

true area of the fractional quarter sections five, ten, or twenty years after the survey.

The settler receiving a patent for a fractional quarter section from the government should receive patent for all the land in the quarter section at that date.

The only positive way of doing this would be to have the water areas surveyed at the time of granting the patent. This could very easily be done if Dominion land surveyors were appointed as homestead inspectors at each land office. The survey of the quarter section could then be made at the time of inspecting the improvements at no additional cost.

During a succession of wet years the settlers want deductions made from the areas of their quarters on account of water. During a succession of dry years they want additions made to the areas. The one for reduction of taxes and amount due on their pre-emptions and the other so as to have more land to sell. As these cycles occur periodically, it is quite possible that a lake might be shown on the township plan at the time of original traverse, to disappear with the second investigation, only to appear again during the third or wet cycle. If investigated during the next dry year, it would again appear as dry land.

To guard against this seeming discrepancy in our surveys, no body of water not previously traversed should be shown as water unless it has been continuously flooded for at least five years, or unless it is apparent that the bed is worthless.

No lake should be shown as dry land unless it has been dry for at least five years. A case might arise of a boundary lake investigated in one township during a dry year and called Class 1, and investigated in the adjacent township in a wet year and called water. The township plans would then show the same feature as dry land in one township and as water in another township.

Following is a partial list of Canadian patents recently issued through the agency of Ridout & Maybee, Toronto: Alfred Matthews, suction blower; Eduardo Murphy and Americo Anzulovich, earth boring machine; Abel Nordstrom and Carlos A. Oberg, drying apparatus; Henry F. Brown, apparatus for cooling, humidifying and filtering air; John W. George, rotary engine; Sidney C. Vinen and Chas. Johnston, centrifugal concrete pole machine; Acme Stamping & Tool Works, cable clamps.

Advocates of the deformed reinforcing bar have ample field for publicity efforts among the members of the firm who recently addressed to the Truscon Steel Co. the following letter:—"Gentlemen—We received order of steel reinforcing bars. We find you sent 70 pieces $\frac{1}{2}$ -in. x 32-ft. round rib straight bars. We wanted these to be smooth round bars so they would, after being coated, slip in concrete as it expanded or contracted. Please ship 70 pieces of $\frac{1}{2}$ -in. x 32-ft. of smooth round bars and advise us where to return the above rib bars. We hope you will arrange to exchange as we do not wish to blacksmith out the ribs to smooth out bars."—Engineering News Record, of New York.

Colonel Yate, in the British House of Commons, last month, asked the Secretary of State for India what steps the Government of India proposes to take to inaugurate an early investigation into all possible sources of water power in India, with a view to a thorough hydrographic survey of the whole of that country with regard to electric power. The Secretary replied as follows:—"The Government of India propose to constitute a small committee of electrical, mechanical and irrigation experts to visit the different provinces and, after conference with the local officers, to examine promising sites and to report whether a detailed survey is worth undertaking. The local governments are being asked to collect information, both physical and commercial, in advance, in order to facilitate the committee's investigations."

TRANSPORTATION DURING THE WAR

"TRANSPORTATION burdens due to the war rendered it necessary to depart from the usual practice by which railways in Canada were operated as single and independent units," says a pamphlet entitled "Canada's War Effort, 1914-18," issued by the Director of Public Information, Ottawa. "The first step taken in that direction was an amendment to the Railway Act during the session of 1915-16, when, on the request of the Board of Railway Commissioners, the board was empowered to take traffic in a congested grain area from the line to which it was tributary, and hand it over to other lines at any intermediate points at which a transfer could or should be made.

"The power thus conferred on the board has been used to a large extent. It has enabled the large grain production of the West to be marketed practically without loss, through the diversion of traffic to the route, irrespective of its ownership, which at the time was least congested; and it has enabled the transportation of grain and flour to Great Britain and the continent to be maintained at the greatest possible speed. Thousands of cars of grain grown in Canadian Northern prairie territory have been thus diverted from congested Canadian Northern areas over the lines of the Canadian Pacific and Grand Trunk Railways. This practice, commencing with wheat, was extended to coal and then to the movement of other bulk commodities. In general, wherever it would afford quicker transportation, re-routing has been carried out. The result is that the Canadian lines, insofar as actual transportation is concerned, have been treated as a single unit and worked for the purpose of obtaining the best results.

"During the past winter a specially heavy burden was laid on Canadian transportation. The entry of the United States into the war created great industrial and agricultural activity, which, together with the movement of troops, caused the American railway lines and terminals to become blocked. In the meantime, the shipment of foodstuffs could not be interrupted. A special programme was, therefore, put into effect to co-ordinate, to the fullest extent possible, the whole wheat movement from the North-West, and as a result wheat and flour were carried for overseas transportation by the Canadian lines in such a way that the whole of the transportation desired was effected without delay to the ocean carriers.

"In order to provide a freer and more perfect co-ordination of the systems, the Canadian Railway Association for National Defence, now termed the Canadian Railway War Board, was formed. The activities of the War Board have materially assisted the railways to cope with the problems created by the war.

"The government has helped to bring about these results, particularly by the purchase of 260 locomotive engines of various types and about 17,000 freight cars, a number of which are leased by the government to the systems that have not been in position to obtain satisfactory deliveries for their requirements."

Under the title of "Some Excavating!", a contemporary tells the following Munchausen tale, showing the quality of the mud in Flanders: "A soldier walking along a road noticed a hat, which he attempted to kick out of the mud. What was his surprise to find a head under it, and to hear a voice calling for help. When the man was extricated, he said: 'I was on horseback.' So together they proceeded to dig out the horse. The horse's mouth was found to be full of hay taken from a wagon which had sunk still farther down!"