all Maine, Vermont and Connecticut; he has also coloured in the detached mass occupying the northern part of the State of New York, between Lakes Ontario and Champlain. The broad belt of "Palœozoic rocks" stretching from Lake Champlain through the Appalachian ridges to the river Coosa in Alabama, and the isolated basin of Rhode Island, he has represented under the older epithet of "Transition." The sandstone of Connecticut and Pennsylvania, now classed as New Red sandstone, is coloured by him as Old Red; whilst, in the absence of positive information respecting the Western States, he coloured them all as "Secondary."

## BAYFIELD, H. W., Captain R. N.

The earliest contribution of this indefatigable explorer of the geological structure of the northern parts of America, is contained in a paper on Lake Superior, published in 1829 in the First Volume of the Transactions of the Literary and Historical Society of Quebec. In this memoir the position and extent of the sandstone, and various trappean and primary rocks which surround the lake and compose its numerous islands, were described from a careful personal survey. The representation given on my map is taken from a coloured copy laid down by Captain Bayfield for me.

Since 1829, Captain Bayfield has explored a great part of the Lake and River coast between Lake Superior and the Gulf of St. Lawrence; and in the present year he communicated to the Geological Society of London a paper "On the Junction of the Transition and Primary Rocks of Canada and La-