associations, a list of cottage hospitals and institutions employing nurses, and details as to provident funds, examining bodies, nurses' benefit societies, and so forth. Altogether a useful little book.

Messrs. Baillière, Tindall, and Cox ask us to state that they have been appointed the London publishers of Dr. L. Duncan Bulkley's "Diet and Hygiene in Diseases of the Skin" (New York: Paul Hoeber. 1913), reviewed in THE LANCET of June 14th, p. 1670.

Rew Inbentions.

THE "SIGNAL" VISION TEST TYPE.

THIS test type has for its signs the Block E, after the fashion of Hirschberg's test types, but only one sign is given for each grade of the test. The signs are mounted on turntables, so that their positions can be varied indefinitely. In one model the whole of the turntables are geared together by a simple pulley arrangement so that the movement of a milled head at the front bottom edge of the board causes all the signs to turn in different directions. In the simpler model the turntables have knobs projecting behind the board by which they are moved as required. This test is of particular value where it is desired to make a subjective test of vision with a minimum of error due to the "mental factor"—e.g., in testing seamen, railwaymen, or other employees whose vision is a matter of importance, for this test requires no knowledge of letters, only the minimum power of imitation. The test has already been in use for testing school children for some time with



As a school vision test the children excellent results. are taught to regard the E sign as three fingers, turned up, down, to the right or left. The teacher draws these signs on the class blackboard in large size and teach the whole class "signal drill," showing them how to stretch out three fingers of both hands in the positions of the fingers of the E sign pointed to. After this drill vision testing is quick and sure. The test should be hung in full daylight (not sunshine); a monitor should stand beside the test holding a sheet of dull coloured card so as to cover all the signs below the one the child is looking at. The child should stand toeing a chalk line drawn at the distance of 16 ft. 6 in. from the test. The examiner sitting slightly behind the child will see both the signs and the signal of the child. The signs should be altered in position for each child by the monitor turning the milled head or one or two of the discs. Except that the test will get dirty there is no objection to letting it hang in the class-room, for it cannot be learned by heart. The illustration shows how the response is made. On the back of each test-card there is gummed a printed sheet with the instructions as above and a figure showing the manner of signalling with the arms and fingers.

The test is made in excellent fashion by Messrs. Curry and Paxton, Great Portland-street, London, W.

N. BISHOP HARMAN, M.B., B.C. Cantab., Harley-street, W. F.R.C.S. Eng.

A NORMAL ADJUSTABLE STETHOSCOPE.

THE advantages of this new pattern stethoscope I have found to be very great. The chest-piece is made of aluminium. The opening which receives the sound waves is twice the capacity of the two tubes leading to the external auditory meatus. The calibre of the instrument is perfectly equal all the way through, no interruption

of any kind occurring either where the metal tubes join the tubing or where the tubing joins the chestpiece, owing to the specially constructed outside tapered knife-edge joints. The chest-piece is made to revolve, so that it is possible to examine the side or back to a very considerable extent without disturbing a very sick patient and without causing the tubes to kink or touch the bed-clothes, while the physician can examine all anterior parts, including the sides,



without changing position. The instrument is made portable by having the spring hinged, and it is of considerable advantage that the arms can be set up at a particular angle coinciding with the direction of the auditory meatus. The stethoscope has been tested and approved at various sanatoriums and hospitals in Great Britain and abroad. The rubber tubes are of especially heavy fine rubber, so that outside noises are excluded almost entirely and no vibrations are set up in the instrument itself at any point. It is termed a normal adjustable stethoscope because it conveys the sound waves emanating from the skin and underlying structures covered by the chest-piece without appreciable loss, without magnification or diminution of either the whole or any component parts making up the complex wave of sound, and without the production of adventitious sounds. While the heart sounds can be heard through the clothes such technique must be condemned. For children and very emaciated adults a localiser has been devised for use with the instrument, and this embodies the same principles on a smaller scale, thus making a very complete instrument. Great care should be used in getting ear-pieces that will fit and be comfortable.

The instrument is made by Messrs. Allen and Hanburys, Limited, Wigmore-street, London, W.

GORDON GROTE COPELAND, B.A., M.B. Toronto, Canada.

AN IMPROVED MOUTH GAG.

THE illustration shows a modification of Doyen's incisor gag. The handles, which are straight, are hinged to the tooth pads by swivel joints, and can thus be swung over to either side of the mouth. I have found it very useful in enucleating tonsils with the guillotine by leaving an abso-



lutely free field at the angle of the mouth for the depression of the guillotine handles. During removal of the right tonsil the handle of the gag is swung to the right side, and of the left tonsil to the left side.

The instrument has been made for me by Messrs. Mayer and Meltzer, 71, Great Portland-street, London, W.

W. S. KERR, M.B., C.M. Edin., F.R.C.S. Edin., Honorary Surgeon, Ear and Throat Department, Sheffield. Royal Infirmary, Sheffield.