

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 Lamarek Fund. Letters should be sent to M. le Secrétaire Général du Comité Lamarek, 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  $12\frac{3}{4}$  inches in diameter and weighs  $106\frac{3}{4}$  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.