

operation ever since. Encouraged by this success, another well was put down at Pt. Lambton, twelve miles farther down this noble river, but it was abandoned after going down about sixteen hundred and eighty feet with no indications of salt. Keen disappointment followed, as the theory was perfect that salt *must* be there—it had already been found at Algonac, Mich., three miles south and at Courtright twelve miles north. A peculiar stratum was reached in this abandoned well—a stratum not found elsewhere in any one of the deep borings of Ontario's western peninsula. This was a pumice-stone formation and furnished the clue whereby geologists were enabled to explain why salt was not found.

From the almost uniform depth at which the salt layer is found in widely separated points, it is apparent that this salt was once liquid and therefore found its own level. In the great cooling processes to which mother earth was subjected this liquid was solidified, leaving here and there mountain peaks of different strata, which had been thrust up through the mass by crunching and grinding upheavals. Pt. Lambton seems to be directly over one of those uplifted peaks—the summit of which at least is pumice stone.

Just here it may be interesting to note the different strata passed through in sinking a salt well along the St. Clair river; and in a general way this holds good for the whole peninsula. The following is the log of the first Mooretown well, completed in Oct. 1892, as furnished by the driller, Mr. John Savage, of Petrolea:

Clay and hard pan.....	145 feet.
Gray and black shale.....	355 "
Limestone.....	40 "
Gray shale and lime.....	235 "
Limerock.....	250 "
Gypsum.....	65 "
Quartz rock.....	210 "
First salt.....	3 "
Sand rock.	30 "

Quartz rock.....	187 feet.
Flint.....	73 "
Gypsum, red shale and salt....	42 "
Black flint.....	8 "
Second salt.....	50 "

Total.....1,693 feet.

Though the first St. Clair river well (Courtright), continued in successful operation after the non-success at Point Lambton, it was not till 1890 that another trial was made in the territory—this time at Sarnia. Meantime deep borings at Petrolea, and elsewhere in the oil country, had clearly demonstrated that a fine salt-bed—in some places one hundred and fifty feet thick—was underneath the whole district, and so confident were the projectors that it could be obtained at Sarnia that large sums were expended in buildings, evaporating pans, etc., before the well was nearly completed. The event justified their confidence—a fine vein of salt, about fifty feet thick, was struck at the usual depth. In the early part of 1892 operations were commenced at Mooretown—one and a half miles north of Courtright—on two wells, the log of one of which has already been given, and at the present time (November), the other well is down more than a thousand feet with a certainty of striking salt.

These when completed, together with the C. P. Railway well at Windsor, will make five wells along our great water arteries capable of supplying *brine* enough to meet the total Canadian demands if sufficient evaporating facilities be also provided. Indeed, the more sanguine projectors boldly claim that along this peerless river the bulk of Canada's future salt trade will be done, basing their claims on the pure water obtainable, cheap freight on fuel (coal), and ready access by boat and rail. How sound these views are, or in what measure they will eventually be fulfilled, the writer does not feel competent to judge. Time and time alone will settle that debatable question.