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CIENTISTS WILL UNDOUBTEDLY BE tempted to condemn the President for vetoing the National Science Foundation Act of 1947 (S. 526), and some have already yielded to this temptation. It may be hoped that the rest will apply the same processes of analytical thought to the reasons behind the veto as they conscientiously apply to their own professional problems.

Although the vetoed Smith bill has evolved a long way from the Magnuson bill, which was introduced into the 79th Congress during the summer of 1945, it is basically the same type of legislation. It has made some political concessions on patent provisions; it has prescribed a feeble measure of geographical distribution for scholarships; and it has liberalized the divisional structure of the Foundation. However, it strictly adheres to administration by a part-time board of eminent scientists, and it commits the legislative blunder of creating an Inter-Departmental Committee on Science whose chairman is an appointee of the part-time board, notwithstanding the fact that his powers affect many of the executive departments of the Government. For the President to have no say in naming a committee chairman who, in regard to scientific matters, outranks his own Cabinet officers in the executive branch of the Government is little short of preposterous. As originally drawn and finally passed, the bill still precludes reasonable geographic distribution of funds for research. It is, in short, the Bush bill, based upon the Bush report, Science, the endless frontier. It was, moreover, engineered through committee by the man who, in 1945 and 1946, personally represented Dr. Bush.

In 1946 the Administration made it perfectly clear that, if such a bill reached the President's desk, it would be vetoed, and the reasons given were substantially the same as those contained in the veto message. That the Administration's views were shared by many scientists and other educators was evident from the size and vigor of the committee formed by Harlow Shapley and Harold C. Urey. Furthermore, that the President had not changed his mind in 1947 must have been clear to Dr. Bush and the other supporters of the bill. It is reported that Senator Smith had even more authoritative information regarding the President's attitude.

In the face of the President's forthright statements, S. 526 was drafted and introduced. Little regard was paid to the carefully considered recommendations of the Inter-Society Committee, sponsored by the American Association for the Advancement of Science. The Morse Amendment, which liberalized the geographic distribution of research funds and which might possibly have saved the bill from veto, was defeated in the House. So the Bush bill went to the President, and the President kept his word. If the proponents found no reason to change the bill, certainly the President had no reason to change his mind. Indeed, it was virtually necessary to veto a piece of legislation which assigned powers in the executive branch of the Government to a director whom the President could neither name nor remove.

Scientists must look at facts squarely and honestly. There are many who favor S. 526 because they have faith in administration by scientists who have demonstrated ability in science and in administration. But there are as many more who feel that, however capable the administration of a scientific board may be, the Board is bound to consist of men who, from temperament and experience, will administer Government-supported scientific research in the same way as industrial and national defense research. At present fewer than 50 institutions are receiving well over 90 per cent of all research financing from industry and from the Army and Navy. There is no complaint about this allotment of funds, but there is serious objection to the disproportionate award of additional grants to the same institutions. Not only will it widen the gap between the large and the small universities and technical schools; it will literally dwarf the latter by drawing Foundation-subsidized students and underpaid but competent instructors to the former.

Two provisions of the bill make such a trend inevitable: (1) the qualifications set for members of the Board, who will necessarily be mainly big-name men from big-name institutions; and (2) the stipulation that research grants shall be made to the institutions best qualified to carry out the projects in question. Such a policy makes good sense to practical business-minded men, but its execution will serve to deepen the existing foundations of science rather than to broaden them or to build new ones.

The administrative structure of the Foundation as proposed in the vetoed bill would have concentrated too much power in the hands of too few, without a single effective control from scientists, the Congress, or the President. Let us grant that the choice of scientists would fall upon men in whom there is complete public and professional confidence. The full Board is required to assemble but once a year, and effective control rests with an executive committee of 9. Everyone will agree that the advice and guidance of such men is imperative to the success of a Foundation; vet, regardless of the character of the men who will be selected, and who will undoubtedly give sincere and disinterested service to the public and to science, is it wise to leave American scientists without recourse or appeal from the acts of the Foundation, save through the slow machinery of presidential appointment or through violent death by the withholding of appropriations?

Already Government-financed research and not a little industrial research are guided and, to some extent, controlled by a small group of scientists. Let it be said they have done their job well. But many scientists are as deeply concerned about close professional control as they are about the hazards of political control. If the Smith bill (S. 526) assures freedom from the latter, it

certainly invites and almost prescribes professional control, which may guite conceivably be identified with the group directing so much industrial and military research. That there may be something to fear is suggested by the way in which S. 526 was introduced and maneuvered in Congress, the limited sources from which advice was sought, and the studied disregard of preferences expressed by the Inter-Society Committee, which had the broadest possible base among U.S. scientists.

There are those who sincerely believe that no such danger exists, but this belief is not held by many who were close to the situation in Washington. It certainly was not held by President Truman, who has persistently shown a genuine concern about the welfare of science. Is it not reasonable, now, to urge that those who have tried to get a particular type of legislation passed and have twice failed, relinquish the task to disinterested, scientists, who will view the problem more broadly and dispassionately? There are many such men, and there is no hostility toward science either in the Congress or in the White House. The Senate has, by passing S. 1850 in 1946 and S. 526 in 1947, demonstrated that it is trying to give scientists what they want. What it needs now is the advice of representatives of science rather than advocates of a partisan point of view. Surely the Association's Inter-Society Committee comes closer to the requirements of the present situation than a group determined to give science what is supposedly good for it, whether it wants it or not. This is the time for leaders in the Inter-Society Committee to take over and to act.

## NEWS and Notes

Since many scientists will not have seen the complete text of President proval of S. 526, dated August 6, and since many others will undoubtedly wish to refer to it in the coming months, the veto message is presented in full below:

526, the National Science Foundation Bill.

I take this action with deep regret. On processes. several occasions, I have urged the Contional security and welfare require that impede rather than promote the Govern- executive officer, known as the Director.

SCIENCE, September 12, 1947

we give direct support to basic scientific ment's efforts to encourage scientific research and take steps to increase the research. The Government's expendinumber of trained scientists. I had hoped tures for scientific research and developcarnestly that the Congress would enact a ment activities currently amount to bill to establish a suitable agency to stim- hundreds of millions of dollars a year. ulate and correlate the activities of the Under present world conditions this Government directed toward these ends. work is vital to our national welfare and

which represent such a marked departure it by imposing upon it an organization from sound principles for the administra- so likely to prove unworkable. tion of public affairs that I cannot give Truman's Memorandum of Disap- it my approval. It would, in effect, vest posed Foundation would be vested in 24 the determination of vital national poli- members appointed by the President cies, the expenditure of large public funds, by and with the advice and consent of and the administration of important the Senate. These members would be governmental functions in a group of in- part-time officials, required to meet only dividuals who would be essentially private once each year. This group would, in citizens. The proposed National Science turn, select biennially from among its I am withholding my approval of S. Foundation would be divorced from con- 24 members an executive committee of trol by the people to an extent that im- 9 members and would exercise its powers plies a distinct lack of faith in democratic through the executive committee. This

gress to enact legislation to establish a in the bill is so complex and unwieldy meet only 6 times a year. National Science Foundation. Our na- that there is grave danger that it would

However, this bill contains provisions security. We cannot afford to jeopardize

Under S. 526, the powers of the pro-9-member executive committee would Moreover, the organization prescribed also be a part-time body required to

The Foundation would have a chief