ENERGY DISTRIBUTION PRESENT AND PROSPECTIVE

BY

JULIAN C. SMITH

In the few minutes which have been allotted to me, I wish to bring to your attention some figures which are now a matter of record, showing the growth in the use of electric energy, and the result which it is having and will continue to have, on the development of electric stations.

As you know, the use of power began in the mining industry in the eighteen hundreds. It was as late as 1840 or 1850 before the development of steam engines had reached any considerable size, and from that time on the development has been extremely rapid.

Naturally, the first development was for each different user of power to instal his own equipment. This was in fact practically the only thing which could be done, as the sizes of the prime movers were small, and there was no means of transmitting power from one station to another except by means of belts, rope drives, etc.

About 1880 electric power first began to be used, and ten years later the first alternating current devices began to appear. From 1890 on to the present time, in a space of 27 years, there has been a continuous development on an increasing scale.

The total amounts of power, excluding railways and steamships, used in the United States at periods of the census taking, are as follows:—