APPLIANCES

DIATHERMY ELECTRODE*†

BY
V. PREZIOSI
Malta, G.C.

THE difficulties of the present technique and the variable results of diathermy depend to some extent on the following factors:

- (1) The variation in dryness of the surface where the electrode is applied.

FIG. 1.—Diagram of Electrode

FIG. 2.—Details showing sizes.

* Received for publication August 1, 1958.
† This instrument was manufactured by C. W. Dixey and Son, Ltd., of 19 Wigmore Street, London, W.1.

Br J Ophthalmol: first published as 10.1136/bjo.43.8.502 on 1 August 1959. Downloaded from <http://bjo.bmj.com/> on April 26, 2023 by guest. Protected by copyright.

- (2) The pressure exerted on the eye.
- (3) The difficulties presented by holes far back, *e.g.* near the posterior pole, to which diathermy cannot be applied under direct vision.

The new diathermy applicator, which has been devised with these points in mind (Fig. 1), consists of a hollow insulated handle, through the centre of which runs a hollow metal tube. At one end a detachable hollow electrode can be fitted and at the other end a suction tube is fitted on to the hollow metal tube. The lead of the electrode is attached to the body of the tube.

The suction tube is connected to a vacuum pump where suction power can be set and controlled (such as that used for the aspiration of mucus in anaesthesia).

The head of the electrode is circular and can be made to various diameters.

The details of the various parts of the apparatus are shown in Fig. 2.

The advantages of the new instrument are as follows:

- (1) Constant pressure of the electrode against the sclera (being a controlled negative pressure). This means that diathermy can be applied as easily to a soft eye, *e.g.* one which has lost its subretinal fluid through drainage puncture, as to an eye of normal tension.
- (2) Perfect dryness of the surface treated.
- (3) Ease of application where direct vision is not possible.
- (4) Following from (1) and (2) above, the current applied is more constant in strength.