ON THE MEASURE OF THE STEREOSCOPIC ACUITY OF VISION *

BY

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SINCE the beginning of this century the International Congresses of Ophthalmology have occupied themselves with the question of internationalising certain measures and procedures of examination in our science. This work led to the adoption of international rules and standards for the determination of the visual acuity and for the notation of the meridians in astigmatism at the XIth International Congress (Naples 1909). The work was interrupted by the first World war, but was taken up again by the XIIIth International Congress (Amsterdam 1929), at which were discussed the visual requirements for traffic and their determination. No resolution, however, was passed, but presumably these questions will now be taken up again.

Among the measures that were taken up at the XIIIth Congress for Internationalisation was also that of the acuity of stereoscopic vision. A report on that subject by Onfray was presented by the committee, in which after a review of the methods in use it was proposed that the acuity of stereoscopic vision should be determined by special stereograms giving the visual angle necessary for their being seen stereoscopically. The acuity of stereoscopic vision for the examined person would thus be given by an angle, *e.g.*, 30'', and a certain angle would be fixed for different occupations.

This way of determining the stereoscopic visual acuity is, however, open to the objection that two persons in whom the same angle of stereoscopic distinction has been found, nevertheless may have a different power of stereoscopic vision, this power depending not only of the stereoscopic angle of distinction, but also of the stereoscopic base, that is of the pupillary distance of the examined person, which varies individually.

In such circumstances it seems appropriate to choose a more exact measure for the power of stereoscopic vision, and such a measure would be the stereoscopic radius of the examined person, that is the radius of the field within which stereoscopic vision is possible. This radius, r , is the quotient of the pupillary distance, b , and the stereoscopic angle of distinction w , *i.e.*, $r = b/w$. Thus an angle of stereoscopic distinction of 3' 0'' and a pupillary distance of 66 mm. would give a stereoscopic radius of 440 mm. and

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the same angle with a pupillary distance of 54 mm. a stereoscopic radius of 360 mm.

This way of measuring the power of stereoscopic vision would not only have the advantage of paying due influence to the pupillary distance, but seems also to give a more expressive and tangible evaluation of the same. It seems therefore desirable that an exchange of the angle of distinction against the radius should be considered in the future discussion of the internationalisation of this measure.

A CASE OF SPONTANEOUS EXOPHTHALMOS DURING DELIVERY*

BY

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A CASE of unilateral exophthalmos occurring during delivery was seen by me, and because reference to this condition in the literature is scarce, I think it of sufficient interest to put on record.

The patient, a 32 years old woman, had previously been healthy. Her blood pressure was 120/80, urine normal, Wassermann reaction of blood—negative. This was her first pregnancy and it was uneventful up to the time of delivery. Three weeks before the expected time, she started to bleed, and was sent to the hospital for induction of labour. During one of her severe pains of the second stage of labour, she suddenly complained of dimness of vision of the left eye, and protrusion of the eye was noticed. I was asked to see this patient shortly after delivery, and found the right eye completely normal. The left eye was considerably proptosed, the upper lid oedematous and the lower lid tucked away behind the proptosed eye. The cornea and conjunctiva were normal, the pupil widely and irregularly dilated without direct reaction to light and the eyeball was completely fixed. The fundus showed gross retinal oedema but details were not discernable. The eye was blind.

Two days later there was some return of movement, the upper lid showed suffusion, but no subconjunctival haemorrhages were present. The fundus was now covered with haemorrhages particularly in the macular region and the disc was pale. During the next ten days the eye movement improved in all directions except upward, the proptosis receded and the retinal haemorrhages

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