

way. Take some thought of your home town, of its planning problems, and how you can help as a leader in public opinion if not in a strictly professional way."

The membership of the Town Planning Institute of Canada comprises surveyors, architects, engineers, landscape architects and barristers. It is made up largely of the first three classes, and I want to make brief mention of their respective relations to housing and town planning. Their primary functions, as I understand it, are respectively to survey, to design and to construct, and these activities must, of course, be closely correlated for any comprehensive development where or if all three classes are engaged.

Town Planning a Collaboration

The surveyor should make a survey of all conditions and factors that may effect a housing or town planning scheme, the incidental staking of street and lot lines becoming possibly quite a subsidiary part of his work. He should report and investigate matters as they exist, or have existed, and by such activities facilitate the planning. To survey in the fullest sense of the word and to record conditions—this is the "statics" of town planning.

The engineer is essentially the constructor to carry out the plan in the constructing of street utilities and buildings, and in the providing of transportation facilities. He is concerned with the "dynamics" of town planning.

The architect has been till recently the only one of the three professions mentioned who is fitted by his training for imaginative design. Engineers cannot be said to design in the sense in which I am using the term, and we find some of our best engineers recognizing this. For example, as to bridge design I was very pleased to listen to an address in Ottawa recently by Frank Barber, of Toronto. In his address he made it quite clear that aesthetics in bridge design—and he, was speaking particularly of concrete bridges with which he is so familiar—did not consist in the calling in of an architect to add a few decorations at the last at extra expense, but of working in co-operation with the architect from the start and obtaining a design not only more beautiful, but certainly at no greater cost—a bridge that would truthfully proclaim to the eye its functions.

Functions of the Surveyor

A number of our surveyors are qualified municipal engineers. I have heard some surveyors criticised for posing as engineers without the necessary experience or knowledge. My own criticism of surveyors is that they have never really in deed or thought become surveyors in the wide sense of the term at all. This point I wish to emphasize, as I think the most important point in the relation of the surveyor to town planning. But if the engineer-surveyor becomes sufficiently skilled in imaginative design to fully take advantage of and correlate all the facts he has collected, and all the conditions he has surveyed, I think we have the "makings" of a town planner who can correlate the work of surveyor, architect and engineer in any large work, or who in a small development can successfully carry it through.

It is in these smaller or at least newer developments that I feel there is the best immediate future for the surveyor. He is well accustomed to subdividing lands, now he must think of developing them. City planning, so engaging to the imagination, frequently involves engineering experts of a nature requiring the services of our best engineering experts. But it is particularly towards new or rural development that our town planning legislation in Canada is directed. Nearly every municipality has its own engineer, fewer a surveyor or architect. In any housing or town planning development sewer, water, street improvements will generally be carried out by the engineer of the municipality, leaving the competitors in private practice, the surveyor and the architect—the one legally qualified to layout the development, the other qualified (legally in some provinces) to design the houses. Who is to do the planning—the architect or the surveyor, or possibly an engineer in private practice?

The field is open, gentlemen—it's a fair race. Each profession can advance good reasons for winning out. But the surveyor should and can be on the ground first because in nearly all instances a topographical survey is necessary.

(To Be Continued)

G. H. DUGGAN TO RECEIVE HONORARY DEGREE

GEORGE HERRICK DUGGAN, president of the Dominion Bridge Co., Ltd., of Montreal, who graduated with the class of '83 from the University of Toronto is to receive the degree of D.Sc. from his alma mater on June 3rd. Mr. Duggan has not only taken a leading part in engineering development in Canada, as for examples in the design and construction of the Quebec bridge, but he has for some years taken an increasingly prominent part in financial undertakings. He is a director of the Royal Bank and a member of other well-known institutions.

The Canadian Concrete Shipbuilding Company's new steamer "Permanencia," the first ocean-going vessel of concrete built in Canada, was launched at North Sydney on May 19th.

Paul Kircher, resident manager of the Canadian Concrete Products Corporations, Ltd., whose plant is at Chatham, Ont., has changed his headquarters from New York to the People's Gas Building, Chicago.

The brickmaking industry is to be initiated at Matheson by the Matheson Products Co. One hundred and ninety acres of land, with a clay deposit that is said to be 40 ft. deep, will be utilized by the company, which will manufacture brick, tile and terra cotta ware. The plant will have a capacity of 20,000 bricks per day to start with, and this output is expected to increase in a short time to five times this amount. R. S. Potter is president of the company, and R. L. Ollman, manager.

An experiment in irrigation, which, if successful, may lead to the adoption by the federal government of a large irrigation policy for eastern Canada, is being conducted at the Experimental Farm this season. This is practically the first irrigation test being conducted for the benefit of the east, although government irrigation schemes have been worked out in the west. Three acres have been leased near Hartwell's Locks for the experiment, and half of this will be irrigated. A comparative report will be prepared when the crops are harvested, and if the irrigated area shows to advantage it is possible that recommendations for a large irrigation may be made. The water will be taken from the spillway of the locks, and roots and corn will be sown.

Dr. Van. H. Manning, Director of the Bureau of Mines, Washington, D.C., in tendering his resignation to President Wilson recently, said: "In leaving the government service there comes to me, as it has over and over again, the thought that, although this government spends each year many millions of dollars in useful scientific work for the benefit of the whole people, the monetary recognition of its scientific and technical servants is not sufficient to enable them to continue in the service for the people. This has been especially true within the last few years, when it has been impossible for many men to remain in the government service. With the marvellous expansion of the industry in this country and the growing necessity of science to industry, the scientific bureaus have been utterly unable to hold their assistants against the competition of industry, which is taking their highly-trained men at salaries the government does not pay, or even approach. I feel very deeply that there ought to be more adequate compensation for the scientific and technical men in the government service, so that none of them may be compelled to accept positions on the outside. Many of these scientific men are of fine type for government work; care little for the commercial field; take an intense professional interest in their tasks, and are of inestimable value to the government."