YORK AND CARLETON COUNTIES.

Lithological features.

Comparison of northern and southern belts.

The rocks of this southern belt consist almost entirely of sl. tes and hard sandstones or quartzites, of a grey colour, and lack almost altogether the crystalline character so conspicuously seen in portions of the belts already described. Here also, as in the middle belt last noticed, there is an entire absence of the great bands of felspathic, hornblendic and felsitic rocks which form such marked features in the geology of Canterbury, Woodstock and Millville. Yet, leaving out of view these rocks of doubtful origin, and many of which may be igneous or intrusive, there can be no question of the essential identity of the remainder with those of the southern belt under discussion. For although, in part owing to concealment by the drift, their resemblances are somewhat obscured, most of the characteristic features of the one are, at different points, reproduced in the other. Thus the peculiar pink or lilac tint and micaceous or gneissic aspect so common in the rocks of the northern belt, while seen only rarely west of the St. John River, (as near Magaguadavic, Blaney Ridge and the Antimony mines of Prince William), are very clearly marked on the eastern side of the river in the section just south of the granite at Bear Island, about Scotch Lake, and especially in the valley of the Keswick north of Zealand; in each of which localities the first named beds are directly followed by and graduate into the ordinary grey slates and quartzites, while in Zealand both sets of beds double around the granite which terminates at this point and become continuous with the similar beds of the central or Haynesville belt. Again, it is unusual to find in the southern belt anything approaching true gneisses or mica schists, the alteration not extending beyond a change of colour and a partial development of mica in the sandstones; but in the extension of these rocks to the Nashwaak River, there is, just south of the granite at the Napadaugon, a series of schists filled with tolerably well developed crystals of staurolite, and this in turn is followed by a wide belt of dark-grey to black highly micaceous slates which are literally studded with cubical crystals of pyrite. So, as a rule, the ordinary slates and sandstones of the southern belt are less felspathic and chloritic than those seen on the river south of Woodstock; but on the Nashwaak, north of Stanley Bridge, slates and sandstones which are probably of this series are highly chloritic as well as micaceous, and recall in the former respect, as they do in their greenish and purplish colours, the slates of the Meduxnakeag and Acker's Brook. No calcareous strata have yet been observed in any portion of this southern belt.

Comparison with rooks of other counties.

In closing the description of the Cambro-Silurian areas of York and Carleton, it is instructive to notice the close parallelism here exhibited with the rocks referred to the same horizon in northern Charlotte and southern Queen's. (See Report of Progress 1870-71). This parallelism may b ture or mi ently simi instances, with the abundantl

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