

up over the limestones by a well-defined overthrust fault, running in a north-westerly direction.

Mount Selwyn is flanked on the west by a small range composed partly of the rocks of the Bow River series and partly of the schists of the still older Shuswap series, all dipping to the south-west. The latter overlie the former, but the cause of their superior position was not ascertained.

Structure of
Mt. Selwyn.

The Peace River section through the Rocky Mountains, thus resembles the Bow River section through the same range, in the predominance of limestones and in the persistent westerly dips due to repetition of the beds by overthrust faulting, but differs from it in its absence of beds newer than the Triassic, and in the gradually increasing age of the rocks from east to west.

Comparison
with Bow
River section.

GEOLOGICAL SUMMARY.

Archæan (Shuswap Series).

The oldest rocks in the district consist of a series of well foliated mica-gneisses, probably derived to a large extent from sheared eruptives, lustrous mica-schists, hornblende- and actinolite-schists, quartzose schists and crystalline limestones, filled with mica, hornblende and other secondary minerals. The rocks of this series are usually evenly bedded and conform in dip with the overlying formations.

Shuswap
series.

Rocks of the Shuswap series are found on both sides of the Finlay from its mouth up to its junction with the Ingenica. North of this point, the formation divides around a bay filled with newer rocks. The eastern limb follows the eastern slope of the Finlay Valley north-westward to the Quadacha and for some distance beyond. It has a width at Paul's Branch, where it forms the most westerly range of the Rocky Mountains, of four miles. This width decreases towards the north and increases to the south.

Distribution.

The western limb bends away from the Finlay above the Ingenica, but crosses it again at the great bend which the Finlay describes after leaving the Rocky Mountains, and continues on to the north. The width of this band was not ascertained, as its western boundary was not reached.

A second area of Shuswap rocks, separated from the first by a band of limestones, occurs on the Omenica River above the Oslinca. The gneisses in this occurrence are coarser in grain than is usually the case, and in places have a granitic appearance. The band has a width of ten miles.