

SCIENTIFIC EVENTS

THE BENGAL FAMINE

IN regard to the recent famine in Bengal, India, Dr. A. V. Hill writes to *The Times*, London, as follows:

There has been much fruitless recrimination about the recent famine in Bengal: instead of arguing about the symptoms, let us face the facts of the disease itself.

(1) The mortality in India at all ages is four to eight times ours; the expectation of life at birth is 26 years instead of our 62; only half the people born reach 22 years, instead of 69 with us.

(2) Ill-health is correspondingly prevalent; between 100 and 200 million people, out of 400 millions, suffer from malaria every year; tuberculosis, cholera, small-pox, plague, guinea-worm and filarial infection, yaws, kala-azar and many other diseases take their continual toll of life and health.

(3) A large part of the population is underfed, according to any reasonable standards more than half; of these, many millions are living near the verge of starvation.

(4) Chronic malnutrition acts with disease in a vicious circle, producing poverty and inefficiency.

(5) In spite of all this, the population of India is increasing now by about 6,000,000 a year, about 15 per thousand per annum.

There is nothing new about disease and under-nourishment in India: indeed the present population trend is a sign that they have rather less effect than formerly. . . . Already about 50 per cent. more food is needed in India. Can agriculture by present methods catch up and cope with the expanding population?

It is idle to talk of family limitation, except as a long-term policy; and the present need is acute. The factor of safety indeed in India is very low. Disorganization or disorder could lead to frightful tragedy. Cooperation by all men of good will in the whole-hearted development of India's resources by modern scientific methods is the only hope of averting it.

THE FORESTRY MISSION TO CHILE

THE technical forestry mission sent to Chile by the Forest Service of the U. S. Department of Agriculture at the request of the Department of State has now completed its work in Chile and has returned to the United States to prepare a formal report. This mission consisted of five technicians: I. T. Haig, assistant chief of the Division of Forest Management and Research, in charge; Lawrence V. Teesdale, Forest Products Laboratory, wood utilization specialist; Philip A. Briegleb, Pacific Northwest Forest Experiment Station, in charge of timber surveys; Burnett H. Payne, North Pacific Region, evaluation surveys, and Martin A. Haertel, specialist in hardwood chemical distillation.

This project, initiated at the request of the Corpora-

ción de Fomento de la Producción, an agency of the Chilean Government, had as its objective an appraisal of the forest resources of Chile and its evaluation as a basis for the expansion of forest industries. This is part of a broad scale program to industrialize the country in so far as natural resources permit and to help to stabilize Chilean economy.

The mission spent six months in a rapid appraisal of the forest situation, including a study of forest volume, distribution and economic availability, forest depletion, forest growth and national timber requirements both present and future. Highlights of the forest situation are: (1) Chile has a substantial forest area; on a *per capita* basis her commercial forest acreage is fairly comparable with that of the United States. (2) There is no forest practice worthy of the name in the natural forest area, even organized fire protection being entirely lacking. In contrast, the small but substantial plantation area is very intensively managed, stand improvement operations beginning in some types at as early as four years of age with harvest cuttings frequently at twelve to fifteen years of age. (3) Under crude forestry, primarily fire protection, the forest resources could sustain on a permanent basis two to three times the industry now based upon it.

THE NEW YORK CITY MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE one hundred and eighth meeting of the American Chemical Society will be held in New York City from September 11 to 15, under the auspices of the North Jersey Section, which has two thousand three hundred and thirty-two members, with headquarters in Newark. The meeting will be devoted to wartime research, problems of the chemical industry and post-war activities of the profession. It is expected that there will be meetings of all divisions except the Division of the History of Chemistry. More than a hundred local sections of the society will be represented.

Rubber, petroleum, food, plastics, fertilizer, cellulose, gas and fuel, medicinal chemistry and education are among the general fields of discussion. Catalysis will be the chief subject discussed by the Petroleum Division, which will also hold a round table on bench-scale techniques in addition to general sessions. The chairman of this section is Dr. Cecil L. Brown, of the Standard Oil Company of Louisiana. Cellulose and cellulose plastics will be discussed at joint sessions of the Cellulose, Colloid, Physical and Inorganic Divisions.

The American Chemical Society is the largest professional organization of its kind in the world with a membership approaching forty thousand. It has a

hundred and four local sections located in all parts of the country.

CIVILIAN MEDICAL CONSULTANTS OF THE ARMY MEDICAL DEPARTMENT

THE War Department announced on June 5 the appointment of nineteen civilian physicians as advisers to the Army Medical Department on problems of internal medicine. The advice of these consultants will supplement that afforded by the special consultants selected from officers in the Medical Corps of the Army and will be carried on through the chief consultant of the department of medicine, Brigadier General Hugh J. Morgan. The consultants appointed, in eight special fields of internal medicine, are:

Dr. Robert Cooke, assistant professor of clinical medicine, Cornell University (allergy).

Dr. Francis Rackemann, physician, Massachusetts General Hospital, Boston (allergy).

Dr. Robert Levy, professor of clinical medicine, College of Physicians and Surgeons, Columbia University (cardiovascular disease).

Dr. Paul White, chief of Cardiac Clinics and Laboratory, Massachusetts General Hospital, Boston (cardiovascular diseases).

Dr. Chester Keefer, professor of medicine, Boston University School of Medicine (chemotherapy).

Dr. Chester Jones, clinical professor of medicine, Harvard Medical School (gastro-enterology).

Dr. Walter L. Palmer, professor of medicine, School of Medicine, of the University of Chicago (gastro-enterology).

Dr. Colin MacLeod, professor of bacteriology, College of Medicine of New York University (infectious diseases).

Dr. Charles E. Smith, professor of public health and preventive medicine, School of Medicine, San Francisco, Stanford University (infectious diseases).

Dr. Carol B. Thomas, associate in medicine, the Johns Hopkins University (infectious diseases).

Dr. Barry Wood, professor of medicine, Washington University, St. Louis (infectious diseases).

Dr. J. Gardner Hopkins, professor of dermatology, College of Physicians and Surgeons, Columbia University (skin diseases).

Dr. John Stokes, director, Institute for Control of Syphilis, University of Pennsylvania (skin diseases).

Dr. Mark F. Boyd, director of the Station for Malaria Research, Tallahassee, Fla. (tropical diseases).

Dr. Harold W. Brown, professor of parasitology, Columbia University (tropical diseases).

Dr. James A. Shannon, assistant professor of medicine, New York University College of Medicine (tropical diseases).

Dr. Robert B. Watson, principal malariologist, Tennessee Valley Authority, Chattanooga (tropical diseases).

Dr. J. Burns Amberson, professor of medicine, College of Physicians and Surgeons, Columbia University (tuberculosis).

Dr. James J. Warning, professor of medicine, School of Medicine at Denver of the University of Colorado (tuberculosis).

THE WORK OF DR. GEORGE HARRISON SHULL

IN an address to the House of Representatives on May 15, the Honorable George A. Dondero called attention to the work of Dr. George Harrison Shull, professor emeritus of botany and genetics of Princeton University, in which he spoke in part as follows:

Dr. George Harrison Shull has contributed much toward the production of food and has made very important contributions to the Nation and perhaps the world in his creation and propagation of hybrid corn. He may be one of the unsung heroes of the Nation. He deserves a high place in the history of food production.

In recognizing hybrid vigor, as it was displayed to him in his corn-breeding cultures following crosses between his highly inbred related lines, and in devising a practical method or agricultural technique for obtaining and utilizing hybrid vigor to the utmost through the use of hybridized seed corn, he demonstrated with striking clarity how research in pure science may lead to results of tremendous practical value.

The procedure which he devised for the practical production of hybrid corn and which he presented in 1909 before the American Breeders Association is in all essentials the basis of methods now used in producing seed of crossed corn for planting upward of 50,000,000 acres of field corn and sweet corn annually in the United States, including almost all of the Iowa corn acreage. The superiority and dependability of hybrid corn is demonstrated most markedly under adverse growing conditions. The trends in corn growing indicate that hybrid corn may soon replace ordinary corn almost completely for planting our annual acreage of upward of 90,000,000 acres. We have reason to believe that general use of hybridized corn seed may enable a somewhat reduced national acreage to produce an annual crop upward of 1,000,000,000 bushels in excess of the best national yields we enjoyed before we had hybrid corn.

Dr. Shull has not profited a penny through devising the agricultural technique which is basic to hybrid corn production. He derives much comfort from the fact that his hybrid corn research has come to be recognized as a classic example of work in pure science which has led directly to economic results of tremendous importance and which has proved of incalculable value in these war years and which may exert an even more benign influence in the coming years of world recovery and reconstruction.

THE RETIREMENT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

THE retirement of Dr. C. G. Abbot as secretary of the Smithsonian Institution has already been announced in *SCIENCE*. His letter of resignation, dated June 20, addressed to the Board of Regents, reads:

Having occupied the post of secretary of the Smithsonian Institution since February, 1928, and of acting