

as now. Because of the marked change in the trend of the coastline, the longshore westbound current would tend to discharge out into the lake at the point where the relatively abrupt change in the direction of the shoreline took place. The cliffs at Scarboro would supply an exceptional amount of loose debris, much more than is found anywhere else along the north shore. The result would be the construction of a flying spit from Scarboro waste reaching out into the lake from the point of discharge of the shore current. This spit would gradually increase in length and also tend to broaden. In time it would protect the land adjacent to the mouth of the Don from eastern storms. Such storms as come from the west would not only be weaker agents of shore processes, but would tend to force the debris which the Don was discharging back into the bay, between the flying spit and the shore. In the early history of the lakes and of the bar it seems probable that the greater portion of the debris from the Don, like that from all the other streams up to the present time, was distributed along the shores by the shore processes, and that no distinctive delta was built up. In later times the protection afforded by the young Scarboro spit guarded the mouth of the Don from master storms, and forthwith it began to build up a delta, and, during the course of delta formation, to aid in filling of what is now called Ashbridge's bay. The westward progress of the spit was, however, far more rapid than the Don filling, so that in time the portion that now forms Toronto harbor was built west of the Don mouth.

At first the flying spit would be narrow and ridge-like, but as the apex advanced into deeper water its progress westward would be slower, giving time and opportunity for storms from other than the dominant direction to variously modify its apex. The general history of all such spits seems to be that when they reach deeper water the outer end shall be turned shoreward by waves and currents from deeper water offshore. The combined action of forward building and shoreward spreading lead, in this as in other cases, to the broadening and hooking of the free end of the spit, and incidentally to the inclosing of a number of lagoons between minor bars built at successive intervals, according as the longshore or transverse processes were more active.

Conclusions:—Toronto island as it stands to-day owes its existence to the inter-relations which have existed between **Shore Processes of Transportation** and the **Supply of Waste**. Interference with either of these will immediately be followed by other changes and modifications on all parts of the island. It is possible to retard the operations of the shore processes,