part of the length of the sea wall the strata are essentially vertical with slight undulations; but at a distance of about 250 feet from the south end of the cliff the strata become much more irregular, maintaining their essentially vertical attitude but are folded and slightly displaced among themselves and faulted against the more erect strata of the main part of the mountain. The southern part of the mass is composed of strata similar to those of the northern but increasingly slaty in composition. In both parts of this Mt Joli massive fossils were found, but they are by no means of common occurrence; moreover they are wedged in the vertical strata so that their extraction is not easily accomplished. From their calcareous layers, which with the eroded interleaved shales form the outermost northern reach of the strata and are exposed only at low tide as reefs, were obtained a few fossils: Platyceras, large species of Helderberg type; Zaphrentis corticata Billings; Z. cingulosa Billings.

The shaly layers on the high vertical north face of the scarp have afforded species provisionally identified as follows:

1 Hindia *sp.*
2 Monograptus *cf.* clintonensis *Hall*
3 Duncanella *cf.* borealis *Nich.*
4 Streptelasma *cf.* caliculus *Hall*
5 Michelinia *cf.* lenticularis *Hall*
6 Dalmanella *cf.* perelegans *Hall*
7 Leptaena rhomboidalis *Wilckens*
8 Stropheodonta *cf.* varistriata *Conrad*
9 Spirifer *cf.* niagarensis *Conrad*
10 Spirifer modestus *Hall?*
11 Cypricardinia *aff.* sublamellosa *Hall*
12 Phacops *sp.*

Giving special attention to the trilobite in which lies the clearest indication of geologic age, we find it to be a fully developed Phacops such as nowhere occurs in the typical Siluric deposits of the Mississippian sea or Appalachian gulf. Its glabella is large, rotund and coarsely pustulose, the glabellar furrows obsolete, eyes large and the genal angles have minute spinules. The pygidium is broad, the axis having six to eight well defined rings, the first bearing a prominent tubercle, the pleurae having five to six ribs all grooved and separated by deep furrows. These structural points indicate an early period in the history of the genus, hence if Siluric, a final stage. The species is equivalent to Phacops logani of the Helderberg and Oriskany of New York, of the Percé rock and the Grande Grève limestones.