

in the war cannot but appeal to the popular imagination. When the ban of secrecy is completely lifted and it is realized how multifarious and how important these achievements have been, public opinion will surely insist on a more generous support of research and a better treatment of the research worker both inside and outside the university. The manufacturers, including the smaller ones, are becoming more and more impressed with the potentialities lying in the application of science to industry. I was told of a manufacturer of wooden ware on a small scale, who took up the construction of aeroplane parts and, in that connection, experienced the benefit of scientific advice. He stated that he had formerly had no faith in the scientist. He now realized however that many of his difficulties might have been solved for him ten years earlier had he been willing to consult a scientifically trained man. This instance was cited to me by a well known chemist who also told me the story of a group of firms which had muddled over a problem until they had expended \$100,000, without result. They then came to him and stated that they were ready to spend \$100,000 more on the problem and that they were willing to wait five years for a solution. The research men were put to work on it and the matter was speedily cleared up. The bill was \$2,000. The results attained have proved of importance in the war.

One of the laboratories visited by the writer last August was that of the Eastman Kodak Company located in Rochester, N.Y. This laboratory employs a staff of forty research workers and costs \$150,000 for annual maintenance. When the United States declared war these research workers together with certain others in the employ of the Company organized themselves into a teaching staff for instructing members of the Air Force in aerophotography. After a sufficient number of the latter had been trained so that they could do the teaching, the research workers returned to their laboratory and devoted themselves exclusively to war problems. Their services cost the country nothing, their salaries being paid by the Company. The problems handled presented a considerable diversity in their nature. They concerned themselves, among other things, with anti-submarine devices, with liquid fuel and with aerophotographic apparatus. In particular much time and ingenuity were expended in originating new types of colour filter, that invention which plays such an important role in bringing out specific features of a landscape as photographed from an aeroplane.

It may be noted that the Eastman Kodak Company is collaborating with the University of Illinois in manufacturing and selling at cost certain important chemical reagents. These reagents, which were formerly imported from Germany, are employed in chemical research.

Another large industry in Rochester is that of the Bausch and Lomb Company. This Company employs nearly 6,000 workers and is the largest optical instrument company in America. Of its output 98%, I was told, was for war purposes. Among its most important products are the rangefinders for the navy and anti-aircraft service. Some of those I saw were thirty feet in length. For the construction of rangefinders the very finest optical glass is essential. At the time of my visit to the United States in 1917 such glass was not to be had. In the meantime scientific men brought their skill and methods to bear on the matter and when I visited