

(ophthalmologists) need well trained ancillary personnel if they wish to render the best possible complete eye care to our ever increasing population.

Historically, the doctor-technician relationship dates back over 100 years, when, in 1827 the first contact lens was suggested by Sir John Herschel, English astronomer and physicist. He constructed a small saucer shaped glass shell for protecting cornea of a physician's patient suffering from diseased eyelids. He did not develop the optical possibilities of this glass disc, it was merely a protective shell. It was not until 1887—(60 years later) after the discovery and use of local anesthetics, that casts of anterior segment of the eye could be made.

In 1887 F. E. Müller, expert glass blower, Wiesbaden, Germany, constructed a hand blown thin glass shell for a patient of Dr. Saemisch to protect the cornea in an eye where the lid had been surgically removed because of malignancy.

In 1888 a Swiss physician in Zurich—Dr. A. Eugene Fick coined term "Kontak Brille" (contact lens) and fitted them to correct refractive errors. These were hand blown corneal lenses fitted by expert glass blowers, working with physician. Here again, we have technician and ophthalmologist working together.

Between 1888 and 1938 investigations were carried on by many men in Germany, Switzerland and U.S.A. (e.g. S. A. Muller, Wiesbaden, Carl Zeiss Company, Jena Germany and Obrig-Muller in U.S.A.)

In 1935 I was completing my residency in ophthalmology at Illinois Eye and Ear Infirmary in Chicago and was working with a technician who many of you may remember—by the name of Hugh Hunter employed by the House of Vision. We were making impressions of the anterior curvature of cornea and sclera, and fitting patients with molded scleral lenses made of glass. It was a time consuming and arduous procedure with few patients being fitted happily. Patients with irregular scleras could not be fitted at all. Corneal edema due to limbal pressures—turbidity of the artificial

precorneal layer of fluid (ph)—difficult to regulate made the procedure a very unsatisfactory one. The lenses were large, uncomfortable, and cosmetically poor.

Ophthalmologists tended to lose interest in contact lenses except for cases of keratoconus and a few other special indications. These cases were usually referred to trained ophthalmic technicians who continued to work with these highly motivated patients.

In 1938 with the development of plastics, Obrig and Muller designed and constructed the first molded plastic scleral lenses made of methylmethacrylate (plexiglass—lucite) which was about 65% lighter in weight than the former thin glass lens. These scleral lenses (Iacrilens) were used with some degree of success for a few years and are still being used in selected cases (athletes).

The small corneal lens had been known since 1890 having been introduced by Kalt, Muller, and were made in Germany by the Carl Zeiss Company in Jena. These lenses were not successful and like so many other things in medicine, the use of corneal lenses remained dormant until Kevin Tourny, an optician and contact lens technician, perfected the first plastic corneal lens in 1948. Now, patients began to wear their contact lenses more comfortably and for longer periods of time.

There quickly followed the Microlens, a smaller lens (9.5 mm.) which tended to relieve peripheral pressure on the cornea, and then the custom fitted lens, even smaller, so that it would center within the border of the limbal flattening. But this lens did not live up to expectations, because in the wearing, it did not center in the desired area and therefore proved to be unsatisfactory.

Today with the so called "custom-fitting" of contact lens paralleling the diminishing curvature of the peripheral portion of the cornea where not only the central base curve but the intermediate and peripheral curves are ground to fit the individual cornea, a contact lens is produced which can be tolerated by a great majority of patients. We see little corneal