

GENERAL SCIENCE

Nation Needs Research

And future of science in United States will be determined by our educational policy. Trained men are limiting factors. National scholarship program urged.

► "IN EVERY section of the entire area where the word science may be properly applied, the limiting factor is a human one. We shall have rapid or slow advance in this direction or in that depending on the number of really first class men who are engaged in the work in question. . . . The future of science in this country will be determined by our basic educational policy," declared Dr. James B. Conant, president of Harvard University and chairman of the National Defense Research Committee, speaking at the meeting of the American Chemical Society, in his address of acceptance of the Priestley medal of the Society, awarded him for his outstanding work with the council and, in association with Bernard M. Baruch, for the early wartime study of the American rubber situation.

"There are few who doubt," he said, "that both the future security of the country from a military standpoint and our continued prosperity as an industrial nation are closely linked with the proper support of scientific research and technical development."

"I am going to be bold enough," he added, "to make a specific suggestion . . . that the federal government institute a national scholarship program for young men who give promise of becoming leaders in science and technology."

Dr. Conant would have these scholarships given to high-school graduates through non-political committees in each state. They would include support on a modest basis through four to seven years of further education.

Recipients of these scholarships would agree, in return for the opportunity thus provided, to make themselves available in time of national emergencies for national service under whatever conditions the government should then set.

There are persons in this country who feel that drastic changes must be made in the organization of applied science, the speaker stated, in the direction of more centralized control, more planning, and more direct intervention by the government.

"It would be my contention," he added, "that experience demonstrates that for the most effective scientific advance

in the applied fields one must have keen rivalry and competition between a number of strong and independent groups. In each industry one might hope that at least half a dozen industrial laboratories would be carrying forward competitive lines of research and development."

Dr. Conant warned industrial laboratories against the danger of their picking off for their work valuable men on university research and teaching staffs. "Remember that you are dealing in your laboratories with the application of science; you must look to the universities for the fundamental advances which you later are to apply. Secondly, you must each year look to the universities for trained men. Therefore, if you raid the university staffs and pick off the promising young professors for your work, you are endangering your greatest assets."

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Young Men Needed

► "FOR GENIUS and display, take youth; for cold calculation and planned execution, take age." This is the conclusion of Dr. Thomas Midgley, Jr., president of the American Chemical Society, in his presidential address at the 108th meeting of the Society.

Dr. Midgley is vice president of Ethyl Corporation. His theme was the need of young men in science research and their necessity as shown by a recent study of the age factor in discovery and invention.

"The extension of life, resulting from the applications of those principles regarding disease, developed nearly a century ago, has produced a condition in society whereby too many men are being kept in service beyond the years when previously they would have been eliminated." Dr. Midgley said, "This is particularly true in those activities requiring originality for scientific progress. Their retention is denying advancement to younger men at the very age when these younger men may be expected to be entering those years when their maximum efficiency will be attained."

As evidence of youth's greater creativeness, Dr. Midgley cited an unpublished Patent Office table of important inven-

tions, ranging from the steam engine by Watt to the airplane by the Wrights.

Of these inventions, 85 in number, 46 were by men 35 years old or less, 58 were by men under 40 years. Many of the inventions were by young men in their twenties. Most of those by men over 40 were men who had not yet reached their fiftieth birthday.

Dr. Midgley explained that he does not mean that men over 40 are of no use to society, for, he said, "it is too evident that they are. But their usefulness is distinctly of a different nature from the usefulness of youth. Youth is original and creative, while age is simply experienced. Both are essential elements on any team that is to make for lasting progress. I am not complaining that we have old men in active service; but I do complain about having old men in young men's places."

Science News Letter, September 23, 1944

ECONOMICS

Seven-Point Program for Full Employment Offered

► FULL employment after the war was blueprinted before the meeting of the American Association for the Advancement of Science by a Washington economist, Dr. Joseph Mayer of the Brookings Institution. His program points include:

1. Establishment of a Reconstruction Employment Commission, set up by Act of Congress and reporting its findings to the President, Congress and the people, with existing agencies entrusted with the execution of its plans.

2. Immediate attack by this Commission on two problems: re-employment of workers displaced during reconversion, and temporary maintenance of the unemployed.

3. Investigation of the adequacy of existing arrangements for demobilization of the armed forces.

4. Obtaining of a clear public statement of postwar domestic policy, especially as regards time of terminating war contracts, relations between government and private enterprise, proposed government fiscal programs, and assumption of responsibility by leaders of labor, business and agriculture.

5. Studies of relations between government and business, particularly on factors making for violent fluctuations between booms and depressions.

6. Adjustment of taxation to give maximum encouragement to venture capital.

7. Encouragement of cooperative planning between labor and business, including agriculture.

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