

border of Charlotte county, the rock fragments, both soft and hard, but especially the latter, which occur in the conglomerate are only slightly worn on the angles, rounded pebbles being of rare occurrence.

These fragmental rocks and the shales which overlie them are well exposed in the bed of Piskahagan River, in Peltoma Settlement, and along the sides of Shin Creek. On both these streams there is also a fine breccia conglomerate, of deep red color weathering to orange-red, consisting of small angular pieces of dark red shale, imbedded in an argillaceous paste of paler hue. With it are associated beds of fire-clay, of amorphous Fire-clay. structure and bright Indian-red color, some of which contain sufficient oxide of iron to be of value as an ochre or "mineral paint." A few of the more slaty beds in this portion of the series hold poorly preserved remains of ferns, and a small *Cardiocarpum*, too obscure for identification. From Fossil plants. the St. Croix River eastward many of the conglomerate beds weather into a somewhat vesicular rock owing to the abundance of calc-spar occupying cavities and crevices in the stone.

This calcareous character becomes more marked at about seven miles from the mouth of Shin Creek, where a band of impure concretionary Concretionary limestone. limestone exists in the upper part of the conglomerate. On the same stream a higher member of the series makes its appearance resting upon the red shales. It belongs to the same horizon as the dolerite rocks along the northern border of the Carboniferous area; but occurs here as an olive colored amygdaloid, which in parts of its distribution is associated with Amygdaloid and compact trap. beds of compact trap of similar greenish hues. The cavities in the former rock, which is generally highly feldspathic, and also contains much iron, are usually filled with calcite, though oftentimes with a dark colored chloritic mineral and less frequently either with vitreous quartz or hematite. Usually also the rock is porphyritic with crystals, sometimes of half an inch but usually not more than one quarter of an inch in length, of pale olive-grey or flesh-red feldspar: the joints of the amygdaloid and of the compact trap are ordinarily occupied by thin veins of hematite. No important change in the appearance of the Lower Carboniferous series was observed on the South Branch of the Oromocto River, into which the Shin Creek discharges, with the exception that, at about half a mile south of Blissville station, the members above enumerated are covered by pale purplish lilac-weathering felsites.

From the South Branch of the Oromocto River the out-crops of the Lower Carboniferous series pass through a low belt of wooded land to the head waters of the Nerepis River. Here there is a considerable area of red rocks, including an out-crop of well developed Lower Carboniferous limestone which occurs in the lower Clones Settlement, about one and a-half miles east of the saw-mill on Kelly's Brook. *Terebratula Sacculus*, var: *sufflata* is very common here in the limestone, as well as a small species