

ones between. On the occipital ring the central pustule, which is more conspicuous than the rest as in other species, is punctuated at the top by a circle of depressions. The head had an original length to the point of recurvature of the neck spines of about 40mm, the greatest divergence of the spines is 29mm, the axial length to the angle of the spines, 23mm, of which 9mm belong to the occipital ring; width between the eyes, 25mm.

From no other evidence have we so satisfactory a basis for the conclusion that the Cap Barré beds follow close below the beds of Percé rock and above those of Mt Joli. We may therefore conclude that either these strata lie buried in the tide-swept interval between the Percé rock and the outermost vertical strata belonging to the Mt Joli massive, or that, originally in place here, they have been pinched out by faulting.

The space between these two massives not in the line of the connecting sand spit but rather in the line of vertical thickness of the strata, at right angles to their present position, is barely enough to admit the beds of Cap Barré. Doubtless they have been largely squeezed out in faulting and pitched over on their side where they now lie, though some part of them may remain in the interval, to be exposed by some favoring neap tide to the eye of the trained observer.

Shales of the North beach. Faintly exposed at spots in the bank along the North beach, in the dugway road to the wharf and at points from there toward Mt Joli are beds of soft shale usually gray, sometimes black, blue black and green black, lying under the reddish soil cap. These are slightly inclined away from the vertical and it is not in my present judgment at all certain that they are continuous with the Joli escarpment which we are about to consider. They have furnished no fossils and outside of them, beneath the water not far from the wharf, is a vertical reef in which cyathophylloid and favosite corals occur and these are doubtless the latest and uppermost beds of the Joli series. Soft drab shales similar to those on the North beach appear also in the roadway between the Cap Canon cliff and the escarpment at Lamb's limekiln, and I have inferred therefrom the presence of an infaulting through which this mass of shales has been displaced from its proper position.