of the right eye, illustrates the left fundus and shows a temporal crescent and the perimacular region is suspiciously pathological. Some of the other drawings are poor.

There is an index and ophthalmological dictionary. Certain common ophthalmic terms which have not been mentioned in the text are placed in appropriate alphabetical order in the index and receive a few lines of explanation and description.

Transactions of the American Ophthalmological Society. Vol. XXXV. 1937.

The 73rd Annual Meeting of the American Ophthalmological Society was held at Hot Springs, Virginia, on June 3, 4 and 5, 1937, under the Presidency of Dr. Harry Friedenwald.

The volume contains many papers of scientific and clinical interest, some of which we hope to publish later in abstract form in the *British Journal of Ophthalmology*. The quality of these original papers, the production of the illustrations and the printing is up to the usual high standard of this work.

The volume also contains a list of the officers and council, past Presidents and members of the Society.

CORRESPONDENCE

SMOOTH MUSCLE OF THE PERIORBITA AND THE MECHANISM OF EXOPHTHALMOS

To the Editors of THE BRITISH JOURNAL OF OPHTHALMOLOGY.

SIRS,—I have read with interest Dr. Brunton's account of the periorbital unstriped muscle and his remarks concerning the possible part played by its contraction in the mechanism of proptosis as found in thyrotoxicosis. It may be that this muscle has some slight influence in the direction stated, but I think it would be unwise to attribute to it anything more in that respect than just that of a coincidental nature, for the following reasons:—

1. It is stated that contraction of the unstriped periorbital muscle produces exophthalmos by causing an increase of retro-bulbar pressure. This is not likely to be the case in Graves' disease because the periorbital fascia is fairly closely attached to the walls of the orbit and any contraction would not produce more than a slight rise in the retro-bulbar pressure. If the periorbital muscular layer were able to free itself from this attachment as a result of its

continued spasm, thereby achieving an efficient increase in the retro-bulbar pressure, the space so developed would surely form a constant feature at autopsy.

2. In the typical case of thyrotoxicosis with exophthalmos there is not the slightest sign of increased retro-bulbar pressure.

3. Contraction of the periorbital membrane in dogs, cats, sheep, etc., produces marked exophthalmos because, (a) it is a well developed muscular membrane, (b) it is in greater part a free and mobile structure. Waves of peristalsis may be seen to pass freely along it following a stimulation of the cervical sympathetic. In the ape, however, in which the orbit takes the form of a bony socket and the periorbital membrane is attached all round, thus resembling the human type, stimulation of the cervical sympathetic does not produce a protrusion of the eye-ball. Hence it may be pointed out that it is hardly logical to expect protrusion of the eye-ball in man in these circumstances.

Finally it may be added that the type of exophthalmos seen in Graves' disease is typically associated with lid retraction, a factor which undoubtedly depends upon a conjoint mechanism.

I am, etc.,

J. H. MULVANY.
(Radium Registrar)

KING'S COLLEGE HOSPITAL,
S.E.5, 21st May, 1938.

CORNEO-SCLERAL SUTURE IN CATARACT EXTRACTION

To the Editors of THE BRITISH JOURNAL OF OPHTHALMOLOGY.

SIRS,—I have read with interest Mr. H. B. Stallard's article on "A Corneo-scleral Suture in Cataract Extraction, etc." in the May number of the Journal.

I have used a suture consistently for some time in all my cases of cataract extraction and agree with him as to the value of a suture of some kind. The suture which he describes is corneo-scleral—I very much prefer a purely conjunctival suture, a full description of which will be found in the *Trans. Ophthalm. Soc. U.K.*, Vol. LIII, p. 86, 1933.

This suture, like the corneo-scleral, is inserted before the section is made, and the technique of its insertion presents no difficulties. Its chief advantages, in my opinion, over the corneo-scleral suture are that a generous conjunctival flap can be obtained and that, owing to the very considerable tension exerted by the tightened conjunctiva, the lips of the wound are held in such close apposition that the danger of prolapse, short of direct violence to the eye, is