

arguments are based upon experience at ophthalmic hospitals. In a well-equipped general hospital, where a patient, referred by the ophthalmic surgeon, is admitted to a medical ward, and subjected to examination, often painfully thorough, by the physician and by the staff of the clinical, chemical, and bacteriological laboratories, there would be no scope for the energies of an ophthalmic physician.

Blindness due to Ophthalmia Neonatorum

The *News Letter*, the official organ of the National Committee for the Prevention of Blindness (New York) has recently (October, 1919) published the statistics of 1918-19 dealing with the admissions to the State Schools for the Blind, and with schools and day classes for the blind in various cities in the United States. The figures are interesting, since those for ophthalmia neonatorum are distinguished from the others. As regards 34 State Schools the total admissions for the two years was 3,537 children, of whom 89 (or 15·7 per cent.) had been blinded by ophthalmia neonatorum. The highest percentage of admissions from ophthalmia was in the Mississippi Institution for the Blind, where it reached the astonishing figure of 85·7 per cent., but then the significance of that figure is much diminished when we find that the total admissions were seven only, of which six were due to the disease in question. Eleven of the institutions had no ophthalmia admissions. Of 56 admissions into 10 schools and classes for the blind in the various cities 16 (or 28·6 per cent.) were admitted on account of the results of ophthalmia. From another table given by our contemporary, showing the number of pupils newly admitted in Schools for the Blind during the past eleven years who were blind from ophthalmia neonatorum, it appears that admissions from ophthalmia ranged from 26·6 per cent. of the admissions in 1907-8 to 14·7 per cent. in 1917-18. The percentage may, broadly speaking, be said to have fallen year by year, a most satisfactory result.

Colour-Matching by "Artificial Daylight"

The correct matching of colours is a problem of great interest, both from the physical and physiological sides, and has been appropriately the subject of study by the Illuminating Engineering Society on several occasions. Assuming that the operator engaged in matching colours has normal colour vision, he in general requires for his work a "white" light, approaching that of the diffused north sky. The ideal natural lighting conditions, however, are

not always realizable. Periods occur in winter when, owing to fogs or mist, the light is too feeble in intensity or too unusual in colour, to enable accurate colour-matching to take place.

It would, therefore, be a great advantage to have available some form of "artificial daylight," i.e., some means of producing, from artificial illuminants, a colour of light closely resembling normal daylight in colour. Such a source would enable colour-matching to be carried on independent of climatic conditions. It would be, for example, most serviceable in the dye industry, and in many processes in which colour-matching is important (e.g., the grading of hops, flour, tobacco, etc.). Similarly in picture galleries "artificial daylight" would be useful in enabling the colours to be seen under good conditions at night, while in drapers' shops, florists, etc., a less accurate imitation of daylight would probably suffice.

The earlier attempts at producing artificial daylight took the form of providing a special coloured screen used with arc lamps, whereby the excess of red and yellow in the artificial illuminant was filtered out. Similar methods were afterwards used with metal filament lamps. Dr. Kenneth Mees described before the Illuminating Engineering Society a special screen of gelatine coloured by permanent dyes, which converted the light from an ordinary metal filament lamp into a close approximation to daylight. This screen was stated to be not only visually, but photographically correct; but naturally such exactitude involves a considerable loss of light. Blue glass bulbs for electric lamps have also been utilized.

The latest attempt, due originally to the artist, Mr. Sheringham, and recently described before the Illuminating Engineering Society by Mr. L. C. Martin, uses a different method. A large reflector is located above a gas-filled ("half watt") lamp, the lower portion of which is obscured. The surface of the reflector is coated with a mosaic of squares in different colours, such that the reflected light can be made to resemble either north sky light or diffused sunlight (which are not quite identical). The whole problem is a most interesting one, and the various methods deserve further study, both from the physical and physiological sides.

