blood marks, foot marks, disturbance of furniture, clothes, signs of a struggle, position of a body, or a weapon, are all factors in the elucidation of a mystery. The Crown's expert could seldom be upon the spot at a moment's notice, and in some cases it would be impossible to await his coming, especially in hot weather or where death had taken place upon a public high road or in a public building. There is another side to the proposal of a Crown's expert, but this side is again on the side of justice and fair play. Through want of courage in the witness-box, medical witnesses sometimes allow their evidence to be whittled down to vanishing point, and an astute counsel will so befog the jury, and even perhaps a judge who knows but little of criminal law and nothing at all of medical jurisprudence, that an undoubted criminal will escape punishment. Here, again, a disinterested and scientific person, whose knowledge of law and evidence and whose experience had taught him to think, would prove of enormous value, and in the end there would be considerably less chance-work in the verdict of the "twelve good men and true." For a poor man a Court of Appeal would do but little, and it is to avoid a further injustice being done to the poor man that the present suggestion is in part thrown out. I read the other day that a medical man said that he was in favour of keeping habitual drunkards locked up, and an advocate for temperance at the meeting remarked that he was in favour of getting at the drunkard before he became habitual, and thus avoiding the extreme measure of providing large establishments for the care of such. The cost of an appeal in criminal cases would be avoided by the exhibition of greater care, more science, more disinterested ability, and more fair play towards all classes of criminals, and more especially towards moneyless, friendless, and ignorant prisoners. If the principle of this suggestion were admitted, and it became a practical question, it is clear that the country would have to be mapped out into districts, and experts allotted to them according to the requirements; some five or ten experts might be appointed in the first instance until the experiment had stood the test of experience.

Carlisle.

THE BORACIC ACID "MASSAGE" TREATMENT OF DISEASES OF THE PALPEBRAL CONJUNCTIVA.¹

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THE treatment of diseases of the cornea and of the palpebral conjunctiva by means of crystals of boracic acid does not appear to be very generally followed by English surgeons. The method was first brought to my notice in the spring of last year by Dr. Landolt of Paris, who told me that he had adopted it in the treatment of cases of granular and follicular ophthalmia &c. Since then I have given it—so far as concerns the palpebral conjunctiva—a fair trial, and have been well satisfied with the results. Keratitis, ulcers, and other diseases of the cornea I have not treated with the so-called "massage," and of them I do not speak. First, then, as to the *modus operandi*, which is very simple. The upper lid is everted in the usual way and powdered boracic acid, ground specially fine, is dusted thickly on the palpebral conjunctiva, either by flicking it on with a camel-hair brush or by blowing it on by means of a puff-ball. The powder is then well rubbed into the conjunctiva by means of the pulp of the forefinger for five or ten seconds, after which what remains may either be washed away by a brush dipped in lead lotion, or, if there is not much discomfort, it may be left within the lid. The lower eyelid is then treated in the same way. Sometimes the first few applications cause pain, but this may always be averted by previously instilling cocaine, and after one or two applications a tolerance is established, which renders the procedure free from anything more

than slight discomfort. It may be repeated daily or on alternate days. The word "massage" seems rather an unfortunate one to apply to the procedure, if by that word is understood a method of manipulation that can only be acquired by technical training either in this metropolis of massage or at some special institution; whereas the boracic powder is merely rubbed in in a matter of fact manner with the pulp of the finger, all that is required being the *tactus eruditus* that every surgeon has at his finger-tips. The condition of the conjunctiva after two or three applications is usually one of healthy reaction, and the improvement so marked that there is no difficulty in getting the patient to attend regularly for the treatment. It is always dangerous to compare different methods of treatment—the individualism of cases, the varying circumstances of the patients, the predilections of the surgeon, and the hydra-forms of disease make comparisons difficult and certainty almost impossible,—but with all due caution I cannot help thinking that my cases of trachoma have proved less intractable since the introduction of the boracic treatment than they were when I relied chiefly on nitrate of silver or bluestone. There is less discomfort to the patient than there is from the application of the mitigated lunar caustic or of bluestone, and there is no argyriasis left to remind the patient of his treatment for the rest of his life.

The following cases, briefly epitomised, are typical of many other similar ones.

CASE 1.—Caroline C—, aged forty-one, attended at the Bath Eye Infirmary on Aug. 22nd, 1889, complaining that she had had "inflamed" eyes for more than thirty years. On inspection the conjunctivæ, both ocular and palpebral, were seen to be stained by nitrate of silver. There was well-marked trachoma and pannus. Vision was reduced to $\frac{1}{16}$ and $\frac{1}{16}$ respectively. Boracic massage was commenced, and after attending regularly for a month her eyes were better than she ever remembered them to have been. Lacrymation, pain, and discharge were all very much less, and vision had improved to $\frac{1}{8}$ in each.

CASE 2.—E. B—, aged twenty-three, has suffered from trachoma of the left lid for eighteen years on and off. Has been treated regularly for three months at a time with lotions, ointment, bluestone, and caustic. In June was treated on alternate days with boracic "massage" for a fortnight, when they became very much better, and she returned to service. She was seen again in September, three months after, when she said she had been more comfortable than she had been for years.

CASE 3.—H. B—, aged sixty-three, has suffered from his eyelids for twenty years. Has been an in-patient several times at an eye infirmary at New York, also at Brooklyn. He attended at the Bath Eye Infirmary on May 2nd, 1889, and was treated for trachoma with bluestone for a month without benefit. In the second week of June boracic acid was rubbed into the lids with immediate benefit, a fortnight later he was so satisfied with the result that he ceased attending, saying he should come again as soon as they were bad. I have not seen him since.

These three cases seem to show that the method is at least worth a prolonged trial—a trial, too, in which an explanation might be sought of the manner in which the boracic acid acts in these cases. The germicide properties of the antiseptic hardly seem sufficient to account for the improvement; a bacillus of trachoma, moreover, has never been shown to exist. In some of the latest literature on the pathology of trachoma, Dr. Thos. Reid of Glasgow² has affirmed that the essential part of this disease lies in the layer of subepithelial lymphoid cells, which become goblet-shaped later on from distension and pressure. Gradually these are invaded by bloodvessels, and the gristly bands of connective tissue are formed. Follicular conjunctivitis Dr. Reid regards as pathologically, though not clinically, identical with the granular form. Now, supposing we rub the trachomatous surface with such a powder as boracic acid, we should almost certainly destroy by mechanical friction the walls, floor, and nuclei of the goblet-cells, together with the subepithelial stroma. The bleeding that follows the treatment implies the destruction of the organising bloodvessels. The course of events is, in fact, much the same as when we scrape an ulcer or curette a cervix.

Bath

¹ A paper read before the Bath and Bristol Branch of the British Medical Association.

² Brit. Med. Jour., Oct. 26th, 1889, p. 924.