

This slight sketch is submitted to the readers of THE OTTAWA NATURALIST as a study in geography. We start with the hypotheses that every city, town and village in the Ottawa valley began at a waterfall, or on an old transportation route and gradually developed according to certain influences which may or may not be connected with geography.

PHYSICAL GEOGRAPHY AND GEOLOGY.

The Ottawa valley is a wide depression extending in a northwesterly direction. It is bordered by a generally well defined escarpment of Archean rocks mostly granite gneisses. The river flows down this depression through a series of long narrow quiet

Archean upland merges into the valley plain on a gentle grade with no well marked escarpment. The abrupt transition from the valley plain to the upland is probably seen to best advantage between Kingsmere and Eardley beginning a few miles northwest of the city of Ottawa. The valley wall is here about 700 feet high and forms a marked contrast to the Ontario boundary on the opposite side of the valley between Carleton Place and Perth where it is merely a gently sloping ridge about 100 feet above the inner edge of the plain.

The great upland of which these escarpments are features is often referred to in various literature as



MAP OF A PORTION OF THE OTTAWA VALLEY.

The heavy dotted lines indicate approximately the escarpments bounding the valley plains. Nearly all the towns and villages and the bulk of the population in the region shown by the map are included in the area between the dotted lines.

water reaches, called lakes, which are connected by much narrower and shorter stretches of rapids or falls. The river forms the boundary between the provinces of Ontario and Quebec.

The elevation of the river is 127 feet above sea level at Ottawa and 364 feet at Pembroke, the distance between these points being about 90 miles.

The escarpment on the Quebec side of the river rises in places to a height of 1000 feet above the river levels, and often presents a wall-like aspect, but on the Ontario side it is not so abrupt, especially in the southern portion of the valley, where the

Laurentian mountains or the Laurentian plateau. Geologists often call it the Archean upland because it is composed wholly of rocks which as far as they know are the oldest in the world, and they usually stand at a higher elevation than the Paleozoic rocks which form a fringe around their southern and northern edges.

The Ottawa valley is more or less plain-like in the southern part and has a width of about 28 miles in an east-west direction between the escarpment near Ottawa to that at Almonte. At Arnprior the width of the valley is about 18 miles. Above this