garded by him as of the age of the Lower Helderberg of New York, at a time when the Helderberg fauna was not estimated with precision. Almost all the divisions were found to be fossiliferous, but the uppermost, 7 and 8, specially so.

It became evident from the identification of the fossils of the upper beds by Billings that divisions 7 and 8 correspond more nearly in fauna to the Oriskany of New York than to the Helderberg, and these have been generally conceded to have this equivalence, but of the fauna of the lower beds, its composition and variations, we know only enough to see therein clues to the origin of the later fauna and invaluable lights on the derivation of all early Devonic faunas of the Atlantic and Mississippian provinces. Contrasted with the other beds in profusion of fossils and diversity of species, divisions 7 and 8 have been distinctively designated, Dr Ami having proposed to call these beds the Grande Grève limestones. To them Logan ascribed a thickness of about 800 feet, and in them is a fauna which differs from that of the Oriskany of eastern New York in as many respects as it agrees therewith and yet is bound to it by such striking paleontologic features as the coexistence of Rensselaeria, Megalanteris, Hipparionyx, Chonostrophia, Spirifer murchisoni, S. arenosus and many other organisms.

Over the Grande Grève limestones lie the Gaspé sandstones of Logan, shown in apparently conformable contact with the rocks below at Little Gaspé, and attaining an immense thickness. Sir William estimated them at over 7000 feet and subdivided them largely on lithologic characters, as they vary from drab ferruginous, fine grained quartz and feldspar sandstone to coarse conglomerates and red sandstones, the latter being mostly toward the top. From the lower beds Dawson described many interesting plant remains all presenting the aspect of such sedimentation as characterizes both in New York and Europe the deposits of the Devonic or Old Red lakes or lagoons. The lower beds about Gaspé basin contain a fairly rich marine fauna which has been partly described by Billings and to which we have been able to add evidences of both early and middle Devonic age.