CANADA IS BUILDING A GIANT FENCE BETWEEN ALBERTA AND BRITISH COLUMBIA

For seven years a hard piece of back-lot fencing has been going on in the Canadian Northwest, and the end of it is still several years off. Just such a piece of work was never undertaken before by any fence builders, kind of country and method of operation considered, and when it is fully completed a record will have been established.

It is a fence line—partly visible, like any good farm fence, and partly invisible, like the equator—between the provinces of Alberta and British Columbia, and its purpose is simply to mark off where each of these provinces begins and ends. To do that, however, involves an altogether unique and exceptional layout, for the 800 miles or more of interprovincial boundary runs over mountains and into long stretches of bush country and through deep wilderness woods, where any kind of a line is hard running. But the three governments, Dominion and two provincial, said to do it, and it is being done.

Purposes of Administration.

The neighbor provinces have never known precisely where the dividing line between them is or ought to be. As by law provided, the boundary follows the Rocky Mountains and the 120th meridian, which is a quite sufficient definition for school maps and guide books, but not for purposes of administration. An official interpretation of the boundary terms in 1913 made the watershed line of the mountains from south to north the real division, and in order to ascertain the location of such a line a full and thorough survey of the interprovincial border was undertaken in that same year.

Where running water along the mountain ridges divided, flowing on one side toward the Pacific Ocean and on the other side toward the Arctic or the Gulf of Mexico, was thus to be the imaginary fence line through the hill country, and an actual line was to be marked where possible, as in the wooded belts. These were the orders given the fence makers, the carrying out of which is proving to be a task if such unusual kind and proportions.

The reason for it all is that increasing settlement and development in parts of the border country make it necessary to know which province has administration rights at any particular point. Confusion has at times arisen over mining claims and farming lands, which could not be accurately located, all existing maps showing errors of sometimes two or three miles on one side or the other. To avoid further trouble on this score the entire boundary line, even across the mountains, is now being determined. There is to be no more uncertainty about these neighbors' lots.

The work began in the summer of 1913, a general plan of operations and an equal division of costs having been agreed upon by the three governments. Boundary commissioners were appointed in the persons of three experienced surveyors, who undertook first to mark the border line through the passes, following approximately the watershed, and then to carry it beyond the passes, over the hills and into the wilds, by photo-topographical surveys.

Concrete Monoliths.

The border line in the passes is established by a series of straight lines which approximate the true position of the watershed. Concrete monuments are built at favorable points on the watershed, and the lines between them are the boundary, care being taken so to place these monuments as to equalize, as nearly as possible, the area of land that the connecting lines may cut off.

Placing monuments on a boundary line corresponds to setting posts for a fence. It is considered a most important part of the work and is carried out with great thoroughness under extraordinary difficulties. The monuments are concrete monoliths three feet high above the surface and 2,700 pounds in weight, built solidly into the ground, not more than half a mile apart and each visible from the next nearest one. Brass name plates, bearing numbers and letters by which the respective passes have been designated, are bolted to each monument, one on the Alberta side and one on the British Columbia side. The boundary fence posts, thus placed and named, are there to stay.

Open to the Sky.

In the timbered sections of the boundary which are many and long, the finding of the watershed and the erection of monuments are almost dwarfed in point of physical effort by the work of cutting lines through the woods to connect up the monuments. These lines are cut so as to give a clear opening to the sky of six feet, which means a width of about fourteen feet on the ground, half on either side of the border. In many places there are miles upon miles of such forest vistas, for the cutting of which the survey party must always include experienced axemen.

Beyond the passes the watershed line along the main ridge is delineated photo-topographically. Vantage points are selected at the summits of the peaks or at other heights where commanding views may be had and to these high places camera and transit theodolite are carried, the climbing not infrequently involving some hard adventuring. The purpose is both to establish boundary monuments across the heights and to make topographical surveys extending a few miles on each side of the boundary. Precision in this work is secured by a process of triangulation, which explains why a transit outfit is taken even on the hardest climbs.

Mountain top monuments are rock cairns built up for identification purposes at the points selected for the survey. There is always abundant material for cairn building, and monumenting of this kind is done more quickly than that below. But the main feature of the work on the summits is the photographing of a series of views in directions to either side established by the use of the transit. When these photographs in due course are developed and printed they give the contours of the whole surrounding area and from them are prepared contour maps that will form part of the permanent boundary records.

Settled For All Time.

There will thus be a means of ascertaining at any future time the exact location of the interprovincial boundary. The maps, compiled from the survey data and printed at Ottawa for just such use, will show the natural watershed line along the mountain range, as photo-topographically defined, and in the passes a series of straight lines only approximately following the watershed, but clearly and definitely marked out. For the hilltop border line, that is to say, one will have to consult the map, which is drawn with due regard to the scale of previous township surveys, and for that on the lower levels there are half-mile monuments and skyline cuttings through the woods that anyone may see.

Though the work of border fence making is hard and the country sometimes desperately rough, surprisingly accurate results have been obtained by the Boundary Commission. Complete field notes are taken at every stage of the work and the preliminary calculations and observations, when the first attempt is made to find the line, are carefully checked up in the final surveys, records of which are registered with the three governments. A degree of precision not attainable in any other way is thus assured and Alberta and British Columbia will presently be able to distinguish their respective properties all the way from South to North with certainty and definiteness.

It is the stiffest piece of fencing yet undertaken in Canada, but persistence and genius are seeing it through. When it has been all done the survey maps will be ratified in Parliament and the boundary thus marked out will be officially adopted as the dividing line between the two provinces.

Giving the Totals For War Honors

A despatch from London says:—War honors published this week, Canadian names of which have already been cabled, constitute the final awards in respect of theatres of war where hostilities ceased at the signing of the armistice. The honors awarded were as follows:

Victoria Cross, 578; C.M.G., 2,136; D.S.O., 8,970, and M.C., 37,018.

The total number of officers and men serving was approximately six million, and the total honors were 254,158.

NIAGARA DECKED IN WINTER GARB

The exceptionally cold weather this winter has made the scenery around Niagara Falls a fairyland of crystal. This view shows two tourists clad in oilskins at the foot of the incline railway on the American side, where everything is coated with ice.

SIR JAMES GRANT CALLED BY DEATH

Last Survivor of First Parliament of Canada.

A despatch from Ottawa says:—Sir James Grant, the sole survivor of the first Parliament of Canada, died on Friday at 3.40 o'clock in St. Luke's Hospital. Sir James fell outside the Russell House and broke his hip on the 20th of last month, and since that time has been confined in St. Luke's Hospital. He had been rapidly losing strength during the last week.

Sir James Alexander Grant was born in Invernessshire, Scotland, on August 11, 1831, and was dsecended from an able and distinguished family. His grandfather was James Grant, advocate at Corrimony, among whose literary productions were essays on the Origin of Society and Thought on the Origin and Descent of the Gael.

Sir James' father was Dr. James Grant, who came to Canada from Edinburgh and practised for many years in Glengarry.

Sir James Grant was educated in Queen's and McGill Universities. He has practised medicine in Ottawa since his graduation in 1854 and attended several Governor-Generals and distinguished visitors.

He was president of the Ontario Medical Council in 1868, and later president of the Canadian Medical Association. He was elected vice-president of Department of Surgery at the International Medical Council in Philadelphia in 1876, and was an honorary member of the British Medical Association and the American Academy of Medicine, Fellow of the Geological Society of the Royal College of Physicians and the Royal College of Surgeons in London and Edinburgh and was president of the Royal Society of Canada in 1901. He was an honorary vice-president at the International Medical Congress of the World held at Washington in 1887. He also belonged to several societies in Italy.

In Queen's jubilee year he was awarded the K.C.M.G., the first Canadian physician to get that honor.

Bernstorff's Name on List Of German War Criminals

A despatch from Berlin says:—One of the most surprised men in Berlin was Count von Bernstorff, former Ambassador to the United States, who, it is said, is desired by the Allies for his alleged connection with Bolo Pasha. The Count, despite his surprise, declared that he was not afraid to face trial. He added that he was ready to go, if wanted, and that he might even put the Allies in a quandary if they attempted to prosecute him.

A man needs all his religion when he undertakes to teach a calf to drink from a bucket.

WAR MEMORIAL FOR CANADIANS

Great Museum at Ottawa to Hold Army Trophies.

A despatch from Ottawa says:—Canada's official war memorial will take the form of a museum, which presumably will be erected in Ottawa, in which will be housed the war trophies belonging to the Canadian Forces. At a meeting held here a resolution was adopted unanimously that there be built for this purpose "a monumental museum containing such other elements as may be necessary to give full expression to national feeling" and as an "expression of the sacrifice of the dead and the greatness of our national effort."

The architect for the memorial will be chosen in a competition open to Canadian architects and the working out of the project is placed in the hands of a commission composed of three delegates from each of the following bodies: The Great War Veterans' Association, The Royal Society of Canada, The Royal Architectural Institute of Canada, The Canadian Royal Academy, and the Town Planning Institute of Canada, and Chairman of the Advisory Arts Council.

The name of the Commission will be the "National Memorial Commission." Its members will serve without remuneration.

Mounties Leave on Arctic Trip.

A despatch from Dawson City, Yukon, says:—Seven men with five dog teams, comprising the Canadian Royal Mounted Police expedition into the Arctic wilderness, left Twelve Mile, the last post having telephone communication with this city, on its hundred-mile journey to Fort MacPherson, Rampart House and the Arctic whaling stations also will be visited. The party is due back in this city in March.

Near Nine Million People in Canada

A despatch from Ottawa says:—Canada's population is estimated by the Census Branch of the Trade and Commerce Department at 8,835,102. The Census Branch has based its estimate for the year 1919 on the known increases in population as shown by the census of 1901 and 1911. Such calculations have in the past proved to be approximately correct.

Some plants do not do well in glazed china pots. These pots are not porous and, although they have a drainage hole in the bottom, the soil does not dry out quickly, and some plants will not stand soil that is constantly wet. Usually shifting these subjects to the ordinary porous clay pots used by florists, and keeping them somewhat warmer for a short time, will revive and save them.

Weekly Market Report

Breadstuffs.

Toronto, Feb. 10.—Manitoba wheat—No. 1 Northern, 2.80; No. 2 Northern, $2.77; No. 3 Northern, $2.73, in store Fort William.

Manitoba oats— No. 2 C.W., 92⅝c; No. 3 C.W., 90⅝c; extra No. 1 feed, 90⅝c; No. 1 feed, 87⅛c; No. 2 feed, 85 1-3c, in store Fort William.

Manitoba barley—No. 3 C.W., $1.70⅝; No. 4 C.W., $1.40⅛c, in store Fort William.

American corn—No. 3 yellow, $1.91; No. 4 yellow, $1.88, track Toronto; prompt shipment.

Ontario oats— No. 3 white, 98c to $1.00, according to freights outside.

Ontario wheat—No. 1 Winter, per car lot, $2.00 to $2.01; No. 2 do., $1.97 to $2.03; No. 3 do, $1.93 to $1.94, f.o.b. shipping points, according to freights.

Ontario wheat—No. 1 Spring, $2.02, to $2.03; No. 2 Spring, $1.98 to $2.05; No. 3 Spring, $1.95 to $2.01, f.o.b. shipping points according to freights

Peas—No. 2, $3.00.

Barley—Malting, $1.80 to $1.82, according to freights outside.

Buckwheat—$1.45 to $1.48, according to freights outside.

Rye—No. 3, $1.77 to $1.80, according to freights outside.

Manitoba flour—Government standard, $13.25, Toronto.

Ontario flour—Government standard, $10.80 to $11.00. Montreal: $11.00 in Toronto, in jute bags. Prompt shipment.

Millfeed — Car lots — Delivered Montreal freight, bags included—Bran, per ton, $45; shorts, per ton, $52; good feed flour, $3.60 to $3.75.

Hay—No. 1, per ton, $27 to $28; mixed, per ton, $25, track, Toronto.

Straw—Car lots, per ton, $16 to $17 track, Toronto.

Country Produce—Wholesale.

Butter—Dairy, tubs and rolls, 43 to 44c; prints, 48 to 50c. Creamery, fresh made solids, 60 to 61c; prints, 62 to 63c.

Eggs—Held, 54 to 55c; new laid, 72 to 73c.

Dressed poultry—Spring chickens, 32 to 35c; roosters, 25c; fowl, 25 to 34c; geese, 28 to 30c; ducklings, 32 to 35c; turkeys, 45 to 50c; squabs, doz., $4.50.

Live poultry—Spring chickens, 20 to 25c; roosters, 20c; fowl, 25 to 32c; geese, 22 to 30c; ducklings, 22c; turkeys, 27 to 40c.

Cheese—New, large, 31½ to 32c; twins, 32 to 32½c; triplets, 33 to 33½c; Stilton, 34 to 35c; old, large, 33½ to 34c; do., twins, 34 to 34½c.

Beans—Canadian, hand-picked, bushel, $5.25 to $5.75; primes, $4.25 to $4.75; Japans, $5.50 to $5.75; California Limas, 17½ to 18½c; Madagascar Limas, lb., 15c; Japan Limas, lb., 11c.

Honey—Extracted clover, 5-lb. tins, 27 to 28c; 10-lb. tins, 25 to 26c; 60-lb. tins, 25c; buckwheat, 60-lb. tins, 18 to 20c; comb, 16-oz., $6.00 to $6.50 doz.; 10-oz., $4.25 to $4.50 doz.

Maple products—Syrup, per imperial gal., $4.25; per 5 imperial gals., $4.00; sugar, lb., 29 to 30c.

Provisions—Wholesale.

Smoked meats—Hams, medium, 34 to 36c; do., heavy, 29 to 30c; cooked, 47 to 50c; rolls, 30 to 31c; breakfast bacon, 40 to 44c; backs, plain, 49 to 51c; boneless, 53 to 55c.

Cured meats—Long clear bacon, 31 to 32c; clear bellies, 30 to 31c.

Lard—Pure, tierces, 31 to 31½c; tubs, 31½ to 32c; pails, 31¾ to 32¼c; prints, 32 to 32½c. Compound tierces, 28½ to 29c; tubs, 29 to 29½c; pails, 29¼ to 29¾c; prints, 30½ to 31c.

Montreal Markets.

Montreal, Feb. 10.—Flour—Manitoba, new standard grade, $13.25 to $13.50. Rolled oats—Bags, 90 lbs., $5.25. Bran—$45.25. Shorts—$52.25. Hay—No. 2, per ton, carlots, $26. Cheese—Finest Easterns, 30c to 30½c. Butter—Choicest creamery, 65c to 65½c; do. seconds, 55c to 60c. Eggs—Fresh, 75c to 80c; do. selected, 60c to 62c; do. No. 1 stock, 50c to 52c. Potatoes—Per bag, carlots, $3.50 to $4. Dressed hogs—Abattoir killed, $25 to $26. Lard—Pure, wood pails, 20 lbs., net, 29c to 30½c.

Live Stock Markets.

Toronto, Feb. 10.—Choice heavy steers, $13.75 to $14.75; good heavy steers, $12.50 to $13; butchers' cattle, choice, $11.50 to $12.25; do., good, $11 to $11.25 do., medium, $9.50 to $10; do., common, $7.25 to $7.75; bulls, choice, $10.50 to $11; do., medium, $9.50 to $10; do., rough, $6.75 to $7.00; butcher cows, choice, $10.50 to $11; do., good, $9.50 to $10; do., medium, $8 to $8.50; do., common, $7 to $7.25; stockers, $7.50 to $10; feeders, $10 to $11; canners and cutters, $5.25 to $6.50; milkers, good to choice, $110 to $165; do., common and medium, $65 to $75; springers, $90 to $165; sheep, $6.50 to $11; lambs, per cwt., $14 to $19; calves, good to choice, $18 to $21; hogs, fed and watered, $19.50; do., weighed off cars, $19.75; do., f.o.b., $18.50; do., do., to farmers, $18.25.

Montreal, Feb. 10.—Butcher steers, medium, $10.75 to $11.75; common, $8 to $10.50; butcher heifers, medium, $9.50 to $10.75; common $7.50 to $9.50; butcher cows, medium, $7 to $9.50; canners, $5.50; cutters, $5.75 to $6.50; butcher bulls, common, $7 to $9.50. Good veal, $17 to $19; medium, $15 to $17; grass, $7.50 to $8.50. Ewes, $9 to $12; lambs, good, $16.50; common, $15.50 to $16.50. Hogs, off car weights, selects, $20.50 to $21; lights, $18.50 to $21; sows, $17.

GRAVE CONDITIONS IN HALF OF EUROPE

British Director of Relief Tells of Desperate Needs.

A despatch from London says:—In his report to the British Government warning that conditions over half of Europe are so tragic as to threaten consequences equal in gravity to the war itself, unless immediately relieved, Sir William Coode, British Director of Relief, thus estimates some of the principal necessities for relief in 1920: Armenia, 6,000 tons of flour a month; Georgia and Azerbudjan, 15,000 tons of flour; Poland, 500,000 tons of cereals; Czecho-Slovakia, 350,000 tons of cereals and 400,000 tons of potatoes; Austria, 632,000 tons of foodstuffs for the year ending September, 1920, coal, 8,700,000 tons and 950,000 tons of raw material. Besides Hungary needs 380,000 tons of wheat and rye, 1,433,000 tons of barley, maize and oats, 53,000 tons of meat, and 63,000 tons of sugar.

During his active career as a professional pianist, Paderewski, the present Premier of Poland, could play from memory more than 500 compositions.

BOYS — THIS WONDERFUL LIQUID PISTOL GIVEN!

Looks like a real automatic. Great fun! This dandy, repeating, liquid pistol absolutely FREE by selling only $3.00 worth of our snap fasteners. Every woman buys them. You'll sell them in jig time. Just send us a postal and we'll send you the goods. Sell them, return us the money and the pistol is yours. Write NOW.

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ONTARIO HOUSE OPENS MARCH 9

Fifteenth Legislature Promises to be a Notable One.

A despatch from Toronto says:—Tuesday, March 9, has been definitely decided upon by the Ontario Government as the date for the opening of the Legislature, according to an announcement by Premier E. C. Drury. Between now and that date the one big task at the Parliament Buildings will be to get the machinery oiled and everything in readiness for what will be the first session of the fifteenth Legislature, and which promises to be a notable one.

That there is much to be done before the second Tuesday in March is agreed on all sides. The Government intends concentrating at this, its first session, on improving legislation dealing with education, good roads, reforestation and fire protection. While the good roads policy has been elucidated in considerable detail, proposed changes in the education and reforestation and fire protection laws have not been outlined except in a general way, and the bills will have to be drafted by the Government and its legal advisers.

Then, too, the Government will have to prepare the way for bringing in legislation to carry out certain changes in the Civil Service administration, that have been foreshadowed in addresses which the Ministers have made in recent weeks. A pension bill to enable many long-service employees to retire is receiving the consideration of the Government, and will likely be introduced. The estimates will also have to be gone over.

"The life of a husbandman of all others, is the most delectable, and has ever been the most favorite occupation of my life."—George Washington.

BRINGING UP FATHER