

*dilleran* glacier was contemporaneous with, if not caused by, a subsidence of the mountain region. Numerous observations of glaciation at levels reaching to 6880 feet, and ranging between 3150 feet and that figure, are recorded on the plateau between North Thompson R. and Dead Man R., on Mount Murray, in the Lytton mountains, and on the plateau between the Thompson and Nicola valleys, and the valley which connects Nicola lake and Kamloops. The *Cordilleran* formation, or drift, appears to be applicable to materials deposited by the Cordilleran glaciers, both east and west of the main axis of dispersion. On Barnes creek the following section occurs:—

- (c) Silty deposits.
- (b) Boulder-clay obscurely stratified, and
- (a) Stratified gravels, silts and sands.

Terraces and shore lines are frequently met with, and white silts, also drumlin-like ridges, moraines, and other drift ridges.

Auriferous placer deposits occur in different periods of the drift of British Columbia. In the Yukon district Dr. Dawson, Mr. Tyrrell, and Mr. McConnell have recorded interesting glacial phenomena, and stratified gravels and sands, many of which have proved to be auriferous. Terraces, indicating higher levels or former reaches of rivers, and glacial lake deposits have also been described.

*The Champlain Period.*—This was a period of subsidence in which the Acadian region as well as a portion of the Laurentian Highlands along their margin, and the Lawrencian Lowlands for the most part were depressed beneath the level of the Atlantic waters. Stratified gravels, sands and clays and kames associated therewith overlaid by river and lake terraces and accompanying kames inland, and *Leda* clays and kames, together with *Saxicava* sands, the latter formed by marine agency, characterize this period throughout Nova Scotia, Prince Edward island, and New Brunswick, whilst the most recent deposits or formations of Quaternary age consist of the river flats and intervalles (*alluvium*) estuarine flats, mussel or oyster beds, natural dykes, etc., with dune or blown sand overlying both. In both the St. Lawrence and Ottawa River valleys terraces of marine clays occur to a height of over 600 feet, and are overlaid by sands and gravels, constituting the *Leda* clay formation and *Saxicava* sand, which nearly everywhere prove to be highly fossiliferous. At River du Loup, Beauport, St. Liboire, and Montreal island, at the Mile End quarries, and the Tanneries, in the province of Quebec, and at Green's creek, and Besserers, near Ottawa, and other localities in the Ottawa valley, an interesting fauna and flora, indicating cold and marine conditions abound. The *Montreal Saxicava* (sand) formation, the *Beauport* sands and gravels, the *Leda* clay, the *Macoma* sands, the