Malagash point. W. A. Bell[1] gives a thickness of 4,583 feet measured at Joggins.

Thin coal seams and lenticular, bedded deposits of copper sulphides occur in the basal portion of the upper member. No workable coal seams are exposed and attempts made to recover the copper have been without success. The copper occurs as minerals resembling chalcocite and bornite associated with plant remains in fine-grained calcareous conglomerates.

The productive coal measures are absent in this district, and as their place probably lies above the Millstone Grit series it is possible that they may have been originally deposited but carried away by erosion along anticlinal folds before the deposition of the New Glasgow series. They may still be present in synclinal folds of the Pennsylvanian system, lying beneath the cover of the New Glasgow series.

New Glasgow Series.

The age of the New Glasgow series is not definitely established, but the rocks composing it are easily distinguishable from the underlying series by their characteristic colour, and a discussion of stratigraphy and correlation is not necessary in this report. The rocks are an interbedded brown and greenish-grey conglomerate, arkose sandstone and shale alternating recurrently. The dominant colour is characteristically a brighter reddish brown than that of the older rocks. The measures are exposed along the north shore, west of the Stake road and along the south shore, west of the mouth of Golden brook.

An erosional unconformity appears to separate the Millstone Grit from the overlying series and this may represent a time gap during which the productive coal measures were removed by erosion along anticlinal folds. Conclusions regarding the original distribution of the productive coal measures will be better arrived at by stratigraphical and palæontological study in the field.

The three series of rocks extend from Cobequid mountains northward to Northumberland strait, the Windsor and Millstone Grit coming to the surface along the axes of anticlinal folds. The Windsor series, in which the salt is found, appears to extend almost continuously, as a narrow band, from Malagash point westward to Cumberland basin. It is probable that the salt strata accompany gypsum beds, and as outcrops of gypsum are found at various places along the axis of the Clairmont anticlinal, salt may occur in other localities than Malagash.

STRUCTURAL GEOLOGY.

The Windsor series has suffered intense folding and faulting. The strata along the shore north of the salt deposit dip southward, but are overturned, and higher strata in the series outcrop to the north beneath Northumberland strait. If the structure continues uniformly, about 650 feet of strata intervene between the coast and the salt deposit, and the strata lie on the north limb of an anticlinal axis. The heavy-bedded sandstones exposed along the coast north of the shaft are crumpled and

[1]Geol. Surv., Can., Guide Book No. 1, pt. II, pp. 331-2.