Scientific men are working together increasingly along economic lines, not to control anything or anybody, but to secure that status which will enable research men to do their best for society.

The Committee of One Hundred on Scientific Research of the American Association for the Advancement of Science is doing a notable service to all scientific men and to the community. Special credit is due to President Millikan, and to Messrs. Cattell, Kellogg, Pupin, Livingston and True, members of the Executive Committee of the Committee of One Hundred. The efforts of the council and the Executive Committee of the association in supporting the work of this committee also deserve appreciation. Most of the work of the Committee of One Hundred has fallen on Dr. Rodney H. True, head of the department of botany and director of the Botanic Garden at the University of Pennsylvania, whose tireless efforts as secretary of the committee are well known to those who have worked close to him.

The work of the Committee of One Hundred has been done in the spirit of a statement made by Sir John Russell referring to research in agriculture:

> The past has been rich in the joys and thrills of discovery; but it has taught this lesson: that discoveries in applied science inevitably follow advances in pure science. If we would improve our agriculture the surest way is to increase knowledge of the soil, the plant and the animal. Empirical methods, it is true, have often given advances in the past, but they are slow, hesitant and uncertain; dependent on accident. Exact knowledge is the only sure basis for improvements; encourage, therefore, those among you who are striving to win it.

WALTER P. TAYLOR
NATIONAL FEDERATION OF FEDERAL EMPLOYEES

OBITUARY

RECENT DEATHS

DR. WILLIAM E. STORY, professor of mathematics at Clark University from its foundation in 1889 to 1921, and since then professor emeritus, died on April 11. He would have been eighty years old on April 29.

DR. FRANK HAIMBACH, assistant curator of entomology at the Academy of Natural Sciences, Philadelphia, has died at the age of seventy years.

DR. FRANZ C. WALDECKER, director of chemical research at the Winthrop Chemical Company, Inc., and the H. A. Metz Laboratories, Inc., died recently in London. He was forty-eight years old.

PROFESSOR JOHN OLIVER ARNOLD, F.R.S., emeritus professor of metallurgy in the University of Sheffield, died on March 27 in his seventy-third year. He was a pioneer in work on vanadium and molybdenum.

THE death at the age of sixty-four years is announced of Professor R. Zsigmondy, holder of the Nobel prize for 1926, professor of chemistry at the University of Göttingen.

THE death is announced of Dr. Hermann von Ihering, professor of zoology in the University of Giessen.

DR. KATSUSABURO YAMAGIWA, professor of pathology at the Tokyo Imperial University, Japan, died on March 2. He specialized in the experimental study of cancer. The production of tar cancer in rabbits was one of his outstanding accomplishments.

MEMORIALS

A TABLET in memory of Bashford Dean was unveiled on April 14 in the hall of armor at the Metropolitan Museum of Art. The tablet is the gift of the sculptor Daniel Chester French. Dr. Dean was at the time of his death honorary curator of arms and armor at the Metropolitan Museum as well as honorary curator in the American Museum of Natural History and professor of zoology at Columbia University.

THE *Journal* of the American Medical Association reports that the physicians at Fukushima, the native place of the late Dr. Hideyo Noguchi, have erected in his honor a stone monument in the garden of his old house on Lake Inawashiro, and the house has been bought to be kept forever in his memory. A library will be established near the house.

The British Medical Journal writes editorially: "Jean Baptiste Lamarck, soldier, biologist and philosopher, was born in Picardy in 1744, and died in 1829. His remains lie buried in an anonymous grave in Montparnasse cemetery, Paris, but until 1914 his native country had a memorial of him in the house where he was born, the home of his ancestors at Bazentin, a small village of the Somme, not far from Albert. During the war years Bazentin lay within the war zone, and now what was Lamarck's house is but a heap of ruins. The Société Linnéenne du Nord de la France has resolved to raise a fund to be used for the purpose of erecting on the site of the old house a memorial worthy of Lamarck's greatness. This memorial will stand in the middle of a garden in which the plants grown will be the botanical species specially studied by Lamarck, or named after him by other botanists. Lamarck belongs not only to his own province and country, but to all countries whose cul-

ture has been influenced by his pioneer work; and the society feels, therefore, that to help it in its project it may call on the members of the great scientific brotherhood throughout the world. It extends its appeal to the scientific societies of the British Isles, and asks that all remittances by check or international postal order should be directed to the account of the Société Linnéenne at the Banque de France, succursale d'Amiens (Somme), and ear-marked for the Lamarck Fund. Letters should be sent to M. le Secrétaire Général du Comité Lamarck, 81, rue Lemerchier à Amiens, Somme."

SCIENTIFIC EVENTS

GIFT OF CRYSTAL TO THE SMITHSONIAN INSTITUTION AS A MEMORIAL TO WORCESTER REED WARNER

THE Smithsonian Institution announces that a perfect sphere of flawless crystal, believed to be the largest in the world, is now the property of the United States National Museum, thanks to the generosity of Mrs. Worcester Reed Warner. Mrs. Warner made the gift as a memorial to her late husband, whose own outstanding achievements were largely in the manufacture of astronomical instruments from quartz.

The crystal ball measures 12⅞ inches in diameter and weighs 106¾ pounds. Perfect spheres of as much as 6 inches in diameter are great rarities, prized alike by emperors and museums, so that the uniqueness of the National Museum's acquisition may be realized.

The block of quartz from which the ball was cut is said to have come from Burma and must have weighed over 1,000 pounds. It was cut in China and polished in Japan. Eighteen months were required for this delicate and laborious task. According to Mr. George F. Kunz, the Japanese workmen first round the rough mass of crystal by careful chipping with a small steel hammer, forming a perfect sphere with the aid of this tool alone. For grinding they use cylindrical pieces of cast iron, about a foot in length and full of perforations, in which the ball is kept constantly turning. The abrasive material used in this first grinding is powdered emery and garnet. The final polishing is effected with crocus or rouge (finely divided hematite), giving a splendid lustrous surface.

The ball came to this country in 1925 and was immediately placed on temporary deposit in the National Museum. The officials of that institution express their pleasure that Mrs. Warner's gift makes it the permanent property of the nation. The late Mr. Warner, to whom the gift is a memorial, was a member of the firm of Warner and Swasey, instrument makers. Mr. Warner designed and constructed three of the largest telescopes in use in this hemisphere, including the 36-inch instrument of the Lick Observatory, the 40-inch telescope of the Yerkes Observatory and the 72-inch telescope for the Dominion of Canada.

FELLOWSHIPS IN CHEMISTRY AT THE JOHNS HOPKINS UNIVERSITY

THE Department of Chemistry of the Johns Hopkins University has announced the second annual quota of fellows selected under the National Fellowship Plan established last year. The plan provides ultimately for the establishment of one fellowship from each of the forty-eight states of the union. There are in addition two national fellowships-at-large and one international fellowship for England.

In announcing the names of the newly elected fellows, Dr. J. C. W. Frazer asked that it again be emphasized that the chemical fellowship plan at the Johns Hopkins University does not contemplate the discovery of chemical geniuses nor the production of "super-chemists." "The plan is in effect," he said, "an experiment in chemical education which puts into actual operation a few ideas which are almost universally endorsed but too seldom concretely applied. The unique feature of the situation is that careful planning on the part of the university officials and generous cooperation from public-spirited individuals and organizations have made it possible to remove many of the practical difficulties which often stand in the way of 'ideal' procedure."

The fellows newly selected by the respective state committees are as follows:

William Shallcross Speed Fellowship: Thomas Cross, Jr., University of Kentucky, Lexington.

U. S. Industrial Alcohol Co. Fellowship: Donald L. Zink, Louisiana State University, Baton Rouge.

General Motors Corporation Research Laboratories Fellowship: Arthur L. Glasebrook, University of Michigan, Ann Arbor.

Hormel Foundation Fellowship: Walter O. Lundberg, University of Minnesota, Minneapolis.

G. A. Pfeiffer Fellowship: Lloyd B. Thomas, University of Missouri, Columbia.

John M. Hancock Fellowship: Donald L. Farnham, University of North Dakota, Grand Forks.

John Wiley and Sons, Incorporated, Fellowship: Donald A. Wilson, Geneva College, Beaver Falls, Pennsylvania.

Du Pont Fellowship: Clarence P. Ely, University of Richmond, Virginia.

Fleischmann Fellowship: William Redmond Johnston, University of Washington, Seattle.