Garden, London. In it Maxim used the force of the explosion to work the breech mechanism, and for the first time produced a fully automatic gun. The Maxim Gun Company was formed in 1884 and soon it was supplying guns to many armies. In the 'nineties Maxim began his experiments with steamdriven 'captive' flying machines, on which he spent many thousands of pounds. He knew he was trying to achieve something thought impossible, and if he had little success he at least brought the subject of aeronautics into the limelight. Scores of distinguished men, including King Edward VII, then Prince of Wales, visited Baldwyns Park in Kent and rode on Maxim's machine.

Like Edison, Maxim had but little schooling, but became a first-class mechanic and pored over such books as Ure's "Dictionary of the Arts". In middle life a short handsome man of great strength, he was as self-reliant as Ericsson and as fruitful in ideas as Trevithick and Bessemer. Traditional views were nothing to him, and, though he made himself familiar with what others had done, he looked at every problem in his own original way. He was born in the State of Maine, U.S.A., but after his visit to Europe he made his home in England, became a naturalized British subject, and in 1901 was knighted. He died on November 24, 1916, and was buried in Norwood Cemetery.

### William Smith

AT a meeting of the Geological Society of London on January 17, Dr. L. R. Cox, of the British Museum (Natural History), delivered a lecture on the life and work of William Smith, the Father of English geology. The subject was chosen for two reasons, one being that this was the session of the Society nearest to the centenary of Smith's death, and the second that Dr. Cox had recently had an opportunity of studying Smith's original notes, diaries and letters, which have not hitherto been made public. These MSS. have apparently lain unexamined at Oxford for many years, presumably since the death of John Phillips, Smith's nephew, who until his death in 1874 occupied the chair of geology there. They were recently discovered in Oxford in a packing-case by Prof. J. A. Douglas, the present occupier of the chair, and through his courtesy they have since been examined systematically by Dr. Cox. They are now catalogued and housed in a specially built cabinet presented by Dr. K. S. Sandford and Mr. H. A. Sandford.

There are many gaps and obscure passages in the existing records of Smith's life, and these manuscripts throw a flood of light on the activities of this great geologist. Apart from the outstanding importance of his contributions to geological science, Smith lived during the heroic age of geology. The MSS. have therefore a more than personal interest, and should contribute materially to the history of the science during this period. The only existing biography of Smith, Phillip's "Memoirs of William Smith, LL.D.", has long been out of print and is almost unprocurable. With the new material at his disposal, there is every reason for Dr. Cox to prepare a full-dress account of the life and work of so worthy a subject, and it is to be hoped that its publication may not be unduly lelayed.

#### Treasury Grant to Universities

IT has been decided to maintain the Government Grant to the Universities and Colleges at the existing level, namely, £2,149,000. In reply to a question in the House of Commons on February 20, Sir John Simon said : "The Government are fully conscious of the vital part played by the universities in the life of the community, and of the importance of maintaining the standards of university education as far as possible in the strained conditions of war. Moreover the universities are making an essential contribution to the national effort at the present time in supplying personnel of the educational standards necessary for many national services, as well as in affording more direct assistance to a number of Government Departments by means of particular researches, the provision of specialized technical equipment in laboratories, and in other ways. I have satisfied myself, after considering the representations of the Vice-Chancellors and the results of a survey of university finance carried out at my request by the University Grants Committee, that the maintenance during the coming financial year of the present provision is necessary if the universities are to continue to make their contribution to the national effort, and the Government therefore earnestly hope that local authorities will take similar action.'

### British and French Scientific Co-operation

In connexion with the recent visit of the French scientific delegation, Capt. D. F. Plugge, chairman of the Parliamentary and Science Committee, asked the Minister of Supply what arrangements had been made for regular liaison between French scientific representatives and the Advisory Council on Scientific Research and Technical Development. Mr. Burgin made the following written reply : "Regular liaison between the Advisory Council referred to and French scientific representatives is effected through the Mission Scientifique Franco-Britannique, which has a permanent Secretary resident in London, who will shortly be located in the Ministry of Supply. The Mission has contact with the whole of the French war-time scientific organization. There is, in addition, a direct link between the Ministry of Supply and the French Ministere de l'Armement, which can be used by the Advisory Council for matters relating to scientific inventions, in the form of a Ministry of Supply officer who has been appointed liaison officer in the French Ministère and will shortly take up his duties in Paris."

# Physics in War

A SERIES of public lectures on the "Background to Present-Day Problems" has been arranged in the University of Birmingham. The second lecture in this series was given by Prof. M. L. E. Oliphant, Poynting professor of physics in the University. His subject was "Physics in War". Prof. Oliphant stressed the value of academic science, which in present circumstances can be turned to practical use. Future development of industry depends on the academic development of science, which in Great Britain is conducted only in the universities. It is therefore essential that the country should encourage academic research in science if we are to keep any sort of supremacy in industry. So far, the War has been almost entirely a physicists' war, waged with weapons depending for their operation on knowledge gained by physicists.

Prof. Oliphant referred to the great value of the pioneer work done by Dr. Lanchester in aviation, to the work of Sir William Bragg and Lord Rutherford on the detection of submarines, and to the development of the high-class optical industry. 'Wireless' is proving to be the fundamental controlling factor in the present War, and perhaps, when it is over, the public will realize how great is the work done by physicists in this field. The control of the magnetic mine presents no difficulties to the physicist. Scientific and technical men sometimes complain that they have not been given any job, and that their talents are not being used. Some of this criticism is justified, Prof. Oliphant said, because in England there is a tendency to allow administrative offices to be filled only by persons with non-technical qualifications. He deplored the conclusion that is sometimes reached that because a man has technical qualifications he cannot discharge administrative duties.

# Censoring Scientific Journaus

IT is announced that, at the request of Sir Walter Monckton, director-general of the Press and Censorship Bureau, Sir William Bragg, as president of the Royal Society, has undertaken the formation of a scientific panel to assist the bureau in arranging the censorship of papers in scientific journals. The following have agreed to serve on the panel: Prof. C. R. Harington (biochemistry), Prof. V. H. Blackman (botany and agriculture), Prof. A. C. Egerton (chemistry), Dr. H. L. Guy (engineering sciences), Prof. P. G. H. Boswell (geology), Prof. S. Chapman (mathematics), Dr. C. H. Desch (metallurgy), Dr. C. G. Darwin (physics), Prof. A. V. Hill (physiology), Prof. F. C. Bartlett (psychology), Prof. W. W. C. Topley (bacteriology and pathology), Prof. M. Greenwood (statistics), Sir Guy Marshall (zoology).

# Animals and Plants of Use to Man

THE British Museum (Natural History) is now open to the public on Saturdays and Sundays from 1 p.m. until 4 p.m. A special exhibition has been arranged in the Shell Gallery to show the animal and plant sources from which some useful commodities come. This is too vast a field for the exhibition to be an exhaustive one, consequently only selected exhibits, illustrating commodities which lend themselves to attractive demonstration, are shown. These include the sources of certain textiles like linen, cotton, silk and rayon; plant and animal dyes used in commerce; the colouring matter and ingredients of cosmetics; the sources of leathers and of bristles for brushes; the plants and animals which produce oil in large enough quantities for it to be valuable to mankind; and some of the uses of moulds and mushrooms. Several of the cases have a war-time interest; for example, animals of use in war, margarine, bacon pigs, pests of stored food. The object of the exhibition is to show the sources of certain commodities, and not to give a detailed explanation with examples of how the raw materials are worked up into the finished products.

### Discovery of a Royal Tomb in Egypt

A FURTHER discovery reported from San-el Hagar, the ancient Tanis, in the Nile Delta, promises results of even greater interest than those anticipated from the examination of the remarkable gold and silver sarcophagus discovered on this site by Prof. E. Montet, of the University of Strasbourg, in March of last year (see NATURE, 143, 512 and 552). When Prof. Montet returned to Egypt about a month ago to reopen his season's work on the tombs of the Twenty-first and Twenty-second Dynasties on this site, he proposed to examine the sarcophagus which had been left unopened. The cartouche of Pharaoh Psussenes, identified with Sheshonk, had led to the attribution of the sarcophagus to that monarch; but in the course of the work of further examination, another tomb, it is reported (The Times, February 20) has been brought to light, which is thought to be the royal tomb, while the gold and silver sarcophagus is now said to be that of a royal priest. The newly discovered tomb contains a huge granite sarcophagus and a profusion of funerary ornaments. These consist for the most part of gold vessels, and include a gold cup in the form of a lotus, which is said to be of great beauty. This is the first royal tomb of the period (c. 1100-1000 B.C.) to be discovered; and it is of enhanced importance as belonging to a phase of Egyptian dynastic history of which archæologically too little is known.

# Statistical Methods and Ethnographical Observations

A NUMBER of attempts have been made from time to time to introduce statistical methods of analysis in the study of ethnographical facts, but certain obvious difficulties, more especially the artificial abstraction and the divorce of so complex an entity as an ethnographical fact from its cultural context, as a rule have militated against extended and continued application of these methods. Anthropologists, therefore, have watched with considerable interest the work of the Culture Element Survey of Native North-West America of the University of California, of which Prof. A. L. Kroeber is director. This survey was initiated as a result of an attempt to apply statistical methods of analysis to the recorded ethnographical data concerning the Indians of California by S. Klimek, who went to the University in 1933 as a Rockefeller Fellow.

The Survey has now become the most considerable example extant of the application of statistical technique to ethnographical observation. Prof.