

between one industrial organization and another, but within the whole body of workers in any single organization? But in order that the community may fully realize all that it owes, and all that it might owe, to the advancement of science, the channels of communication between research and the public mind have to be kept clear, maintained and widened. The non-scientific public is accustomed to view science as it might view a volcano; prepared for the eruption of some new discovery from time to time, but accepting the effects of the eruption without realizing the processes which led up to it during the preceding period of quiescence. The period of preparation by research before science can offer the world some new benefit may be long, but the scientific machine is always running quietly in the laboratory. There is an example ready to our hands. We recall the introduction of wireless telegraphy and telephony as a scientific gift of quite recent years. Do we all realize that it was here in Oxford, at the meeting of the British Association so long ago as 1849, that the first public demonstration of wireless signalling by means of electro-magnetic waves was given by Sir Oliver Lodge? It was the work of science to develop the methods then demonstrated until they have been brought to their present marvellous uses. On the other hand it is often the case, whether in industrial or agricultural, domestic or whatever application, that science has knowledge at command, awaiting use, long before mankind can be brought actually to apply it. Though we have quickened, we are not yet so quick in the uptake of the results of applied scientific research as, for instance, some of our commercial competitors. The public support of scientific research, upon all these grounds, should be accorded freely, with understanding, and with patience.

This brings me, ladies and gentlemen, to the close of what I have to say to you this evening. From my opening remarks, you will have gathered that I looked on you as an extremely formidable audience. That was when I only knew you, so to speak, on paper. Now that I have met some of you face to face—and hope to meet others in the Town Hall in a few minutes—I can only say that, if the presidential address has not the traditional weight of knowledge behind it, no president in the history of the association has ever received a more kindly and sympathetic welcome than you have given me to-night. I am deeply grateful for it.

One more duty remains to me—a duty to our hosts and to our guests. The university and city of Oxford have received us all with a high hospitality worthy of this town, to which all who have known it in the past always return with delight, and which never fails to throw its spell on those who see it for the first

time. Their friendly reception has made it possible for those who have worked so hard at the organization of this meeting to bring it to the successful culmination which it promises to attain. Not the least successful feature of it is the large number of distinguished guests whom it has attracted from overseas. To all these I wish to offer a most cordial welcome with the sincere hope that they may always carry with them, as I shall myself, the most pleasant recollections of a memorable gathering.

GEORGE D. SHEPARDSON

PROFESSOR GEORGE DEFREES SHEPARDSON, for the past thirty-five years head of the department of electrical engineering at the University of Minnesota, died May 26, 1926, in Florence, Italy. He was absent this year on a sabbatical furlough, which he was spending with his family on a trip around the world.

Professor Shepardson was born in Cincinnati, Ohio, in 1864, the son of Reverend Daniel and Eliza Shepardson, who were the founders of Shepardson College for Women at Granville, Ohio. He graduated from Denison University in 1885 and received a Master's degree in 1888. He graduated in mechanical engineering at Cornell in 1889 and received the degree of doctor of science from Harvard in 1912.

In 1891 Professor Shepardson came to the University of Minnesota to take charge of the work in electrical engineering which was just beginning. The development of this department from that time to the largest of the engineering departments at Minnesota, is due to his leadership. He was the author of many text-books and technical and scientific articles.

He was a member of the jury of awards at the Buffalo exposition in 1901 and at the St. Louis exposition in 1904. He was a member of the American Institute of Electrical Engineers, National Electric Light Association, and the Society for the Promotion of Engineering Education, and a fellow of the American Association for the Advancement of Science. He was a member also of the honorary societies Sigma Xi, Phi Beta Kappa, Tau Beta Pi, Eta Kappa Nu.

Professor Shepardson was married in 1892 to Miss Harriet B. King, of Kings Mills, Ohio, who, with their daughter, Mary, survives him.

He was a cultured, Christian gentleman, very widely read in both the sciences and humanities. All his students will remember him for his readiness to help, his conscientiousness, patience, courtesy and kindness.

O. M. LELAND

UNIVERSITY OF MINNESOTA