

GENERAL SCIENCE

Science Foundation Bill

For the third consecutive year President Truman has included a foundation bill in the budget. A total of \$15,000,000 for fiscal 1950 has been listed for it.

► PRESIDENT TRUMAN included a national science foundation in the budget for the third consecutive year and called on Congress to establish the new civilian agency for directing federal support of science.

Scientists, frustrated after three years of legislative and executive disagreement, are hopeful that the new election-borne weight now given the President's words will help bring the long-sought foundation into being. A total of \$15,000,000 for fiscal 1950 for the foundation to start its program is listed in the budget.

A bi-partisan bill, identical with one which passed the Senate and died in the House of Representatives last year, has already been introduced in the Senate. Heading the list of senators who introduced the bill (S. 247) is the new chairman of the Labor and Public Welfare Committee where the bill has been assigned, Sen. Elbert D. Thomas, D., Utah. Other sponsors include two other Democrats, Sens. Harley M. Kilgore, W. Va., and J. William Fulbright, Ark., and three Republicans, H. Alexander Smith, N. J., Guy Cordon, Ore., and Leverett Saltonstall, Mass.

The bill was originally sponsored in the Republican Eightieth Congress by Sen. Smith. It meets the objections the President raised in 1947 when he killed a foundation bill by pocket veto. Main objection at that time was appointment of the director of the foundation by a large group of members. Under the present bill, the President appoints both the director and the members, with advice and consent of the Senate.

The foundation's big jobs are planned to be the support of research, particularly fundamental research, with grants of federal funds and the awarding of scholarships and fellowships to scientists and prospective scientists. As called for in the bill, it would function through divisions covering different sciences. A minor point of dispute in the last Congress was whether special groups should be specified for attacks on major diseases, but this was compromised by providing that the foundation could set up such other divisions and commissions as it deemed advisable.

Dr. Vannevar Bush, president of the Carnegie Institution of Washington, first proposed the foundation as a civilian, peacetime successor to the successful Office of Scientific Research and Development which he headed in World War II. OSRD passed out of existence, but the new foundation failed to be enacted into law, twice dying in Congress and once at the White House.

Meanwhile, the burden of the support

of the fundamental research which everyone has agreed is vital to the country for peace as well as war has fallen chiefly to military organizations, such as the Office of Naval Research.

Most scientists today will be satisfied to get any foundation bill written into law, so that the new organization can finally

start its task, more than three years after the war. Some, however, would like to see some changes made in the present bill. Most of these would be in the direction of more power for the foundation, and particularly the director.

One argument being advanced is that the new Congress need not be hesitant about changing the Republican "Smith Bill" of last year, which is identical with the new one. Some scientists even suggest they would prefer the bill which Sen. Thomas himself introduced in the last session.

But most scientists are merely hopeful that the foundation, which has almost unanimous support from science and education, will finally be established.

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MEDICINE

Find Gallstones by Sound

► GALLSTONES hiding in the common bile duct after the surgeon thinks he has removed them all can now be made to broadcast their presence to the surgeon or to the entire surgical team. They will do it through a gallstone detector developed by Dr. Eric A. Walker and E. G. Thurston, of the Ordnance Research Laboratory, Pennsylvania State College, for Dr. C. K. Kirby of the University of Pennsylvania Hospital.

The detector is something like a phonograph pickup. It consists of a standard

surgical probe held in a chuck, or handle, which contains a glenite ceramic piezoelectric element. Sound waves travel through the probe to the crystal and are there turned into small electric currents which are carried by means of a telephone cable to an amplifier. This amplifies the small electric current and changes it back to sound energy in the loud-speaker. Or the amplifier may be connected to earphones for the surgeon to wear.

By this combination the very slight sounds of the probe striking a tiny gallstone are



GALLSTONE DETECTOR—Amplifier at left emits a sound when the probe is inserted in contact with a gallstone.