

yet adversary operation would in all probability create a similar and fresh boundary. The deposits of Indian shells, at places along these sounds, do not show that, years ago, vegetation and the security of terra firma extended farther eastward than now; on the contrary, the position of these being exactly similar to the same kind of deposits on the shores of the Chesapeake and the banks of the Potomac, would induce the belief that since the aboriginal periods at least, the topographical positions have remained unaltered.

Although, however, the headlands do not appear to have changed either their form or their relative position, considerably and gradually progressive alterations have taken place in the channel-ways, whose general result has been (though produced as they are by varying causes, many local differences of operation may exist) to throw the channel further to the westward. Without speculating as to the ultimate effect of these alterations, which they have called, and which so far appear "progressive," they have permitted the consideration of the fact to exert an influence in the adoption of principles for the government of the locations. These principles they will briefly state:

1. An inclination of the route as far inwards or westerly as possible, in order to avoid the incoming of sand shoals from the beach, or rather from the ocean bottom contiguous to the beach, whose aggressions, from whatever causes, have been strongly marked during the last years.

2. The cutting through islands or points of marsh, in the Sounds, whenever without materially increasing the expence, such cutting would tend to shorten the distance of the route; and

3. The location of the canal lines through the existing marshy bed of streams in preference to the fast land near the bed itself.

A reason for this might be suggested in the diminution of expence; as, generally speaking, the fast land is of so much greater depth than the adjoining and selected marsh, as to overbalance the difficulties always existing and to be apprehended in marsh cutting. This, however, was not the reason which operated with the Commissioners: for were the work to have been executed peremptorily upon their location, and the item of expence left to their discretion, the fast land would un-