enables one to follow the fight of the body against infection, to know beforehand its probable termination, and forms a criterion for intervention. The R.E.S. has the property of taking up negatively laden colloids introduced into the blood. Congo-red is such a colloid capable of great dispersion and absolutely harmless to the body.

The normal Congo-red index for human blood has been found to be 50–70 per cent. (For the details of the test the reader is referred to the original.) According to Monjukova, Fradkin and Heyfetz an index of over 75 indicates a depression of function of the R.E.S. They have determined this index in a number of diseases of the eye and tabulated their findings. Depression of function of the R. E. S. in four cases of tuberculous uveitis, three of sympathetic ophthalmitis, one of von Hippel's disease, one of buphthalmos and one of traumatic irido-cyclitis was noted. One case of interstitial keratitis showed a scarcely appreciable depression.

The authors lay special stress on their finding in sympathetic ophthalmitis. Latterly, Guillery has worked out experimentally the connection between tuberculous intoxication and sympathetic ophthalmitis. The authors foresee the possibility of deriving practical guidance from the functional testing of the R.E.S. for pre-diagnosing a brewing sympathetic ophthalmitis and as to whether or not and when to enucleate an eye.

They also draw our attention to the influence of the R.E.S. on transplants such as those of the cornea and on protein therapy so often employed in ophthalmology.

D. V. Giri.

---

**BOOK NOTICE**


Newton's classical experiment of producing the spectrum of sunlight with a glass prism was first published in the Philosophical Transactions of the Royal Society in 1672. His deduction that "to the same degree of refrangibility ever belongs the same colour, and the same colour ever belongs the same degree of refrangibility" was vehemently criticised by Hooke. Newton's dislike of controversy nearly led him "to be no farther solicitous about matters of philosophy." Fortunately, however, his scientific curiosity could not be abated, and we know that the first manuscript of a
large work on Optics was accidentally burnt in 1692. It may have been that the death of Hooke in 1703 led to the publication of the rewritten work in 1704. Other editions, containing additional "Queries" appeared in 1717, 1721 and 1730; the last "corrected by the author's own hand" is the text of the present reprint.

Newton's "Opticks" is, of course, the greatest work on optics ever written, but probably few even of those who have made a special study of the subject have read it. Its diction and its partial supersession by the wave-theory of light have led to its neglect. The advent of quantum mechanics have resuscitated the corpuscular theory and the confirmation of Einstein's physical predictions on the basis of the relativity theory have provided fresh evidence in its favour.

There are quite other grounds on which to urge the study of this book. It is written in such a naive, attractive and logical fashion that every page reveals the exact working of the author's mind in a manner which it would be difficult to parallel in any other scientific book. It is, in fact, difficult for any one who has read it to agree with the statement in Prof. Einstein's rather florid foreword, that "Nature to him was an open book, whose letters he could read without effort." On the contrary, it proves intense application and a laborious dragging forth of Nature's secrets into the light of day.

Though written two hundred years ago this book laid the foundations of every branch of optics—the spectrum, the rainbow, the colours of thin films, the polarisation of light, and the theory of light. Newton's observations on colour mixture led to Young's theory of colour vision. Newton's observations on the colours of thin films led to Young's work on interference, thence to the interferometer, thence to the Michelson-Morley experiment, and so finally to Einstein's theory. It is a matter of congratulation that this great work has been made generally available in a book so admirably printed and at so moderate a cost.

---

NOTES

**Appointment**

Mr. B. W. Rycroft has been appointed Hon. Ophthalmic Surgeon to the East Ham Memorial Hospital.

\*

**Bowman Lecture, 1932**

Prof. van der Hoeve has been invited by the Council of the Ophthalmological Society of the United Kingdom to give the Bowman Lecture at the Congress in 1932, and has accepted the invitation.