c. Lead.—The lodes, which bear this metal, are not homogeneous, but consist chiefly of quartz, barytes, and a little fluor. This is the case at L'Etang, which is almost the only distinct lead lode I have seen in the Province. None of the others are well defined. Barytes and fluor are very favorable indications for this metal. The country-rock of lead is metamorphic limestone. With lead is often associated *blende*, the ore of zinc.

d. Manganese is generally found in quartz or barytes, especially the latter, the country-rock being slates. At Upham, King's County, it has been described as occurring in limestone.

e. Iron.—The haematite of Woodstock occurs in calciferous slate, belonging to the mica-schist formation; that of West Beach also in slates, and to some extent in conglomerate. The latter, (*i. e.* the West Beach ore,) is of sedimentary origin.

3. *The Direction of Metallic Lodes.*—This is a point of some interest to determine. It requires, however, for sure results, a considerable number of observations. So far as my own experience has shown, these lodes, especially as regards lead and copper, pursue a course not varying far from east or west, and have as a rule a dip to the northward. This will be more readily seen by the following Table:—

	Strike.	Dip.
Antimony Mines at Prince William,	N.E. & S.W.	to the North.
Key's Mine, (Charlotte,) Champion lode,	7° N. of E.	a little W. of N.
" 5 subordinate lodes,	" "	unknown.
L'Etang Lead Mine, principal lode,	E. N. E.	"
Hatt's Lode, (Charlotte,)	about E. & W.	
Crory's Lode,	10° N. of E.	
Campo Bello Lead Vein, not well determined, but tending to E.		
Mines at Salmon River—Champion lodes,	10° N. of E.	
Subordinate lodes,	6° & 8° N. of E.	
Tattagouche Copper Mines, (Bathurst)	E. & W.	to the North.
"St. John & Albert Mines," (Martin's Head)	a little E. of N.	to the West.

If the above rule is found to be a universal one, it may serve to distinguish the subordinate from the champion lodes, the difference being a very material point to ascertain. It will be noticed that the above prevailing line of strike coincides nearly with that of the coast line of the Bay of Fundy, and also with that of the central granitic band.

From what has now been said, I think I am warranted in drawing the following general conclusions:—

1st.—The principal metalliferous deposits of New Brunswick, (excepting sedimentary beds), are confined to metamorphic slates and mica schists, of Lower Silurian or Cambrian age.

2nd.—That in these metamorphic belts, the best mining districts, so far known, are near where the slates and schists have been injected by deposits of igneous rocks, trap, syenite, &c.