the bottom of the lake from Kingston nearly to Toronto, is full of such brines. Two borings at Kingston gave me waters holding in 1000 parts 52.25 and 13.83 of solid matters. At Hallowell, on the Bay of Quinté, two wells for salt-making exist, which give 68.64 and 36.08 of saline matters. At Whitby is a copious saline spring, which gave 46.30 parts. At Ancaster, near Hamilton, another old salt well, probably getting its brine from the underlying Trenton, gave me 36.69 of salts, while another locality at St. Catherines, where salt-wells were once bored down into the Hudson River or Lorraine shales which overlie the Trenton, gave three brines with 30.15, 36.81 and 50.60 parts of salts. So you see the whole north and north-west side of the lake is bordered and underlaid by soils charged with the salts of an ancient ocean, and doubtless there are many points where fish could find the saline matter which they may need. The ocean waters do not contain more than about 35 parts in 1,000 of salts, and are therefore less strong than some of those which we found on the shores of Lake Ontario. I shall be glad if these notes throw any light on the problem of the land-locked Salmon.

Very truly yours, T. STERRY HUNT.

P.S.—The brine-springs which I have mentioned are no longer worked for salt, as they contain a larger proportion of bitter salts than Goderich or Syracuse brine, and are not very good for salt-making.

T. S. H.

* In the "Geology of Canada," 1863.

SWIVEL GUNS.

Sir,-I happened to read lately in a number of your sporting paper, an article signed "Wallace," referring to the use of swivel guns in duck shooting, by Americans in our waters. I am personally interested in any measure which will preserve, for fair sportsmen, a little of that sport which is rapidly becoming a thing of the past, owing to the indiscriminate slaughter of our birds for the New York market, and it occurred to me that you or some of the readers of your paper might beable to give me some reliable details on the subject. I have had a good deal of conversation about it with Mr. J. Kerr, the member for Stormont, in the Ontario Parliament, and he is anxious to be turnished with information as to the size of the guns; their charges; the number of birds killed induce them to turn back when ten feet of at one shot; the manner of approaching the their journey. About the time mentioned,

birds, and the way in which Americans in their steam-yachts reach the grounds. It ap pears to me that it is in Lake St. Francis that the principal destruction takes place. I have often heard the heavy firing, but have had no opportunity of seeing the methods adopted There is no doubt that the birds, soon after their appearance, become so wild that fair sport is hardly possible. I believe that if we can procure the necessary information, something can be done to stop the nuisance.

Lam, yours truly, H. B. HOLLINSHEAP Toronto, 21st Feb., 1881.

The use of swivel or punt guns for the put pose of killing wild fowl is prohibited by law in Ontario. The American yachts, referred to in our correspondent's letter, come down the St. Lawrence, but from what point we have not been able to ascertain. It is an easy mat ter to secure a conviction against the offenders and now that the attention of our sportsmen has been directed to their operations, we have no doubt these pot-hunters will not be per mitted to prosecute their illegal traffic during the coming season.—En.

PIGEON SHOOTING.

Dear Sir,—Can you give your readers and information as to why we are never visited now by the immense flocks of wild pigeon which were so numerous in this neighborhood about fifteen or twenty years ago? For man years pigeons in large numbers have been at most unknown in this part of the country, which formerly used to be one of their favorite lines of flight. About twenty-two years ago, with a double muzzle-loader, within a mile the City of Ottawa, between the tenth of April and the fifteenth of July, I killed 3,500 pigeons on the bank of the Ottawa, in their flight from south to north. Of course, I did not miss of day, except Sundays, and I was always out 91 daylight and home about nine o'clock a.111 During the same year there was a wonderful migration of red squirrels northward. I have seen twenty of these little animals in the Otts wa River, within sight at one time, making their way towards the North Shore, which the were so determined to reach that nothing could