From long-sustained thinking was born his paper, "Concerning Ephemerides of Small Planets" (*M.N.*, **84**, 585, 1934). This gives a good idea of the man himself—of his originality in ideas and in language, his disregard for tradition, of his readiness to apply his mathematics to astronomical difficulties and of his halting near the end with refusal to "deal with numerical examples." Three other mathematical papers followed as a continuation of this subject in *M.N.*, **85** and **89**. In 1914, at the Napier Tercentenary Celebration, he read a note on "Critical Tables"—a labour-saving device which gives results true to the nearest unit at sight and yet without uncertainty. Such tables are now aids familiar to every computer.

In the Handbook of the Napier Exhibition there is at page 127 a clear account by Hudson of the Anti-differencing Machine (Burroughs) and its application to Heliocentric Longitudes by means of end-figure interpolation.

Hudson married, in 1904, Sarah Beatrice Brown of Thorpe House, Raunds, Northants, and had four children, of whom three survive. His wife, well known at our meetings, and by reason of her bright disposition and courage under difficulties very popular, died in 1930.

Hudson died at Saffron Walden a few days after being stricken with cerebral hæmorrhage, on 1937 May 19.

Throughout his life he was ever ready to dispute theological questions, and in particular those where he evermore

"Came out by the same door as in I went"

and now no more words concerning my wayward friend. F. R.

RICHARD INWARDS, son of Jabez Inwards, was born on 1840 April 22. He was trained as a mining engineer, and was employed by Messrs. Evan & Askin to manage mines at San Baldomero, Bolivia; and in Spain for the Manganese Company. He also managed the Iron Mine and Railway in that country, and reported on mining enterprises in Austria, Mexico, Norway, Portugal, South America and England.

In the eighties he happily became acquainted with the inventive genius, Professor David E. Hughes, F.R.S., which led to his attending from time to time the happy weekly luncheon parties of the Hughes' Coterie—consisting of J. Buckney, Conrad W. Cooke, Edward Clodd, Henry Edmunds, George Forbes, Sir Percy F. Frankland, Oliver Heaviside, A. E. Horton, Sir William H. Preece, Augustus Stroh and other notable men. For many years the Coterie met at the Horse Shoe Hotel, but when Frascati's opened a large table was reserved there every Wednesday for the luncheon. Inwards often blessed the day that he first met Stroh at one of these jovial gatherings, as they became very intimate and lasting friends. They had much in common, as Stroh was a mechanician of the highest order (having worked out Wheatstone's famous electric telegraph instruments, and later manufactured such instruments for the Government, as well as having invented a beautiful stereoscope, and a new violin), while about this time Inwards's principal recreations were mechanical and microscopical, producing beautiful models and the like in a workshop (fitted with a wonderful lathe) arranged

in his home. He lived not far from Stroh, and they were both members of the Camera Club.

The professional work of Inwards, George Forbes and some other members of the Coterie, often called for their services abroad, and on their return there was much rejoicing. A notable occasion was the return of Forbes from his Survey of the Cataracts of the Nile, for the Egyptian Government, in 1898. Inwards and the others were thrilled when Forbes described his remarkable experiences, particularly how on his return to Cairo the some 2000 negatives of important photographs he had taken were spoilt and practically ruined by the unskilful treatment by a local photographer! Forbes also humorously told us that he commenced his Report on the Survey by writing "There are no Cataracts on the Nile"!

The fact that Hughes during many of his last years was a Vice-President and Manager of the Royal Institution was much appreciated by Inwards, as he was able, whenever he wished, to attend the Friday evening Lectures there, and exhibit his models at the Conversazione that followed—one of them being a wood model of part of the great Pyramid (showing the entrance to it) that was much admired.

The following is a typical letter from Hughes to Inwards, dated 1896 June 7: "Many thanks for your kindness in sending me copies of your interesting paper on Meteorological Observations and Turner Lightning, I had already read these in abstract but have read them again in full. Turner's clear idea of the true form of Lightning is most interesting, and I believe he stands alone in being the only one which gave something new which photography has revealed to us. Hoping to have the pleasure of seeing you at the Royal Institution on the 19th, when Niagara is the order of the day, or rather night, and with thanks. Sincerely yours."

Inwards was the author of three notable books: the first, *Weather Lore* (1869), is a remarkable collection of proverbs, sayings and rules concerning Weather Wisdom; and following the Introduction are Sections on Time and Seasons; Sun, Moon, etc.; Wind; Clouds; Animals, etc.; Plants, etc.; the 91 pages of the work representing a great amount of research and discrimination. His second work, *The Temple of the Andes* (1884), sketches the history and traditions of the Peruvian people, with a fine account of the ruins of an ancient temple in Bolivia; it is beautifully illustrated by 20 full-page plates—accounts of the old Spanish writers being drawn upon. His *Life and Work of William F. Stanley* (1911) describes the career of his friend, the founder of the Company of Engineering Opticians, established in 1853—specialising in the manufacture of theodolites, levels, mining dials, drawing, meteorological and scientific instruments.

He was Joint Editor of the *Quarterly Journal of the Royal Meteorological Society* for about twenty years, and President of the Society, 1894–5.

He was elected a Fellow of the Royal Astronomical Society so long ago as 1861 February 8, and at the time of his death was the "Father" of the Society. For many years he was a regular attendant at its meetings where, with his long beard, he was a notable figure. In the two years 1895 and 1908