

As a result of all these activities two tendencies have been emphasised: (1) Trade associations have been formed for common action at home and abroad raising the average standard of production, and (2) recognition has been made of the leeway they had to make up as regards scientific research, the utilisation of its results and its application to technical and industrial purposes.

The Commission to which I have already referred has been a most potent factor in stimulating and promoting all these results. It has encouraged manufacturers of particular lines to combine in their efforts, it has co-operated by supplying them with information as to the technique of their industries and it has furnished a supply of scientific men likely to help them in the solution of their problems.

WORKS RESEARCH LABORATORIES.

In addition to drawing lessons from what has been accomplished in Great Britain, much may be learned also from what is going on to the south of us. In such large organisations as The General Electric Co., of Schenectady, The Westinghouse Electric and Manufacturing Co., of East Pittsburg., The Eastman Kodak Co., of Rochester, The DuPont Powder Co., The American Rolling Mills Co., The National Electric Lamp Association, The General Chemical Co., The U.S. Steel Corporation, The Edison Laboratories, The Pennsylvania R.R., they have as adjuncts large and magnificently equipped research laboratories manned by the ablest scientific men whose services can be secured and hundreds of thousands of dollars are set apart by each of these organisations each year for industrial research.

In a number of these laboratories the activities of the researchers are not confined to the solution of problems of pressing necessity. In the laboratory of the General Electric Co., for example, the workers are encouraged to exploit fields of purely scientific interest, for it is realised that what to-day may be of merely academic interest may to-morrow have the greatest industrial importance. It is to the credit of this policy that to-day we have on the market the metallic filament electric lamp, the gas filled electric lamp, the gas arc electric lamp, gas electric rectifiers, the Coolidge X-ray tube, and the steel alloys of vanadium and other rare metals which have proven themselves so useful in the manufacture of dental and high speed mechanical cutting tools.

In Canada our works are as yet, generally speaking, small and circumscribed in their production. We have, however, industries such as the rubber industry, the agricultural implement industry, the cyanamide works, and the steel industry in which a beginning has been made. All these have now research laboratories attached to their works. The