

# CARL ZEISS - JENA

Telegraphic Address: ZEISSWERK JENA

Branches: Berlin W. 9, Potsdamerstrasse 139 / Hamburg, "Alsterhaus", Alsterdamm 12/13

Vienna IX/3, Ferstelgasse 1 / Buenos Aires, Bernardo de Irigoyen 330 / Kobe (Japan), Naniwa machi 64

Distributing Agencies: London W. C. 1: J.W. Atha & Co., 8, Southampton Row / New York: Harold M. Bennett, 153 West 23<sup>rd</sup> Street / Montreal: The Hughes Owens Co. Ltd., 247 Notre Dame Street, also at Ottawa, Toronto, Winnipeg, Vancouver / Calcutta: Adair, Dutt & Co. Ltd., 22, Canning Street / Melbourne: E. C. Heyne Pty. Ltd., Union Building, 100 Flinders Street, also at Sydney and at Paris, Milan, Madrid, Rio de Janeiro, Shanghai etc.

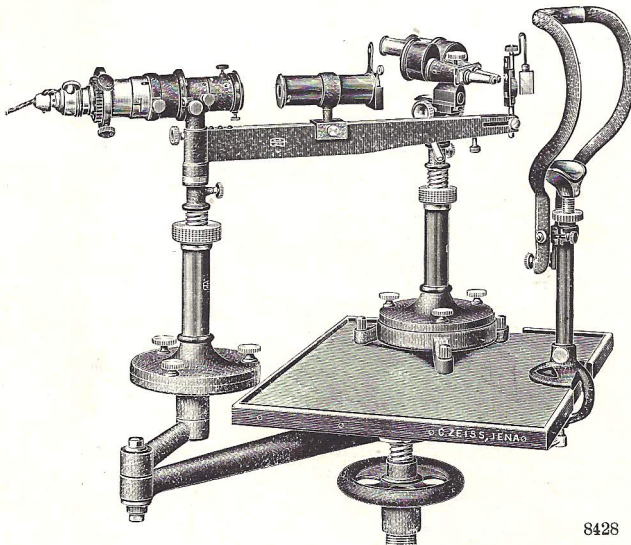
## Gullstrand Slit Lamp

The methods of slit lamp microscopy developed by Gullstrand, Koeppe, and Vogt have attained significance in equal measures in scientific research as well in daily practice, where it is being recognised as an indispensable means of securing an unerring clinical diagnosis and also as a perfect aid in the ophthalmology of injuries due to accidents. As an instrument of differential diagnosis and delicate prognosis the method is of immense clinical value in that it

furnishes a means of recognising various cellular and allied microscopic changes of a morbid character long before any clinical symptom makes its appearance, indeed at an early stage where every other method fails to disclose a change or to utter a warning capable of suggesting prompt treatment at incipience, such as could not fail to offer a vastly increased chance of successfully bringing aid to the patient.

Normal and morbid conditions which hitherto were known as anatomical facts only are disclosed by this method in the living eye, as pointed out by Prof. Vogt. Indeed, it brings into view, not only what is anatomically known but also a number of appearances which hitherto were not amenable to anatomical demonstration. The method furnishes for the first time a means of seeing the living endothelium of the posterior wall of the cornea and of tracing the course of the

normal nerve fibres throughout their finest ramifications. Individual blood corpuscles can be seen rolling through the blood vessels of the cornea, and the oedema of the epithelium or endothelium of the cornea is rendered manifest by visible dew formation. The slit lamp enables us to distinguish between acquired and numerous forms of congenital opacities. It is the only means so far evolved which furnishes clearly defined clinical criteria for the differential diagnosis of complicated and senile cataract. The new method throws also a considerable amount of light on the physiology of the young and ageing lens. By means of the slit lamp the living vitreous may further be studied in its manifold forms. In one case it will be seen to form a highly transmissive seething structure of folds, in others the latter reduces to a slender arrangement of fibres, striae or membranes, and much more varied appearances are presented to the eye by the many pathological changes which the vitreous humour may undergo.



8428

**Fig. 1.** Simple Combination for the use of oculists. The slit Nitra lamp (on the double radius bar attached to the instrument table) in combination with the corneal microscope on annular foot (resting on the glass plate which covers the table). The slit lamp bar carries a single Koeppe light-screening tube with a Vogt redfree filter and a Vogt slit lamp lens (about  $\frac{1}{10}$  full size).

