ANCIENT CHANNELS OF THE OTTAWA RIVER.

By R. W. Ells, LL.D., F.R.S.C.

The Ottawa may well be regarded as one of the great historic rivers of Canada. For hundreds of years it formed the favourite means of communication between the Indian tribes of the west and those of the east. It was ascended by Champlain in 1615. At that early date he crossed the height of land at Lake Nipissing, and was presumably the first white man to gaze upon the vast expanse of our inland seas.

Following the advent of this great explorer, this river became the chosen route of the voyageurs on their way inland to the great unexplored country of the western plains. On the coming of the Hudson Bay Company it formed the principal channel for carrying on their immense business, their brigades of boats and canoes passing year by year, carrying eastward the annual harvest of furs and bearing westward into the wilds of our vast interior the various kinds of merchandise suitable to the trade with the savages of the great west. Later, by means of steamboats on the deep stretches and by portages round the falls and heavy rapids, it formed the chief means of communication between the east and the numerous settlers who were scattered along its route.

The river itself is of very ancient date. When the continent was young, its valley was outlined, and for countless centuries the drainage of a large part of eastern and northern America followed approximately the present course. In support of this statement it may be said that along the present channel of the stream, extensive deposits of the oldest Palæozoic formations of this part of Canada are found, ranging from the base of the Potsdam sandstone upward into the Silurian, comprising many hundreds of feet of strata, the greater portion of which, over many thousands of square miles, has long since been removed by the various processes of denudation.

The finding of these formations at many points in the bed of the present channel shews that, before they were deposited, the granite and gneiss hills were formed and the principal river channels