

zymatic processes. From this point of view, increased importance must be attached to the old question of whether the proteinases themselves are proteins or contain proteins as an essential constituent. In the event that the proteinases are not proteins or do not contain proteins, it would be necessary to postulate the existence of another group of substances capable of equal multiplicity of form in order to explain the organization of the numerous individual proteins. If, on the other hand, the individual organizing proteinases are wholly or partially proteins, no special postulates are necessary and the known examples of proteins with catalytic properties would be increased by an additional and extensive group of substances. The intracellular proteinases would then have to be regarded as proteins endowed with the property of

catalyzing the formation of specific proteins from the materials at their disposal. This view-point is worthy of discussion, since it leads to interesting consequences and new experiments. If the proteinases themselves are proteins and at the same time have the ability to synthesize other individual proteins, then there must exist proteinases which have the ability to synthesize replicas of their own structural pattern and therefore are able to "multiply" in suitable surroundings. Such a type of proteinase when placed in the presence of a suitable host organism would cause the continuous production of foreign protein. It is evident that this property is similar to that described by Stanley for the tobacco mosaic virus, and it would appear desirable to investigate this and other viruses for possible proteinase activity.

## SCIENTIFIC EVENTS

### CONGRESSIONAL APPROPRIATIONS FOR SCIENTIFIC WORK

A SUMMARY of legislation enacted by the seventy-fifth Congress is printed in *The New York Times*. A list of appropriations for agriculture and for the work of the Department of the Interior are as follows:

Appropriations of \$630,381,208 are made for the Department of Agriculture and Farm Credit Administration for the fiscal year 1938.

Among the major items are \$6,232,500 for agricultural experiment station payments to states, Hawaii, Alaska and Puerto Rico; \$1,200,000 for the department's special research fund; \$13,690,672 for the Agricultural Extension Service; \$4,703,049 for the Weather Bureau; \$10,373,098 for the Bureau of Animal Industry; \$703,694 for the Bureau of Dairy Industry; \$4,833,048 for the Bureau of Plant Industry; \$18,892,182 for the Forest Service; \$1,425,431 for the Bureau of Chemistry and Soils; \$5,711,398 for the Bureau of Entomology and Plant Quarantine; \$2,127,840 for the Biological Survey; \$167,500,000 for the Bureau of Public Roads; \$6,212,698 for the Bureau of Agricultural Economics; \$500,000 for the enforcement of the Commodity Exchange Act; \$2,227,758 for the Food and Drug Administration; \$24,390,780 for the Soil Conservation Service; \$340,000,000 for carrying into effect the provisions of the Soil Conservation Act plus not to exceed \$100,000,000 for that purpose of the funds made available for the fiscal years 1937 and 1938 by Section 32 of the Act of August 24, 1935; \$12,500,000 for forest roads and trails; \$4,000,000 for the Farm Credit Administration plus \$2,950,000 from funds made available under Section 5 of the Emergency Crop Loan Act of 1934; \$15,000,000 for the Federal Farm Mortgage Corporation.

Appropriations of \$132,732,499.85 for the various activities of the Department of the Interior during the fiscal year 1938 include \$14,483,000 for vocational education; \$13,000,000 for the Grand Coulee Dam project; \$12,500,000 for the Central Valley reclamation project in

California; \$3,050,000 for the Boulder Dam, plus \$1,500,000 for the All-American Canal phase of that project; \$1,500,000 for the Yakima, Wash., reclamation project; \$1,000,000 for the Boise, Idaho, reclamation project; \$900,000 for the Colorado-Big Thompson tunnel project in Colorado; \$700,000 for the Gila reclamation project in Arizona; \$750,000 for the Provo River reclamation project in Utah; \$500,000 for the Owyhee project in Oregon; \$650,000 for the Casper-Alxova reclamation project in Wyoming; \$700,000 for the Shoshone reclamation project in Wyoming, and \$500,000 for the Colorado River irrigation project.

### THE LEVERHULME FELLOWSHIPS IN GREAT BRITAIN

AWARDS of thirteen Leverhulme research fellowships in 1937 and fourteen grants to research workers have been announced.

The awards in the sciences are as follows:

D. H. BANGHAM, professor of inorganic chemistry, Egyptian University, Cairo. The wetting of solid surfaces and the phenomena of spreading liquids thereon.

MISS D. E. CHARLES, research fellow, department of social biology, London. The mechanism of population decline with special reference to Scottish population problems.

C. W. DAVIES, senior lecturer in chemistry, Battersea Polytechnic. Adsorption at liquid surfaces.

J. R. FIRTH, senior lecturer in phonetics, University College, London. Research in the phonetics of four principal languages of India.

O. V. S. HEATH, research worker, Institute of Plant Physiology, London. Study of carbon assimilation by the green plant.

J. DE GRAAFF HUNTER, lately director, survey of India, Leverhulme research fellow. Planning and execution of geodetic triangulation of great extent. (Renewal of present fellowship.)

G. W. B. HUNTINGFORD, farmer, Kenya Colony, mem-