the noblest attributes of man. In his agelong difficult struggle he has been able to secure greater freedom only through a better technical mastery of his environment. No other method of liberation has been vouchsafed to him. But this increased mastery has brought with it automatically new intellectual responsibilities and a more complex way of life. In consequence, unforeseen and threatening dangers arise from time to time; and there is thus imposed on him the necessity to advance still further, which is to-day more urgent than ever before.

• A new injunction has been laid upon the spirit of man, to know and to understand ever more broadly and deeply.³

Now along with the increase in scientific knowledge there appear certain crudely expressed, deeper insights, not completely true or false, some in opposition to others, but all supremely valuable nevertheless. These are embodied in beliefs which seem the inevitable accompaniment of all creative thought.

Thus in the daring effort of the scientist to extend knowledge as far as possible, there arises an aura of faith. It is this spontaneous faith which furnishes the most powerful incentive and is the best guide to further progress.

Such are some of the very general points of view to which a considerable mathematical and scientific experience has led me. If they are worthy of serious attention it is not because of their novelty, but rather because in their aggregate they rise above the details of the numerous specialized fields of knowledge and sustain the scientist in his unceasing and ardent search after truth.

Doubtless many of you are ready to ask the ever more insistent question: If science has thus profoundly modified the general outlook and way of life of mankind, is it not the especial duty of such an association as ours to point out constructive remedies for the ensuing maladjustments? In the "Part II: Science and Warfare" of his admirable address as president of the British Association last August Lord Rayleigh closed by expressing the hope that our two associations could cooperate in such a way as to "bear useful if modest fruit in promoting international amity." In this hope all of us will deeply concur. The presence of Sir Richard Gregory with us at the Richmond meeting is the first token of the projected closer relation between the parent British Association and ourselves. It is much to be desired that this action will encourage further unification of the whole scientific world. I am sure that practically all our joint membership would agree with me that it is the wider diffusion of "the steady light of scientific truth" which holds out most hope of a better understanding among men.

SCIENTIFIC EVENTS

THE PENNSYLVANIA CHEMICAL SOCIETY

A GROUP of Pennsylvania chemists received on December 14 a charter as "The Pennsylvania Chemical Society." Included among the incorporators are Dr. Edward R. Weidlein, director of the Mellon Institute at Pittsburgh, and Dr. Frank C. Whitmore, dean of the School of Chemistry and Physics at the Pennsylvania State College.

The society is incorporated "for the purpose of encouraging in the broadest and most liberal manner the advancement of chemistry as a science and as a profession in the Commonwealth of Pennsylvania, especially in fostering public welfare and education in matters involving chemistry, and aiding the development of industry and promoting the health, happiness and prosperity of the people of the Commonwealth. The society will carry forward the important role which chemistry has played in Pennsylvania from earliest Colonial times. Even prior to the establishment of this nation when the colonies and the early states were mainly dependent upon other foreign countries for many advances in science and also for most of their chemical necessities, there was formed in Penn-

³ From my circular Association letter of 1936.

sylvania what appears to be probably the first organization on the American Continent for the production of chemical products upon an industrial basis. Pennsylvania has mothered American chemical industry and been the seat of much distinguished work in the profession. Pennsylvania has led in the formation of institutions of learning from which there have gone forth innumerable chemists to teach others throughout the land how best to make use of the science and how to serve the commonwealth, the nation and themselves in an adequate capacity."

The officers of the society are as follows:

President—Dr. Jos. W. E. Harrisson, consulting chemist, member of the firm of LaWall and Harrisson of Philadelphia, assistant professor at the Philadelphia College of Pharmacy and Science.

Vice-president—Dr. Nelson W. Taylor, of the School of Mineral Industries, Pennsylvania State College.

Secretary and Treasurer—Dr. Elliott P. Barrett, member of the staff of the Mellon Institute for Industrial Research, Pittsburgh.

The society will shortly hold a meeting for formal acceptance of the articles of incorporation and will actively proceed with its corporate purposes.