

Editorial

INDUSTRIAL RESEARCH.

It seems to be a pretty well fixed belief that knowledge should be pursued for its own sake, and that the quest for truth should be unhampered by anything that even has the semblance of utilitarianism about it.

Since the outbreak of war much has been written concerning the necessity for greater activity in the realm of industrial research in Canada. This is a subject which should not be left altogether to universities and scientific bodies. Manufacturers, if they are to maintain their superiority, must recognize that they, too, have responsibilities in connection with the development of industrial research in this country.

Certain large individual industries, as well as groups of industries, have spent large sums of money for research work. Monies have been and are now being spent in this country for this kind of work, but it is very spasmodic. It is a question as to whether we are as a people, and especially as manufacturers, attaching sufficient importance to this matter, and whether we are dealing with it in a corporate and national spirit.

While application and genius are necessary if research work is to be carried to a successful conclusion, money also is called for.

Many men are conducting research work, but are very much handicapped by the lack of apparatus which is absolutely necessary if the best work is to be done. Would it not be possible to gather up these loose ends of disconnected effort by greater co-operation between scientific and industrial groups and seek to approach the problem in a more intelligent, broader and really national sense?

THE ENGINEERS' LIBRARY.

For several years *The Canadian Engineer* has made a practice of publishing in the last issue of each month a department known as the Engineers' Library. In this department are to be found reviews of the new engineering books of the month, these reviews being written by engineers who have made a special study of the subjects with which the books deal. Under the heading of "Publications Received" there is given a review of reports issued by various public bodies which are more or less related to the engineering profession, while under the heading of "Catalogues Received" appear brief summaries of the trade literature of the month.

Every engineer, no matter in what particular branch of the profession he is interested, must feel, in view of the rapidity with which engineering practice changes and the speed with which one development follows another, the need of keeping himself posted, and has a more or less complete selection of text and reference books of his own.

The Engineers' Library as found in *The Canadian Engineer* can be made of great service to the man who recognizes the importance of having beside him at least a few standard general engineering books as well as others which deal more specifically with the phase of

engineering with which he is especially interested for reference purposes. Such a collection of books will be found a tool by no means the least useful.

Reports of public officials, publications of engineering societies contain information of value to all engineers, while trade literature, though primarily advertising, very frequently contain data that will be found serviceable to the engineer in his work.

Two things usually limit the extent to which an engineer will build up a library: the demands of his everyday work, and the time and facilities at his disposal for collecting and filing information.

It is in order to render our subscribers the greatest possible assistance in selecting such material as they think should rightly find a place in their collection, that this department was established and is being maintained.

ECONOMIC VALUE OF THE GOOD ROADS MOVEMENT.

The development of the good roads movement will unquestionably help to solve many economic and social problems with which we are confronted to-day. Slowly, but none the less surely, people are beginning to realize the great importance of permanent road construction and to recognize the real significance of the movement.

While a great deal has been done in highway engineering in Canada, there is yet a great deal to be accomplished.

Those who cry "back to the land" will never get very far unless simultaneously with it they lend their practical support to the efforts which various bodies are making, looking to a betterment in the design, construction and maintenance of highways throughout the country.

Many farms that to-day are deserted would never have been so treated had the good roads idea come into service touch with them, and thus made it possible for the tenants to get and keep in more intimate contact with the communities immediately beyond their own borders.

The public highway is, after all, more generally used than any other means of communication, and is free and open to all classes of the community. It is well known that where a community passes from a condition in which poor roads are a rule to one in which good roads dominate, land values advance. The redistribution of a considerable portion of the population in such a way as to remove congestion in the cities and add them to the dwellers in rural communities has been given a great stimulus and will continue to be greatly stimulated by the good roads movement.

There are many districts all over Canada, rich in agricultural products but poor in roads. Such a community is under an enormous handicap. The incoming shipments greatly exceed the outgoing, whereas with improved road condition, these same communities could not only be self-supporting, but could ship products to other markets.

In very many quarters, at least, the real significance of highway improvement is not appreciated and objections