floor, somewhat dazed, but soon recovered consciousness. Mr. Carlyon, of Redruth, was immediately sent for. The man stated to him that he stood before the looking glass, and turning his head well round to the left, placed the muzzle of the revolver behind his right ear. He then fired and was aware of the fact that the bullet fell out of his mouth on to the dressing table. It was subsequently found by Mr. Carlyon on the floor of the room.

On examination it was discovered that he had shot himself through the right mastoid process; the wound of exit into the mouth was conjectured to be somewhere behind the soft palate. There was some considerable hæmorrhage both from the wound and also from the mouth.

On December 5th I saw this case in consultation with Mr. Carlyon. He was in bed, perfectly collected and apparently suffering but little distress, except from a somewhat troublesome cough, accompanied with blood-stained muco-purulent expectoration. His breathing was natural, his lungs were not affected, and he could swallow with but little pain. His tongue, which was very much coated was, on protrusion, strongly deflected to the right side. His sight was normal in both eyes, and his pupils active. He was a little deaf in his right ear. His upper extremities were not affected; but on getting him out of bed I found that he slightly dragged his right leg. His patellar reflex on that side was diminished, and on tickling the bottom of his right foot there was no response. Sensation was normal. On lifting the soft palate I found the wound of exit at the back of the pharynx, a little to the right of the median line, and surrounded with extensive ecchymosis. His temperature was 99.2° (having been subnormal the night before), and his pulse 123.

From this date Mr. Carlyon tells me he rapidly became worse. His temperature and pulse rose daily, and on the day of his death his temperature was 102.6° , and his pulse 163.

On December 4th he was attacked with acute congestion of his right lung. The deafness in the right ear increased. I append two drawings, one illustrating the original size and shape of the bullet, and the other the condition in which it was found. In the interstices of the lead a quantity of bony tissue was deposited. Unfortunately, no *post-mortem* examination could be obtained.

The probable course of the bullet was as follows:—Penetrating obliquely the posterior surface of the mastoid, it just missed the lateral sinus and, without entering the skull, it then passed between the jugular fossa and right condyle of the occipital bone, cutting the hypoglossal nerve at the anterior condyloid foramen, and injuring the pneumogastric and glosso-pharyngeal as they emerge from the anterior part of the jugular fossa. It then made its way forward under the basilar process of the occipital, emerging through the posterior wall of the pharynx, and probably in so doing bruised the upper part of the spinal cord on the right side, which would be somewhat exposed to injury by flexion and rotation of the head to the left.

Such a course and the injuries inflicted would account for the various symptoms noticed.

ON THE PREVENTION OF INFANTILE OPHTHALMIA.¹

By KARL GROSSMANN, M.D., F.R.C.S.E.,
Ophthalmic Surgeon, Stanley Hospital, Liverpool.

IF I were to discuss the treatment and the prevention of blenorrhœa neonatorum, I should have to repeat almost word for word what I said last year before the annual meeting at Leeds; and it will be less tiring and more expedient to dis-

¹ Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association, held in Birmingham, July, 1890.

tribute a reprint of my paper read on that occasion, and to make a sort of addendum to it. Not that our knowledge of the disease has undergone any great modification. That was scarcely possible, since its etiology and pathology are familiar enough to us all. Neither was there any urgent need to add to the remedies by which it may be treated. We have already a sufficient number at our disposal; and although we shall always be glad to add to our armamentarium such new names as pyoktanin, we need not forget that what we have had hitherto has proved itself thoroughly efficient.

The reason why I recur to this subject to-day is twofold. First, it is our duty to strive to prevent disease. The individual can do something to this end; but individual efforts are limited; and, to secure substantial results, combination will be needed and State enforcements of precautions. We know how the efforts of the Committee of the Ophthalmological Society on this subject collapsed, because the resolutions which were put forward were not adopted in proper quarters; and the matter ended there. Distribution of cards may have been very good as far as it went, but, even if carried out, would probably have fallen short of the desired effect.

The possibility of the prophylaxis of the disease rests chiefly with midwives, because confinements in those classes which yield the largest percentage of blindness from this cause, are principally attended by midwives and not by medical practitioners. It is, therefore, through the instrumentality of midwives that we must hope to banish this scourge. The present time is very favourable for considering what steps ought to be taken. Of course, legislation only can help here. In Saxony, where Professor Crêdè was the first to point out and to prove by thousands of cases the possibility of effectually preventing infantile ophthalmia, the regulations for midwives treat fully on the matter. As far back as 1882 regulations were made and were further amplified in 1885. In Prussia less stringent rules exist, but the midwives are fully instructed as to the danger of the disease, and are directed what to do.

It was therefore a great satisfaction to me to see that quite recently the State of New York has legislated on the matter. Through the kindness of Dr. Swann Burnett, of Washington, who was with us last year at Leeds (and who personally has been instrumental in bringing about this law), I am enabled to give its text. It is short and decided, and runs thus:

"Section I. Should any midwife or nurse having charge of an infant in this State notice that one or both eyes of such infant are inflamed or reddened at any time within two weeks after its birth, it shall be the duty of such midwife or nurse so having charge of such infant to report the fact in writing within six hours to the health officer or some legally qualified practitioner of medicine of the city, town, or district in which the parents of the infant reside.

"Section II. Any failure to comply with the provisions of this Act shall be punished by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both.

"Section III. This Act shall take effect on the first of September, eighteen hundred and ninety."

Here, then, is a step in the right direction. I think it is all the more necessary for us to take some steps, as a Bill was recently brought before Parliament concerning midwives, and, though shelved for six months, is likely to be heard of again.

BLEPHAROCHEILOPLASTIC OPERATIONS.¹

By ARTHUR BENSON, F.R.C.S.I.,
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Two years ago I brought before the Ophthalmological Section of the British Medical Association (Glasgow meeting) the subject of entropion and trichiasis, with special reference to the operative measures for their cure. I would not again venture to bring the subject forward in any form but that I have received so many letters from different ophthalmic surgeons asking for further information regarding the operation of transplanting mucous membrane from the mouth to the eyelids.

¹ Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association held in Birmingham, July, 1890.

In Ireland, where granular ophthalmia and consequently entropion and trichiasis are so common, we have such a large field for testing the value of any operation of the sort, that it is natural we should try various modifications in the details as well as in the larger features of the method. The operation, as at present performed at St. Mark's Ophthalmic Hospital, is what I purpose describing, and I shall not delay to mention the various modifications by which it reached its present form. It will be obvious to anyone who cares to compare the two that the details differ materially from those described by Van Millingen in the *Ophthalmic Review*, vol. vi, p. 309.

The operation is of necessity a somewhat tedious one, and simplicity of manipulation has always been our endeavour. "The St. Mark's Hospital operation" consists in: 1. Splitting the affected lid along the whole length of its free border with a small scalpel, or a broad cutting needle, or a Beer's knife. The incision must be made so that all the cilia, both normal and abnormal, are in the anterior or skin flap, and all the conjunctiva is in the posterior flap. The making of this incision is by far the most difficult and important part of the operation. It is best accomplished by using Knapp's modification of Snellen's clamp, and the larger the instrument that can be inserted into the palpebral aperture the better will be the result. By using this clamp all hæmorrhage is prevented during the operation, and the line of the incision can be accurately made so as to avoid the hair bulbs in the lid, and also the depth of the incision can be more easily estimated. The incision should run obliquely through the tarsus, and extend into the subcutaneous tissue of the lid, otherwise the wound does not gape freely and the transplanted flap is squeezed out of its place by the rigid lips of the incision.

Before considering the section complete it is advisable to use a pair of fairly fine-bladed scissors along the incision, so as to completely divide any remnants of the tarsus that escaped the scalpel. The splitting of the lid being now completed, the clamp is not removed, but a pledget of cotton wool, wet in boric lotion, is laid over it. Another large clamp is then taken and applied to the lip—upper or lower, according to taste—and screwed tightly down. The lip being then everted, two parallel incisions are made the full length of the incision in the lid, and from 3 to 5 millimetres, or even 6 millimetres, apart, if the deformity to be corrected is very great.

These incisions converge rapidly at each end, so as to leave pointed extremities to the flap, which is then dissected up with a pair of scissors. The worm-like flap of mucous membrane so obtained is then turned, with its submucous surface upwards, upon the operator's left hand, and the submucous fat and areolar tissue removed with the scissors.

While this is being done by the operator an assistant puts in a couple of sutures loosely into the lip wound, and then, removing the clamp, these are brought together. This is by no means essential, but facilitates the healing of the lip. Pressure is then kept up on the lip by the assistant, who uses a pledget of boric wool over the wound for the purpose.

When the flap is freed from its fat, etc., a fine waxed silk suture is passed through, close to its pointed extremity, from mucous to raw surface; the needle is then passed through the lid at the angle of the incision, from raw surface to lid border, and tied into position. By making a large knot on the suture a few inches from its end, the point of the flap can be drawn closely into the angle of the incision and kept in close apposition with it. Another similar suture is applied to the other end, and two, three, or four sutures are used to keep the edges of the flap in close apposition with the lips of the lid wound.

These sutures are not absolutely essential, but our experience shows that they do no harm whatever, and greatly add to the security of the flap in its proper position and the consequent certainty with which it lives in every part.

When the flap is fixed in position, with as many sutures as the operator cares to use (I generally apply six altogether), the clamp is unscrewed. The operation up to that had been practically bloodless, but the moment the clamp is removed a very brisk hæmorrhage ensues, which, but for the sutures, would undoubtedly displace the flap. Pledgets of cotton wadding, wet with boric lotion, applied over the lids, speedily cause the hæmorrhage to diminish, and soon to cease altogether.

At first we had apprehensions as to the consequences of

leaving the clots that form about the wound, fearing they would interfere with the vitality of the transplanted flap; but here again experience proved our fears to be groundless. In no case (though I have seen some with very severe and long continued hæmorrhage) can I remember to have seen trouble from this cause.

When the bleeding has fairly well abated, a dressing of iodoform ointment on lint, and wet boric wool over it, is applied to the eye; a small portion of oiled silk and some dry cotton wool is placed over this, and the whole is kept in position by a light bandage. This dressing is reapplied night and morning. The sutures are removed after three or four days (or sooner if there is any reason for so doing), and soon after the sutures are removed the bandage is left off.

The changes in colour which the transplanted flap undergoes are remarkable. When first transplanted it is almost white and utterly bloodless. After twenty-four hours it turns a peculiar dark, almost black red, like an old blood clot, and in another twenty-four it becomes a bright, healthy-looking pink colour, which it retains for ever after.

The advantages of this operation over all that preceded it for the cure of entropion and trichiasis are too obvious, and have been too often stated to make any repetition of them by me necessary.

Our experience at St. Mark's Hospital is very large in the class of cases that require this operation, and I can state, without fear of contradiction, that no other operation has ever given us at all the same perfection and permanence of result as we have obtained by the blepharocheloplasty operation.

TREATMENT OF CANCER OF THE UTERUS BY EXCAVATION AND CAUTERY.

By J. STUART NAIRNE, F.R.C.S. Ed. (Exam.),
Surgeon to the Glasgow Samaritan Hospital for Women.

In the summer of 1887, that is nearly three years and a half ago, I received a letter from Dr. Thomas Keith, recommending a lady patient to me with a "bad cervix." She had had excessive bleedings, there was fœtor with the discharge, and she had been attended by her own medical man, who had done all he could think of to cure her. She was 42 years of age, and in all other respects seemed a very healthy person. The disease was very readily diagnosed as cancer, a diagnosis which inspection afterwards confirmed.

Dr. Keith's straightforward, unhesitating advice at that time was to pull well down and cut off as high up as possible, and she would likely be saved "for a time." I have no idea how long "for a time" may be, but I know that cases such as this one was have usually a very short time indeed, and I have no doubt that the same knowledge as to the course of the disease was in Dr. Keith's mind when he wrote and that "for a time" meant problematically a short time. At any rate, the operation was done. But in addition to pulling well down, which in this case was no easy matter, and cutting off by the scissors as high up as possible, I applied most freely, a spectator said most barbarously, the actual cautery. I used a good substantial cautery, as thick as a poker. Times without number before that time and since that time, I have gone through the same process. It may be barbarous and it may be "monstrous bad surgery;" but to refer only to this one case, what is the report to-day? She has remained in perfect health ever since; I examined her about seven weeks ago, and there is not the slightest trace of disease about her. What could be done better in such a terrible disease? As a very pronounced advocate of this treatment in properly selected cases, and having for several years in succession laid a list of such cases before the meetings of the British Medical Association, I feel bound to defend the practice I follow, attacked as it has been in Dr. Keith's recent paper in the *BRITISH MEDICAL JOURNAL*. I do not think it is "monstrous bad surgery." It has good results, and therefore as far as it goes it is good surgery.

Let the cases be selected properly and the work done thoroughly, and the benefit to the sufferer will, I know, be sufficient to justify the treatment. Dr. Keith objects that the part cauterised cannot be clamped, and that the action of the