

the concave side, facing the north, and is highest midway tapering and spreading out towards both ends. Further observation has shown that these ridges with slight breaks extend eastward through the city of Hull toward Lake Flora. Northward as far as the Gatineau River there are many low ridges of rounded boulders of much the same material as in the most northerly ridge referred to above.

The diversity both in the character and condition of the material composing the first ridges described, taken in connection with their proximity, makes it somewhat difficult to account for their origin. Those lying to the north and extending to the Gatineau River are probably moraines, and were left in their present position by ice moving down the Gatineau Valley.

The angular condition of the blocks in the most southerly ridge shows that they have not been transported any very great distance. The following section is from this ridge near Chaudiere street and is in descending order,

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|---|--------|
| 1. Large angular blocks of limestone mixed with sand and gravel, and an occasional rounded boulder of granite, etc..... | 8 feet |
| 2. Fine sand and gravel.....  | 2 "    |
| 3. Fine tough bluish stratified clay (Leda clay).....   | 1½ "   |
| 4. Boulder clay.....  | 3 "    |
| 5. Limestone rock in place, glaciated, striæ, course S. 60° E.  |        |

If No. 1 of this section is of morainic origin, then after the ice which glaciated the underlying rock had receded, leaving the boulder-clay, the land remained submerged long enough to admit of the deposition of the clay and sand. (Nos 3 and 2 of the above section) after which the ice again advanced, and without displacing the underlying material deposited the limestone blocks composing the ridge. Another explanation is that it was formed by ice jams in the Ottawa River when it flowed through the channel where Brewery Creek now runs.