

121,544,696 bushels, or 3,241,218 tons of wheat. We raised this season 279,090 tons of wheat or nearly one-twelfth of the imports; in less than a dozen years we will raise the whole amount. The immediate effect will be to hasten Imperial Federation—to compel the Imperial Government to raise a Tariff Revenue instead of the one-sided Free Trade, whose only effects have been to increase the pauperism of the British Isles, to restrict her colonial trade and development and to act injuriously on all her interests.

The folly of supposing that all rail routes will transport agricultural freight for a distance of 1,500 miles cheaper than by water is abundantly manifest and is one of those axioms known to every mechanic—based on the fact that what is gained in speed is lost in power—so that no acceleration of speed or modification of machinery will increase the capacity for transport beyond the mechanical power of the railway, which is based on time. Taking the frontier canals, the St. Lawrence, Welland and Michigan canals, and the lakes, the voyage to Montreal can be made in 13 days. Vessels of 2,000 tons burthen can get as far as Kingston, but must there discharge cargo into lighters or barges of 350 tons. This state of affairs is due to the enlargement of the Welland canal. Previously to that event the frontier canals were governed by the existing size of the Welland canal, and have been so for forty years. The good people of Montreal, through their Board of Trade, propose that the people of Canada should expend \$12,000,000 deepening existing canals to fourteen feet, to enable vessels passing the Welland canal with full cargoes to meet the ocean steamships below the city. To this there are objections of a serious character—in detail—but which may be summed up in the one word, *Time*, which means in this case Power, and every other attribute which governs and defines the capacity of a navigable channel—its liability to storms, fogs, and natural phenomena where large sheets of water are to be overpassed; the difficulty of navigating large vessels through comparatively narrow channels; and the greater difficulty arising from the liability of the channel enlarged or deepened finding natural conditions more readily than accepting those artificially provided for it. The time occupied in sending a cargo from Prince Arthur's Landing to Montreal by water, 1,285 miles, via lakes, rivers and canals, is 312 hours. This would give for a season of 214 days, from 15th April to 15th November in each year, equal to 16 trips, viz., 8 with cargo and 8 returning empty. This would be equal to 16,000 tons or 6,000,000 bushels. So that the surplus production of all kinds of grain at Winnipeg would require two steam-vessels of 2,000 tons burthen to remove it to the seaboard in one year.

Economic requirements will limit the season as a general rule to 76 days, viz.: September, 30 days; October, 31, November 15. The holding over of the surplus crop entails loss to producer and consumer, and this condition would simply involve the increase of steam plant three times.

In this line therefore time, involving increased expense of fully 200 per cent., would be increased by simply observing economic conditions alone—that is, to allow the producers full value for crop. The increase of machinery means increase of expenses—and the remedy to be sought is in the direction of distance. One hundred and eighty miles south from St. Mary's River the French River discharges the waters of a catchment basin of 9,000 square miles in area. It may be described as two large reservoirs—the first, Lake Tamangamingue, is 350 square miles; and the second, Lake Nippissingue, 560 miles. The first or upper lake is connected with the lower by Sturgeon River, and the French River discharges the waters of both into Lake Huron. A summit of three miles has to be passed over, its highest point being 25 feet above the level of the lower lake. At this point the waters of Upper Trout Lake are those of the Mattawan river, which, after a course of 40 miles falls into the Ottawa 304 miles above Montreal. The advocates of this line of navigation point to the advantages it would have over every other means of rapid transit for freight from the point of concentration at Winnipeg. Taking Montreal as starting point, where the ocean steamer would meet the cargoes from the ship canals, the distances are: Montreal to junction of Mattawan river, via the Ottawa, 304 miles; Mattawan, 43 miles; summit, 3 miles; Lake Nippissingue, 30 miles; French river to Lake Huron, 50 miles; total, 430 miles; from mouth of French river to foot of Lake Superior, 181 miles; thence to Prince Arthur's landing, 260 miles; total 441 miles, or gross distance to Montreal 875 miles, as compared with the route from Prince Arthur to that city, 1280 miles, by way of great lakes and frontier canals, leaving a difference of 405 miles in favor of the Ottawa route. Including lockage the voyage from Prince Arthur to Montreal is generally made at 4 miles per hour, or a difference in *time* in favor of Ottawa route of 108 hours—four days and one half saving, or nine days per round trip. This is giving the longer route the advantage by at least 50 per cent. in length of voyage. From Port Arthur to foot of Lake Superior the distance is 260 miles of lake navigation, liable to delay by fogs and other impediments. Of course this is common to both routes, but the longer Montreal has also to contend

with fogs, etc., on Lake Huron for 260 miles, Lake St. Clair 20 miles of dangerous shallows, Lake Erie 250 miles, and Lake Ontario 180 miles, equal to 710 miles of dangerous navigation. The navigation of the Ottawa would be from the foot of Lake Superior completely land-locked, its channel to French river being sheltered by islands. At that point it turns sharply to the east for 50 miles, when it issues from Lake Nipissing. Over 30 miles of that lake brings cargo to summit level, the lake being 50 feet above Lake Huron. During the season of 312 days the longer route makes 7 round trips, the shorter 15 (fifteen) round trips. It is not likely that any other route can be found to offer similar advantages—not only are or can be every advantage, practical or theoretical, found in the shorter line. It has been shown that it is beyond the power of railways to touch the quantities of freight which will develop from the resources of the North-West. But a few years will tax the genius of the speculator to the utmost powers of mechanical skill to accommodate it.

(To be continued.)

A Budget from Toronto.

A MILITIAMAN'S PRIVILEGES IN ONTARIO—A LARGE PARADE OF THE QUEEN'S OWN—THEIR MILITARY TOURNAMENT—THE GRENADIERS AT WORD—MISCELLANEOUS NOTES OF INTEREST.

SERGEANT-MAJOR MUNRO, of "C" company, I.S.C., has been appointed to the position of public school drill instructor at Hamilton. He has also been appointed Sergt.-Major and drill instructor to the 13th Battalion, Sergt.-Major Woodhouse, the late sergt.-major, retaining the rank of first-class staff-sergt.

Upper Canada College boasts of a fine body of cadets, including a band. Last year a drill instructor was detailed from "C" company; this year, however, being short handed no instructor has been told off, much to the boys' regret, consequently the corps it may be said is hibernating.

Chas. Kingsley says: "Never lose an opportunity of seeing anything beautiful. * * * Therefore I said that picture galleries should be the townsman's paradise of refreshment." Whether he would include Cycloramas or not I don't know, but to every militiaman, great or small, I would say, "when in Toronto go and see the Battle of Sedan."

A correspondent asks me "what, if any, privileges does a militiaman enjoy in Ontario?" Officers, n.c.o. and men of corps of *volunteers* are exempt from serving as constables and as jurymen; n. c. o. and privates of the volunteer force certified to as being *efficient* volunteers and who are not assessed for property shall not be called upon to perform statute labor or to commute therefor. Officers, n. c. o. and men, being in proper staff or regimental uniform, and their horses (but not when passing in any hired or private vehicle, unless when on duty) are exempt from toll on any road, wharf, landing place or bridge in Ontario. This probably covers all the privileges. Perhaps some correspondent will inform us, through your columns, of the privileges enjoyed by the militia in other provinces.

While on the question of militia privileges, I would like to see the following added to the list, but which are of course provincial matters:—Officers, n. c. o. and men of militia, on *actual* military service, have the power to make, so far as their personal estate is concerned, a nuncupative will—that is to say, a verbal will—as distinguished from a written one, declared before two or three witnesses; and that no probate fees, etc., shall be charged for proving a will of an officer or soldier who is killed or dies while on actual service.

Col. H. J. Grasett, of the Royal Grenadiers, has left his single state, having been married in England to Miss Alice Parke, daughter of the late William Parke, of South Kensington. The gallant colonel and his bride, who have our best wishes, are expected to arrive in Toronto about 1st November, and will be welcomed at the Union by the "Grens."

About twenty-five n.c.o.'s. of the Grenadiers are attending drills and lectures given by Capt. and Adjutant Manley; the recruits are being drilled by Sergt. Belan, "C" company, R. S. I., and the ambulance corps are lectured to by Surgeon King.

I am glad to read in the GAZETTE of the interest taken by the citizens of Belleville in their militia. This is a striking contrast to the conduct of a certain *militia clothing contractor* who, when one of his men was ordered to camp, gave him the option of being discharged or going to camp. The gunner, for he was a gunner, chose the latter and has been since looking for employment—which he has now found.

The Queen's Own paraded 466 strong on 19th inst. under command of Lieut.-Col. Allan. The regiment marched from the armory to Moss Park Rink, where they were put through light infantry drill. Though this was the first drill of the kind this season, the movements were well executed, all ranks taking the greatest interest, and it is the evident intention of the "boys" to give a good account of themselves at the inspection which takes place on the afternoon of the 5th November, Col. Otter, D. A. G. being the inspecting officer. After the parade the colonel expressed himself as well satisfied and complimented the men on their neat appearance.

After the parade of the Q.O.R., Capt. Thomson, the newly appointed captain of "A" company, entertained the members of his command at the Hub. Col. Allan, Major Hamilton and Capt. Macdonald honored the gathering with their presence and delivered short addresses, congratulating the company upon having been fortunate enough to secure Capt. Thomson as their commanding officer. A pleasant evening was spent in song and speech.

There was a small parade of the Royal Grenadiers on 20th inst., under Major Dawson, owing to the wet weather. The smallness of the drill shcd was again quite apparent, even with a comparatively small number. At the close of the drill, which consisted of the movements to be practised at inspection, Major Dawson stated that the inspection would take place on Nov. 5th, and the annual rifle match on Oct. 29th. The annual theatrical entertainment of the regiment takes place on October 31st and November 1st and 2nd, and tickets have been handed out to the members of the regiment to sell. After the parade Capt Bruce of "G" company entertained his men at supper at the Criterion. Everyone enjoyed himself immensely.

The Imperial authorities have issued a new edition of "Musketry Instructions, 1887." Although for the Martini-Henry it contained a lot of new matter of interest to our militia rifle shots.