

THURSDAY, SEPTEMBER 30, 1909.

## APPRECIATIONS OF CARL VON LINNÉ.

*Carl von Linné's Bedeutung als Naturforscher und Arzt.* Schilderungen herausgegeben von der Königl. Schwedischen Akademie der Wissenschaften anlässlich der zoo-jährigen Wiederkehr des Geburtstages Linné's. Pp. iv+168; 48; 43; 188; 86, 2 pl.; 42. (Jena: G. Fischer, 1909.) Price 20 marks.

THIS volume is a German version of that issued in May, 1907, by the Royal Swedish Academy of Science, and consists of six appreciations of the great Swedish naturalist.

The first of these, by Emeritus Prof. Otto E. A. Hjelt, was written at the request of the Academy, and is a revised edition of a former work prepared for the celebration of the quatercentenary of Upsala University in 1877, embodying various improvements through recent investigation into Linnéan matters, due to the devotion of the late Dr. E. Ährling and Prof. T. M. Fries. In common with the other essays, this is separately paged, and may be procured apart from its accompanying discourses.

Linné's remarkable services to botany and zoology have thrown somewhat into the shade his acquirements as a practising physician and professor of medicine. This essay will do much to draw attention to this side of Linné's activities. It must not be forgotten that he was rescued from a suggested apprenticeship to a tailor or shoemaker, by the sagacity of his early teacher, Rothman, who assured Nils Linnæus that his son showed great aptitude for medicine. It was for this that Linné entered the University of Lund, and afterwards migrated to Upsala for further improvement; he took his degree of M.D., to earn a livelihood, and he practised in Stockholm after his return to Sweden. His first chair at Upsala was of medicine, and though soon afterwards he exchanged it for that of botany, he continued to keep in touch with it during his career, and left manuscripts showing his unabated interest, in spite of his exertions in other directions. A list of his medical writings at the end of this essay contains eighty-six titles.

This is followed by "Carl von Linné und die Lehre von der Wirbelthieren," of Prof. Einar Lönnberg, in which a *résumé* is given of Linné's predecessors in zoology, from Conrad Gesner, Rondelet, Aldrovandi, and others, to Ray and Willoughby, and contrasting the order brought in by methodical arrangement under Classes, Orders, and Genera.

The third essay, "Carl von Linné als Entomolog," is by Dr. Chr. Aurivillius, and is here separately given; in the original Swedish edition, Linné was considered as a zoologist, in a joint memoir with the previous author, but in this issue the part of each writer is set out separately. Following the same line of thought as in the foregoing essay, Dr. Aurivillius points out that the collections formerly belonging to Queen Lovisa Ulrika at Drottningholm and of King Adolf Fredrik at Ulriksdal, which had been arranged and catalogued by Linné, have been in the keeping of the University of Upsala since 1803.

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Dr. C. A. M. Lindman is responsible for the next memoir, "C. v. L. als botanischer Forscher und Schriftsteller," and is the longest of the series. Beginning with Linné's early training and first catalogues of local plants, it deals with that wonderful series of books which were printed in Amsterdam, the "Systema Naturæ," "Genera plantarum," "Flora lapponica," "Hortus Cliffortianus," &c., especially drawing attention to such parts of Linné's botanical teaching which are apt to be overlooked, such as his attempts at a natural system, and observations in morphology and physiology of plants; of these, many are to be found in his dissertations and travels, rarely looked at now. Indeed, Linné's books are chiefly referred to at the present day from the systematic point of view. The fact that his busy mind had occupied itself on problems which even now are unsolved is lost sight of, because his observations must be sought for in their original Latin or Swedish dress. The latter portion especially of Dr. Lindman's work should be carefully read, and will heighten our wonder at the enormous amount of work accomplished by the occupant of the Chair of Botany at Upsala.

Linné regarded as a geologist forms the next part of this volume, and is due to Prof. Nathorst; it is illustrated with two plates, and ten figures in the text. Both as petrologist and palæontologist the merits of Linné are set out, and his keen insight into geological causes are dwelt upon. Linné had but little opportunity as a field geologist; his travels were practically bounded by his official journeys to Gotland, Westgotland, and Skåne, and yet his observations merit careful reading in the light of modern science.

A similar appreciation is given by Prof. Sjögren in the last section, "Carl von Linné als Mineralog." The Linnéan collection of minerals was sold by Dr. J. E. Smith in 1796, when about to remove from Chelsea to Norwich, and its present condition and place are unknown. But it is enough to gather from the various statements in the writings of Linné to put before us the views of the great naturalist, in honour of whom these essays were composed.

The chief difference noticed between the original and the present edition is the omission of the reprint of Linné's "Clavis medicinæ," which formed an appendix of ninety pages to Prof. Hjelt's memoir.

B. D. J.

## INDIA-RUBBER MANUFACTURE.

*The Manufacture of Rubber Goods.* A Practical Handbook for the Use of Manufacturers, Chemists, and Others. By Adolf Heil and Dr. W. Esch. English Edition by E. W. Lewis. Pp. viii+236. (London: C. Griffin and Co., Ltd., 1909.) Price 10s. 6d. net.

IT is now several years since the late Dr. Weber's treatise upon "The Chemistry of India Rubber" was published. The book was reviewed in these columns at the time, and has become a standard work upon the scientific principles involved in the production of rubber. A companion volume upon the practical manufacture of rubber articles was con-

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