

silica set free occurred in some cases, a secondary kaolinite being formed. This association of kaolinite and bauxitic matter in the same series of deposits recalls observations made by the Geological Survey of Ireland on the Cainozoic beds of Co. Antrim (Mem. on the Interbasaltic Rocks, p. 51, 1912). In both areas, titanium dioxide is a prominent constituent of the clays; Mr. Wilson (p. 12) shows that it is present as rutile and anatase, less commonly as brookite, and sometimes in combination in sphene. He traces its origin to the augite of the basalts; in Ireland it has been attributed to the decay of ilmenite.

The new industry now developed in Ayrshire, in the manufacture both of refractory bricks and of alum, is a satisfactory result of the official researches here described.

G. A. J. C.

### Anderson Stuart: his Relation to Medicine and to the Empire.

*Anderson Stuart, M.D., Physiologist, Teacher, Builder, Organiser, Citizen.* By William Epps. Pp. xv + 177. (Sydney, N.S.W.: Angus and Robertson, Ltd., 1922.)

THE career of Sir Thomas Peter Anderson Stuart has few parallels in medical or other annals. His student career in Edinburgh under Turner, Rutherford, and Lister was brilliant; his building and organisation of the Sydney school, and what they provoked, form a university romance of the first order. Dean for thirty-six years, he dominated medical history in Australia in a manner that few, if any, individuals will ever be able to imitate. During that period the number of students in medicine increased from four to nearly one thousand; and for this apotheosis of his department Anderson Stuart planned and built. Without any demerit to the brilliance of assistants in his faculty or to the capacity of men in other faculties of the University of Sydney, it is no exaggeration to state that that phenomenon was the offspring of Anderson Stuart's imagination and the fruition of his consummate scheming and effective individual manoeuvre.

In this sphere his work was monumental. The standards set by Anderson Stuart in his school involved the emergence of such a university in Sydney as stands to-day—not merely a local inspiration, but the most prominent centre of Anglo-Saxon culture in the Southern Hemisphere. This achievement carries Stuart's work beyond the confines of institutional endeavour, and places it in the rank of empire-building.

For Australia, his work had a distinctive result in society-moulding, in that it was the initial step towards the quasi-aristocratic rank which the medical profession now enjoys in that country, and in that it

foreshadowed and conditioned the elevated professional status which dentistry, veterinary medicine, nursing, midwifery, and massage are rapidly assuming in that continent.

Such are the more outstanding facts upon which Stuart's claims to remembrance will rest. As a physiologist and a man of science he was not distinguished, nor even as a teacher. Although he was a forceful lecturer, his words were selected for their rhetorical effect, and his lecture material was that of an earlier generation of physiologists. A claim to teaching ability must rest on more than rhetoric—it must rest upon the capacity to arouse the hearers to be *doers*; and doers in physiology as a result of Anderson Stuart's teaching are difficult to discover.

To present a man's autobiography with the force, frankness, and vividness that Mr. Epps has done, vindicates his claim that it was "a labour of love." He has carried out with nice selection a difficult piece of composition, which will always bring credit to himself and to the long list of subscribers. But Epps is not a Strachey. Although he has described many of Anderson Stuart's characteristics in the introduction, and although others crop out in the faithful narrative of events, the fearless character sketch is still unpenned. The achievement of a man is only explicable in terms of his character, and can be appreciated best when the record is frankest. Such incidents as the expectation of his name at the "top of the class list," and such self-appreciation as his own declaration that "I had the essentials of a good teacher born in me," reveal the character of Stuart more warmly and nakedly. A towering ambition and a Napoleonic will to tyrannic power, together with sufficient selfishness for the realisation of these twain—these very qualities are at one and the same time the key to his achievements, to the oppositions they evoked, and to the relentless manner of their crushing.

Anderson Stuart will always stand as a beacon-light and a landmark in the history of a university and a country which have a long future.

RAYMOND A. DART.

### Our Bookshelf.

*The Home of the Indo-Europeans.* By Prof. H. H. Bender. Pp. 58. (Princeton: Princeton University Press; London: Oxford University Press, 1922.) 4s. 6d. net.

The original home of the Indo-Europeans is a well-worn subject, and Prof. Bender has treated it generally on the lines of philology, familiar to readers of works like Schrader's "Prehistoric Antiquities of the Aryan Peoples." He suggests, but does not grapple with, the question whether there was an Indo-European