

authorities in the United States, and backed up by inexhaustable war appropriations, the work is being carried out on right lines, either for the present or for the future.

The American Association of Port Authorities meets this week at one of the great American ports. It would appear that, if not too late, a vast good could be accomplished by a discussion at that convention of the principles of the Port War Development now being carried out.

Prof. MacElwee has evidently studied the commercial and economical aspects. In his valuable book he has set forth the problem in clear terms. He has given splendid and detailed examples of successful foreign ports. The solution, so far as America goes, is not yet forthcoming, however.

Without giving heed to war efforts, when the best brains in the country, together with the unlimited credit and insistent patriotic demands, cannot but result in success, can it be hoped that American ports will be on a par with American railroads or American industrial success? It is only necessary to study the record and experience of the executive heads of successful railroads. Or the manufacturing or mining magnates; are they made in a day or would they be equal to the task with the usual life of an American port authority?

In foreign countries, the port authorities, as representative committee men, chairman of committees and president, following a successful career in allied ventures, spend the later part of their lives in analytic and studied effort. There, port engineers are in a class by themselves, and it is the most remunerative and highest class in the profession. What wonder if, when the author asks the question, "What does make a successful port?" he cannot answer by a good example in the United States, a country full of economically successful examples.

A few quotations from Professor MacElwee's book will be sufficient to call the attention of port authorities and engineers to the necessity of obtaining a copy and the interest and value it will give them.

"Economic aspects of the problem of efficient ports.

"Expensive harbor works alone do not make a port which will bring commerce and wealth to a city.

"The need for better port and terminal facilities is not only a vital war measure but of continued and increasing importance in securing to the United States its place as the leading maritime power after the war.

"The importance of the subject to the nation and community.

"What does make a successful port?

"The importance of ports and terminals in national economy.

"The Port of New York has been congested.

"As a war factor, the port problem is a serious one.

"The commerce of the United States overseas is hampered or limited by lack of development of the terminal facilities in our American sea ports.

"After the war, fierce commercial struggle to capture the markets of the world.

"The marine terminal problem is a national and not a private one.

"The railroad costs for 90 miles are 27c. The terminal expenses are nearly fourteen times the rail haul.

"Goods once loaded, may move from Havana, Cuba, to Boston (1,320 miles) cheaper than from one pier to another in Boston.

"There is no short-cut to the perfect port. Engineering-economist and administrator must co-operate. Planning and execution will require engineering-economists.

"The efficiency of a port is not its size.

"With equal facilities for handling and with equal port charges, the port with the widest choice of transportation facilities to the interior will be the greatest port.

"Needless duplication. . . . It is the old story of a port built by a railroad.

"Montreal is one of the most conspicuous examples of a publicly owned and operated harbor belt line. It has been most successful.

"At the Port of New York most of the export and import freight is handled by lighter."

The author has personally studied European ports. He writes:—

"In time, we should develop at New York and New Orleans transshipping ports for grain as efficient as those of Hamburg, Rotterdam and Antwerp."

The reviewer visited the three last-mentioned ports three months before the opening of the war. It is true that their equipment and their charges for grain handling were examples of efficiency and economy as compared with the ports of London, Liverpool, Havre and Marseilles, but not so good as Manchester or Genoa, and it was demonstrated by the writer before the Institution of Civil Engineers that the plant for the storage and handling of grain at Montreal, Canada, for despatch, economy and permanence, was in a class far in advance of any.

The author should visit Montreal and he would convince himself that in the case of liners taking on other cargo at piers, he is not correct in saying "loading is only possible from the water side."

The author has stated the case. Advisability and necessity may be considered as demonstrated. A solution is still open. Legislation, co-ordination and engineering will be factors in any real solution.

The publishing is excellent; the style makes the reading attractive and the matter is most interesting.

## PUBLICATIONS RECEIVED

**Air Compressors.**—New bulletin on Class EL-2, power driven, two stage, straight line air compressors, 6 x 9, coated paper, well illustrated, 12 pages. Canadian Ingersoll-Rand Co., Limited, Montreal.

**Coal Saving.**—Reprint from "Engineering" of article on "Coal Saving by the Scientific Control of Steam Boiler Plants," by D. Brownlie, B.Sc. Distributed free by Brownlie & Green, Limited, Manchester, England.

**O.L.S. Annual Report.**—Issued by the Association of Ontario Land Surveyors, annual report and proceedings of the last annual meeting. 228 pages, 5¼ x 8¾ ins., illustrated. L. V. Rorke, secretary, Parliament Buildings, Toronto.

**The Barrett Trail.**—Under this name a new house organ is being issued by the Barrett Co., of New York, Toronto, Montreal, etc. Two well-printed numbers have already been published, full of personal news of interest to the large Barrett staff that is scattered from coast to coast.

**Building and Ornamental Stones.**—Volume 5 of a report on the building and ornamental stones of Canada. This volume covers the province of British Columbia, previous volumes having dealt with Ontario and the Prairie Provinces. 236 pages and cover, very well illustrated and accompanied by maps. Some of the illustrations are notable, being excellent reproductions in their natural colors of various granites, marbles, etc.