addition to this it was desirable that a reconnaissance be made of the tributaries of Milk River as far east as Battle Creek.

The conditions to be confronted were these: The whole territory to be covered meant a distance to be travelled by trail of 214 miles from end to end. The distance by trail to cover the Milk River alone is about 150 miles and throughout all of this territory no definite information was available as to where gauging stations could be developed so that it was necessary to first of all make a reconnaissance trip over the whole territory, and it was also realized that to get complete discharge measurements on the Milk River, at sufficiently close intervals, would mean that the party would have to do nothing but travel continuously up and down the river and this would leave no time for the construction of permanent stations.

After due consideration of all these points it was decided that the best policy to adopt, for the best ultimate results, was one which would ensure the river being properly prepared for complete measurements in the future, and at the same time get as many stream measurements as possible during the season.

(This article will be concluded in the issue of November 10.h, 1910.)

## ORDERS OF THE RAILWAY COMMISSIONERS OF CANADA.

Copies of these orders may be secured from the Canadian Engineer for a small fee.

12020-October 20-Authorizing the C.P.R. Company to construct and operate three extensions of its existing spur across Rose Street, north of Dewdney Street, Regina, Sask.

operate three extensions of its existing spur across Rose Street, north of Dewdney Street, Regina, Sask. 12021-October 19-Approving change in location of the C.P.R. main line as now constructed between Elko and Wardner, B.C. 12022-Oct. 12-Authorizing the T. H. & B. R. Co., and the G.T.R. Co., to construct and operate a stub-track, or spur between Wentworth Street South and Victoria Avenue South, Hamilton, from the main lines of re-spective railways to and across the lines of and forming a junction with the tracks of the other. 12024-October 18-Authorizing the C.N.R. Company to construct its line of railway across seventy-three highways west of the Fourth Meridian. 12024-September 27-Amending Order No. 11278, dated July toth, 190, by adding the following after the words, "On the said plan 'A,"" at the end of first paragraph thereof: "Subject to the conditions that the Applicant Company shall make such changes in the bed of the creek as will permit the same uninterrupted flow of water- under the viaduct as existed prior to its construction, and shall, at all times, promptly remove any material caught by the piers which may be obstructing the flow of the stream."

stream." 12025-October 19-Authorizing the C.N.O.R. Company to construct its line of railway across the public road between Lots 194 and 196, Concession 1, Township of Chatham, County Argenteuil. 12026-October 19-Authorizing the C.N.O.R. Company to construct its lines and tracks across public road known as Mary Street, Be'leville, Outaria

Ontario. 12027—October 18—Authorizing the C.N.O.R. Company to construct its railway across public road known as Maria Street, James Street, John Street, Pinnacle Street, and Water Street, Belleville. 15028-9—October 20—Authorizing the Hydro-Electric Power Commission of Ontario to erect transmission wires across the track and wires of the of Ontario to erect transmission wires across the track and wires of the of cerect its telephone wires across the tracks and wires of the Pere Marquette Railway Company at Lot 19, Concession 2, Township of West-minster, County Middlesex, Ont. 12030—October 18—Au...orizing the Lethbridge Collieries, Limited, to lay a six-inch steel pipe under the track of the C.P.R. Company's Crow's Nest Branch, in the south-west quarter of Section 21, Township 9, Range 22, west of 4th Meridian.

Nest Branch, in the sou 22, west of 4th Meridian.

22, west of 4th Meridian. 12031-October 14-Authorizing the C.P.R. Company to carry what is known as Mimimo Cut-off, Township of Etobicoke. across Scarlett Road. Chadwick Avenue, Church Street, Dundas Street, Montgomerv Street, and two road allowances in Concession 5, also to raise grade of Dundas Street and of the tracks of the Toronto Suburban Electric Railway at Dundas Street

Street.
12022-3-October 10-Authorizing the C.N.O.R. Company to construct its railway across the public roads known as Front Street, and Church Street, city of Belleville.
12034-5-October 18-Authorizing the Kingston & Pembroke Rai'way Company to construct bridges Nos. 87.2 and 70.2 on its line of railway.
12076-October 13-Authorizing the C.N.O.R. Company to construct the proposed extension of its siding across Muskoka Road, Washago.

12037-October 13-Refusing application of Edward Bayly, Toronto, on behalf of Miss Ethel A. Bayly, re rate charged by the Ben Telephone Company for a telep.one installed in their house at 28 Ross Street,

1070n10. 12038-September 24-Refusing application of J. T. Hall, Yorkton, Sask., for a farm crossing over the G.T.P. Railway. 12039-September 23-Lismissing application of the Grain Growers' Association of Kenville, Man., complaint that the rate charged by the C.N.R. Company on shipments of grain on its Thunder Hill Branch are crossing and discriminatory.

Association of Kenville, Man., complaint that the rate charged by the C.N.R. Company on shipments of grain on its Thunder Hill Branch are excessive and discriminatory. 12040—September 6—Directing Vancouver, Victoria, & Eastern Railway to widen the dump on Oscar Street, Abbotsford, B.C., to 20 feet top and guarded by railings; and to construct a subway on Montrose Avenue, 20 feet clear in www.u, and to open the said avenue for traffic; the work to be finished on or before September 1st, 1917. 12041—September 1-Directing that, upon the corporation of city of Victoria providing for the removal of all trees on the south-west corner of the proposed crossing and undertaking that no obstruction to the view be allowed to be erected on the north-west side of the crossing, the Esqui-malt & Nanaimo Railway Company make the necessary changes in order to carry Wilson Street, Victoria, across its right-of-way, so as in all re-spects to comply with the Standard Regulations of the Board affecting high-way cossings, as amended May 4th, 1910. 12042—September 6—Directing the Vancouver, Victoria & Eastern Rail-way Company to construct a wooden bridge over its cutting where the same intersects Woodland Drive, Vancouver. 12043—September 6.—Directing the Vancouver, Victoria & Eastern Rail-way Company to construct, within six months from the date of this Order, a wooden bridge over its cutting where the same intersects Lakewood Drive, Vancouver, B.C. 12044—September 22—Resending Order No. 11654, dated September 134, 1910. 12045—September 22—Resending Order No. 11654, dated September 134, 1910. 12045—September 22—Resending Order No. 11654, dated September 134, 1910 poto, which authorized the C.P.R. Company to provide culverts over its right-of-way in the municipality of Montcalm, Man, at four dif-ferent points; and to provide proper approaches to the crossing of the railway where the same crosses the public highway on or adjoining River Lots 251 and 253. 12045—September 22—Rescinding Order No. 8914, December 15th, '1909, which wa

Railway Companies 12048-September 23-Rescinding Order No. 8914, December 15th, 1997, which was made upon the application of Wm. Bailey, of Zelma, Sask. 12049-September 22-Rescinding Order No. 11156, July 11th, 1910, which authorized the construction of the connection of the G.T.P. Branch Lines Company's Yorkton Branch with the C.N.R. at Canora, Sask. 12050-October 13-Directing that the crossing by the C.P.R. over Elizabeth Street, Toronto, be protected by a subway to be constructed within one year from the date of this Order. 12051-October 14-Authorizing the Essex Terminal Railway Company to cross, at rail level, with its tracks the tracks of the Windsor, Essex, and Lake Shore Railway Company, at Howard Avenue, in Windsor, Ontario. and La Ontario.

12052-October 7-Granting leave to the Bay of Quinte Railway Com-pany to move, at its own expense, its tracks from its yards at Napanee, Ontario.

Ontario. 12053-54—October 21—Authorizing the C.P.R. Company to use and operate the following bridges on the Prescott Branch of its line of rail-way: Bridges Nos. 1.9, 42.3, and 51.3; and on the Brockville Branch of its line of railway: Bridges Nos. 18.2, and 18.39, and bridge on Smart's Siding, Brockville Lo

Brockville Loop. 21055-October 21-Authorizing the Alberta Central Railway Company to cross, by means of an overhead bridge, the lines and tracks of the Calgary & Edmonton Branch of the C.P.R. Company at Red Deer, Alta. 12056-October 20-Authorizing the G.T.R. Company to construct an additional or passing track upon and across Division and Prince Edward Streets, Brighton, Ontario. 12057-October 20-Authorizing the C.N.O.R. Company to construct its railway across Kingston Road, Lot 33, Concession 1, Township of Sidney, County Hastings, Ontario.

County Hastings, Ontario.

Loost Plastings, Ontario. 12058-October 20-Amending Order No. 11288, July 25th, 1010, by strik-ing out the words, "and one mile east," in the fourth line of the operative part of the Order and adding thereto, before the words "approved and sanctioned," in the last line of the Order, the words "two miles east of Red Deer, as shown on the plan on file with the Board under File No. 14007 I" 14097.I.

12050-October 21-Authorizing the corporation of the town of Buck-ingham to lay a sewer pipe under the track of the C.P.R. Company where the same crosses Church Street, Buckingham, Quebec.

12060-October 21-Authorizing the G.T.R. Company to construct and operate a branch line of railway or siding to premises of the Canada Re-fining and Sme'ting Company Limited, Township South Orillia.

<sup>12061—October</sup> <sup>12—Directing</sup> that the G.T.R. Company install gates at the Sherman Avenue and Lottridge Street crossings, Hamilton, appoint-ing a watchman to operate same; also authorizing the G.T.R. to construct and operate the northerly track of the two additional tracks, authorized by Order No. 3370, to be constructed at these crossings.

12062-September 15-Directing the C.P.R. Company to construct an overhead bridge about 1,200 feet west of the present crossing at mileage 2.6, west of city limits of city of Lethbridge; and to construct at mileage 10.6, an overhead bridge.

12063- October 21-Authorizing the corporation of town of Brantford, Ontario, to lay a storm and sanitary sewer under the track of the T. H. & B. Rai'way Company on South Market Street, Brantford. Ontario

12c64-October 21-Authorizing the corporation of the town of Meaford, Ontario, to lay a water mair under the G.T.R. where the same intersects St. Vincent Street, Meaford, Ont.

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