in aid to counties, which would involve an outlay by the counties themselves of another \$450,000. The Ontario system does not recognize any municipality smaller than a county.

The Toronto-Hamilton Highway is the only trunk road of great importance that has been built in Ontario within the past few years, but a Provincial Road from Ottawa to Windsor has been planned and will be gone ahead with as rapidly as finances permit under war conditions. In Ontario also there is an energetic highway department, which is planning far ahead, at the same time closely supervising existing roads.

Both the Ontario and Quebec governments are doing their best to eliminate toll roads and toll bridges. A considerable proportion of the federal aid could be used advantageously in the improvement of bridges. A speaker at the last road congress stated that about ten thousand wooden bridges and culverts had been replaced by steel and concrete in Quebec Province in the last ten years.

Many thousands of miles of roads in Canada require construction or reconstruction. Broadly speaking, we might almost say that Canada has no roads; the era of road building in Canada has only begun. The support that was accorded the Canadian Road Congress in Montreal in 1914 and 1916, and in Toronto in 1915, is an indication of the interest that the people of Quebec and Ontario are taking in good roads, and there is no doubt but that similar interest will be shown in the meeting at Ottawa next week.

ANOTHER MONTREAL DRAMA.

Life must be interesting for the members of Montreal's Works Department and Board of Control. To say the least, it never becomes monotonous. Investigations, suits, scandals, charges, court trials and other incidents of municipal regime follow along with startling rapidity in our eastern metropolis. But the scenery is always the same. Different actors, various lines and new stage managers enter the limelight, but the background of alleged graft never changes.

The latest drama might be entitled, "Spending \$5,000, or a Closed Specification for Flushing Equipment"—in three reels. The scenario follows :—

First Reel—Views of Montreal's streets, showing the mud for which said streets are noted in the springtime. Close-up of city engineer reaching decision to call for tenders on motor-driven flushing machines, the most modern and best method of street cleaning. Enter Chas. Hvaas, of New York City, strongly determined to have "Hvaas" superstructure equipment specified, whatever truck or chassis is purchased.

Second Reel—View of Board of Control meeting. Tenders received. Complaints of favoritism and "absolute specifications." New tenders called on revised specifications which other manufacturers allege admit only "Hvaas" equipment. Chas. Hvaas quotes Montreal truck dealers \$2,500 per set of equipment, compared with \$1,300 quoted for the same equipment before tenders were called. Dealers complain. Hvaas says: "It cost me a lot of hard work and \$5,000 to have my specifications passed and if I give the price quoted before, who will pay me back the \$5,000?" Hvaas later lowers price somewhat but is still higher than original figure.

Third Reel—Flash-back to Board of Control. Second tenders received. Demand for investigation of Hvaas' statements. Cut-in of meeting of investigators. Hvaas on stand. Admits statement, but claims the \$5,000 was spent on hotel bills, salary, etc., during three months' work of persuading Montreal officials to use his specifications. Says he never gave a nickel to any city executive. Details of notes, loans and much of the private life of a controller and his former secretary, now an agent for the Hvaas Co., enliven the scene and permit a display of fine emotional acting. Return to original setting:—Board of Control calls for third tenders, manufacturers still complaining about the specifications.

The failure of this drama to secure popular applause will be its lack of new "props" and of new "location." Every up-to-date movie director knows that the public tires in time of seeing the same old background even though the story varies. Why doesn't Montreal shift the scene and play "The Open Specification, or Always Giving Everyone a Square Deal"?

PERSONAL.

T. S. HUSBAND has been appointed waterworks engineer at Ladner, B.C.

CARLTON MILLER has been appointed town engineer of Bridgeburg, Ont., to succeed EDWIN J. JUKES, who recently resigned.

M. LEIGHTON WADE, for the past two years electrical superintendent at Duncan, B.C., has resigned, and will re-enter the plant construction field.

FRANCIS C. McMATH, president of the Canadian Bridge Co., Walkerville, Ont., was recently appointed a member of the Detroit Municipal Street Railway Commission.

A. S. CLARSON, engineer of the city of Verdun, Que., has been appointed consulting engineer to the city in connection with the proposed underground conduit system, estimated to cost \$200,000.

STEWART JONES, of Welland, Ont., has been appointed inspector of power plants for the Hydro-Electric Commission of Ontario. For the last eleven years he has been with the Hydraulic Power Company of Niagara Falls, N.Y.

R. H. STARR has severed his connection with the engineering staff of the Toronto Hydro-Electric System, and has accepted a position as sales engineer with the Toronto sales office of the Moloney Electric Company of Canada, Limited.

P. W. GORDON, who has been with the Imperial Oil Co. at Calgary for eight years, has been promoted to the managership of the Saskatoon territory. Before his departure from Calgary he was presented with a watch and chain and Masonic charm by the staff.

Capt. RAYMOND TYRWHITT, of Toronto, who joined the 215th Báttalion at Brantford, Ont., as a lieutenant, and was subsequently promoted to be captain, has been appointed adjutant of that unit. Capt. Tyrwhitt was a member of the School of Applied Science, class '15.

Lieut. FRANKLIN ROY MALCOLM, of Locust Hill, Ont., a student at the School of Applied Science, Toronto, has been appointed second lieutenant in the 25th Northumberland Fusiliers. He went to England with the second draft from the Overseas Training Company.

FRANK BARBER, A.M.Can.Soc.C.E., and R. O. WYNNE-ROBERTS, M.Can.Soc.C.E., consulting en-

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