

ent ways of doing the same thing, and that one always finds the way he is accustomed to the most satisfactory. Taking up some of the points mentioned, first in reference to the sight-hole of the mirror, the objection that when the glass is left dust collects on it and is difficult to remove, I have recently met by placing back of the sight-hole a thin piece of glass like a cover-slip and cementing it on, so that it is just as easy to wipe and keep dust off the mirror as to keep it off our glasses.

In regard to protecting the unused eye from light, it is sometimes a little help to close the eye that is not back of the opening, but more of the time it is a help to keep it open, particularly when you are trying to find where the light is and turn it in the proper direction. There are times when I find myself closing one eye, but mostly I work with both open. As to the position of the light over the patient's head, that is the place for it, or back of the patient, with the concave mirror, and it is also moderately satisfactory with the plane mirror when you work at the distance of one meter or over. The whole question of light depends upon having the light area as definite as possible, and no matter what the source of it the image will not be definite unless it is focused on the retina; and in order to be so focused it must be situated at the distance for which the eye is adjusted. In making the test, when we get to the point of reversal, we have the focus of the patient's eye at our own; and in order to have the light source focused on the patient's retina at the same time, it must be near the position of the surgeon's eye.

If you attempt to work closer than one meter, placing the light over the patient's head is not satisfactory. If you come to one-third of a meter there is one and one-half D. of inaccuracy, and that greatly lessens the value of the test. For many eyes the one-meter distance is fairly satisfactory, and if you take it as routine method the light above the patient will do. But if you limit your use of the test to this method, you restrict its value. A small point of light, too, is not satisfactory if placed over the patient's head, but if brought close to the mirror it gives a more delicate test.

I have used a disc, not one so well arranged and complete as this of Dr. Jennings. But after using it for some months I went back to the trial set. I prefer a small trial set kept right at hand. I find it, on the whole, more convenient than any form of instrument or disc.

Dr. H. V. WUERDEMANN of Milwaukee—The first instrument brought to this country was in 1887 by Donn of Oxford. In 1888 Burnett of Washington showed before this Section a disc skiascope, and about a year later I made a modification of it. Wood was the next man to put in an appearance with an instrument, which he uses with great satisfaction, based upon the same principles as those of Dr. Jennings. I would personally object to the size of this instrument on account of the space it would take up in the dark room, and in the examination more time is taken than is necessary.

Dr. J. E. JENNINGS—I think the idea of an extra piece of glass behind the mirror, suggested by Dr. Jackson, will be a very convenient thing, and we can thus keep the glass perfectly clean without rubbing off the silver. In regard to Dr. Würdemann's remarks, the hand skiascope is a very convenient and useful instrument, but an objection to it is that the patient controls the movement of the instrument and you are not always sure which aperture they are looking through, whereas my instrument records the number of the lens in front of the sight-hole and is under the control of the surgeon.

A METHOD OF EMPLOYING KANGAROO TENDON IN THE OPERATION FOR SHORTENING OCULAR MUSCLES.

Presented to the Section on Ophthalmology at the Forty-eighth Annual Meeting of the American Medical Association held at Philadelphia, June 1-4, 1897.

BY JOHN O. McREYNOLDS, B.Sc., M.D.
DALLAS, TEXAS.

Without attempting to review the subject of muscle shortening I will briefly present a method which has been quite satisfactory in my experience on account of the short time required for its performance, its freedom from pain, and the accuracy with which any degree of heterophoria may be corrected. It may also be successfully employed as an auxiliary in those cases of marked strabismus in which complete tenotomies alone will not entirely correct the deviation. The method is as follows: With broad fixation forceps pro-

vided with teeth sufficiently long to engage all the ocular tissues down to the sclera, grasp conjunctiva, capsule of Tenon and tendon of ocular muscle in such a way as to produce a loop of tendon. Then fix the loop thus formed by a single suture of kangaroo tendon embracing the ocular tendon. Tie the thread thus employed and leave it to be absorbed. In case there should be a desire to have the kangaroo tendon buried beneath the conjunctiva short incisions through this membrane will allow the thread to sink out of sight beneath the conjunctiva. The operation can be made in less time than one minute, involves no pain or subsequent discomfort and will correct with precision any ordinary degree of heterophoria.

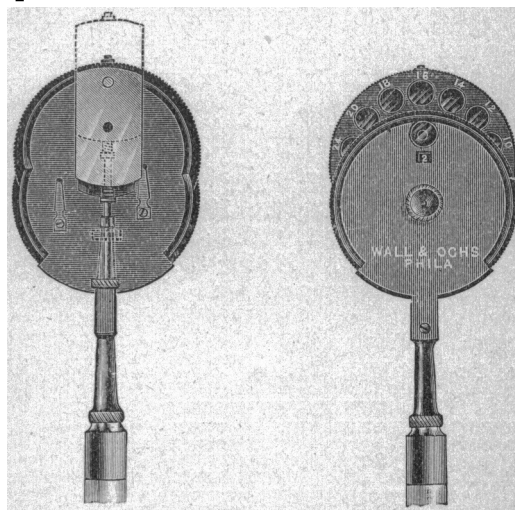
A NEW OPHTHALMOSCOPE.

Presented in the Section on Ophthalmology, at the Forty-eighth Annual Meeting of the American Medical Association, held at Philadelphia, Pa., June 1-4, 1897.

BY JOHN WELSH CROSKY, M.D.
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In the construction of this ophthalmoscope the object desired is to obtain a sufficiently large series of lenses in the most compact form and to permit of all the lenses being used without removing the instrument from the face.

When it is taken into consideration that to use an ophthalmoscope properly the accommodation should be relaxed, these advantages will be appreciated. The size of the instrument can be judged from the illustrations, which are two-thirds actual size, a point which will be valued by oculists who carry their ophthalmoscopes with them.



The ophthalmoscope itself consists of two discs, one for convenience called the lower disc, containing the weaker plus and minus glasses, ranging from +1 to +6 by single diopters and from -1 to -8 by single diopters; the upper disk containing the stronger lenses, ranging from +8 to +20 by alternate diopters and from -10 to -24 by alternate diopters.

It will be noticed that the discs are used independently and should the fundus require a stronger lens to explore it than is contained in the lower disc, it is not necessary to remove the ophthalmoscope from the eye; but, by simply pushing the mirror upward with the forefinger, so as to be opposite the lenses in the upper disk, as shown by the dotted lines in the illustration, the examination may be continued.