

such guidance one looks to Rothamsted, and the rapidity with which a second edition of Dr. Russell's little treatise on manuring has been called for is the best evidence of the success with which he has discharged his obligation. In the briefest compass he gives the clearest possible guidance to the practice of manuring, illustrated throughout by what is probably the most complete summary extant of the results of manurial experiments carried out in this country. The previous edition has been considerably amplified and a very brief chapter added on the breaking up of grassland.

#### SIR CLEMENTS MARKHAM.

*The Life of Sir Clements R. Markham, K.C.B., F.R.S.* By Admiral Sir A. H. Markham. Pp. xi+384. (London: John Murray, 1917.) Price 15s. net.

IT is not often that the story of a notable life is told by a biographer who is at once sympathetic and impartial. Admiral Sir Albert Markham, the author of the work under review, is not merely closely related to the subject of the memoir, but was his warm and constant friend. Yet he tells his story with the straight simplicity which seems specially to distinguish naval writers, and he leaves his readers to form their own conclusions. Therein lies the greatest charm of the book, for we can well construct for ourselves from the incidents of a life overflowing with energy and achievement the character of a man who enriched the world by many of those "footprints on the sands of time" which serve as indications and guides in the path of generations to come.

The opening chapters of the book are devoted to the career of young Clements whilst he served as cadet and midshipman in the Royal Navy. Incidentally, there is much interesting history of the gradual extension of our geographical knowledge of the Pacific towards the end of last century, and a very clear conception is given of life in a wooden-sided sailing-ship of the latest and smartest class which preceded the introduction of steam, just about the time when steam was beginning to assert a preponderating influence on naval construction. All this is told with the loving interest of a blue-water sailor, and it is easy to gather from the story how the foundations were then laid of that deep admiration and reverence for the Royal Navy which towards the end of Sir Clements Markham's career amounted almost to infatuation. In the sailor boy, too, we can mark the germs of the mature character of the man. Full of generous impulse, which landed him now and then in serious difficulty (as when he rushed headlong, without even the preliminary knock at the door, into the sacred precincts of his captain's cabin to protest against the flogging of a man who had been twice convicted of drunkenness), he finally decided to forsake a career of adventure which he really loved for the prosaic prospects of a life on land, because of a mistaken notion that discipline and fair play could not be reconciled. His persistent adherence to that decision, from which no persuasions of his family and many friends could shake him, was quite characteristic

of his subsequent attitude in circumstances which occurred not infrequently when his opinions on more important matters were questioned by those who worked with him in the interests of scientific geography. The word "obstinate" has occasionally been whispered of him; but it is not always easy to say where the line is to be drawn between the firmness which may be essential to the successful issue of an important scheme and the unyielding attitude of the autocrat.

Undoubtedly Sir Clements was able, by reason of his determination and his forceful character, to carry through schemes for exploration in regions of the world where no economic gain could be expected in return for great expenditure, and the whole object of research was purely scientific, which would never have matured in the hands of a more feeble advocate. There are some thrilling accounts of Arctic adventure in the book, which is, perhaps, most interesting in these earlier chapters devoted to the moulding of the Markham character.

The author succeeds in carrying our sympathies with his subject from his earliest years of adventure in the fields of exploration and literature (the young Clements wrote a book on astronomy and physical geography at the age of thirteen!) until the pitiful tragedy of his death occurred, without ever drawing on any idealistic resources of his own. Full justice is done to the noble qualities of the man. His warm-hearted enthusiasm for the supremacy of his country in the wide field of exploration, and his devotion to historical and geographical literature which resulted in the publication of much valuable information which might otherwise have been lost to the world, are easily to be gathered from the pages of this biography. His kindly nature (which won him hosts of friends), his ready assistance to those who wanted it; his life-long interest in all that might benefit humanity, which included the acquisition for England of that life-giving remedy for tropical fevers, cinchona, after a difficult and perhaps dangerous quest for the seeds and plants in Peru—all these things combined to illustrate a character which is perhaps unique in these days, and fully deserves the permanent record which has been so ably rendered by Admiral Sir Albert Markham.

As a rule, biographies written by relatives are accepted with a certain amount of justifiable suspicion. There need be no such suspicion in this case. No one who had the privilege of friendship with the subject of these memoirs will say that there is a word too much of uncalled-for adulation. It is a fair record all through and a most interesting story.

T. H. H.

#### OUR BOOKSHELF.

*Food Poisoning.* By Edwin O. Jordan. Pp. viii+115. (Chicago, Ill.: University of Chicago Press; London: Cambridge University Press, 1917.) Price 1 dollar or 4s. net.

This little book gives an excellent summary of the subject of food poisoning. It is not within its scope to consider those cases in which definite poisonous substances are added to food with