

cer Park at Point Levis, consisting of a number of wooden huts and other out-buildings, furnished and totally unprotected, the Board think it desirable that they should be occupied by caretakers, and that allowances for two stoves in winter and midwinter should be granted, and two cooking allowances all the year round, with a like proportion of coal oil for lighting.

The same caretakers exercising a general supervision over the fortifications and the trees on the government property in the neighbourhood.

With regard to the Four Martello Towers, extending from the St. Lawrence to the St. Charles Rivers, on the west of the citadel, and facing the Plains of Abraham, the Board consider that they need not be occupied by military detachments or caretakers from B battery, but should be occasionally visited by an officer under the orders of the Commandant of Artillery. At present the board find only one of them occupied, and that one by a civilian and his family, to whom no allowances of any kind are given; while the Board are informed that in the estimates of fuel wood this year, upwards of forty two cords of wood are included for these towers, and which they considered quite unnecessary, unless occupied by detachments of troops.

The Board were further informed that fifty one cords of wood were estimated for the water-pipes in the citadel, but they only were shown four such pipes. One of which was in a staff-sergeant's room and three others in a model room. These pipes convey water from the roof to tanks below, to provide for the exigencies of a siege. The Board do not think it necessary to allow extra fuel for such purpose at present.

Subject to the above mentioned considerations, the Board recommend the scale of allowances of fuel and light for B battery at Quebec, as detailed in the annexed scale of fuel and light for that garrison.

MONTREAL.

November 17th, 1873.

The Board having proceeded from Quebec to Montreal, and having inspected St. Helen's Island Barracks, report that they found occupied by the detachment of B. Battery, School of Gunnery, the following quarters viz:

- 1 Officer's quarters.
- 1 Officer's kitchen.
- 1 Orderly room.
- 1 Sergeant's room.
- 3 Barrack rooms, capable of containing 16 men each, thus:
  - 1 containing 10 men.
  - 1 do 6 do.
  - 1 used as a dining hall.
- 2 Married men's quarters. (two small rooms for each man).
- 1 Soldier's kitchen.
- 1 Canteen.
- 1 Small arm armourer's quarters. (attached to B. battery for subsistence).

The Board were further informed that a detached guard house was occasionally used as a "lock-up" when necessary to confine unruly prisoners, and for which the allowance of fuel might be required; but no permanent guard was mounted there.

The Board have not therefore made any stated appropriation for this "lock up," but recommend that when used, the fuel for one stove be allowed, upon special certificate of the officer commanding the detachment, and approved by the Deputy Adjutant General commanding the district.

The Board recommend that the allowance of fuel and light, as detailed in the scale attached to this report, shall be established for the detachment at St. Helen's Island, furnished by B. battery, so long as the detachment is considered necessary and remain at its present strength.

The Board do not deem it necessary to recommend fuel and light for vacant rooms, morely as married men's quarters: for they consider such rooms do not require permanent and continuous heating or lighting for their mere preservation, except under the direction of a professional engineer, as before stated with reference to the numerous casemates and other vacant rooms at Quebec: but in the absence of any authority for married men's accommodation with separate quarters in the barracks, the Board would suggest that a limited per centage of married men be recognized on the establishment of both A. and B. batteries, for the purpose of washing and repairing the single men's clothing.

When such a per centage shall be established by authority from the head quarters of the Militia Department, the Board would recommend the same allowances of fuel and light for such quarters as are allowed to sergeants' rooms, for the number of stoves actually required.

The Board find at St. Helen's Island a small arm armourer detached from the corps of small arm armourers in England, and now under the orders of the store department in Ottawa, but attached to B. battery for pay and allowances. As this man is not on the effective strength of B. battery, the Board do not hold him to be subject to the regulations at present under consideration, and therefore do not include his quarters with those of the School of Gunnery.

If, however, he should be transferred as an armourer to the School of Gunnery, the Board recommend his allowance of fuel and light to be the same as that for a staff-sergeant of the battery.

The same remarks applies to the small arm armourer at Quebec.

The Board find, by the Imperial Regulations on Fuel and Light, that in Montreal and Quebec, all contracts for fuel wood were to be made in French measurement, viz. — "The cord to consist of 8 French feet long, 4 French feet high, 3 English feet wide and is also to be issued and accounted for by the same measure." This appears to be in English measurement, about 8 feet 8 inches long, 4 feet 4 inches high, and 3 feet wide. Such measurement being one eighth less than an English cord, the Board, in assimilating the issues of fuel light and in Ontario and Quebec Provinces, have made their recommendation for both Provinces on the English measurement of a cord of wood, viz. — 8 English feet long, 4 English feet high, and 4 English feet wide; and are of opinion that the issues made in Quebec and Montreal should be supplemented by such quantities as will make the number of rations of wood in French measurement equivalent to the same number of rations of wood in English measurement.

The "scale" of allowances, attached hereto, of fuel and light, for St. Helen's Island, with the exception of the ablution house, are recommended by the Board on the supposition that the detachment from B Battery will not exceed one officer, one sergeant and thirty two non commissioned officers and men—the barrack rooms being adapted to hold 16 men each.

The ablution room allowances to remain the same at all times while the barracks are occupied by troops.

The Board do not deem it necessary to recommend fuel and light for an orderly room for so small a force as that in St. Helen's Island.

The Board do not deem it necessary to recommend fuel and light for a barrack room to be used as a dining hall for the men, as at present there being no authority for such an appropriation in the Imperial service, nor is it the usual custom to do so.

The Board do not deem it necessary to recommend fuel and light for a canteen under any circumstances, as these institutions should be self supporting.

In view of the increased and increasing price of fuel wood, the Board think that a more economical method of heating the barracks and quarters might be found in substituting self feeding coal stoves for the old wooden stoves, and allowing an equivalent in coal, according to the relative consumption of the two kinds of fuel, based upon the scale fuel wood allowances already recommended, and taken from the Imperial regulations.

The Board would recommend such equivalent in coal not to exceed twelve pounds of best hard coal to one inch running measure of an English cord of wood, as a single ration.

If new barracks were being erected, it might be an advantage to build them with apparatus for heating with steam, but the old barracks and buildings handed over to the Dominion are not now adapted to this mode of heating, and the expense of making the necessary alterations would be very great.

Upon a calculation that one ton of 2,000lbs. of hard coal is equivalent in time of burning to about one cord and three quarters of the best wood. And that such coal can now be purchased for \$7.50 a ton of 2,000lbs. while the price of wood ranges from \$6 to \$3 a cord, with a probability of this price increasing, the Board consider that so great a saving in the price of fuel would be effected in one year, by the substitution of coal for wood, as would cover the cost of purchasing the coal stoves required; and in each subsequent year there would be a direct saving of that amount annually. And the Board also believe that the barracks and quarters would be more uniformly heated thereby.

The Board beg further to suggest that if a District Quartermaster were appointed at Kingston and Quebec, as was formerly the case, this officer could act as a supply officer to the force on permanent duty at those stations, and be likewise available for the care of stores and other Government property at the head quarters of the districts not under the immediate charge of the Artillery. He could also be responsible for the proper issue and receipt of camp equipage when required for annual drills, and his salary would amount to but a small percentage on the annual expenditure under those heads; while the possible reduction in expenditure of supplies and the safety and preservation of the public property in his charge, would amount to a large percentage on the sum now expended, and on the value of property lost or damaged for want of the necessary supervision.

- S. P. JARVIS, Lt. Col.  
President.
- W. H. JACKSON, Lt. Col. Act.  
D.A.G., M.D. No. 4.
- L. A. CASAULT, Lt. Col.  
D.A.G., Mil. Dist. No. 7.

KINGSTON, Dec. 12th, 1873.

(To be continued.)