In one case in which injury was followed by a central opacity of the cornea, with adhesions of the capsule to it, and the opaque capsule stretching forwards through the pupil had also portions of iris adherent to it, Mr. Streetfield first divided the corneal adhesion with the broad needle, then with the cannula forceps withdrew the capsule by separately detaching the points of adhesion of the iris with a needle introduced at the opposite edge of the cornea, and by a subsequent operation made an artificial pupil downwards and inwards; vision was from mere perception of light improved to a knowledge of objects.

VII. EXCISION OF THE GLOBE was performed in five cases. Three were for staphylomatous enlargement after purulent ophthalmia, and two for what is called chronic glaucoma. In none of the cases *perception of light* existed in the glaucomatous cases; a piece of iris was excised from the opposite eye. The pathological change in the two excised globes consisted in a peculiar disease in or upon (?) the nerve-cell layer of the retina, accompanied by enormous vascularity and by the effects of pressure (atrophy of the optic nerve fibres, retarded ciliary and retinal circulation, opacity of the lens, etc.).

Total of major operations, 89.

Original Communications.

PUERPERAL CONVULSIONS, WITH COMPLETE OCCLUSION OF THE OS UTERI.

By CHARLES ROBERT THOMPSON, Esq., Surgeon, Westerham.

AUGUST 20TH, 1857. Mrs. L., aged about 35, is a tall, well made woman, of dark complexion. She has been married some years: has one child 12 years old, and is now in the eighth month of her second pregnancy, having been sterile nearly twelve years. Soon after her previous confinement, she suffered from some uterine mischief, for which she was treated in London, having caustic applied to the uterus during a period of several months, at the end of which time she was informed by her physician that she would probably never again be pregnant. Since then, she reports that she has had tolerable health, but latterly has been subject to headache, and disinclined for society, and consequently left London, and came to reside in this neighbourhood. She states that the catamenial periods had been regular until pregnancy, but always with great suffering for some days. She has been complaining for the last six weeks of headache, with puffiness of the eyelids and face, some œdema of the legs, and scanty, turbid urine, for which mild diuretics and purgatives have been given. She took an aperient yesterday morning, which acted freely.

This morning, at 6 A.M., she had a slight convulsion, lasting only a few minutes, and from which she rallied perfectly. This was repeated at 9 A.M., when the friends were alarmed, and sent for assistance. On my father's arrival, he found her in a semi-comatose state, with heavy laboured breathing, and dusky countenance; pulse about 96, firm, but easily compressed. He bled her to sixteen ounces, gave calomel and enemata, and applied cold lotions to the head, and sinapisms to the neck and legs. At noon she had another convulsion; and from that time until 10 P.M. they returned at regular intervals of an hour, with increasing severity, and deep coma between the fits.

At 4 P.M. the face was very dusky; the head hot; pulse about 96, soft and compressible, but not indicating exhaustion; tongue swollen, protruding, and bleeding; pupils rather dilated, but contracting sluggishly on stimulus of light. A small quantity of urine, withdrawn by the catheter, was very turbid, and loaded with albumen. Every few minutes she would become restless, and moan as if in pain, probably from some uterine effort. The uterus externally appeared normal, and firmly pressing on its contents; no vaginal discharge of any kind.

On examination *per vaginam*, the head could be felt, covered by the uterine wall, in the brim of the pelvis; but the most careful and repeated examinations failed to detect any os uteri. From her being insensible, it was easy to introduce the left hand fairly into the vagina, pass the fingers up to the reflection of the mucous membrane, and thoroughly examine the lower part of the uterus. It felt firm, globular, and perfectly smooth, with no trace of an os, excepting a little doubtful, almost imperceptible indentation, high up, and directed back

towards the sacrum; but even at this point the uterine wall was thick and firm, and with unbroken surface. The uterus was not forced down into the pelvis at all, as though there were any expulsive pains.

At 6 P.M. we had the advantage of Dr. Lever's opinion. He quite agreed as to the os being perfectly occluded; and, after some consideration, he forcibly bored and pushed his finger into the uterus, at the part where the slight indentation existed; he then ruptured the membranes, and felt the fetal head. She had a fearful convulsion directly after this proceeding.

Dr. Lever suggested grain doses of tartar emetic every twenty minutes; and, in addition to this, we removed the hair, kept ether lotions to the scalp, gave another full dose of calomel, and enemata of turpentine and castor oil. Dr. Lever also agreed that, directly it was possible, the fetus must be removed by any means, as the only chance of saving our patient. He then left at 7 P.M.

The os uteri was very thick and unyielding, and of almost gristly hardness. In about three hours it was of the size of a crown piece; and, as it seemed very undilatable, and the convulsions continued, the perforator was guided on to the head between the tips of two fingers, and the brain was evacuated, in the hope that, by getting a firm hold, and making traction, the os might dilate gradually by the pressure from within. From this time until she was delivered, about midnight, she had but one convulsion; she was semi-comatose, but disturbed and crying out at intervals of a few minutes, evidently from uterine pains; and then traction was made on the head. After steady perseverance the os yielded a little; the parietal bones, being very soft, were torn away, and at last a firm hold was obtained with the crochets on the outside of the base of the skull; and about midnight the child was brought away. The placenta was removed without difficulty, and the uterus contracted firmly at once.

The pulse had kept tolerably steady, though feeble; and we now made her swallow a few teaspoonfuls of brandy-and-water. There was no further return of convulsions. Through the night and next day she remained comatose; but she took stimulants, and in thirty-six hours began to show some consciousness. Her convalescence was slow, but satisfactory: she was down stairs, and able to get out in her carriage, in about six weeks. The catamenia reappeared, without pain, about ten weeks after labour. The urine is still slightly albuminous; but this is decreasing.

REMARKS. This case is very apposite to those lately related in the JOURNAL by Mr. Hutton and Dr. Mayne. In the few books to which I have had the opportunity of referring, I have found details of seven cases of labour with occluded os uteri. The above case differs from these, not only in the fearful coincidence of convulsions, but also in this respect, that in all the other cases the full term of gestation had been reached; there were strong uterine efforts, and the head, covered by the closed uterus, was forced down into the pelvis, or even to the vulva, at each pain, before interference became necessary; whereas, here, in the eighth month of pregnancy, there was no decided evidence of labour, and the uterus was not forced down below the brim of the pelvis. In two cases, Dr. Mayne's and Dr. Highmore's (*Lancet*, vol. ii, 1852, p. 174), there was, as in this instance, evidence of previous uterine disease, inflammation with the so-called ulceration of the os and cervix, resulting in thickness and induration, or inflammatory hypertrophy of the os uteri. In our case this was sufficient so nearly to obliterate the canal of the cervix, as to cause difficult menstruation and sterility for above eleven years, when, by some fortuitous combination of circumstances, conception again took place.

I think it is impossible to read Dr. Mayne's and this case without a suspicion as to whether the *treatment* of the previous disease had not a share in producing the hardness and contraction of the part. Dr. Rigby (*Female Diseases*, p. 114) says that he has seen a great number of cases where severe uterine irritation had been produced, with chronic induration of the part, from the too frequent and injudicious use of caustics. Dr. H. Bennet writes (*On Inflammation of the Uterus*, p. 417): "Sometimes the os uteri becomes smaller than in its healthy state, only admitting the uterine sound on a little pressure being used; but I have never seen it obliterated by these severe cauterisations. In one instance, in which I had produced a large eschar in an hypertrophied cervix by the potassa-cum-calc, on complete cicatrization taking place the orifice of the os uteri was scarcely perceptible. The first day (of the next menstruation) was more painful than usual, but subsequently the sanguineous flux was freely established; and on examina-

tion of the patient afterwards I found the os open. This narrowing of the os uteri may take place after the cure of inflammation or ulceration of the cervical cavity by milder means." On the other hand he writes: "Even when a deep slough has been formed by the action of a powerful caustic, such as potassa fusa, or the actual cautery, in the course of a few months, or even weeks, all trace of the cicatrix disappears, and the cervix again becomes soft and supple." (*Op. cit.*, p. 397). And again: "I have repeatedly seen females confined without difficulty or accident, whom I had previously treated by deep cauterisation. M. Gendrin's experience on this point is the same as my own." (p. 434.) Dr. Bennet argues that mucous membrane, wanting the developed fibrous tissue of true skin, cannot become the seat of a hard cicatrix; but it is, I believe, no uncommon thing to have hard cicatrices, producing stricture of the œsophagus, as the result of swallowing boiling or corrosive liquids; and the urethral stricture following on the cicatrization of a wound or injury of the mucous membrane is one of the most intractable and recurring forms of that disease.

As to the treatment of our case, it seemed right, as there was no sign of labour, first to try all remedies for the convulsions; and, these failing, it became imperative to empty the uterus. But for the success of Dr. Lever's expedient of boring through the closed os with the finger, we were prepared to make an incision into the most depending part, as has been done successfully in several instances; but fortunately this was not necessary, and the great rigidity of the os was overcome by steady perseverance.

PRACTICAL ILLUSTRATIONS OF THE TREATMENT OF SOME CASES OF INJURY TO THE HANDS.

By JOHN BIRKETT, Esq., F.R.C.S., Surgeon to Guy's Hospital.

[Read before the Medical Society of London, October 24th, 1857.]

THE opportunities afforded by the clinical experience of a large hospital may be taken advantage of by the practical surgeon for the benefit of the public in two ways.

First, he has abundant examples of the results of improper surgical treatment, in consequence of the prejudices of the sufferers themselves, the advice of some parties not qualified to direct the most suitable plan of treatment, and neglect of, or the inability to carry out, the proper mode of treatment when advised to do so.

Secondly, he has a vast field open before him in which to observe the method and plan of treatment by which the most permanent and rapid cures are effected, and the reparative powers of nature assisted.

From the first class of cases, therefore, he learns what to avoid; from the second, he feels confidence in the plan of treatment he recommends.

Fortified by the observation of both classes of cases, I thought it might be useful to bring forward for discussion the treatment of certain forms of injury to the hands which are very common in our metropolitan hospitals; and my chief object in doing this has been to elicit the opinions of hospital surgeons upon its merits.

Some of the members of the Society, especially the hospital surgeons, may regard this communication as destitute of novelty and deficient in originality; but I made choice of the subject, under the conviction that the treatment of the injuries to which it relates is not generally recognised, and certainly, from the number of cases I have seen treated with stripes of adhesive plaster, that it is not very generally practised.

For many years accustomed to see the ill effects resulting from the plan of encircling with stripes of adhesive plaster even slight injuries of the fingers, particularly in the labouring classes, it occurred to me that it might be useful to describe a plan of treatment, simple in itself, and certainly most efficacious in producing a very rapid cicatrization of a wound. It has constantly occurred to me to see a man's hand inflamed, thecal abscess produced, and even the destruction of a finger result from this method of applying plaster around that which was in the first instance a most simple injury—a simple incised wound.

I considered, therefore, that, by the relation of a few practical illustrations of the advantages of the method now generally adopted in Guy's Hospital, and, as we shall probably learn to night, in other hospitals, the chemists and druggists and the surgery assistants might be induced to lay aside their plaster for strips of wet lint, and some surgeons their bread or

meal poultices for a much more cleanly and really useful application. I strongly advocate the plan to be immediately described in every kind of injury of the hand or fingers, except the purely incised wound inflicted with a sharp cutting instrument. In such an injury the careful adjustment of the lips of the wound with adhesive plaster may be admissible, the application being so arranged that the finger is never encircled, nor the wound entirely covered and closed over with the plaster.

In all other injuries complicated with wounds, my practical experience induces me to urge the adoption of another plan, which I will now briefly describe.

After the thorough cleansing of the hand by soaking in warm water, narrow stripes of lint or linen wetted in tepid water should be lightly and gently applied around the fingers which are injured, commencing from their ungual phalanges. In each case some slight modification may be required, and often an oblique or even a vertical adjustment of the lint may be useful. When a severe laceration of the back of the hand or palm is to be treated, pieces of lint with a slit in them may be advantageously employed. The finger passes through the aperture in the lint, and the stripe then supports the flap of integument very firmly. The arm is to be supported and raised upon a pillow, and irrigation may be used temporarily or continuously. This is accomplished by arranging a vessel to hold water above the patient, and to this a tube of vulcanised India-rubber is affixed, the end of which terminates in a fan-shaped piece of zinc, the convex border of which is perforated with small holes, through which, by means of threads, the water percolates guttatim. A piece of vulcanised India-rubber cloth must be laid upon the bed as a conductor for the water as it drains off into some receptacle placed by the side of the patient.

The advantages of this plan seem to be—

1. A constant stream of water is flowing over the injured part, whereby an equable temperature is maintained.

2. When suppuration is established, the discharge, especially if sloughing takes place, is washed away, and the wound kept perfectly clean.

3. The cuticle is kept moist and yielding, a circumstance of no little importance in the treatment of injuries of the hand in the working classes, in whom this structure, often like a layer of horn, prevents the swelling resulting from inflammation, and causes intense pain, and therefore more constitutional disturbance.

4. It ensures the parts being kept moist, which is not always the case when the patient is dependent upon another person to apply the water.

In illustration of the advantages of the treatment advocated, I adduce the following cases, which I will now briefly relate.

CASE I. *Incised wound of the Index Finger, with division of its Metacarpal Bone.* A boy, aged 8 years, whilst using a chaff cutting knife, inflicted upon his right hand the following injury. A wound in the soft parts extended from the palmar surface of the index finger transversely across its radial border, over its dorsal surface, and terminated at the radial border of the extensor tendon of the middle finger. The head of the metacarpal bone was severed from its shaft, and the member hung down from the hand, being attached by the soft parts only on its palmar aspect. The knife had cut into the metacarpal bone of the middle finger also. My dresser, Mr. Penfold, at once determined to attempt the restoration of the finger, and adjusted the parts by means of stripes of wet lint in an extended position. The arm and hand were elevated, and the parts were kept constantly wet. Suppuration occurred; but after a few days the wound granulated healthily, and in nine weeks the part was healed, and the boy enjoyed flexion and extension of the finger.

CASE II. *Incised Wound of the Metacarpo-Phalangeal Articulations and soft parts on the Dorsal Surface of the Right Thumb and Index Finger.* Dennis Haley, aged 20, was admitted into Guy's Hospital May 6th, 1853. He was a healthy, robust countryman from Bexley, and employed in a stable. With the knife of a chaff-cutting machine he had inflicted a severe wound transversely across the dorsal surface of the right thumb and index finger. The metacarpo-phalangeal articulations of both these members were laid open. The extensor tendons of the thumb were divided, but those of the index finger were not entirely divided. The thumb was partially dislocated forwards by the action of the flexor muscles. The wound extended slightly round to the radial border of the thumb. The hand was well soaked in warm water; and afterwards, the soft parts being adjusted, and the articular surfaces of the thumb being brought into apposition, narrow stripes of