forming the task, although it has had to make the nation

into one vast organized war institution.

In the United States, banks, traders, governments and other units are planning for the peace period in a way which we might well emulate to at least some extent.

PERSONAL.

C. H. WITHERS has been appointed manager for Escher Wyss & Company's Canadian head office in Montreal.

W. E. SKEAD has been appointed city purchasing agent, Brandon, Man., and will make purchases for the Brandon Municipal Railway.

Lieut.-Col. C. H. MITCHELL has been gazetted as a general staff officer of first grade, according to press dispatches from London, Eng.

J. F. MacGREGOR has been appointed a member of the Hydro-Electric Commission, Galt, Ont., to fill the vacancy caused by the resignation of H. W. D. Browne.

J. E. MORAZAIN has been appointed superintendent of District No. 1, Canadian Government Railways, with office at Levis, Que., succeeding R. Colclough, transferred.

DENIS MURPHY, president of the Ottawa Transportation Co., and one of the Timiskaming & Northern Ontario Railway Commissioners, has been seriously ill at his home in Ottawa for several weeks.

ELWOOD WILSON, Jr., who studied forestry and engineering at Cornell and McGill Universities, has enlisted with the 242nd Forestry Battalion, C.E.F., and has been given a commission as lieutenant.

Professor W. J. DORSEY, of the University of Manitoba, read a paper on "Cut-out System on Party Telephone Lines" at the monthly meeting of the electrical section of the Manitoba branch of the Canadian Society of Civil Engineers.

R. E. SPEAKMAN, city engineer, Brandon, Man., is leaving in a few weeks' time to return to his home in England. Mr. Speakman has suffered severely from rheumatism during the past two years. He was city engineer at Calgary when the street paving was put in there and left that city to go to Brandon.

F. L. FELLOWES, city engineer of Vancouver, B.C., attended a meeting of the executive of the Union of British Columbia Municipalities, held at Vernon, B.C., on October 10th, and delivered an address at the annual convention held on the two succeeding days.

C. A. AMIRAULT, who for 25 years has been connected with the engineering department of the city of Montreal and is at the present time engineer of the sidewalks and sewers division in the office of the chairman of the Board of Assessors, will shortly resign. Mr. Amirault is one of the oldest engineers in the civic employ. For many years he was chief engineer in charge of the northern division of sewer work.

OBITUARY.

DUNCAN McINTYRE, vice-president of McIntyre, Son and Company, Limited, founded by his father, Duncan McIntyre, a member of the syndicate which constructed the C.P.R., died in Montreal on November 5th, at the age of 50 years.

Lieut. CARL J. BEATTY, of the Royal Flying Corps of the British Army, was recently killed in action. Lieut. Beatty was in the employ of the engineering department of the British Columbia government for some time before he enlisted. Previous to that time he had been a member of the engineer corps of the Northern Pacific Railway.

CANADIAN SOCIETY OF CIVIL ENGINEERS TORONTO BRANCH MEETS.

Mr. William Storrie, chief engineer of the John ver Mehr Engineering Co., last Thursday evening addressed the Toronto Branch of the Canadian Society of Civil Engineers, explaining the design and construction of the Toronto rapid sand filtration plant. The meeting was well attended and a vote of thanks was accorded Mr. Storrie for his interesting review of the principles upon which the plant was designed.

Mr. William Gore, the company's consulting engineer, lead the discussion. He said that the impurities and foreign matter that must be filtered out of a water supply vary from one two-millionth of an inch in diameter all the way up to one-quarter inch. The art of filtration has been developing for a hundred years, said Mr. Gore. At first it was simply a straining action; then the "dirty layer" theory was the basis of all progress; now, in the Toronto plant, the absorption theory supplants the dirty-layer theory. The absorption theory brings in the principle of electrostatic equilibrium. To introduce a solid into the raw water disturbs the electrical equilibrium of the small particles, which must either go to the solid or away from it.

Filter alum is electrically positive to most particles, said Mr. Gore, and the impurities are drawn electrically to the coagulant, both impurities and alum being removed by the filter. The effective cleansing area of the Toronto filter, he said, is not dependent only upon the actual net area of the sand, but is the area of the cones of fixed sand. This fact, together with the grading of gravel which dispenses with screens between the sand and gravel, are among the chief features of the new plant.

The annual excursion of the Toronto branch will be held next Saturday, November 18th. The members are to assemble not later than 2 p.m. at the Yonge Street dock. The tug "Geary" will take them to the Island for an inspection of the plant described by Mr. Storrie.

MANITOBA BRANCH MEETING.

On the evening of November 2nd Mr. S. Bylander addressed the Manitoba Branch on "Shop Details of Steelwork for Buildings." The speaker drew upon his own experience and methods, discussing the subject under the following heads:—

First, American methods, as introduced into Englandmany years ago; second, Old English methods; third, Modern English methods.

Mr. Bylander explained quite fully his methods of detailing steelwork for fabrication, and they are very similar to those practiced by structural engineers in Canada. Some phases of the paper (for example, his methods of obtaining dimensions of skew members) would be of interest to any one engaged in structural work, so it is likely that the entire paper will be published by the Branch at a later date.