

James Duncan McNeile.

The sudden death on 1935 January 5 of J. D. McNeile has removed from our midst one of the most energetic and valued members of the Association. Only those intimately associated with the work of the Computing Section know the extent of his contributions, for he did not seek publicity.

J. D. McNeile, son of Lieut.-Colonel J. M. McNeile, R.E., was born at Beckenham, Kent, on 1879 April 29. In his early years he suffered from ill-health; in fact, he never enjoyed a robust constitution. His early education was at St. Lawrence, Ramsgate. Later he entered Sidney Sussex College, Cambridge, as a Mathematical Scholar, and read for the Mathematical Tripos, graduating as a Wrangler in 1902, after which he became Fereday Fellow of St. John's College, Oxford. He entered the teaching profession, his first appointment being Mathematical and Engineering Master at King William's College, Isle of Man. In 1906 he went to Gresham's School, Holt, and in 1909 joined the staff of Wellington College, Berks, where he remained till his retirement in April 1934. During the War, in which he could not serve for medical reasons, he held the post of House Master. Later he was appointed Senior Mathematical Master, and had the respect of all his colleagues, one of whom writes that "he was always careful, accurate and thorough. His relations with his pupils were friendly but never familiar; the atmosphere of his classroom was always strictly business." Another says: "He was a glutton for mathematical problems; he had made complete solutions of every example in many books on higher mathematics." He was a co-author (with his brother, a

Mathematical Master at Eton College) of a school text on calculus.

His first astronomical work seems to have been done with F. A. Bellamy on faint stars with large proper motions in the *Oxford Astrographic Catalogue* (M.N., 78, 538). For some years he was in charge of the 7-inch refractor (formerly the property of S. A. Saunder) at Wellington College, but observational astronomy did not really appeal to him. He joined the Association on 1927 February 23, and became immediately an active member of the Computing Section.

It will be remembered that about 1925 Professor E. W. Brown issued a world-wide appeal for observations of lunar occultations, in order to obtain material for studying departures of the Moon's position from that given by his *Tables*. The Association was asked to arrange for reductions of certain groups of observations; this was eventually organised as a separate activity of the Computing Section, under the direct superintendence of McNeile. He applied himself diligently and vigorously to this new task, and in the short space of a year or so overtook the arrears that he found awaiting him. Only three days before his death he handed over the corrected proofs of the 1933 reductions, which appeared in No. 3 of the current *Journal*. He had a passion for computing; every reduction is done in duplicate, but he almost invariably did one of the reductions himself. He was unusually rapid and accurate, and capable of great endurance, and was naturally possessed of the qualities and temperament required of a Director of the Computing Section. When that Directorship fell vacant in 1931 he was urged to accept it, but felt himself compelled, while still holding other responsibilities, to decline. Nevertheless he looked forward to his retirement in order that he might devote his full energies to what had become his main interest. Hence in October 1934, when Levin laid down the reins of office for the second time, McNeile became his successor, and immediately threw himself into the work of preparing the *Handbook* for 1936.

About 1929 McNeile designed and constructed an ingenious machine to enable the path of the Moon's shadow during an occultation to be projected on to a globe representing the Earth. During the next five years this machine was on loan to H.M. Nautical Almanac Office, and was used principally to indicate cases in which occultations were not visible under favourable observing conditions at any known observing centre; the Besselian elements of such occultations were not published. The success of the machine was such that the Admiralty authorised the construction of a new machine in metal. This was entrusted to Mr. A. C. S. Wescott, of the Royal Observatory, and the finished machine was delivered in July last. McNeile himself was the first to use the new machine on an extended programme of predictions for 1937. In the course of a month's work the times and position angles of occultations of about forty stations were read off with a probable error of about $\pm 1^m$; these times are refined before publication by a numerical differential process, so that the final error will rarely exceed $0^m.2$. The

machine has done more than lighten work formerly done; it has made possible an extensive prediction programme that could never have been undertaken otherwise. For this alone McNeile has put astronomers all over the world in his debt.

McNeile was extremely clever with his hands; in particular he was a wonderful carpenter, all his parts fitting together perfectly. A keen photographer, he never took a photograph unless the light was right. Fishing was a favourite pastime, and he played Eton fives, tennis and golf. He was a good skater in the English style, and spent many of his Christmas vacations in Switzerland. It was there, while ski-ing, that he collapsed from heart failure.

Of a retiring nature, McNeile made few friends, but was particularly loyal to those he did make. He was at his best as a talker in a small company, where his dry humour and accurate knowledge of many subjects gave a real flavour to all he said. The motto to which he lived was: "If a thing is worth doing at all it is worth doing well," and in all that he did he gave minute attention to detail; above all, he did astronomy well.—L. J. C.