of the two-stroke cycle engine ; but inventors are plentiful and inventions mark phases only. The great value of Clerk's work lies rather in his brilliant analyses of the working processes, in his lucid presentations of these in a form which appeal alike to the student, to the purely scientific investigator, and to the practical engineer—these will live for ever.

In his earlier work Clerk could rely for his observations only on the very imperfect and erratic instruments which were available, but he sifted and supplemented these often conflicting observations with such judgment and insight, and with such a breadth of imagination, that all his deductions have stood the test of time and hold good to-day.

The value of Clerk's scientific work was enhanced greatly by the extraordinary charm of his personality, by his kindness and encouragement and by the almost limitless trouble he took to assist and encourage all the younger generation. My first meeting with Sir Dugald Clerk was some twenty-five years ago. As a very young man I had invented, or thought I had invented, an improved type of engine ; I had submitted this invention to a manufacturing firm, who had referred it to Sir Dugald Clerk. Sir Dugald sent for me and explained that, reluctantly, he had turned down my invention ; he explained exactly why and urged me not to be discouraged—he suggested many ways in which the idea could be improved, and invited me to call on him at any time for any help or advice he could give. At once I fell a victim to his charm and the obvious sincerity of his kindness—a kindness which he bestowed on me from that time until the day of his death.

Too often one has to record the great work of a man left unrecognised and unappreciated until after his death. Fortunately this does not apply in Sir Dugald Clerk's case : his work was known and recognised all the world over and he was honoured, as was his due, by the leading scientific institutions of his day and by his innumerable friends and admirers. His scientific lectures were always a joy to attend, not alone for the value of the material they contained, but also for the sheer joy of listening to his beautiful diction and his pleasant voice. H. R. RICARDO.

MR. T. G. SLOANE

THOMAS GIBSON SLOANE, of Moorilla Station, Young, New South Wales, who died on October 20, combined the unusual association of sheep-breeder, philosopher, naturalist in general and entomologist in particular. One of five sons of Alexander Sloane, of Mulwala, Murray River, a well-known merino expert, he was educated partly at the Scot's College, Melbourne, partly by tutor at home. There was a strong literary taste in the family, and a fine knowledge of the English poets was a background of his well-stored mind. He was

sent to Sydney to learn business methods and returned to manage Moorilla for the firm of Alexander Sloane and Sons, which he inherited as his life-long home. Here he won numerous prizes for sheep at various shows ; had a stud of his own registered in the flock book ; kept accurate records of wool weights and was a regular attendant at Sydney sheep sales.

In Sydney, however, Sloane also met Sir W. Macleay and his scientific henchman, the late J. J. Fletcher, who became his lifelong friend ; and in 1888 contributed his first paper on Carabidæ to the Linnean Society of New South Wales. Natural history was his passion, and I have never met any man who so closely and enthusiastically studied Darwin, especially "The Origin of Species".

As an entomologist Sloane was soon recognised as the Australian authority on the Carabidæ, though he later included the Cicendelidæ in his studies. But his mental horizon was too wide to allow himself to be limited to collecting and describing new species. Phylogeny and distribution greatly occupied him. His paper on the "Faunal Subregions of Australia" has often been quoted by later authors, while his "Classification of the Family Carabidæ" (*Trans. Ent. Soc. London*, 1923) has received wide notice. Sloane's "Table of Tribes" has been adopted as being the most satisfactory classification in existence.

Sloane contributed some sixty-one papers to various societies—the great majority to the Linnean Society of New South Wales—and described 595 new species, of which 557 were Carabidæ, including a few from New Guinea. With a world-wide correspondence, he found time to help his brother entomologists generously by naming their collections, until later years brought those economic worries that have especially troubled Australian pastoralists.

I accompanied him on many a distant trip through Queensland, Western Australia, New South Wales and Victoria. He was a delightful companion and a lovable friend, with an unlimited stock of yarns, and a good 'mixer' with bush folk, whom he understood. A retentive, but not a wide, reader, he avoided modern fiction, but collected a good library especially on Australian exploration and traveller naturalists. Generous in excess to others, sparing in his own needs, a stoic by nature and will, his last years were spent in hard work on his homestead. He passed away at the Burrangong Hospital, Young, a victim to cardiac asthma, leaving a widow, two sons and four daughters to mourn his loss. H. J. CARTER.

MR. G. B. SCOTT, C.I.E.

By the death of Mr. G. B. Scott, which took place at Bournemouth on November 20 at the age of eighty-eight years, a distinguished Indian frontier surveyor passed away.

Scott's memory carried him as far back as the stirring times of the Second Sikh War. He was educated at the Lawrence Military Asylum at