case was marked oxaluria (for which he had, however, been treated for six months), which, with the mo-

bility of the kidney and the sacculatation of one of its calyces afforded a combination of possible causes for his symptoms.

In the fourth case the kidney was very movable, and had given rise to a sense of something moving like the "pendulum of a clock" in the loin; but after death, which happened eighteen months later than the operation, it was proved that a stone in the ureter had been keeping up the symptoms of renal calculus.

In the fifth case the kidney was easily felt, on bedside examination, to be very movable and also displaced forwards; and this displacement was proved at the operation to be due to an abscess behind the kidney in association with Pott's curvature of the spine.

5. *Abscess of the Prostate.*—A case has been referred to under the heading of abscess of the kidney in which a tuberculous abscess of the prostate (associated with tuberculous disease of the bladder and vesicula seminalis) kept up the same symptoms after as had existed before a scrofulous abscess of the left kidney had been opened and drained, and at length treated by nephrectomy. In my list there is also the case of a gardener, aged 30, who was sent into the hospital with suspected renal stone, and who died several months after leaving the hospital from abscess of the prostate. For seven years he had had attacks of hæmaturia and severe pain in the left loin, frequent and painful micturition, tenderness on pressure in the loin, and albumen in the urine. He was explored on December 1st, 1886, but no stone was found. The lumbar wound healed readily, but three weeks later I opened a small abscess (no doubt of scrofulous nature) in the prostate whilst exploring the bladder through a perineal incision. The perineal wound never healed, the prostatic abscess did not close, and he left the hospital with a perineal fistula.

6. *Prostatic Calculus.*—A man, aged 59, was admitted in April, 1886, for suspected renal calculus. Thirteen years before he had been under Mr. Nunn for "cystitis and renal calculus." On April 14th, 1886, I explored his left kidney because of frequent sudden attacks of pain in the left lumbar region, and very frequent and painful micturition. His urine was very acid, and contained pus and blood, but no casts or crystals. The wound was healed by May 8th, but no relief had been given by the operation. On May 20th I performed perineal urethrotomy to examine his bladder and prostate, but nothing of the nature of stone or growth was found. He died on June 19th, and at the *post-mortem* examination the right kidney was found quite shrivelled; its ureter, at 3 inches from the renal pelvis, was changed into a mere cord; both ureters, as well as the bladder, were inflamed and contained purulent urine, and the left kidney showed signs of commencing suppuration in minute foci. A stone the size of a horse bean was found in the prostate.

This case proved to me the occasional difficulty there must be in detecting a stone in the prostate, even with one index finger in the prostatic urethra and the other in the rectum. The kidney, therefore, is not alone in this respect—namely, that there may be a stone embedded within it which no compression of its surfaces will discover; and another point of resemblance between the two organs is that there are conditions of the prostate which simulate prostatic and also renal calculus, as there are non-calculous conditions of the kidney simulating renal calculus.

(To be continued.)

THE GRESHAM UNIVERSITY.—The following resolution was unanimously passed by the Council of the General Practitioners' Alliance, and a copy forwarded to the Lord President of Her Majesty's Privy Council: "That the Council of the General Practitioners' Alliance regret to find that, whilst representatives of universities and medical corporations have been appointed to serve on the Royal Commission on the proposed Gresham University, no independent representative of the general body of medical practitioners has been appointed thereon; and the Council respectfully request the Lord President of the Privy Council to receive a deputation of medical men on this subject at an early date to urge the desirability, on public grounds, of appointing representatives of the medical profession not connected with the governing bodies of existing corporations to serve on that Commission." The Lord President has declined to receive the proposed deputation.