

Part Third.

MEETINGS OF SOCIETIES.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

SESSION LII.—MEETING V.

Wednesday, 5th February 1873.—Dr HANDYSIDE, *President*, in the Chair.

I. *Dr Batty Tuke* showed two specimens of HORSESHOE KIDNEY—one he had met with in a patient of his own, the other he had been allowed by Professor Turner to show to the Society. This was the only example Professor Turner had met in the University dissecting-rooms since his connexion with them as Demonstrator and Professor.

II. The *President* showed a drawing of a MISPLACED LEFT KIDNEY. It was of normal size and shape, and lay in the left iliac fossa, midway between the umbilicus and Poupart's ligament. The ureter lay in front; the right kidney was normal. He mentioned that 930 subjects had passed through his hands, and that he had never met with a horseshoe kidney. He showed a drawing of an example preserved in the Museum of the Royal College of Surgeons.

III. *Mr Annandale* showed,—1. An example of MALIGNANT TUMOUR of very rapid growth, occurring in the leg of a young lad, for which amputation had been performed at the knee-joint. He received a blow on the leg two months before Mr A. saw him. Nothing was noticed until five weeks after, when a fungating growth formed at the seat of injury. This increased rapidly, and at the time of the operation involved the tissue throughout almost the entire thickness of the limb.

2. A MEDULLARY TUMOUR OF THE UPPER JAW, from a woman aged 56. The skin over the tumour, which had originated in the antrum and grown forwards, was implicated, requiring removal, and necessitating a plastic operation, the gap being filled up by a flap from the lower part of the cheek and neck.

3. The ARM OF A LADY, aged 65, amputated above the elbow-joint, in consequence of spreading gangrene. The exciting cause was a simple fracture of the bones of the forearm, which occurred five days before the operation. The gangrene was first noticed on the evening of the third day, and at the time of the operation the forearm was gangrenous and the lower part of the arm brawny. The operation had checked the spread of the disease, and the patient made a good recovery.

4. The LOWER END OF A CARIOUS HUMERUS, which Mr Annandale had excised by means of lateral incisions, leaving the radius and ulna and the attachment of the triceps intact.

IV. *Dr Batty Tuke* then read his paper on the MORBID HISTOLOGY OF THE BRAIN AND SPINAL CORD AS OBSERVED IN THE INSANE.

The paper consisted of an elaborate description of the microscopic appearances met with in the minute bloodvessels and membranes in the brains of 92 persons, 86 of whom were insane. These brains were compared with specimens of healthy human brains and with the brains of the lower animals.

In the vessels, *Dr Tuke* directed attention to,—(1.) A dilated condition of the brain-substance immediately surrounding the vessels; (2.) A thickened condition of the hyaline membrane; (3.) Deposits in the tunica adventitia; (4.) Hypertrophy of the muscular coat; (5.) Microscopic aneurisms and apoplexies; (6.) Abnormalities in direction; and, (7.) Pigmentation.

In the membranes, to,—(1.) Deposits of phosphate of lime on the inner surface of the pia mater; and, (2.) Lymph deposits between the substance of the cord and the pia mater; also to granulations on the surface of the brain and the floors of the ventricles, and to various changes in the central canal.

The *President*, in the name of the Society, thanked *Dr Tuke* for his excellent paper. He thought that the comparison of the appearances met with in the brain of man with the brains of the lower animals added greatly to the interest of the communication. The early examination of the bodies rendered the observations very valuable. Such investigations were of importance in attempting to clear up important practical questions regarding the circulation within the cranium.

Professor Sanders expressed the satisfaction with which he had heard the paper. He had seen many of the specimens described. He considered that the relation of the blood-supply to the nutrition of the brain was a most important question; many brain diseases were in reality diseases of the vascular system. It had lately been pointed out that sanguineous apoplexy was in many cases caused by the rupture of minute microscopic aneurisms. Such investigations in the minute changes in the wall of the bloodvessels were most interesting.

Dr Tuke, in reply, regretted that *Dr M'Kendrick* was not present, because he had met with appearances in the brains of pigeons traumatically injured which were precisely similar to certain of the appearances in the brains of the insane, described by *Dr Tuke*. He referred more especially to amyloid bodies.

SESSION LII.—MEETING VI.

Wednesday, 19th February 1873.—Mr BENJAMIN BELL in the Chair.

I. *Dr Joseph Bell* exhibited TWO OXALATE OF LIME CALCULI, which he had removed from the bladder of an old gentleman by lithotomy. The only object of interest about them was the fact, that what he had considered to be only one stone on sounding the

bladder, turned out to be two, very slightly attached, and fitting into each other. He had no doubt they had preserved their relation to each other pretty constantly in the bladder.

II. *Dr Argyll Robertson* then presented a patient labouring under A RARE DISEASE OF THE EYELIDS. At first sight it appeared to be an œdema, but it had endured for several years, even after repeated and various treatment. Further, there was little pitting on pressure, and no œdema in any other part of the body, and there was no cardiac or renal disease. For want of a better term, he would denominate it localized elephantiasis of the lids. It was difficult to test the sensation of the eyelids, but so far as he could make out, he thought that the sensation had been diminished in this case. The swollen condition of the lids had the unfortunate effect of narrowing the field of vision, and thus interfered with the patient's occupation. He proposed to remove a considerable portion of the hypertrophied skin.

III. *Dr Davidson*, of Madagascar, then read his paper, entitled, BRIEF RETROSPECT OF THE RECENT HISTORY OF LITHOTOMY, WITH AN ACCOUNT OF A NEW METHOD OF PERFORMING THE OPERATION, which appears in full at p. 1057 of our present number.

The *Chairman* thanked the author for his paper.

Dr Chiene criticised the communication as practical and interesting. In making any remarks, he would do so from the standpoint of an anatomist. He thought that *Dr Davidson*, in speaking of *Dr Buchanan's* operation as a median one, was in error, as it appeared to him to be a lateral operation. The cut which is made in the prostate in the common lateral operation is not, as *Dr Davidson* remarks, indefinite, as it is in proportion to the breadth of the knife. The principle of the operation is to divide the fibrous ring at the neck of the bladder, after which the prostate is easily dilated. The instrument which *Dr Davidson* proposed as a guide to the forceps, he considered was too large, being larger than the finger, and consequently the tendency to laceration is as great as in the ordinary operation.

Dr Joseph Bell remarked that it certainly was the fact, that surgeons were now devising means of improving or modifying the old operation of lateral lithotomy. He agreed with *Dr Chiene* in considering *Dr Buchanan's* operation a lateral, and not a median. But he was of opinion that the method of operation was not so important as the consideration of the health of the patient before the operation, and the manner in which he was cared for after it was performed. He then explained the cause of the incisions being broader than the knife, and the uses and advantages of the straight staff, and was of opinion that a guide of some sort was of advantage in these days of chloroform.

Dr Davidson shortly replied, thanking the Society for the courteous hearing they had given his paper.

OBSTETRICAL SOCIETY OF EDINBURGH.

SESSION XXXII.—MEETING VIII.

12th March 1873.—Professor SIMPSON, *Vice-President*, in the Chair.

Mr W. A. Smith, L.R.C.P. and S.E., was admitted as a Corresponding Fellow.

Dr Milne read the following paper on the CAUSATION, EFFECTS, AND TREATMENT OF UTERINE SUBINVOLUTION:—

In this short paper, I purpose calling attention to some points, more particularly as regards the causation, effects, and treatment of that condition of the uterus which results from an arrestment of the process of involution, and which has been termed subinvolution. We all know that in a few weeks after labour the uterus ought to retrograde nearly to that condition in which it existed prior to conception,—viz., a small body about three or four inches in length. This diminution is accomplished by the joint processes of absorption and excretion—the tissues of the womb previously taking on fatty degeneration—and also by a simultaneous growth of new fibres. Well, this process of involution is arrested in many cases, and, speaking for myself, I must say that I have met with the abnormality pretty often, and am persuaded that it is of frequent occurrence. The causes usually cited are metritis, frequent abortion, and rising too soon after labour. Now, I have no doubt that these have much to do with the condition; but I think there are one or two other causes highly conducive, and that, so far as I am aware, they have hitherto been overlooked. One of the most important of these, in my estimation, is non-lactation. In the majority of the cases which have come under my observation the female had been unable to suckle her child, and had either not given suck at all, or abandoned it after perhaps a few days' trial. How this should be a cause of defective involution would appear to be not difficult of explanation. The reflex connexion between the uterus and mammæ, now so well known, throws light on the subject. Illustrations of this are found in cases of abortion due to lactation; in the enhancement of uterine pain on applying the infant to the breast; and in the mammary pain on the one hand, and the uterine on the other, when one or other of these organs is the seat of disease. We know also that Scanzoni proposed suction of the mammæ, with the view of exciting uterine contraction, and thereby inducing premature labour. Well, when a woman does not apply her child to the breast, or does so only for a day or two, and then desists, the powerful post-partum contractions of the uterus are greatly abated or altogether wanting. These contractions when in operation narrow the bore of the uterine vessels, and diminish its blood-supply, but when feeble or absent, conduce to a persistent hyperæmia; and this fulness appears to hinder the degenerative process and impede absorption. I believe

that this accounts for numerous cases, and that in not a few of these it will be found there is nothing so grave, in the way of causation, as can be fitly dignified with the term inflammation. At all events, if you interrogate the women, they will often tell you that they were quite unaware of such a thing—that is, that they experienced no pain, nothing perhaps beyond a little feeling of weight or fulness at the most.

Another cause, in my opinion, is to be found in a too early cessation of the lochia. In some of the cases which I have met with, this discharge has dried up about the third or fourth day, although no immediate threatening symptom supervened. For example, there was no pain or fever—nothing to indicate metritis. How this early suppression of the lochia should operate as a cause would seem not difficult of explanation. Involution is perhaps as much accomplished by the effete material escaping by the vagina as it is by absorption. Let the lochia be suppressed within the first few days, and then one medium or channel for the escape of the degenerate elements is done away with. Of course we have suppressed lochia in metritis; but we shall frequently find it occurring, as before said, at the fourth or fifth day, independent of this, and without any tangible result setting in beyond the probability of subinvolution.

A third cause which I shall name, and which, like the others, appears to have been overlooked, is frequent childbearing. When women have been often pregnant, and more especially when they have conceived quickly—that is to say, when there has been but a short interval, say a year or so, betwixt one conception and another or one delivery and another—the process of involution can hardly fail to be interfered with, on the one hand, by its tissue becoming atonied, its nerve force enfeebled, and on the other, by conception in point of fact preceding the usual period within which involution is effected. Many cases, for instance, are met with where conception takes place from fourteen to twenty-one days after delivery. Under such circumstances, it were truly a truism to say that involution were impossible, and that hyperæmia clearly must prevail. Such are the causes hitherto overlooked, of much importance in my view, in the production of subinvolution, and which causes it is necessary to insist on, if we would carry out a complete scheme of rational and effective treatment.

I shall now say a word or two in reference to some of the effects of this enlargement of the uterus, before noticing the treatment of it. I find that one important effect has escaped the notice of our gynæcologists—viz., retroversion. I have found this condition pretty frequently. There is rarely flexion, because the uterine walls are uniformly enlarged, but there is a tendency to prolapsus. We have also leucorrhœa; in some cases difficult defæcation and micturition; pain in the back and limbs, with numbness.

Treatment.—And now as regards the treatment of the affection.

This is of much importance, and happily a good deal can be done when the enlargement is not of long duration. Our great remedy—our sheet anchor—in such cases, is ergot given internally. I may be thought a little too fond of this drug, having so recently lauded it in the treatment of uterine cancer; but if I am sure of any mundane thing, it is that ergot perseveringly given helps wonderfully to reduce the enlargement due to imperfect involution. I give the liquor twice a day for from four to six weeks, as may be requisite. Moreover, the virtue of the ergot is not all told yet. It is not only an efficient cure, but also a powerful preventive of the enlargement of which we are speaking. When a woman, from inability or otherwise, has made up her mind not to apply her child to the breast, the medical attendant should see to it that a short course of ergot be given. It will stimulate those uterine contractions which are so indispensable to effective involution, and which, in the absence of mammary excitation, might be wanting, or, if present, feeble and inefficient. Thus, we may in many cases avert the affection, and have the consolation and the triumph of prevention, which is “better than cure.” I ought to remark, that in such instances (where we wish to prevent), it will be sufficient to give the ergot for a week or ten days. I have not a great deal of faith *now* in the bromide and iodide of potassium—that is, as uterine deobstruents. They may do a little good in the course of time, but they have no special action on the uterus; and if they promote the absorption of its redundant parts, they also favour the absorption of other parts and organs. On the other hand, the ergot acts specially on the womb, and in the precise manner desiderated—viz., by causing contraction of its fibres, diminishing the calibre of its vessels, and thus reducing the amount of its blood-supply. Instead of employing topically pessaries of iodide of lead, etc., I think more benefit will be got by painting the interior of the uterus with tincture of iodine, and occasionally with tincture of cantharides. In chronic cases, the employment of an intra-uterine pessary, as recommended by the late Sir J. Simpson, will be found to do good, by augmenting the enlargement in the first instance; which enlargement may, however, at length take on the process of effective involution, especially when aided by a course of deobstruent remedies, and more particularly by the great oxytoxic ergot. Not a few cases of subinvolution coexist with an anæmic condition. In such, a chalybeate course is called for; the various preparations of iron being tried, and recourse had to the more famous springs; or to baths at home, when these are inaccessible. An embargo should be laid on too frequent childbearing, or, what is much the same, *coitus*; and if there is a great proneness to abortions, the cause of these should, if possible, be traced, and, if practicable, removed. Subinvolution, in conclusion, I would just reiterate, is one of those uterine affections which, though often obstinate, will yet often

yield to one or more of the afore-named remedies ; and I am firmly of opinion, as before said, that it may also, in many cases, be prevented. I would again urge strongly that the great value of ergot be kept in remembrance when the disorder has to be treated, and more particularly when lactation has to be foregone.

Prof. Simpson thought the paper was an extremely interesting one, and that the Society were obliged by Dr Milne bringing it before them. With regard to the causes of this uterine condition, he considered inflammation was a certain cause. When set up either in the uterus or its appendages, it undoubtedly interfered with the involution of the uterus. Frequent miscarriages, or even frequent childbearing, were conditions which also tended to produce it, by preventing the uterus regaining its natural state. Another cause was the compression of vessels of the uterus by tight bandages or binders. But the suggestion that imperfect lactation leads to it, he was not prepared to admit. He could not regard it as one of the common causes ; but there are very few married women who do not make the attempt to nurse. He, however, agreed with Dr Milne as to the necessity for causing firm contraction of the uterus, and lactation favoured this. As to ergot, he had only used it when the subinvolution was aggravated with menorrhagia. He thought the occurrence of imperfect lactation as a cause was practically rare, even if it were shown to be theoretically correct. He would, however, rather regard Dr Milne's second cause as a concomitant. The lochia being suppressed must arise from some cause, and it was probable that inflammatory action was preventing their flow, and that therefore their absence was due to a cause which of itself was the occasion of subinvolution of the uterus. Their absence was not therefore the cause. As to Dr Milne's remarks on treatment, they were all practical and sensible, as his views on uterine treatment always were. He had, however, left out one means of treatment, and that was mercury. He had seen useful results from it in the form of pessary, when the hypertrophy was due to influx of action, and especially when there was syphilis complicating the case. It was not necessary generally to push it to its full extent. He preferred using it in form of bichloride, combined with quinine, for the general health in these cases was usually defective. He also mentioned the treatment by introduction of a sponge-tent or bougie. This treatment was based on correct idea, for their presence excited uterine action, and rendered the condition more sensible to deobstruents. He was chary about the injection of fluids into uterus, and would never inject them except with a cervix previously dilated or very patulous. Adopting a suggestion from America, he applied tincture of iodine and other liquids on cotton wadding wrapped round the point of a sound. It was a safe method of applying injections, and fulfilled all the indications wanted, without any risk.

Dr Macdonald had listened with much pleasure to Dr Milne's

paper, and thought that the thanks of the meeting should be given him for it. He had not seen imperfect lactation as a cause of subinvolution. He referred to the state of the uterus after labour, observing that a few hours, say nine or ten, after labour, the normal condition of the uterus is that of a flaccid body which may be felt distinctly lying in the abdomen as high up as the umbilicus, and he doubted whether active contraction after this was a physiological condition, nor did he think it was required. He did not believe the non-involution was due to the imperfect lactation, but that the unsuccessful lactation and it were due to a common weakness. The condition of health which prevented the woman nursing predisposed to local congestions, and thereby led to the congestion of the uterus, and thus to its subinvolution. He agreed with Dr Milne in the use of ergot of rye in such cases, and also particularly with Sir James Simpson's combination of it with cinchona. He also alluded to the fact that it had been used by Credé, in cases of subinvolution with retroversion, and referred to his recent paper in the *Archiv für Gynæcology* as an instance to show that the use of ergot of rye for this purpose was not a new idea.

Dr Cairns regretted he was prevented being present when the paper was read, and had therefore to speak on it from the observations of preceding speakers. As regards the causes, he differed from the views expressed, and would take them in the order he had heard them mentioned. *1st*, Inflammation: subinvolution of the uterus, he held, could not be due to this, for in such cases you never have any rigors symptomatic of inflammation. *2d*, The use of tight binders. He was puzzled to find that the President (Professor Simpson) stated this to be a cause, after the views which were expressed at a previous meeting upon his paper. But their use could not cause this uterine condition, but would rather prevent it, for pressure would cause absorption. *3d*, Suppression of the lochia was also evidently not a cause; for if any foreign body lodges in the uterus, the uterus would make efforts to contract and expel it. If by the expression non-elimination is intended, that too could have no effect, for the non-elimination is a result of an altered condition of the uterus. *4th*, The last point is, that it is caused by non-lactation. How the non-production of milk can produce such a result he could not understand. He thought the view was not only physiologically incorrect, but it was quite contrary to fact; for women were constantly bringing up children on the bottle without the production of any such state of the uterus. He now came to consider what he regarded as the real cause of subinvolution. It was partial paralysis of the sympathetic and pneumogastric nerves. For this reason the power was not present to cause decomposition of uterine fibre into fatty matter. Every medical man must have attended hundreds of cases of non-lactation, and never found such cases of

subinvolution occur. He would rather not enter upon the question of treatment, as he intended to confine his remarks to the causes, and he had not heard Dr Milne's observations on treatment; but he might observe, that he thought the use of galvanic pessaries the best treatment, or, next to that, the use of large doses of alkalis, which have the effect of dissolving fibrine. But he would rather not at present enter into this branch of the subject.

Dr Cochrane, in a few complimentary remarks on the paper, observed he was much inclined to support the views of Dr Milne.

Dr Milne said that Dr Cairns seemed entirely to ignore the influence of mammary excitement on uterine contraction.

SESSION XXXII.—MEETING X.

Wednesday, 9th April 1873.—Dr THOMSON, *President*, in the Chair.

I. *Dr Angus Macdonald* read a paper on LATENT GONORRHOEA IN THE FEMALE SEX, which appears at page 1086 of the present number.

Dr Keiller thought it exceedingly important to keep in mind the risks that women ran from gonorrhœa. At the same time, his own experience did not support the conclusions arrived at in the paper. He had often treated married men for gonorrhœa, and their wives, although also affected, had never complained of suffering from such symptoms as Dr Macdonald had mentioned; and further, he had never noticed any falling-off in their fertility. The views of Dr Noeggerath, even as accepted by Dr Macdonald, required a larger amount of confirmation than the few illustrative cases given in the paper now read afforded.

Dr Young had often watched cases of gonorrhœa in the married and unmarried, and never been able to find the results Dr Macdonald has brought out. If the disease was present at all, it was most likely to show itself in the form of ophthalmia, he believed.

Dr Bell desired to know whether it was the man or woman who was sterile, and how long it was to last?

Dr M. Duncan remarked how difficult it was to arrive at firm ground on such a practical question. It is universally admitted that acute gonorrhœa gives rise to all the accidents which Dr Noeggerath attributes to the latent form. Dr N. says a man is never cured of a gonorrhœa, and this man, though apparently cured, is apt to cause all these troubles to his wife. Dr D. had seen many cases which led him to suspect as much before he ever read the paper; but he thought Dr N. went too far in his assumptions. He had frequently met with cases where men were suffering for years from this disease, and mentioned that Dr Curling had shown that gonorrhœa was frequently a cause of sterility in the male.

Dr Macdonald replied.

II. CRANIOTOMY CONTRASTED WITH CEPHALOTRIPSY. BY DR
CONNELL, PEEBLES.

Having recently been under the unfortunate necessity of destroying the fœtus twice within three months, I have thought it well to put the cases on record, in order to justify my conduct not only to others, but also, and especially, to myself.

The two cases I have to relate offer various points of interest for discussion, and bring out prominently the superiority of the latter over the former method of operation.

About the middle of September last I was called to see Mrs C., who said she had been suffering for some time from pain shooting down the back of the left thigh. She was also alarmed to find that her abdomen was increasing in size; but as she had now been five years married without offspring, and was forty-one, she supposed the swelling to be due not to pregnancy, but to some internal growth connected with the change of life. She had menstruated regularly until six months previously, but had never suffered from morning sickness nor other unpleasant symptom, till the pain in the thigh compelled her to seek advice.

I found, on examination, that there was a tumour corresponding to a uterus in the sixth month of pregnancy, and that the state of the os and cervix was in harmony with the same theory of her condition; but failing to make out the fœtal heart-sounds, I refrained from giving a decided opinion. Next day (the bowels having been emptied in the meantime) I was relieved to find that they were very distinct, and I at once assured her that she was pregnant. She answered that if it was that it would be her death; nor did she ever get rid of this impression. Finding that the regulation of the bowels did not suffice to relieve the sciatic pain, which now became more and more excruciating, I gave her a nightly dose of chloral, with the effect of rendering it bearable. I suppose that almost every medical man who has used chloral will have seen cases where the patient has alarmed friends and neighbours by keeping up an almost continuous crying or roaring for hours after the dose has taken effect. The patient afterwards denies all consciousness, and the crying is, of course, merely a sensori-motor action. In the present case, the roaring was kept up for several nights; the patient, however, affirming afterwards that she had slept comfortably.

Edema shortly appeared in both ankles, but the urine continued perfectly free from albumen; and by the middle of November—though the left leg had swollen considerably—pain ceased to be complained of. On the morning of Wednesday the 3d December, I was called to see her. She said she had been taken ill about 3 o'clock in the morning, and that the pains were pretty constant. On examination I found that the os was beginning to dilate; and as she again complained of severe pain in the thigh, I prescribed a dose of her chloral mixture. On calling back in the evening, I

found things pretty much as before, and as she had settled for several hours, I intimated that I would not call again till I was sent for. I was not summoned till about 6 P.M. on Friday the 5th, and, on arriving about 8, found the membranes ruptured, the os almost fully dilated, but dry and rigid, and the head still free in the pelvis. She had made water about an hour before, but had not been otherwise aware of any flow of fluid. I began to give chloroform about 9; and about 10, finding that no progress whatever was being made, I introduced my hand within the os, and now found that I had a narrow pelvis to deal with. I at once thought of turning, but found (what indeed I had dreaded) that the parts were so rigid, and the uterus so strongly and constantly contracted, that this was impossible, even though I carried the chloroform to and beyond the limits of safety. The head not being a large one, I did not yet despair of delivery by the long forceps, but my strongest and most skilful efforts were unavailing, and the instrument repeatedly slipped without having moved the head in the least.

I now sent for Dr Ferguson, and on his arrival, about 2 A.M., we decided on performing craniotomy. I removed some small pieces of bone, and at the same time broke up and scooped out with my finger as much of the brain as possible. The difficulties were now only begun, our combined efforts at extraction proving most tedious and exhausting. Deeming that it would be wise to allow nature another chance of completing the delivery, we desisted from further operations, and in the meantime sent off the husband to Edinburgh, requesting Dr Keiller to bring or send his cephalotribe. The woman was by this time much exhausted, and we dreaded that she should die before delivery was accomplished. Uterine action had entirely ceased, and another attempt was made to turn the child. The left foot was seized and brought into the vagina; but it was severed from the leg by the force of traction employed, without aiding at all in changing the child's position. I therefore pushed the leg back, and left the head still presenting. About 6 A.M. there was evidence of uterine action returning; and my last hope was that, by forming a sort of rope of the integuments of the head, and assisting the uterus, I might ultimately drag the body into the world. After three hours of hard work this was at last accomplished, the shoulder having offered almost as great a difficulty as the head.

Dr Keiller arrived soon afterwards, and I need not say that his prognosis was most unfavourable. In fact, extensive sloughing of the vagina took place, and the woman died on the sixth day after, apparently of exhaustion and blood-poisoning.

I turn now to a case which, fortunately, has had a different issue.

Mrs K. has had six children, of whom only the first three have been born alive. The oldest is a girl, and was born after a labour of nearly three days' duration. The second and third are boys, of whom the former was born prematurely, and the latter (now seven

years of age) has a deep mark over the right eyebrow, which gives ocular demonstration of his having been a difficult long-forceps case. He had, in fact, been laid aside for dead, when some slight movement arrested the doctor's attention, and caused him to renew his efforts to induce respiration. This, at least, is the woman's statement. The fourth was hopelessly dead; and if we credit the parents' statement, that the head was all smashed-up by the two doctors, we must conclude either that craniotomy had been performed, or that the forceps had been repeatedly tried and failed.

Her fifth confinement was the first I attended her in; and having heard her history from herself only a fortnight beforehand, I resolved to employ turning, if necessary. It happened that the head was large and strongly ossified, and I had taken care to have a qualified assistant along with me.

When the os had been fully dilated for about two hours, we put her under chloroform, and with some delay (owing to the great size of the child) the turning was accomplished. Even with the assistance of the uterus, and with carefully directed force on our part, the extraction was a matter of more than two hours' exhausting toil. I hardly exaggerate when I say that every bone in the body was broken or dislocated. Had the neck given way (which it was on the point of doing), and left the head in utero, I think the woman must inevitably have died. Her recovery was tedious, and it was a settled point with me that I should never attempt turning in her case again. On her once more becoming pregnant, I strongly urged the propriety of having premature labour induced at the seventh month; but she allowed the time to pass without making up her mind. I suppose no one with the same data could have come to any other conclusion than that cephalotripsy was the best alternative. As, however, her difficulty was due rather to the large heads of her children than to any great contraction of the pelvis, it was not till after I had made several attempts with the forceps, and after she had been nearly twelve hours in the second stage, that cephalotripsy was determined on.

With Dr Ferguson's assistance, the instrument was applied without difficulty, but the blades twice slipped from the head in screwing up the winch. The third time, a still worse accident happened. While still holding firmly, and before any crushing of the head had taken place, the bolt which forms the lock started from its socket, at once rendering the instrument useless. Fortunately, a blacksmith lived about a mile off, and no time was lost in getting a new rivet put in. Before applying the instrument again, the skull was perforated, and the blades did not again slip. A stream of brain-substance issuing from the vagina showed that the skull was being rapidly flattened, when in a moment the rivet again gave way, this time breaking quite across, and again rendering the instrument useless. The head, however, was now so thoroughly broken up, and the soft parts so well preserved, that before the smith had

renewed the rivet, extraction had been finished by the aid of the crotchet.

The recovery in this case was extended over four weeks, but the catheter did not require to be used more than twice, as compared with four times in her previous confinement.

In reflecting on these two cases, my first conviction is, that craniotomy and cephalotripsy can only be used together to be contrasted.

In Mrs C.'s case, I believe the severe manipulations were in great measure the cause of death, and the timely use of the cephalotribe would have reduced it to one of comparative simplicity.

In Mrs K.'s case, the cephalotribe was used under great disadvantages. Not only was the head very strong and large, and the pelvis contracted in its antero-posterior diameter, but the anterior lip of the uterus was so elongated and œdematous as to resemble a large polypus, and hung down in such a manner between the blades that I had great difficulty, while the screw was being turned, in preventing its being amputated.

The starting of the lock-bolt was a most alarming accident, and when it happened I looked for nothing but a repetition of my former case. The instrument used was one of Dr Matthews Duncan's pattern; but I would not attempt the operation again without having the bolt screwed, and not riveted, through the blade into a nut on the opposite side.

Remembering also how much more easily and certainly the blades embraced the head after perforation, I would make it a rule to perforate first in all cases.

It would be easy to adapt a perforator to the instrument, so as to make it perfect in itself, and to embody the idea that perforation, crushing, and extraction, being equally provided for, are the three essential elements of the operation. (*Model shown.*)

One other remark I would make in reference to a matter which I saw mentioned in a recent discussion of the Society. The use of the catheter in any patient whose vagina is sloughing is an exceedingly unpleasant operation, and a simple means of removing the fœtor from hands and instrument is surely a desideratum. In attending Mrs C. after the operation, I was surprised to see a female neighbour put her hands into the fire, "to cleanse them," as she said, after handling the patient. There is no doubt she has hit upon the right idea. I can confidently assert, after trying every kind of antiseptic, that the smoke either of wood or coal is simple and effectual. First hold the fingers in the smoke; then wash with soap and water; then repeat the smoking, and wash again, and not a trace of the offensive odour will be left. The idea is so simple that it appears as if every one ought to know it; and yet I have never met any one who did.

Dr Matthews Duncan remarked, that when he was contriving some slight alterations on the French instrument, the bolt was the chief difficulty he had to contend with. The bolt of a French specimen

once broke right across. It had an angle or knee upon it, now it is made without any angle. As to the operation itself, he looked upon it as an addition to craniotomy. Where there is not great contraction of the pelvis, the perfection of the operation is not required; all that is needed being simply to break up the head, and then to wait for some hours. He desired to see some instrument invented which would act both as a powerful crusher and an extractor.

Dr Keiller had no doubt but that the head ought to be perforated before you crush. He disagreed with *Dr Duncan* when he said we have as yet no instruments which are crushers and extractors; he (*Dr K.*) had not only frequently seen and used such instruments, but had on various occasions exhibited in this Society actual cases with the very instruments still applied to the child's head as sufficiently powerful crushers, and at the same time as most effective extractors. He had never used *Dr Duncan's* cephalotribe; at the same time, he thought it too unwieldy. *Dr Connell's* adaptation would not always do, as sometimes you require to fix the head with the cephalotribe before you perforate.

Dr Macdonald's views were more akin to *Dr Keiller's* than to *Dr Duncan's*. With *Dr Duncan* he held that, if by a cephalotribe we meant an instrument fit to crush the foetal head to pulp without having a perforator, in cases of extreme contraction the Edinburgh instrument was insufficient. But he knew from experience that, after perforating, the Edinburgh instrument, if made of properly tempered steel, was perfectly sufficient to effect all the crushing of the skull that was ordinarily needed, and it was certainly more easily carried and applied than the French instrument. Besides, after it was screwed tightly on the head, it formed an excellent crotchet.

Dr Gordon had seen the blades of the common instrument twist during the operation.

Part Fourth.

PERISCOPE.

PROPYLAMINE has of late been much recommended as a remedy for acute rheumatism; it has a most horrible taste, and in any but the most minute doses is liable to produce severe gastralgia. Being so irritating, it is not very suitable for subcutaneous injection. Propylamine was discovered by *Wertheim* in 1850. It can be obtained artificially by acting on the iodide of propylene with ammonia; naturally, by extracting it from those substances which contain it. It is met with in the flowers of *Oratægus oxycantha*,