awry those levers, etc., must either follow and confirm the spinal slope, be thrown out of gear, or by standing away and projecting from the figure be quite unwearable; there is only the choice between these three ways.

Yet this is the prevalent form of treatment, and so many patients come to me who have without benefit worn these mechanisms for years, that it becomes incumbent upon me to show with greater precision why they are, and must necessarily be, unsuccessful. As is always the case with mechanisms that fail to fulfil their purpose, innumerable modifications exist; space, however, will only permit me to depict two, which fairly represent the types of the principal forms.³ They, judging from what many girls when they first come to me are wearing, seem to be those chiefly in use. Two notions prompt to the inception and construction of these things; one, that "plates" projecting from each side of an upright can act with sufficient power and constancy to have an effect on the most prominent part of the curve; the other that it is feasible to "take off the weight of the head and shoulders" from the spine; some patterns aim at only one of these objects, others at both. Here represented (Fig. 3) is an implement intended to fulfil the former purpose. The essential part is an upright divided into two by a slot beginning on a level with the top of the sacrum, and ending above, on, or near the first dorsal vertebra. Projecting laterally from this upright by slotted stalks fixable by nuts are certain so-called plates, two to left one to the right; the last named is intended to act through the medium of the ribs on the most deviated part of the dorsal curve, while the upper one on the left is supposed to influence in like manner the re-entering bend. The position of the lower left one is such that it can only press on the ends of the lower ribs and the lateral wall of the abdomen. In applying this implement the plates are squeezed in upon those various parts with the hands while an assistant with a key fixes them to the upright. But if these plates are to exert any power that upright from which they are supposed to work must be fixed; Archimedes himself could not work his lever without a fixed point (του σταυ).

Now the contrivances for procuring such fixity are a metal half-girth overlying the sacrum and ilium, completed by a strap embracing the lower part of the abdomen, two other straps springing from the square pad atop encircle each a shoulder. Another square pad on the lower dorsal region carries a broad webbing strap passing round the lower ribs. These bonds, supposed to fix the implement, are so perfectly ineffective that on every one of the patients that have come to me wearing such mechanism one can with the greatest ease sway the whole thing from side to side without moving her trunk in the slightest degree, and this whether one laid hold of the square pad atop or of the iliac half-girth.

The contrivance can therefore by no means influence a contorted spine while the upper plate on the left is so nearly opposite that on the right that if these could press at all they would only, as far as curvature is concerned, counteract each other while they co-operate in compressing the chest. Moreover, in the course of the day a young person stoops pretty frequently, and the upright being rigid must, on a back rounded forward for that purpose, project away from it top and bottom, while pressing unduly on the middle where the lower square pad is placed. In nearly all who have worn that instrument the skin in the situation of that pad is white and bloodless; in one patient, eight months after discarding the appliance, the mark still remains. By these and other necessary functional movements the various bands, etc., become displaced and loosened, the thing becomes a dead weight of about 4 lbs. hanging to the patient's shoulders. Here the choice of the dilemma above indicated has fallen on letting the machine get out of gear.

A different horn has been chosen in the construction of the implement shown in Fig. 4; it is complicated, and a very minute description would probably be inadvisable. To the usual steel pelvic girth are fastened metal hoops to lie above the iliac crests, preventing the implement slipping down. The double central upright carries laced pads, one on the right overlying the most prominent ribs, and, singular enough, opposite to it, is one on the left over the most depressed part of the dorsal thorax. The uprights also carry steel bands or braces, which, passing under the armpits, are

attached to the side uprights, and are designed to "take the weight off," but as the shoulder girdle is very movable the only effect is to make the man high shouldered. As far as metal work and belt construction goes the instrument is admirably manufactured; it fitted the man so closely that

Fig. 4.—Another instrument.

one rather wonders how he could manage to breathe. Indeed the fitting is perfect, and the side uprights follow almost exactly the asymmetry of the patient's form—that is to say, the thing is as crooked as the man's back, which, when it has thus been for a few years kept in a crooked splint, is expected, *mirabile dictu*, to come out straight.

REFERENCES.

- ¹ *The Causes and Treatment of Lateral Curvature of the Spine*, 5th Edition, 1895.
- ² *Clinical Society's Transactions*, vol. xxii, pp. 14, etc.
- ³ Two other forms are given in my work on *The Causes and Treatment of Lateral Curvature*.

ECTROPIUM: COMPLETE EXPOSURE OF THE CORNEA FOR TEN YEARS WITHOUT DESTRUCTION OF THE EYEBALL.

By W. ERNEST THOMSON, M.A., M.D.,

Clinical Assistant Glasgow Eye Infirmary, Oculist Glasgow Public Dispensary.

THE patient declares she is not more than 50 or 55 years of age. Sixteen years ago she fell and (it is said) wounded the right upper eyelid. For many years she has been subject to "breakings out" on the face, and ten years ago a "pimple" appeared at the margin of the orbit, suppurated, and eventually in healing drew up the upper eyelid, to which it had become attached. The nose is said to have been broken in childhood. She came to me, however, not about the right eye at all, which does not indeed seem to her to be worth consideration, but because of increasing dimness of vision in the left eye.

The right upper eyelid is partially everted and tacked up near its edge to the orbital margin. Both lower lids are completely everted; the right can be replaced by pressure upwards upon the skin over the malar bone, the left is completely bound down. The right cornea, which has been completely exposed to the air for about ten years, is covered with a thick greenish yellow crust, which comes off at intervals,

usually of several weeks. When this occurs she is able to distinguish the light from the fire or gas or from the window, and to indicate fairly well the position of a candle flame held near the eye. The eye gives her no pain.

On examining the cornea after the removal of the crust the following are the appearances: The cornea is grey and opaque, somewhat flattened, and shows some blood vessels in its substance. The limbus is indicated by an elevated ridge all round, so that the surface layers of the corneal tissue appear to have been destroyed. The whole of this surface stains greenish with fluoresceine. There is a zone of vascularity, chiefly conjunctival, around the limbus. The size and tension of the eyeball are normal. There is a chronic muco-purulent condition of the conjunctiva and lachrymal sac.

The cause of the dimness of sight in the left eye is opacity of the upper half of the cornea, due to irritation by chalky particles in the conjunctiva of the upper lid. The removal of these has greatly relieved the patient. In addition to numerous crusted patches on the face, the point of the nose is in a typical "apple-jelly" condition, and two fingers of the left hand are affected with lupus. (Two consultants, the one a physician, the other a surgeon, are agreed that the disease is tuberculous.)

Without wishing to trust too implicitly to the patient's account of her trouble, there can be no doubt that the exposure of the right cornea is of many years' duration. One would have expected that such prolonged exposure would long ago have led to perforation of the cornea and destruction of the eyeball by suppuration. Yet this has not occurred. As soon as one crust becomes detached another commences to form, grows to a considerable thickness, and then, owing to a collection of fluid beneath it, separates and leaves the corneal tissue exposed and almost perfectly clean.

One must presumably call the disease keratitis e lagophthalmo, though it has not run an acute course. The patient refuses any operation on the face or amputation of the fingers. In any case a plastic operation on such a patient would probably be unsuccessful.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

HYSTERICAL CONTRACTION OF THE KNEE-JOINT IN A BOY.

I was sent for on the evening of June 8th to see F. R., aged 9, who I was informed had received a kick on the left iliac fossa an hour or so previously.

On examination, there was no evidence of contusion, but marked tenderness, and the boy had vomited. After rest in bed for a day or two, the tenderness gradually decreased, no other symptoms manifesting themselves. On the third day he was sufficiently well to get up for a short time, when it was found that he was unable to put the sole of his left foot

to the ground. There was marked contraction of the knee-joint with superficial tenderness over the knee, hip, and lower part of the lumbar spine. Any attempt at extension very much aggravated the pain. He was ordered complete rest in bed for a day or two, but no improvement taking place, a weight and pulley were applied, with the result that in two days the limb became perfectly straight, and the boy was able to walk about without any symptom.

I thought this case worth reporting on account of the age and sex of the patient. I am under obligation to Mr. J. S. Purdy for kindly taking notes of the case for me. I may also add that there had been no previous manifestation of any neurotic tendency.

Leeds.

W. MARTIN FROBISHER, M.R.C.S.Eng.

CASE OF CHLOROFORM POISONING: RECOVERY.

As cases in which chloroform has been swallowed for the purpose of committing suicide are somewhat rare, the following case which has come under my notice may prove interesting:

I was called at 8.30 to see a servant girl, aged 19, who had been found lying in bed insensible. I was informed by her mistress that as the servant had failed to appear in the morning, she had gone to her room and had found her insensible.

I found the patient insensible, the face somewhat flushed, breathing stertorous, foaming at mouth, and jaws tightly closed. The pupils were greatly dilated, the eyes directed upwards and outwards, and conjunctival reflexes gone. The limbs were cold, flaccid, and covered with a clammy perspiration. The pulse was slow, feeble, and irregular.

I immediately gave her gr. $\frac{1}{2}$ of strychnine hypodermically, and slapped her chest and face with a wet towel. On learning the nature of the case, I had despatched a messenger to Dr. Pinkerton requesting him to bring the stomach pump, etc., and on his arrival we proceeded to wash out the stomach first with a solution containing 7 grains of sulphate of zinc and then with a solution containing bicarbonate of soda, some of which was allowed to remain in the stomach. In the fluid which was returned from the stomach we detected a slight odour of chloroform. We applied mustard over the cardiac area, and hot water bottles to the feet and legs. Under this treatment she recovered consciousness; the pupils became less dilated, the pulse improved, and her breathing became normal, but showed great signs of a tendency to relapse again.

I had her moved as soon as she seemed able to another bed, and in doing so a one-ounce bottle containing about two drachms of chloroform was found concealed among the bed-clothes. I ordered her to have an enema of hot coffee and drinks of water containing bicarbonate of soda.

The after-history is of no interest. She made an uninterrupted recovery, and on account of some slight gastric pain she had a mixture of bismuth and alkalies, and is now quite well.

REMARKS.—(1) I learned from a fellow servant that when she left her at 7 A.M. she was quite well, but seemed depressed, so that it was within two hours after she took the chloroform that I saw her. (2) I was led to make the diagnosis of chloroform poisoning on account of there being found near her bed a bottle said to contain a mixture of carbolic acid, creasote, and chloroform, and as there were no signs of carbolic acid or creasote poisoning I fell back on chloroform, the signs of poisoning by which were well marked. This was verified by the subsequent finding of the bottle containing the chloroform. (3) I estimate the quantity of chloroform taken to be about six drachms. (4) The patient, although she took the chloroform undiluted, never complained of any pain or discomfort in the mouth or fauces.

Southport.

W. B. ARMSTRONG, M.B., C.M.

APPARENT DEATH.—A Committee has been formed in Naples for the study of the question of apparent death. The President is Dr. Oscar Giacchi, and the members are Drs. G. Albertolli, F. Bonelli, E. Chiaiso, S. Lanza, F. Conti, L. Lombar, and P. Vandoni, and Miss Elizabeth Berkeley-Barter. The Secretaries of the Committee are Dr. F. Bonelli and Signor C. Gallo.