or, to be strictly accurate, the carrier of the disease, has been stamped out in the island.

The methods used for getting rid of the fly comprised:—(1) Clearing of vegetation, felling of forest, clearing of woodlands and secondary jungle growth, so as to admit light and air into the haunts of the shade-loving tsetse. (2) Drainage of swamps and clearing of the banks of streams. (3) Extermination of pigs, dogs, and cattle.

For the protection of those at work in the fly areas the Maldonado method of trapping the fly was adopted. The members of the fly brigade wore canvas, back and front, covered with a viscid preparation made in Reading. (It would appear to be composed, like fly-papers, largely of boiled linseed oil.) By this means at the beginning of the campaign as many as 500 flies could occasionally be caught by a single man in a day, and the average caught by the gang was about 17,000 a month in 1911, less than 6000 a month in 1912, while in the first three months of 1914 only 14 flies were caught by 297 men, and in the last nine months of the year none.

The mission is to be congratulated on the success of its efforts. J. W. W. S.

CLEMENT REID, F.R.S.

THE death of Mr. Clement Reid on December 10 is a severe loss alike to geological and to botanical science. Born on January 6, 1853, Reid joined the Geological Survey in 1874, and began field-work in the south-west of England, but was soon transferred to the eastern counties. Here, in mapping the Cromer Forest Bed and other plant-bearing formations exposed on the coast, he entered upon the investigation of our Pliocene and Pleistocene flora, which thereafter he pursued with characteristic enthusiasm and ability throughout his life. Devising ingenious methods for separating out the seeds of plants from any material in which they lay hidden, he showed the significance of these inconspicuous fossils as indicators of past climate; and he soon became recognised as our leading authority on this subject. In the "Cromer" memoir of the Geological Survey (1882) he firmly established his capability both as an investigator and as an expositor. His next field-work was in Yorkshire, first on the north-eastern moorlands and then in the Holderness country, after which it was carried southward into Lincolnshire, the results being published in the "Holderness" memoir (1885). This done, he was sent to map the South Downs and the coastal tract of Sussex; and he worked westward thence through Hampshire and part of the Isle of Wight into Dorset and Wiltshire, describing this country in several more memoirs, published between 1898 and 1903. Meanwhile, he had also produced a collective "General" memoir on the Pliocene deposits of Britain (1890), during the preparation of which he visited Belgium and North Italy for the study of the equivalent deposits there.

Besides his official work, Reid had by this time contributed many notable and widely discussed papers to scientific societies and periodicals, dealing mainly with the palæobotany of the later geological periods; with the climatal conditions indicated by geological formations; and with subjects in the debatable territory where geology and archæology meet. In 1899 he summed up his knowledge of past botanical conditions in a book full of acute observation and suggestion, entitled "The Origin of the British Flora"; and, in 1913, he dealt similarly, in a small book, with our "Submerged Forests." His critical study of the fossil Characeæ, in collaboration with Mr. J. Groves, of which the first-fruits are in course of publication, has now been lamentably arrested.

In his later researches Reid was ably assisted by his wife (previously Miss E. M. Wynne Edwards), joint-author with him in his description of the interesting Pliocene flora of Tegelen, Holland, and in several other botanical and geological papers.

On his advancement to the post of district geologist in 1901, Reid was placed in charge of the Geological Survey work in Cornwall and Devon, and afterwards in the south-eastern district around London. On retiring from official duty early in 1913, he went to live at a chosen spot at Milford-on-Sea, overlooking the Solent, and died there, after a short illness.

In recognition of his work, Reid was awarded by the Geological Society the Murchison Fund in 1886, and the Bigsby Medal in 1897; and by the Royal Geological Society of Cornwall, the Bolitho Medal in 1911. He was elected a fellow of the Royal Society in 1899. He served terms of office on the council of the Linnean Society and of the Geological Society, being vice-president of the latter from 1913 to 1916. He leaves a widow, but no children.

WILLIAM ELLIS, F.R.S.

FOR the third time in about six months the Royal Meteorological Society has to mourn the loss of a past president. Mr. William Ellis was born at Greenwich on February 20, 1828, and succumbed to heart failure on December 11 at Blackheath, having spent nearly the whole of his long life in the immediate neighbourhood of the Royal Observatory. His father, Henry Ellis, was an assistant there, and he himself began work there as a boy computer in 1841. After several years' experience as an astronomical observer, he left in 1852 to take charge of Durham Observatory, returning in 1853 when a vacancy occurred on the staff at Greenwich. He was attached to the Time Department, and soon afterwards had charge of it, including the galvanic batteries and circuits, but after eighteen years' superintendence of that work, and more than twenty years as a regular astronomical observer on the staff, he was transferred, on Glaisher's retirement, to the Magnetical and Meteorological Department, of which he was superintendent for nineteen years, until his retirement at the end of 1893, in which year he

was elected F.R.S. During his short stay at Durham he communicated results of his observations of minor planets to the Royal Astronomical Society, following them up with further contributions, and was elected a fellow of the society in 1864. Soon after succeeding Glaisher in 1875, he became a fellow of the Royal Meteorological Society, and was president in 1886 and 1887, also serving as official referee for papers for nearly thirty years.

The most important Greenwich publication associated with Ellis's name is that which deals exhaustively with air temperature for fifty years, 1841–90, in the production of which he did a very great amount of hard work in rendering the earlier observations comparable with those taken under his own superintendence. But he is probably better known in connection with his contribution to the Philosophical Transactions of the Royal Society for 1880, in which he showed for the first time a relation between sun-spot frequency and terrestrial magnetic disturbance, a subject which he followed up with further contributions to the R.A.S. Monthly Notices. He strongly objected to the notion that the moon affects the weather, and so long ago as 1867 maintained in the *Philosophical Magazine* that the idea of the moon's clearing away clouds was nothing but a poet's fancy. To the subject of cloudiness he returned later, dealing in one of his presidential addresses to the Royal Meteorological Society with seventy years' cloud observations at Greenwich. His association with the Time Department is reflected in a highly interesting article in the Monthly Notices of the Royal Astronomical Society dealing with the rating of several clocks destined for use during the observations of the transit of Venus in 1874, in which he showed that the oscillation of one pendulum was distinctly affected by that of another in the vicinity, especially if the clocks were mounted on the same stand.

Ellis was a frequent contributor also to the Quarterly Journal of the Royal Meteorological Society, and for many years a member of the Institution of Electrical Engineers, in connection with which he investigated the effect of the City and South London Electric Railway trains on the earth-current registers at the Royal Observatory. He was keenly interested in the new magnetic instruments introduced at Greenwich by the present Astronomer Royal, which he was unfortunately unable to see for himself, as his sight had practically failed for some years before his death. He insisted to the last on attending the annual visitation of Greenwich Observatory, putting in his seventy-fifth consecutive appearance at that function last June, but no one who saw him then can be surprised that it was his last visitation day. He was able to appreciate a reference in the current issue of the *Observatory* magazine only a few days before his death, but had been for some weeks confined to his bed, though suffering from no specific ailment of any great importance. Though twice married he had no children, but he leaves a widow. He was buried at Charlton Cemetery on Saturday, December 16. W. W. B.

NOTES.

By the will of the late Mr. Percival Lowell, a fund amounting to 10 per cent. of the income of his total estate of a million dollars is set apart for the maintenance of the Lowell Observatory at Flagstaff, Arizona, to be used especially for "the study of our solar system and its evolutions." It is specified that the observatory is never to be merged or joined with any other institution. The fund devoted to this purpose is to be held in trust by the late astronomer's brother-in-law, Mr. W. Lowell Putnam.

We regret to announce the death on December 14, at seventy-three years of age, of Prof. T Purdie, F.R.S., emeritus professor of chemistry in the University of St. Andrews.

Capt. C. Bathurst has been appointed Parliamentary Secretary of the Food Control Department in the new Ministry, and not of the Board of Agriculture, as was expected last week. This office is held by Sir R. Winfrey, who occupied the same post in 1906–10, when Earl Carrington was Minister of Agriculture.

The death is announced of Dr. Hugo Münsterberg, since 1892 professor of psychology, and director of the psychological laboratory, Harvard University.

Mr. W. Kewley has been appointed secretary-superintendent of the Middlesex Hospital in succession to the late Mr. F. Clare Melhado.

Dr. A. Yersin, director of the Pasteur Institute of Indo-China, has been awarded the Lasserre prize for the present year for his work on anti-plague serum.

It is announced in the issue of *Science* for November 17 that the American Academy of Arts and Sciences on November 15 presented the Rumford medals to Dr. C. G. Abbot, of the Smithsonian Institution, for his researches on solar radiation.

We learn from the *Times* that Sub-Lieut. O. J. Hobbs, previously reported missing, is now reported killed on or about November 13. At the outbreak of war he was science master at the King Edward VI. Grammar School, Southampton. Announcement is also made that Lieut. J. C. Simpson, R.E., an associate of the Royal School of Mines and a fellow of the Geological Society, was killed on December 4.

We regret to note that *Engineering* for December 15 records the death, on December 11, in his sixty-fourth year, of Mr. Archibald Colville, the chairman of Messrs. David Colville and Sons, Ltd., the well-known steel-makers of Motherwell. Mr. Colville was chairman of the Scottish Steel Makers' Association, and was a member of the Board of Trade Iron and Steel Industries Committee.

A fund is being raised to purchase the very valuable scientific library of the late Prof. Silvanus Thompson and to present it to the Institution of Electrical Engineers as a memorial of his life and work, the library to be accessible to the public on the same conditions as the Ronalds Library. Those who wish to subscribe to this fund or to have further information regarding it are requested to communicate with Mr. W. M. Mordey, 82 Victoria Street, London, S.W.

At a recent meeting of the Anatomical Society of Great Britain and Ireland the following members were appointed to edit and manage the *Journal of Anatomy*:—Prof. T. H. Bryce, University of Glasgow; Prof. E. Fawcett, University of Bristol; Prof. J. P. Hill, University College, London; Prof. G. Elliot Smith, University of Manchester; and Prof. A.