

summed up the known facts as to Arctic geology in a series of articles in *Nature*, from which it appears that this area presents from without inwards a succession of older and newer formations from the Eozoic to the Tertiary, and that its extent must have been greater in former periods than at present, while it must have enjoyed a comparatively warm climate from the Cambrian to the Pleistocene period. The relations of its deposits and fossils are closer with those of the Atlantic than with those of the Pacific, as might be anticipated from its wider opening into the former. Blandford has recently remarked on the correspondence of the marginal deposits around the Pacific and Indian oceans,¹ and Dr. Dawson informs me that this is equally marked in comparison with the west coast of America, but these marginal areas have not yet gained much on the ocean. In the North Atlantic, on the other hand, there is a wide belt of comparatively modern rocks on both sides, more especially toward the south and on the American side; but while there appears to be a perfect correspondence on both sides of the Atlantic, and around the Pacific respectively, there seems to be less parallelism between the deposits and forms of life of the two oceans, as compared with each other, and less correspondence in forms of life, especially in modern times. Still, in the earlier geological ages, as might have been anticipated from the imperfect development of the continents, the same forms of life characterise the whole ocean from Australia to Arctic America, and indicate a grand unity of Pacific and

¹ *Journal of Geological Society*, May, 1886. Blandford's statements respecting the mechanical deposits of the close of the Palæozoic in the Indian Ocean, whether these are glacial or not, would seem to show a correspondence with the Permian conglomerates and earth movements of the Atlantic area; but since that time the Atlantic has enjoyed comparative repose. The Pacific seems to have reproduced the conditions of the Carboniferous in the Cretaceous age, and seems to have been less affected by the great changes of the Pleistocene.