It must be remembered that the parts are reversed in the mirror, both as regards right and left, and anterior and posterior.

The stimulant treatment was adopted, and the lining membrane of the larynx was swabbed daily with the diluted tincture of capsicum; the system was invigorated by suitable hygienic treatment, and, as there was debility and loss of appetite, quinine was prescribed. Though this treatment was industriously pursued, there was no alteration in the appearance of the veins till the end of a week, when the large vein on the left side ceased to be visible on the superior ligament of the larynx, though it was still seen on the true vocal cords: the hoarseness was no better. Four days afterwards (on the 13th of January), the treatment having been continued, the left half of the larynx appeared quite healthy, though the right vocal cord was still in the same condition as when first seen; the voice was much improved, though still harsh. The application was now repeated twice a week for a fortnight longer, when, the voice being quite regained, the treatment was discontinued, though a few fine vessels were still to be seen on the right vocal cord.

ON A NEW FORCEPS FOR USE IN OPHTHALMIC SURGERY.

By THOMAS NUNNELEY, Esq., F.R.C.S.,
SURGEON TO THE LEEDS EYE AND EAR INFIRMARY.

THOUGH, unquestionably, in the great majority of cases of cataract extraction, the removal of foreign bodies from the cornea, and other operations where a fixed condition of the eyeball is required, the fingers of the operator are the best ophthalmostate that can be employed, yet as unquestionably a certain number of cases are met with in which some other means of steadying the globe is desirable. While, however, the numerous instruments which in different ages have been invented for this purpose prove the want which so many operators have felt of some means of safely and securely fixing the eyeball, the varied forms of their instruments and the successive abandonment of each of them, equally prove their inefficiency for the purpose intended. Specula of various forms, rings, thimbles, prongs, and forceps have been devised, lauded, disused, and most of them forgotten; so that in many of the recent works on ophthalmic surgery they are either not alluded to at all, or they are only noticed to be condemned. But in this condemnation there is not entire unanimity, as Mr. France, some four years ago, introduced the use of strong sharp-toothed forceps for seizing the eyeball, which he thinks "facilitates the operation in difficult cases in exact proportion to their previous difficulty and risk." Mr. France has since, on more than one occasion, published many cases, the successful issue of which he attributes to the use of the forceps; and, still more lately, Mr. Poland has had "no hesitation in pronouncing this method a most valuable addition to the operation of extraction."

The objections to all the plans which have hitherto been proposed, and, indeed, have mainly caused their rejection, apply, I apprehend, rather to the imperfections and inconveniences of the instruments than to the principle itself. The instruments and the objections to them may be divided into two classes:—

1st. Instruments intended to be held by the operator himself. Here one of his hands is occupied by the instrument, when it might be much more efficiently employed upon the eyeball and eyelids; and there is the difficulty of applying that

exact degree of pressure—neither too much nor too little—and in the precise spot required, as shall just secure the steadiness of the eyeball, and give the exact amount of counter-pressure to the passage of the knife through the cornea which is necessary, and no more.

2nd. When the instrument is intended to be held by an assistant. This occasions the introduction of a third hand, which may be much in the way of the operator, and, above all, involves the utter impossibility of securing that consentaneity of manipulation which is so essential to success in the section of the cornea. With the operator himself the adaptation of minutely varying force and the direction of it is, so to speak, intuitively instantaneous; when two hands and three or four hands are employed, however skilful they may be when acting alone, this can hardly be secured.

This latter objection to mechanical apparatus for steadying the eyeball, where the control is by the hands of an assistant, and which is common to the forceps of Mr. France with older methods, is so serious that with many operators it has been, and, I believe, will continue to be, considered as a fatal one. I am convinced that any means, to be really effective, must be entirely under the control of the operator himself, and yet so arranged as not to occupy a hand, or even to much interfere with the delicate motion of the fingers.

With this object I have constructed a pair of forceps, the form of which, and the mode of using, will be better understood from examining the accompanying sketches, for which I am indebted to my friend and colleague, Mr. H. M. Atkinson.

The forceps are intended to be held between the first and second fingers. To some slight extent they must vary in length with the length of the operator's hand. For my hand they are an inch and a half long. This will answer for most persons; but those whose fingers are very long or short may require them to be made one-eighth of an inch longer or shorter. They should reach from the upper third of the middle phalanx to the tip of the fingers, with which the points should be *exactly even*, so that when the fingers, in the ordinary way in extraction of the lens, reach over the margin of the lid, and rest upon the ball, the points of the forceps should be able to grip the morsel of conjunctiva and sub-conjunctival tissue which then lies between their points. If the forceps be too long, they would press too much upon the middle joint of the finger, so as to interfere with its motions, or the points would project too much and injure the ball. If, on the contrary, they are too short, they cannot be held steadily, or they cannot seize the tissue, and so would become useless. They are slightly curved in their length to correspond with the bend in the distal joints of the two fingers when these rest upon the eyeball. (If preferred the blades might be straight, and the ring be set somewhat obliquely to them, by which the same position would be secured.) On the end is fixed transversely at right angles, a light ring of watch spring sufficiently large to just pass without force upon the middle phalanx of the second finger, by which the forceps are held in position. The ring should be an open one, so as to accommodate itself to the finger without any great pressure. On the outer side of the forceps is a slightly curved and roughened clip upon which the forefinger rests, and thus steadies and guides them. They should be light, so as not to require much force to bring the blades together, or the free motions of the fingers will be impaired in exercising it, and yet they must be sufficiently strong not to spring when they are brought together, or the points will not hold; the blades being slightly bowed from each other at their middle part will assist this, and allow of the tips of the two fingers being somewhat separated from each other as is usual when they touch the eyeball as the section of the cornea is made. Their points should be small, but firm, and terminate with sharp short teeth set at right angles, so as to fit well into each other.

Those who are ambidextrous should have two pairs of forceps made—one for the right, the other for the left hand, with the ring and the clip reversed; for though a single pair may answer, the ring being placed upon the long or forefinger as the left or right hand is employed for steadying the eye, it will, I think, be found in practice more convenient to place the ring upon the long than upon the forefinger; at least I find it so.

It is necessary, as Mr. France has remarked, to seize the sub-conjunctival tissue, or the hold will not be sufficiently firm, but as the fingers of the operator assist, a much slighter hold of the tissue will be required than where the forceps are held by the hand of another. As he has also remarked, the inconvenience thereby occasioned is so trivial and momentary, as to be of no importance, for neither spasm nor inflammation, which have been alleged to have been occasioned by mechanical restraints, are ever induced by so seizing the tissues.

Such forceps will, perhaps, be even of more value in examinations of the eyeball in nervous, irritable persons, and in timid children, where there is photophobia, and especially in the removal of a foreign body imbedded in the cornea, than in cataract extraction or operations upon the iris; for, as I have said, in these latter operations the necessity for any means of fixing the eyeball, other than the operator's fingers, is rather the exception than the rule, whereas every surgeon must not unfrequently have felt the urgent want of some effectual method for steadying the eyeball when extracting small particles from the cornea, particularly when they are buried in its laminae, or have been in it some little time, and the eye has become inflamed, or the cornea soft and tender.

P. S.—Since the above sketches were taken, I have had made a pair of forceps with the blades crossing each other, as in the bulldog forceps, by which they become *self-holding*; thus the fingers are left as wholly free as if no forceps were employed, and all possible objection to their use is removed, as they do not in any way interfere with the most delicate manipulation of the operator.

Leeds, June, 1862.

CONTRIBUTIONS TO THE SCIENCE OF OBSTETRIC SURGERY.

By CHAS. EDWARDS, A.B., M.D., F.R.C.S.,
Cheltenham.

(Concluded from vol. ii. 1861, p. 614.)

I now proceed to discuss the salient points of the after-treatment. And first as to position. After having been removed to bed, the patient should not be merely "placed on her left side," but turned as far over on the face as can be comfortably borne, so that the posterior part of the wound may be the least dependent. By a little address this can be accomplished by elevating the hip, the thighs and knees being bandaged lightly together, the line from the hip to the knee representing an inclined plane. This plus-semiprone position should be maintained as continuously as possible, and especially after inserting the catheter. The collection of vaginal discharges and the contact of urine can thus with a little management be almost entirely prevented, and simple ablution will thus quite supersede Mr. Brown's "injections of tepid water two or three times daily," the injecting instrument possibly in some cases proving no pledge of fealty to the adhesive process. The colodion varnish, advised in my last paper, will also render unnecessary the "cold-water dressing." (p. 37, *op. cit.*)

The next consideration is that of the catheter. This may be fixed in the bladder, unless the surgeon feel disposed to visit the lady "every four or six hours" night and day for a week or two; but an expedient most happily adopted by me in a case lately operated upon may possibly be worthy of consideration—namely, to teach the patient to introduce the catheter for herself. This operation I strenuously oppose being assigned to the nurse, as she will be pretty sure to contribute her quota to a recto-vaginal imperfection. When the patient is taught to operate, her *sensus et tactus eruditus* invariably conspire to prevent such an accident.

With respect to opium, to procure a necessary constipation, I may just observe that, although six grains per diem were administered for ten days, the patient alluded to had no headache, and complained sadly that she could get no sleep.

As to diet, I advise very little *fluid* of any kind—at least till

the patient shall be adroit with the catheter; and I specially recommend those kinds of solids which leave least faecal residue. Vegetable diet is therefore prohibited, with the exception of rice, which, though vulgarly and erroneously regarded as an astringent, is simply digested, leaving little *débris*.

We next proceed to the sutures. And here I would simply say that whether the superficial or the deep, or some of each together, are to be first removed, must be determined by the application of the art and science of surgery to the actual condition of the wound, &c.; but if a choice were permitted, I should advise the quill sutures to be first removed, as in some cases where they may have been too well or forcibly approximated, their surviving the removal of the superficial ones may cause divergence at the site of the latter, and so impede adhesion.

Aperients.—We next consider the Augean process, which may be safely instituted about the tenth day; and therefore we should scarcely solicit such a Herculean effort as would be involved by Mr. Brown's directions to "keep the bowels constipated two or three weeks after the parts have united." (p. 30, *op. cit.*)

I think that the "strength of the adhesion set up and the amount of reparation of lost tissue" shall have proved either a *fait accompli* or a hopeless failure long before that period. If a failure, what benefit is derivable from such a faecal burden?—sloughing I should expect. If a success, it will only be imperiled by a useless procrastination of the Herculean task. Such are the horns of my dilemma.

To perform this task (with description as euphemismal as possible) I next essay, but certainly not with "injections of warm water and castor oil," (p. 38, *op. cit.*) Such a feat is simply impracticable, as they cannot pass, for the site is a plenum, and magnitudes cannot at once occupy the same space.

I administer a good draught of castor oil with about one-fourth of the best Lucca oil (why this admixture?—try, and see the effect); and supporting the new perineum when hardened masses cause stretching and appear in view, let one nurse carefully, and under surgical superintendence, use the escape, aided by a stream of warm water from a double-action syringe, held at a distance, and plied by another *con amore*.

Recto-vaginal imperfection.—Should this unhappily result, Mr. Brown's practice (p. 57, *op. cit.*) is as follows:—"A small recto-vaginal opening is discoverable; apply strong acetum lyttae to its walls;" then, "this not closing as quickly as could be wished, introducing a rectum speculum into the bowel, and a uterine speculum into the vagina, &c., I obtained a perfect view." Doubtless a very perfect view! and likely to become more perfect by the joint tenancy of the two rival specula.

Supposing that this specular demonstration may be more visually gratifying than tributary to adhesion, I advise the following method:—First ascertain the rectal outlet by injecting a little tepid water through the vagina; then insert and secure in the hollow of an instrument, precisely similar to Lallemand's *porte caustique*, a small piece of lint, well saturated with Burt's liquor (a vesicatory first introduced to my notice by Mr. M'Whinnie); introduce this from the rectum into the ascertained aperture, and unsheath *secundum artem*; and you will find that an instrument much abused by empirics may have its nativity viewed without regret, were it only applicable to this special mission. It will quite supersede the double distension of the two specula *semel*, and consequent disruption of the partial adhesion gained, as also the gentle affair of the "actual cautery by means of a bent iron instrument," which, however potent, may not be so elective of the tract to touch.

Finally, to consider the work of any man perfect is but an obeisance to human frailty and pride. Everything, surgical or otherwise, admits of development and improvement; and if, as I love to do, I have criticized unsparingly, yet I trust I have done so with respect,—for each point rendering a reason,—in the hope that a better knowledge when and how to operate may by these papers be diffused and developed, so as to reduce to a minimum the difficulties of an operation capable of relieving one of the most pitiable examples of human deformity.

Havelock House, Cheltenham, 1862.

SALE OF COSMETICS IN FRANCE.—A very favourable report has lately been presented, by M. Trébuchet, to the Academy of Medicine of Paris, on an essay, by M. Réveil, treating of the danger of using cosmetics, many of them being composed of noxious substances. The Academy has pointed out to the Secretary of State for Commerce that it is important to check such sales, and to enforce existing laws and regulations, by which the dangerous effects of some cosmetics may be prevented.