the difficult problems of surplus and bonus distribution so skilfully that he evolved a fair method for the particular scale of premium—the general problem still gives difficulty and is widely discussed even now. Morgan also studied the mortality experience of the persons insured, and his manuscript volume on the subject, from which he gave abridged tables in his published work, was the first investigation of the kind. Morgan published some tracts on public finance, wrote a life of Price and edited his works, contributed articles to Rees' "Cyclopedia", etc., and, in earlier days, displayed an interest in electricity and heat. His great achievement was that, in effect, he started the profession of 'actuary' and a new science which would nowadays be called actuarial science, and he proved that life assurance was a practical possibility and not merely an interesting theory.

Dr. William Babington, F.R.S., 1756-1833

ON April 30 occurs the centenary of the death of Dr. William Babington, one of the founders of the Geological Society of London, who during his life gained the respect and admiration of all with whom he had come in contact, both by his skill as a physician and by the elevation of his character. Born in Ireland in 1756, at the age of twenty-one he became an assistant surgeon at the Haslar Naval Hospital, and four years later was appointed apothecary to Guy's Hospital, London, of which for some years he was also the physician. Though he made no notable contribution to science, he wrote several acceptable works on chemistry and mineralogy and it was at his house that in 1807 the gathering took place which led to the formation of the Geological Society, the first president of which was that "staunch geological Tory" George Bellas Greenough. Babington himself served as president in 1822 of the Society he had assisted to found. He was also one of the founders of the Hunterian Society. Described by Geikie as "a kindly, bland and courteous veteran", one of his last public actions before he fell a victim to an epidemic of influenza was to preside over the Priestley centenary celebrations. It was said that history does not recall a physician more loved and respected than Babington, and it was this wide-spread admiration for his character which led to the erection of his statue in St. Paul's Cathedral. The statue is a noble piece of work by Behnes. At his death, Babington was buried in St. Mary Aldermanbury in the City. He left several children and one of his daughters became the wife of Dr. Richard Bright, the discoverer of 'Bright's disease'.

Eradication of Prickly Pear in Australia

STRIKING success continues to attend the efforts to eradicate prickly pear (*Opuntia* spp.) in Queensland and northern New South Wales, mainly through the introduction of *Cactoblastis cactorum*. By the end of 1930, some 3,000,000,000 eggs had been distributed throughout the length and breadth of the sixty million acres infested and by the end of 1931 the insect existed on practically every acre. To-day probably 80 per cent of the dense primary pear in Queensland has been destroyed, while in New South Wales the figure is 50–60 per cent if one excludes the Hunter Valley and Camden districts where climatic and soil factors are delaying, but not preventing, the progress of *Cactoblastis*. Queensland is energetically pushing a scheme of development of reclaimed land and already 1,515,000 acres have been re-selected for mixed farming purposes and 1,701,000 for grazing. Unfortunately, the sight of miles of dead and rotting cactus tends to create the impression in political circles that the problem is solved and that further expenditure upon intensive research work is not needed.

SUCH views are dangerous and quite unjustified. Re-growth, owing to incomplete destruction of butts and roots, is a problem which grows in seriousness as the old pear, supporting an insect population ready to attack new shoots, disappears. It will be unwise to leave the control of re-growth to *Cactoblastis* alone. Also parasitism, though not yet causing more than 20 per cent loss in any district, and much less in some, requires close watching: and the Hunter Valley area of two to three million acres presents a unique problem in some respects, though *Cactoblastis* is more promising there to-day than it was eighteen months ago. Moreover, though the infestation is almost entirely the vulnerable *O. inermis* and *O. stricta*, it would be unwise to ignore the menace of the tiger-pear (*O. aurautiaca*) now covering some 25,000 acres, and the tree pears (*O. tomentosa* and *O. streptacantha*). *Cactoblastis* destroys the upper growth but not the underground bulb of the former, the recuperative powers of which are very great; while it destroys only the young plants of *O. tomentosa*. Other enemies of these must be sought and entomologists have already been sent to South America to seek parasites of them and allied species.

A Complex Solar Halo

A VERY well-developed solar halo of 22° radius with mock sun ring was observed from places in Kent and Sussex on April 14. An excellent description has been received from Mr. R. C. T. Evans and his son, Dr. C. Evans, 10 Eddington Lane, Herne Bay. The 22° halo was observed at about 12.35 p.m. (B.S.T.), and two "bright patches" proceeding not quite radially from the eastern and western sides, at angular positions corresponding roughly with those of the hour hand of a watch at 9.30 and 2.30 o'clock. Shortly afterwards, these bright patches were observed to form part of a luminous ring which reached northwards to about the position of the pole star (invisible, of course, at the time) but did not cross the region inside the 22° halo. The elevation of the sun must have been nearly 48° at this time and that of the pole star only very slightly greater in this latitude; there seems, therefore, every reason for believing that this ring, which was faint except near the 22° halo, was the mock sun ring, which has the zenith for its centre. The 22° halo showed strong red coloration on the edge nearest to the sun, and a suspicion of blue towards the