THE PRODUCTION OF SCIENTIFIC KNOWLEDGE

The great value of scientific research both to the industries and to the nations at large is now generally recognized throughout the world and the last few years have seen a remarkable increase in the efforts made to stimulate the production of scientific knowledge. In 1914 the American Association for the Advancement of Science appointed a Committee of One Hundred to inquire into the steps which should be taken for the increase of scientific research in the United States and the work of this committee has been continued and expanded by the National Research Council. Among the European nations there is a great awakening to the national value of scientific research. The British government has appointed a Department of the Privy Council to deal with the subject, while it is announced that in France a new national laboratory on a very large scale has been projected. In Australia the government has appointed a special department to consider what steps should be taken for the organization and development of research work in the Commonwealth, and in Canada the matter has been the subject of government inquiry and solicitude.

The increase of scientific knowledge can be divided into three steps: first, the production of new knowledge by means of laboratory research; second, the publication of this knowledge in the form of papers and abstracts of papers; third, the digestion of the new knowledge and its absorp-

1 Being a paper read before the Rochester Section of the Optical Society of America, October 23, 1917.