

NEWS OF THE ENGINEERING SOCIETIES

Brief items relating to the activities of associations for men in engineering and closely allied practice. THE CANADIAN ENGINEER publishes, on page 90, a directory of such societies and their chief officials.

DOMINION LAND SURVEYORS.

The eighth annual meeting of the Dominion Land Surveyors was held in the Carnegie Library, Ottawa, March 3rd and 4th. Lectures of a scientific and practical nature were delivered by eminent members of the profession.

First Day.—Morning Session.—The President of the Association, Mr. C. F. Miles, D.L.S., was not present, as he is at present inspecting surveys in Northern Alberta. In his absence, Mr. J. J. McArthur, Assistant Commissioner of Boundary Surveys, acted as chairman.

A paper by H. G. Dixon, D.L.S., on the proposed transfer of natural resources to the western provinces provoked considerable discussion at the morning session. The western provinces having made a move to take over the management of their own natural resources, the Dominion Land Surveyors, in whose hands the work has always been, are afraid that they will lose some of their status—and, in fact, their jobs—if the provincial authorities achieve their desire. A committee was appointed to conserve the Association's interests in this matter.

Land surveying is apparently a healthy occupation. One member is 75 years of age and is still actively engaged in the rigorous duties even during the severe winter months. J. J. McArthur referred to this and pointed out what a healthy profession land surveying proved itself to be.

A paper on Arctic and Antarctic research was read by J. N. Brownlee, D.L.S., of Vancouver.

The report of Secretary-Treasurer Hubbell showed that the Association had made good progress during the year, and has a satisfactory financial balance. There are now 233 members. Motions of condolence were passed on the deaths of two of the members, J. K. McLean, D.L.S., and C. E. Johnston, D.L.S.

Afternoon Session.—A most interesting lecture, illustrated by photos and blackboard diagrams, mathematical formula, etc., was given on Tuesday afternoon. Dr. Otto Klotz, D.L.S., Chief Astronomer of the Dominion Observatory, was the speaker. The subject of the lecture was the "Seismograph" in its relation to earthquakes. While he did not deal with the causes of earthquakes, he expanded upon the results of phenomena. He mentioned an experiment which is being instituted at the Dominion Observatory to determine the physical tides of the earth, Ottawa has been selected, with three or four other points in the world, one in Germany and one in Africa, for the conduction of this experiment. A huge pit was now being dug in which the seismograph would be placed, and the experiments of the future continued. He fully explained the intricate and physical technique of the seismograph.

A useful paper on the transportation problem for survey work in the Canadian North was given by F. C. Herriott. This subject was considered of great importance, and two other papers bearing on this same subject, were read and discussed on the following day. Mr. Herriott gave many suggestions as to the best means of transportation for survey parties operating in the northern sections of Western Canada, many miles from civilization, which makes supplying the commissariat a most difficult problem. In summer there are canoe, and man-packs, while in winter months these give place to the dog-teams, or, in sections where the snow is not

too deep, the pack-horse. Mr. C. F. Aylesworth, D.L.S., vice-president, occupied the chair.

Annual Banquet.—The annual banquet of the Association was held at Chateau Laurier in the evening. There were present the Minister of the Interior, Hon. Dr. Roche, Dr. Thompson, M.P., Yukon; M. McNutt, M.P., Saltcoats; H. S. Clements, M.P., Como-Atlin, B.C.; J. D. Taylor, M.P., New Westminster; Senator Casgrain, Dr. King, Director of the Dominion Observatory, and nearly a hundred Dominion land surveyors.

Among the speakers were Hon. Dr. Roche, Dr. Deville, Surveyor-General, and Senator Casgrain. The Senator is an old surveyor, by the way, and brought greetings from the Quebec Land Surveyors' Association. He was glad, he said, to have had some of his reward for his land surveying by his elevation to a body that went on for ever, and one that nothing could alter—the Canadian Senate.

Mr. George Mountain, Chief Engineer of the Railway Commission, told of his saving the Senator's life while in the wilds of Northern Quebec in a surveying party, sharing his small residue of food, when otherwise there would be no Senator Casgrain. Other interesting speeches were given during the evening by Dr. Otto Klotz, Messrs. Taylor, McNutt and Clements.

Second Day.—The attendance on Wednesday was even better than the first, a large number of the employees of the Topographical Surveys Branch, who are nearly all surveyors or assistants, were present, and the hall was again filled to overflowing.

The first paper was, "Goedetic Results and their Practical Meaning," by Mr. William Tobey, Dominion Topographical Surveyor. Another interesting paper was, "The Survey of River Lots in Manitoba," by Mr. Wm. Pearce, D.L.S. These papers elicited a lot of discussion by Mr. Thomas Shanks, Assistant Surveyor-General, Mr. A. E. Aylesworth, Mr. E. W. Hubbell, Dr. Deville and others.

Several excellent papers were delivered later in the day. A paper on "Chaining," by Mr. A. H. Hawkins elicited much interest. Mr. Hawkins preferred the four-chain tape and the lighter tapes rather than the heavier. He impressed upon the surveyors present the vital importance of good chaining, and threw out many hints and suggestions for its further improvement. Several papers on "Pack Trains" had been prepared, two of which were read, one by Mr. J. M. Aitkens, D.L.S., and another by Mr. Hawkins. Transportation is one of the most important features of the surveyor's work, as he is often forced to work as much as 200 miles from railway and steamboat terminals depending on pack ponies, dog-trains, canoes and packers for the transport of the food supplies and paraphernalia. There was a lot of discussion. Messrs. J. E. Dodge, A. Milliken, Chas. Ways, Dr. Deville, E. W. Hubbell, Thomas Shanks, A. H. Hawkins, and others, participating. The laboratory for testing of chains and other surveying instruments, at Ottawa, in charge of the Topographical Surveys Branch, was described by Mr. Ways, Mr. Milliken described how the accuracy of azimuth and precise chaining was arrived at by calculation in the Topographical Surveys office.

Mr. Speight, O.L.S., brought greetings from the Ontario Land Surveyors' Association, and also described the work of base-line surveying in Northern Ontario.