Association Affairs

James Bryant Conant

Karl T. Compton, *President*
Massachusetts Institute of Technology

WHEN JAMES BRYANT CONANT accepted the presidency of Harvard University in 1933, at the age of forty, he made the decision to forego the further satisfactions of his brilliantly productive career as Sheldon Emery professor of organic chemistry and chairman of the Department of Chemistry and to shoulder the more complex responsibilities as educational leader of this, the oldest and greatest of our nation's universities. How great and complex these responsibilities were to be he could not then have foreseen, for the next dozen years brought World War II and found him by sheer force of merit and ability in the top key positions of scientific leadership in this struggle. Now, with victory but a few months past, he leads his institution out of its great war program into a well-studied new program of education, and he becomes president of the American Association for the Advancement of Science.

In his own work as a chemist, Dr. Conant has made many contributions of permanent value in two important fields: structural studies of complex natural products, and investigations of basic theoretical significance in the borderland joining organic and physical chemistry. In the latter class is his work on the dissociation of organic molecules into free radicals and quantitative rate and equilibrium studies on organic reactions, including replacements, dissociation of acids, and enolization. Studies of the properties of hemoglobin and the structure of chlorophyll were his major contributions in one of the most complex portions of the field of natural products. An example of Dr. Conant's dual interests in research and teaching is the fact that at the peak of his productivity as an investigator he found time to write the book which has become the most widely used text of organic chemistry.

In recognition of Dr. Conant's achievements in chemistry he was awarded the Chandler and Nichols medals in 1932, the medal of the American Institute of Chemists in 1934, and the Priestley medal of the American Chemical Society in 1944.

Dr. Conant's initial war service was as a Lieutenant in the Sanitary Corps of the U. S. Army in 1917, and in the following year he became a Major in the Chemical Warfare Service. He was one of that small group of outstanding young American chemists who so quickly developed American competence in the production and use of poison gas, and protection against it, immediately after this frightful new weapon had been launched by the Germans against the allied forces in France.

Because of this experience and his subsequent eminent career as a chemist, it was therefore natural that he should have been appointed by President Roosevelt as the chemical member of the National Defense Research Committee when this agency was established as a national defense measure in June 1940 under the chairmanship of Dr. Vannevar Bush. When the President, in 1941, expanded this scientific preparedness program by the establishment of the Office of Scientific Research and Development under the directorship of Dr. Bush, it was equally natural that Dr. Conant should become the chairman of NDRC and thus take the major responsibility for the organization of the nation's civilian scientific effort in the development of new weapons. To this work he brought not only his knowledge of science and acquaintance with scientists, but also great skill in administration and an unusual ability to avoid confusion and entanglement in minor complexities, and to cut through quickly and decisively to the fundamental issues involved.

Then, in the following year, there was another call to service when our supplies of natural rubber were cut off by the Japanese invasion of the East Indies, and the nation was faced with a near impasse of conflicting councils for averting the complete paralysis which would result from rubber bankruptcy. In the Summer of 1942 the President appointed Dr. Conant as the chemistry member of the Baruch Rubber Survey Committee which, after a hectic two months study, submitted to the President the recommendations followed so successfully in establishing a great program of synthetic rubber production and conservation of our remaining natural rubber resources.

Then, in 1943, came the most difficult and important assignment of all as member of the small committee which was appointed to steer the atomic bomb project from the preliminary stage, in which the first laboratory demonstration was made of the feasibility of a nuclear chain reaction, to the final climax on 6 August 1945, when the first atomic bomb was dropped on

Hiroshima. During these last two years of the war Dr. Conant spent an increasingly major portion of his time on the atomic bomb project, unbeknown to any except a few of his closest colleagues, but in spite of this added burden continued effectively to coordinate and steer the program of NDRC.

Any one of the above war assignments would have been a notable contribution to the nation. Taken all together they constitute a truly remarkable record of achievement, and one which can be fully appreciated only by those who have themselves known at first hand something of the magnitude and complexity of the problems which were involved, as well as the success of the achievements and the importance of their contributions to the winning of the war.

Some of these responsibilities continue but, happily, on a much-diminished scale, and Dr. Conant is now able to devote increasing time to the reconversion problems and to the establishment of the revised educational program at Harvard University, based on the report of the Harvard committee on General Education in a Free Society.

This record of achievement is ample explanation of Dr. Conant's election to the presidency of the American Association for the Advancement of Science. With the confidence and the teamwork which were developed among American scientists during the war, there is a very great opportunity for the advancement of science and its effective contributions to our society in the era of peace which we now enter.

Science Legislation

Compromise Bill for a National Science Foundation

Howard A. Meyerhoff
Executive Secretary, AAAS, Washington, D.C.

Agreement has been reached on the final draft of a National Science Foundation bill which will make its way to the Senate floor as rapidly as legislative machinery can function.

Senator Saltonstall presided at the meeting 9 February, held in the Military Affairs committee room at the Capitol, which accomplished a resolution of conflicting views and redrafted a National Science Foundation bill. Senators Kilgore and Magnuson, representatives of the Committee Supporting the Bush Report, the Committee for a National Science Foundation, and the American Association for the Advancement of Science, with legal counsel, discussed the few remaining provisions of S. 1720 still in dispute. Complete accord was effected on every issue under Senator Saltonstall's leadership.

The new bill,[1] which will now go to the Senate, will be known as the Kilgore-Magnuson Bill. Senators Johnson, Pepper, Fulbright and Saltonstall, and possibly others, will be co-sponsors. The new draft will bear a new number, although S. 1720, introduced 19 December 1945, served as its base (*Science,* 1946, **103,** 39–44).

The changes are not many in number and some of them can scarcely be called improvements; but they have served the purpose of providing safeguards liberalizing, qualifying, or clarifying clauses in S. 1720 to which objections had been raised. The relationships between the Administrator and the National Science Board have been more precisely delineated, reducing the possibility of friction and deadlock. The functions of the Division of Social Sciences are yet partially restricted until the divisional committee surveys the field and submits its recommendations to the Board. Somewhat more rigid standards are placed upon all projects for which Foundation support is sought, and the Adminstrator is given more latitude in denying subvention to proposals that do not conform to the policies and standards of the Foundation.

The patent provisions of S. 1720 have undergone extensive revision without sacrificing the basic principles of free dissemination and public use of all knowledge and discoveries arising from Federal support. The attempt has been made to provide equal access to Foundation support or contracts without requiring or inviting changes in corporate structure of the applicant bodies. At the same time government agencies are no more restricted than they have been in arranging to have essential research done. The new bill provides for the absorption of the Office of Scientific Research and Development and of the Roster of Scientific and Specialized Personnel. The new bill provides a new horizon for international cooperation.

It is a document which combines sound scientific thinking with sagacious political realism and to which scientists can unhesitatingly lend their support.

[1] *Science* will carry the full text of the new bill 22 February.