

followed by the erection of a great new physical chemistry institute. "The Oxford school of chemistry will then be without doubt the finest in the Empire". The article ends with a plea for the award of college fellowships to more of the best of the young men holding University posts in science, especially in the less popular sciences—engineering, zoology, botany, geology. The same number of *Oxford* has noteworthy articles on "Politics or Poetry?", on university camps for the unemployed (which have amply justified the money and effort expended on them), and on women as housing estate managers on the Octavia Hill system.

### Medical Research in South Africa

MUCH important research work is summarized in the annual report of the South African Institute for Medical Research for 1935. The use of a 'mixed vaccine' for the prevention of pneumonia among the Rand native miners has been continued with encouraging results. In the Biochemical Department, a strange finding was that the leaf of a plant belonging to the yam family contained forty times as much iron as spinach. Lucerne has been found to be suitable for human consumption as an anti-scorbutic, and several mines are now including this plant as part of their vegetable ration. The influence of South African snake venoms, previously tested on animal tumours, has now been tried on human cancers. Cobra venom often produced a relief of pain in cases of cancer, but not always; and no permanent beneficial effect resulted. There was no evidence that African snake venoms had any action on the majority of malignant tumours in man. Rodents to the number of 2,026 were examined for presence of plague infection, of which 51 were found to be infected with *B. pestis*.

### Standardization of Microscope Fittings

IN order that the microscope objectives of different makers might be interchangeable for use with the microscope stands of other makers, the Royal Microscopical Society of London drew up in 1858 a specification for the screw thread of objective and of nose-piece. This specification was revised in 1896, 1915 and 1924, and in its final form has been generally adopted by microscope makers at home and abroad. In view of the increasing use of apparatus above the eyepiece, a committee of the Society has now drafted specifications of standard sizes for the external diameter of the eyepiece end of the draw tube and limits for the outside diameter of the eyepiece shoulder; these have been adopted by the Council of the Society and are detailed in the December issue of its journal (*J. Roy. Micro. Soc.*, 56, 377–380; 1936).

### The Smithsonian Institution

THE report of the secretary of the Smithsonian Institution for the year ended June 30, 1936, refers to the continuation of the study of the relation of weather to changes in the sun's radiation. Two papers by Dr. C. G. Abbot appear to prove that the

short interval changes of solar radiation are of major influence on the weather for at least the following two weeks. To test this promising method of weather forecasting, seven additional observing stations are required, but a bill to provide funds for this purpose passed by the Senate was rejected later. The Division of Radiation and Organisms has continued its work on the dependence of carbon dioxide assimilation in wheat upon the wave-length of radiation as well as its experiments on the effect of ultra-violet rays on algæ and of light of different wave-lengths on the growth of tomatoes. An extremely sensitive and quick-acting spectroscopic method has been developed for measuring the concentration of carbon dioxide, as well as a highly sensitive robust thermocouple. The Institution has also published the latest results of the high-altitude rocket experiments of Dr. R. H. Goddard, whose earlier work it supported for twelve years. In the most recent trial flights, the liquid-propelled rocket attained a height of 7,500 ft., its automatic stabilizer keeping the flight vertical. Sales of the Smithsonian Scientific Series continue to increase, and in addition to a summary of the work of the Institution and the financial report, the present report of the secretary includes appendices giving more detailed accounts of the work of the National Museum, the Bureau of American Ethnology, the International Exchanges, the National Zoological Park, the Astrophysical Observatory, the Division of Radiation and Organisms, the Smithsonian Library, the National Gallery of Art and the Freer Gallery of Art.

### National Museum of Wales

THE twenty-ninth annual report, for the year ending September 30, 1936, of the National Museum of Wales, gives evidence of steady progress. By an increase of £500, the Treasury annual grant for the year was raised to £17,375, and a detailed report, furnished to H.M. Treasury by the Council, and pointing to the increased expenditure necessitated by the opening of the east wing, had the effect of inducing an allocation of £18,500 for the current year and a promise of £20,000 per annum as from April 1, 1938. The increased grant has enabled the Council to found a Specimens Purchase Fund, to be applied to the purchase of collections or specimens of outstanding importance as the need arises, and to create a Department of Folk Culture and Industries, which was responsible for a special temporary exhibition of Welsh furniture. At that exhibition nearly a hundred examples of furniture, made or used in Wales, and ranging from Tudor to Georgian times, were gathered together. The list of free public lectures displays refreshing variety, and the installation of a 16 mm. sound film apparatus should add to the popularity of the Reardon Smith Lecture Theatre.

### Dairy Research in Scotland

THE seventh annual report of the Hannah Dairy Research Institute, Kirkhill, Ayr, contains an account of the developments, finance, and research work of