

**Extent of area.** The greatest breadth of the outlier is about twelve miles, and it extends northerly on the Tobique to a point a little beyond Blue Mountain bend. The strata are lying everywhere nearly horizontally, with broad, low undulations showing that they have been subjected to but little disturbance since their original deposition. Their succession on the Tobique, in descending order, seems to be :—

**Succession of beds.**

Coarse, red conglomerate.  
Gypsum.  
Soft, red, shaly sandstone, with thin bands of limestone.  
Limestone.  
Highly calcareous white and red sandstone.  
Red and grey grits and conglomerates.  
Soft red shales.  
Red sandstones and conglomerates.

**Volcanic rocks.** At the edge of the basin on Otelloch stream, and at the Blue Mountains, small masses of volcanic origin occur. These consist of ash-like felsitic beds, volcanic agglomerates, traps and claystone porphyries, and are probably contemporaneous with the upper beds of the Lower Carboniferous.

**Trap.** Just above the Blue Mountains, these beds are represented by a massive ledge of green, chloritic, highly calcareous, amygdaloidal trap, which is exposed on the left bank of the stream; in general aspect, this trap closely resembles those of Lower Carboniferous age in the southern part of the province. A flesh pink mineral, resembling natrolite, occurs in this ledge, but the vesicles are mostly filled with calcite.

**Blue Mountains.** The principle exposure of the volcanic material, however, is that making up the mass of the Blue Mountains and rising in low cliffs from the water's edge at the bend of the river. These are red crystalline felsites, hardly distinguishable from those of Pre-Cambrian age, and dull reddish-purple, banded, felsitic beds of ash-like aspect, associated with volcanic breccia or agglomerate, with light-green, hard, serpentinous matrix. Where exposed on the steep sides of the upper penk, they show an almost horizontal, gently undulating stratification. None of these beds are seen in actual contact with the Lower Carboniferous, so that stratigraphical evidence of their relative age is wanting.

**Limestones.** Their close similarity to the volcanic masses so common in other parts of the province at the base of the Millstone Grit, warrants the conjecture that these are also overflows which have occurred about that time. Limestones of Lower Carboniferous age, occurring about half a mile below these beds on the river, are quite hard and crystalline, but show no disturbance. Red and greenish-grey in colour, often