

heater and temperature measuring sheet which will enable cloth-pressing to be carried on by less empirical methods than at present. The Rothamsted Experimental Station displayed a "pachimeter" made out of meccano parts for testing the plasticity of soils and clays. This, it is thought, may be useful also for millers and bakers in the preparation of flours.

Apparatus for studying speech visually were to be seen in many parts of the exhibition, the most interesting, perhaps, according to the *Times*, being that developed by Professor E. W. Scripture and the adaptations used at the Speech Laboratory of the West End Hospital for Nervous Diseases by Miss F. Janvrin. Speech curves, it appears, can be produced upon smoked paper, so as to provide clearly recognizable tests for the presence of such diseases as epilepsy, disseminated sclerosis, or general paralysis when the symptoms can not be directly recognized in listening to the patient's voice. Another interesting application of physical apparatus to physiological problems was shown by Professor A. V. Hill, in photographic exhibits of the minute heat-production curves which are produced by the stimulation of a nerve or the twitch of a muscle.

In the trade section the experimental sound-film projector for sub-standard (16 millimeter) film shown by the Ensign Company, the "tong-test" for alternating and direct current measurement produced by Crompton Parkinson, and the giant epidiascope with a throw of 70 feet made by W. Edwards and Company were typical of the more popular apparatus.

THE FEDERAL APPROPRIATIONS FOR AGRICULTURAL RESEARCH

SCIENCE SERVICE reports that items in the agricultural appropriation bill, which were reduced below the Bureau of the Budget estimates for 1933 by the House Committee on Appropriations included many lines of scientific research, which had already felt the pruning knife of the agricultural chiefs and the bureau.

The Bureau of the Budget estimates had pared the \$235,664,694 agricultural supply act of 1932 down to \$186,243,405—a decrease of more than \$60,000,000. Much of this was concerned with decreased appropriations for road building and relief loans—in fact almost all of it except about \$10,000,000 to be cut from regular departmental activities. Actual savings of more than three millions, to revert to the treasury, were planned in various agricultural bureaus.

The house appropriations committee cuts from budget estimates, amounting to an additional ten million dollars, were made all along the line, and touched the following scientific investigations:

Administration of agricultural experiment stations, \$13,646. (Bureau of the Budget had recommended increase.)

General weather service and research in Weather Bureau, \$30,500. (Already cut \$71,482.)

Aerology, \$26,900. (Already cut \$225,000.)

Animal husbandry, \$20,505. (Already cut \$29,495.)

Diseases of animals, \$6,000. (Already cut \$31,050.)

Dairy investigations, \$9,900. (Already cut \$69,442.)

Barberry eradication, \$3,600. (Already cut \$177,140.)

Cereal crops and diseases, \$3,700. (Already cut \$19,575.)

Citrus canker eradication, \$2,100. (Already cut \$7,900.)

Cotton production and diseases, \$2,600. (Already cut \$12,100.)

Rubber, fiber and other tropical plants, \$1,500. (Already cut \$25,031.)

Protection and administration, national forests, \$76,500. (Already cut \$119,746.)

Forest products investigations, \$2,200. (Already cut \$25,460.)

Agricultural chemical investigations, \$5,600. (Already cut \$5,851.)

Color investigations, \$800. (Already cut \$2,500.)

Insecticide and fungicide investigations, \$1,100. (Already cut \$10,000.)

Soil chemical and physical investigations, \$200. (Already cut \$30.)

Cereal and forage insects, \$4,900. (Already cut \$42,500.)

Insects affecting man and animals, \$4,300. (Already cut \$10,200.)

Agricultural engineering investigations, \$6,600. (Already cut \$58,550.)

Home economics investigations, \$900. (Already cut \$12,335.)

Pink boll worm control, \$5,600. (Already cut \$61,000.)

Gypsy and brown-tail moth control, \$5,700. (Already cut \$65,000.)

European corn borer control, \$500,000. (Already cut \$155,000.)

Japanese beetle control, \$25,000. (Already cut \$45,000.)

Among other cuts made by the Bureau of the Budget and not touched by the committee was one of \$40,840 from the soil erosion investigation appropriation last year.

THE INTERNATIONAL CONGRESS OF PURE AND APPLIED CHEMISTRY

THE Ninth International Congress of Pure and Applied Chemistry will be held in Madrid from April 3 to 10. The officers of the congress are: J. R. Mourello, vice-president of the Academy of Sciences and professor emeritus of the School of Arts, *honorary president*; O. Fernandez, professor at the University of Madrid, member of the Academy of Sciences and dean of the Academy of Pharmacy, *president*; and E. Moles, professor at the university and at the