sic series, with labradorites and limestones. 3. Lower Silurian, Potsdam to Trenton. On the opposite side of the Ottawa, in Quebec, the rocks were found to be of precisely the same general character. It is probable another limestone trough exists up the Ottawa valley as far as the Upper Allumette Lake. The great Ramsay, Lanark and Dalhousie band crossing at Bristol, and along that township and Clarendon, runs inland northward for more than 100 miles, and after a number of zig-zags, again approaches the Ottawa and joins the Petite Nation and Grenville series Iron ore was found from Hull to Post Creek, in Cameron township, between the Gatineau and Thirty-one-mile Lake, 54 miles in a direct line north from the Ottawa River Apatite is found in the townships of Buckingham and Templeton in a belt of rocks averaging 1¾ miles in width, running N.E. from near the centre of Templeton The belt is very productive and the apatite of very fine quality. It has also been found in Hull and Wakefield, and probably exists some distance north along the Gatineau, S E. of the apatite belt .The plumbago-bearing rocks occupy a very large area in Buckingham and Lochaber

Mr. G F. Mathew was engaged in 1875 and 1876 in Charlotte Co., New Brunswick. In 1875 the summer was spent in the examination of the "dark argillites," or Upper Silurian slates of the north-west part of the county, and that of 1876, in the south-east part of the same county, in order to ascertain the age of some groups of strata in tha quarter, described as "Coastal" and "Kingston" series. The former are described to be probably Laurentian. B tween Lepreau Basin and Dipper Harbour there is an abundance of dark grey and pale grey limestone, apparently inexhaustible in quantity, with two good harbours close at hand and a heavy growth of wood on the ridge. The "Kingston series" has the same characteristics as the "Upper Silurian" of the north-west part of the county. Two important metalliferous zones occur in the "Kingston," containing copper, lead, bismuth and iron. In the vicinity of Lepreau Basin, a shaft 90 feet deep had been sunk to test the beds of anthracite coal found there. The mineral is a granular anthracite. Slaty layers are irregularly distributed through the upper part of the seam, but improve in quality on the south side, and at the bottom four feet of pure coal had been penetrated without reaching the foot wall of the seam. At St. George three companies have been formed for the purpose of working the beautiful dark red granite quarries The rock is red, of various degrees of intensity, with occasional large patches 20 to 40 feet across, of indefinite length, of pale cream colour and grey. Blocks 2 or 3 feet long are taken out by blast, and can be readily split The whole surface is capable of very high polish

Professor Bailey and Mr. Ells made an examination of portions of Albert and Westmoreland counties, New Brunswick, in order to obtain a more accurate knowledge of the belt of the lower carboniferous rocks traversing those counties, and especially of the belt of "Albert Shale," holding the deposit of *Albertite*. This Lower Carboniferous belt lies along the northern flank and eastern end of a chain of high lands, which extends from St. John eastwardly to a little beyond the centre of Albert County. The "Albert Shales," the most important member of this series, traverses the County of Albert in two distinct and well defined bands. The shales are, in general, thinly bedded, splitting easily into thin and flexible sheets, alternating with thicker and harder beds, very tough, and breaking only with a conchoidal fracture. All are highly bituminous, with frequent occurrences of streaks and layers of oily matter and from the more sandy beds fluid petroleum may be seen to flow. In certain bands of the shale, vast numbers of fossil fishes occur. These bituminous shales occupy an area of about 50 acres The "Albert" mine is now being worked at a depth of 1,260 feet, and a trial hole shows its continuance 1 0 feet further.

he albertite is not a true coal, but an oxidised hydrocarbon, at one time existing, like petroleum, in a condition of fluidity. Besides the veins of "Albertite," the Albert shales also contain themselves a sufficient quantity of bituminous matter to make them available sources of supply both of o l and gas. It is also probable they may be available for the manufacture of paving mater al or cements. The plaster beds found in this Lower Carboniferous series, are the most extensive and valuable in New Brunswick. Much of the rock s a pure white snowy alabaster, easily cut or ground, other portions pale cream colour, light grey, light blue, and translucent. The analysis of the albertite shows that it contains 86 parts of carbon.

Mr. Fletcher was engaged during the summer of 1876, in the counties of Victoria, Cape Breton, and Richmond, Nova Scotia, being that part of the island of Cape Breton lying between Loch Lomond, Salmon and Mira Rivers on the east, and the Great Bras D'Or and St. Patrick Channel on the west. The Bras d'Or Lakes occupy deep basins, excavated in soft carboniferous strata, encompassed by hills of lignite and other pre-silurian rocks. They are connected with each other by Barra Strait, with the Gulf of St. Lawrence by the Great and Little Bras d'Or, and with the Atlantic Ocean by the St. Peter's Canal Plaster, iron, and building stone are found on their shores, and their scenery is of surpassing beauty. Fish of all sorts abound in the bays and streams, and ducks, loons. cranes, sea pigeons, plover, partridges, fox, rabbit, mink and wild cat offer attractions to the sportsman. At East Bay there is a mineral spring similar to that of St. Catharines, Ont. Feldspathic and gneissoid rocks form the surface over a large area, constituting hill ranges, seldom exceeding 600 feet in height. The prevailing scarcity of superficial deposits, other than those produced from the disintegration of the underlying rocks, is worthy of notice. The banks are sometimes composed of stratified sand, clay and gravel, the gravel at the bottom, and at some places black magnetic iron sand is strewn along the beach. Sometimes the shores are low with ponds nearly dry and capable of being reclaimed as excellent hay land. Interval lands of great fertility are found in the