

Prophylaxis of Trachoma

The Ophthalmological Society of Egypt in 1920 elected a Committee to study and report on the means of prophylaxis against trachoma and acute ophthalmias. This report has just been published in the Annual Bulletin of the Society. It is a serious effort to grapple with a condition of affairs as old as the Pharaohs and affecting a proportion of the population of native Egyptians which has been estimated to be about 90 per cent. From a study of the published Annual Reports of the Director of Ophthalmic Hospitals since 1912, it is clear that not only has there been an improvement in the incidence of trachoma and acute ophthalmias, but that by the agency of the Ophthalmic Hospitals, now twenty in number, a firm desire has been implanted in the minds of the educated population to proceed still further in the direction of universal facilities for ophthalmic treatment and adequate means of prophylaxis. So that the Ophthalmological Society's report should be considered rather as a response to a popular feeling than as a new trumpet call to modern ideas of health.

The English and the arrangement of the report are defective, but are nevertheless highly creditable to a body of ophthalmic surgeons, the native language of the majority of whom is Arabic.

A good many of the suggestions are such as will be found in the usual treatises on diseases of the eye, others are taken without acknowledgment from MacCallan's book, "Trachoma in Egypt." We are not in a position to give an opinion on the general sanitary measures recommended, nor on the advisability of introducing Universal Elementary Education for boys and girls, though they seem to be a sound foundation for the improvement of any generally illiterate people who, outside some of the largest towns, are unacquainted with even the rudiments of sanitary science.

MERCHANT SHIPPING. STANDARD OF REJECTION FOR COLOUR-BLINDNESS IN SEAMEN

Report to the Board of Trade by Dr. Edridge-Green

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MERCANTILE MARINE DEPARTMENT,
BOARD OF TRADE,

68, VICTORIA STREET,
LONDON, S.W.1,

November 7th, 1921.

SIR,—I beg to enclose my report on the proposed Standard of Rejection for Colour-blindness for Seamen.

STANDARD OF REJECTION FOR COLOUR-BLINDNESS IN SEAMEN 127

Captain Fulton, the Principal Examiner of Masters and Mates to the Board of Trade, entirely concurs with this report.

I am, Sir,

Your obedient Servant,

F. W. EDRIDGE-GREEN.

The Assistant Secretary,

Mercantile Marine Department, Board of Trade.

There is no universally recognised standard of rejection for colour-blindness since the wool test has become obsolete. With the wool test any one found to show any evidence of colour-blindness was rejected. The wool test allows 50 per cent. of dangerously colour-blind to pass and of those rejected 50 per cent. are not dangerously colour-blind.

The Nautical Advisers of the Board of Trade are agreed that any one who can distinguish between the red, green and white lights at a distance of a mile has sufficiently good colour perception for the purpose of navigation at sea.

The point, therefore, for consideration is the degree of defective colour perception corresponding to a failure to distinguish between the red, green and white lights used at sea at a distance of a mile.

About 25 per cent. of men have diminished colour perception in comparison with the remaining 75 per cent. As these cases form a complete series from total colour-blindness to super-normal colour perception the consideration is where the dividing line should be drawn and whether there is some special fact which will indicate the limit of safety. About 5 per cent. of men will fail to distinguish between the red, green, and white lights of a properly constructed lantern or with the actual lights themselves at a distance of a mile. These men will equally fail with other properly constructed tests, as for instance, my spectrometer or card test. An examination with the spectrometer shows that they may be ranged in three definite classes, the dichromic, who see only two colours in the spectrum, red and violet with a neutral division between them, the trichromic who see only three colours in the spectrum, red, green, and violet, and who designate the yellow of the spectrum as red-green, and those who have shortening of the red end of the spectrum. The spectrometer is the most convincing test in these cases. For instance, the trichromic will isolate a considerable portion of the yellow region of the spectrum containing to the normal-sighted orange-yellow, yellow and yellow-green and will state that it is one uniform band of colour.

A person of very acute colour-vision can distinguish seven colours in the solar spectrum, red, orange, yellow, green, blue, indigo, and violet. Those who have for all practical purposes normal colour-vision, six, five, or four colours, those who see six failing to distinguish indigo, those who see five, orange as well,

and those who see four, blue in addition. Those who can distinguish seven colours are called heptachromic and those of less acute perception, in descending order, hexa-, penta-, tetra-, tri-, and dichromic. The tetrachromic, or those who see four colours in the spectrum, red, yellow, green, and violet, though in continual difficulty about blue and green, have a definite yellow sensation and repeated and extended examinations with actual lights extending in some cases over five hours have convinced me that for practical purposes the tetrachromic are not dangerous. The possession of a definite yellow sensation is therefore the deciding point for passing as practically normal.

The lantern is therefore an efficient test and cases of acquired colour-blindness, as for instance those with central colour scotoma, are also excluded, as well as those due to defective light perception such as shortening of the red end of the spectrum.

It will be noticed that this standard is based only on facts.

According to my experiments this standard is safe for a greater distance than a mile and will tend to diminish and not increase the number of candidates rejected.

ABSTRACTS

I—CONGENITAL NYSTAGMUS

Haïri, H. (Geneva).—Congenital latent nystagmus. (*Nystagmus latent congénitale.*) *Revue Générale d'Ophtal.*, April, 1921.

In a somewhat long and rather speculative article **Haïri** discusses what he denominates latent nystagmus of congenital origin. This must be distinguished from latent nystagmus of acquired type, such as comes on only under certain circumstances as in coal miners or certain professional occupations. The definition of the congenital type is, according to the author, "A trembling of one or both eyeballs, which becomes manifest on covering one eye." The leading work on this subject is that of C. and H. Fromaget (*Ann. d'oculist*, 1912). These writers supposed that their case was unique, but **Haïri** shows that that is far from being the case, he having found cases recorded as far back as that of **Faucou** in 1872. Nevertheless, the literature is not very large and includes, in addition to continental writers, the names of **Brewerton**, **Grimsdale**, **Clarke**, and **E. Thomson** in Great Britain. In his explanation of the pathogenesis the author gives schemata to indicate the nerve paths between the cortex, the supranuclear and the nuclear centres, and the eyeballs. These diagrams show how direct central