

beds of South Africa. In the present work, "The Coming of Man", he again utilises his South African experience to elucidate the agencies which have brought about the evolution of man.

Dr. Broom differs from most writers on human evolution in supposing that man did not emerge from an anthropoid state until a comparatively late geological date, namely, lower Pliocene or possibly upper Miocene. Further, he regards *Australopithecus* as by far the most human of anthropoids so far discovered, and states that "a higher primate allied to *Australopithecus* . . . started the line that led to man".

Dr. Broom is particularly interested in the

agencies and forces which brought about human evolution. In his introduction, he gives his readers due warning as to the line of argument he is to adopt. "I fancy I can trace intelligence behind it all," he writes. Then he adds (p. 12), "We seem to see many agencies at work, some beneficent, some malignant; but amid it all some power has guided the main evolution to man". Chap. vii is devoted to the powers which are invoked by Dr. Broom; the title given to this chapter, namely, "The Possibility of a Spiritual Agency", will give some indication as to the kind of power invoked—one which will appeal to the theologian rather than to the scientific worker.

Short Reviews

Studies in the History of Ophthalmology in England prior to the Year 1800. By R. Rutson James. (Published for the *British Journal of Ophthalmology*.) Pp. x+255+9 plates. (Cambridge: At the University Press, 1933.) 15s. net.

MEDICINE is both an art and a science. To those who are most interested in it as a science, the history of medicine is peculiarly lacking in inspiration. Even from this point of view ophthalmology, perhaps by virtue of its dependence upon optics and neurology, is less sterile than most other branches of the subject. Even in the thirteenth century Robert Grosseteste "neglected altogether the books of Aristotle and by his own experiments . . . employed himself in the scientific questions which Aristotle had treated". But most of the ophthalmologists of whom the author writes in this admirable book were advertisers and quacks. This is true of most of the Royal oculists of the eighteenth century, such as Sir William Read, Queen Anne's oculist, who was the son of a cobbler, and his successor, Roger Grant, who "rested his pretensions to practise ophthalmology on the fact that he had lost an eye in the Emperor's service in the continental wars; thus reversing the case of the gladiator alluded to by Martial:

Oplomachus nunc es, fueras ophthalmicus ante.
Fecisti medicus quod facis oplomachus."

The most astounding of all was the Chevalier Taylor, oculist in ordinary to George II, whose extraordinary career, recounted by the late George Coats and reprinted here, reveals almost incredible effrontery. He had all the qualities of a perfect charlatan—"except ignorance, and this is his chief condemnation".

The book is an excellent piece of historical research and of such varied interest as to read in parts like a romance. It must not, however, be concluded that it is solely concerned with the vagaries of quacks. The specialist will find in it landmarks in the development of the treatment of the chief diseases of the eye, notably cataract.

(1) *Sailplanes: their Design, Construction and Pilotage.* By C. H. Latimer Needham. Pp. xx+268+26 plates. (London: Chapman and Hall, Ltd., 1932.) 15s. net.

(2) *Gliding and Motorless Flight.* By L. Howard-Flanders and C. F. Carr. Second edition. Pp. xiii+145+30 plates. (London: Sir Isaac Pitman and Sons, Ltd., 1932.) 7s. 6d. net.

THESE volumes will be welcomed by those who, like the reviewer, sometimes wonder what is the aim of gliding enthusiasts—sport or scientific study.

(1) Mr. C. H. Latimer Needham's book suggests the latter, and as a founder member of the British Gliding Association and chairman of its Technical Committee, his qualifications to write from such a point of view are unquestionable. Yet his book is weak, principally because it is too ambitious. It gives the impression that it has been pruned drastically and suffers from the sins of omission rather than of commission. For example, a discussion on the distribution of air loading on a wing omits to mention the possible alteration due to twist. This might easily be vital upon very high aspect ratio wings, the type always found on gliders for reasons of aerodynamical efficiency. Again, the part devoted to stressing is inadequate as an instruction to anyone contemplating designing a glider. The part of this dealing with airworthiness requirements is good, in that it emphasises the discrepancies between the strength requirements of different countries. The book can be recommended to a reader who wishes to begin to understand the technical points, that is, to do something more than mere aerial tobogganing.

(2) This book is in a different category. It is evidently meant to be a practical instruction manual, containing chapters on training, organising clubs, care and maintenance of gliders, etc. It fails because so much space has been given to purely popular writing, that might better have been devoted to a more detailed discussion of the subject matter in the technical chapters.