shattered as though lying near the axis of a fold, a synclinal to the north, or nn nuticlinal to the south. The rocks suffered sufficient deformation at the close of Mississippinn time to cause the strata to assume a vertical attitude before the deposition of the Millstone Grit series in Pennsylvanian time. Before the deposition of the New Glasgow series, both the Windsor and Millstone Grit series were folded and eroded. Subsequent to the deposition of the New Glasgow series all three, each comprising several thousands of feet thickness of deformed strata, were folded together until the youngest member lies in brond, open folds locally thrust into steeply dipping attitudes. It is impossible to reconstruct and represent the complicated structure of the Windsor series, except where good exposures may be curefully studied. Open folding has been superimposed on the already highly folded older series; various horizons in the older series may, therefore, have been brought to the surface along the anticlinal axes and not necessarily the lower measures, even though an anticli al form may have been induced upon previous folds of the older rocks.

The sult stratu were formed by evaporation of sea water in isolated lagoons and probably overlie limestone and gypsum measures which occur in the lower part of the Windsor series. The gypsum and sult may recur rhythmically interbedded, as do the limestone and gypsum on Smith island, Inverness county.

The Malagash salt horizon lies along the axis of an anticlinal fold, and may, therefore, be crumpled locally and perhaps thickened by isoclinal folding and duplication of its strata. It is impossible to state positively whether the salt strata continue to great depths with the attitude found in the mine workings or are folded so as to retain a more shallow position; but they probably continue with local crumpling for several hundred feet at least and, as far as mining operations are concerned, no immediate difficulty may be looked for regarding depth.

Along the strike, two important sets of faults or zones of faulting traverse the rocks exposed along the shore. Their extension inland is unknown since rock outcrops are wanting, but if these faults are ever met in the mine they should be easily recognized. As indicated on the maps one fault may cut the deposit about 500 feet east, and the other over 3,000 feet west, of the present workings, so that they need occasion no immediate concern at the mine.

The displacement of the salt horizon along the fault west of the shaft may be referred to in greater detail since the amount of the throw of the fault west of the shaft is fairly well indicated. A zone of faulting occurs within a distance of 100 yards west of the mouth of the stream flowing through the farm of Henry Porteous, about three-quarters of a mile west of the shaft, measured along the road.

The fault strikes magnetic south, ε id the direction of throw, as indicated by slickensiding, is vertical and dips to the west. The base of the Millstone Grit is considered to occur about 1,500 feet south of the shore-line, as indicated by the presence on the shore of about 1,000 feet of exposed strata belonging to a horizon above the conglomerate. The underlying Windsor series should also be dislocated and if the salt strata continue to dip southerly, the downthrow to the west would cause this horizon to be thrown north. Horizontal displacement, if any, would