

with which they have joined some of the Volunteer Corps shews this to be so. At the same time, as may be inferred from my preceding answer, I think it would be highly injudicious that they should be taken away from the line of canal as Volunteers.

Question. 7.—What is the nature of the Chippewa Creek? What description of boats are generally used upon it? What is the nature of the mouth of the creek? and could gun-boats go in and out easily?

Answer.—The Chippewa Creek is a sluggish stream; its extreme level is not varied more than 3 feet by the spring freshets, or strong winds producing a great flow down the Niagara River, which causes the Chippewa to rise. Its depth from the mouth to the entrance of the canal at Port Robinson, is 16 feet and upwards.

Across the mouth of the creek, there is a bar, with but from 7 to 9 feet of water. The navigation entrance to the creek is by an artificial cut, through which large steamers easily pass, drawing 10 feet of water, and there would be no difficulty of gun boats passing in and out of it easily.

Question 8.—What is the shortest time in which a vessel of the largest size that the locks of the canal will admit, can be passed from lake to lake.

Answer.—From 10 to 12 hours.

The length of the Welland Canal, from its extreme north end at Lake Ontario, to its extreme south end at Lake Erie, is ...				27½ Miles.
The length from Port Dalhousie to "The Junction" is ...				20 "
The length of the Feeder from "The Junction" lock to the head of the canal at Dunnville, is ...				21 "

The navigation by the Feeder from lake to lake passes vessels drawing 8½ feet water, 26¼ feet breadth of beam, and 140 feet long.

The length of the canal from Port Dalhousie to the Grand River, <i>via</i> the Feeder and Broad Creek, or Port Maitland lock, is ...				38 Miles.
From the mouth of the canal at the Grand River to Dunnville, <i>via</i> the lock at Port Maitland, and the canal, it is ...				6½ "
Height of the canal above lake Ontario, is ...				328½ Feet.
Same above Lake Erie ...				6 "

Vessels pass through the entire length of the main canal, from Dalhousie to Colborne, drawing 10 feet of water, 140 to 141 feet long, 26¼ feet beam.

From Dalhousie to St. Catharine's, the limits of the dimensions of vessels are 10 feet water, 179 feet long, and 44 feet beam.

Vessels can pass, from Colborne to Allanburgh, 200 feet long, 44 feet beam, 10 feet draught of water (with present height of Lake Erie, drawing 12 feet) a distance of 14¾ miles.

Vessels can pass through the Port Maitland lock, 163 feet long, 44 feet beam, and 10 feet draught of water.

I have, &c.,
(Signed) S. D. WOODRUFF,
Superintendent.

To W. Crossman, Esq.,
Captain, Royal Engineers, Secretary.