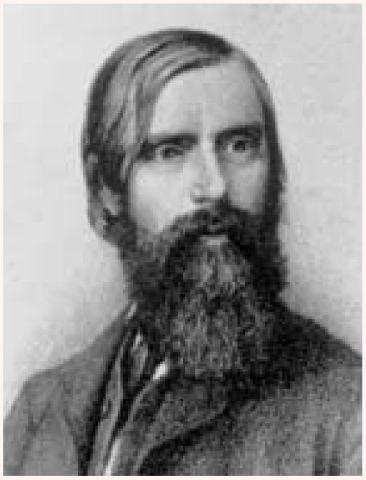
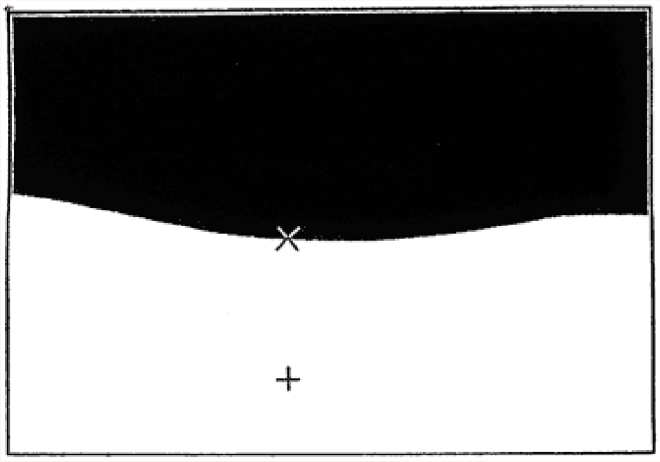
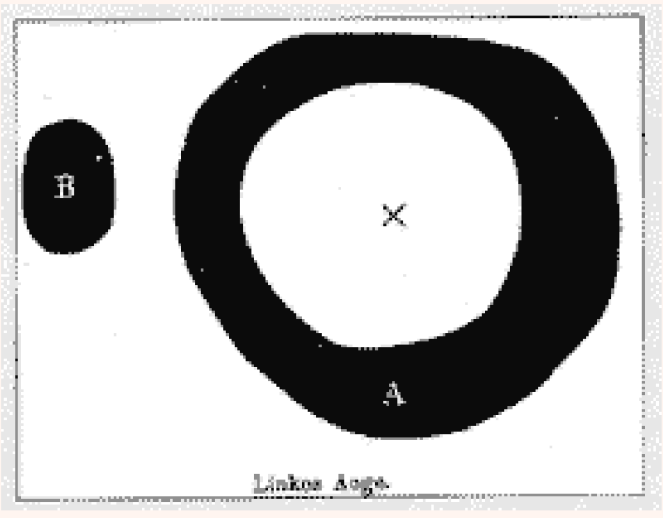
# THE INTRODUCTION OF PERIMETRY INTO MEDICINE: VON GRAEFE AND THE CAMPIMETER 1856

Von Graefe (right) is credited with introducing perimetry into clinical medicine. In 1855, at the age of 28, he published "Examination of the Visual Functions in Amblyopic Affections." Von Graefe built on the work of Helmholtz. Helmholtz had recommended that, in order to keep one's bearing during the examination of the ocular fundus, a numbered grid be placed in front of the patient to direct the patient's eye into certain known directions of gaze. It was a piece of blackboard marked in this way that von Graefe used as a tangent screen. He worked at a distance of 18 inches and used as a test object a piece of white chalk, about 1 cm across, held in a wire. He made use of various symbols and dots as a fixation point so that the patient could recognize his deficits more easily.








It was clear from this classic article that von Graefe had been plotting visual fields on almost everybody for some years.

He gave examples of ring scotomata, concentric constriction of the visual field, enlargement of the blind spot, and homonymous, bitemporal, and binasal hemianopia. He suggested that homonymous hemianopias were caused by unilateral cerebral disease and heteronymous hemianopias by growths at the base of the brain. This seminal work is responsible for establishing visual-field testing equipment in the ophthalmologist's clinic.