

and the products of the latter. The true substance of the cornea is invaded and the infiltration may extend half way through the thickness of the substantia propria. For several weeks this state of things may remain substantially unchanged, the remedies applied or the vitality of the tissues, or both forces working together, retarding the progress of the disease.

No new deposits of leucocytes are form-

ed. The active germs do not increase in numbers, and finally repair sets in. When that begins the peri-corneal blood vessels, whose capillaries apparently ended at the limbus, project small delicate processes into the substance of the cornea towards the ulcerated spot and repair goes on here pretty much as it does in other situations, with much the same results. This third stage is represented in Fig. 3.

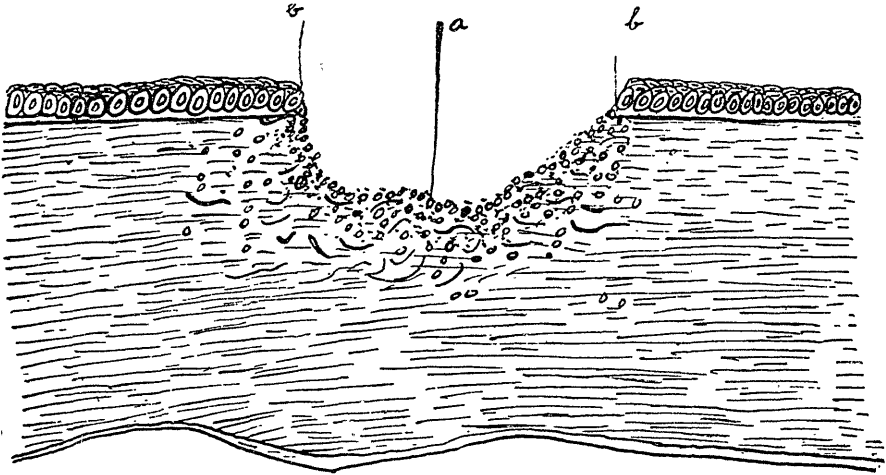


Figure 2. Second stage of simple corneal ulcer. The edges of the ulcer are at *b b*, where the epithelium and anterior elastic lamina end. The bottom of the excavation, *a*, is covered with tissue debris.

The outlying collections of round cells have been absorbed into the corneal lymphatic spaces whose contents finally empty into the pre-auricular lymph stream. When

repair is complete (as in Fig. 4), the new vessels disappear and the *hiatus corneae* is filled by connective tissue. In other words the sub-epithelial layer (of Bowman)

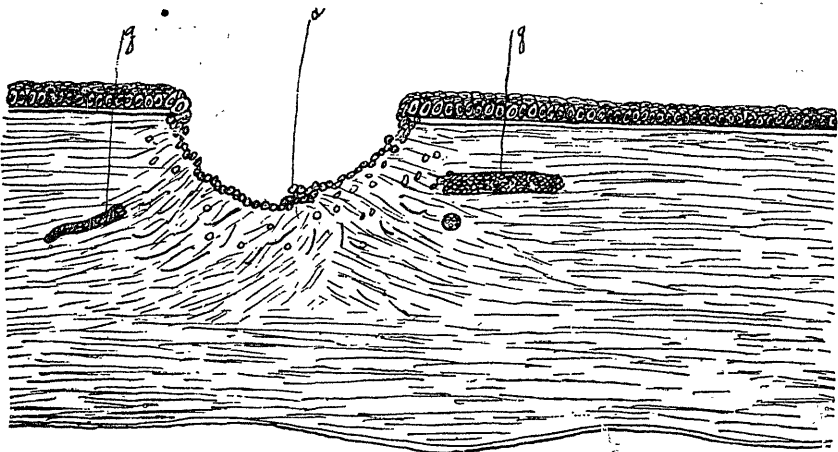


Figure 3. (After Saemisch.) Section of corneal ulcer. Beginning repair. The proliferating epithelium has covered the bottom of the ulcer *a*. New blood vessels have been cut through at *g*.