## Thomas Nelson Annandale, D.Sc., C.I.E. By Dr John Stephenson.

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DR NELSON ANNANDALE, Director of the Zoological Survey of India, was the eldest son of the late Professor Thomas Annandale of Edinburgh University, and was educated at Rugby, Edinburgh University, and Balliol. He was forty-eight years of age at the time of his death.

On leaving Oxford he made two journeys to the Malay Peninsula; and after holding a Research Fellowship in Anthropology in Edinburgh University, he was in 1904 appointed Deputy-Superintendent in the Indian Museum, Calcutta, succeeding to the Superintendentship on the retirement of Colonel A. W. Alcock in 1906.

Annandale was soon successful in founding the Records and the Memoirs of the Indian Museum. Of the first, twenty-five volumes have now appeared—one per year, with a number of extra volumes on special subjects or collecting the papers dealing with the zoology of a particular expedition; of the Memoirs six volumes have been completed. Annandale was able to enlist the services of a number of the first zoologists of the time in working out the rich collections of the Museum; and these two series take a very high rank among publications dealing with systematic zoology, on account of the excellence of the printing and of the plates, as well as of the quality of the matter.

His time was largely taken up with administration; but notwith-standing this his output of zoological research was very considerable. He had an extremely wide knowledge of zoology, and must have been unique among zoologists, or almost so, in regard to the number of groups on which he had himself made original observations; his two chief groups were Sponges and Molluscs. It is not, however, solely by his own work that Annandale helped forward, and will still continue to help forward, Indian zoology; he will long remain an effective force through his encouragement of younger men and the fruitful direction he was often able to give to their researches.

Under Annandale's Superintendentship the Museum collections were continually augmented by the labours of the Museum staff, including those of himself, often in out-of-the-way regions, where the difficulties of preservation and transport must have been great. These collections have yielded many rare or unique specimens of extreme interest. But the

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Indian Museum and its publications are by no means devoted to merely taxonomic investigations: it was not only the animal in and for itself, its structure and place in the zoological system, and certainly not the description and naming of new species, that interested Annandale; it was rather the animal in relation to its environment, with its special adaptations fitting it for its special habitat, and the animal as a member of a faunistic group—the ecological study of special localities—which claimed his special attention.

Thus he collected, and sent to experts for examination where he could not undertake this himself, the fauna of brackish waters in India, especially of the Hooghly River and the Chilka Lake, the latter a lagoon on the East Coast, now largely cut off from the sea; he also collected the fauna of the Lake of Galilee while visiting Palestine on a holiday; and, again on a holiday, that of certain brackish water lakes of China. The fresh-water fauna, too, interested him deeply; among other subjects, much work was done in the Museum, at his instigation and partly by himself, on the special adaptations of the Fishes and Amphibia living in hill-streams and torrents. He recently organised the survey of the Siju Cave, an immense cavern in Assam.

In 1916, after considerable difficulty, he prevailed on the Government of India to raise his department—the zoological side of the Indian Museum—to the rank of "The Zoological Survey of India," and thus to place it on an equality of opportunities and importance with the Geological and Botanical Surveys. In recent years he was also successful in obtaining an increase of staff, though this is still ridiculously small for the work to be accomplished.

He was much interested in Anthropology, especially of the peoples of Further India, on which he published a number of papers. He worked enthusiastically for the Asiatic Society of Bengal, of which he had, after holding other offices in former years, recently been President. Last year he was made a C.I.E. in recognition of his services to Indian Zoology; and he was recently selected by the Council of the Royal Society for election as Fellow.

To his colleagues and subordinates he was invariably kind, considerate, and helpful, and none have ever spoken of him but with gratitude and affection. His death at an early age removes a notable personality, who would have done much more for science if he had been spared. He will ever remain an outstanding figure in the history of Indian Zoology.

Dr Annandale was elected a Fellow of this Society in 1921.