Analyses of "Disseminated graphite" from Buckingham.

Silica	very small quantity.	Lime	large quantity.
Alumina	very large "	Magnesia	moderate quantity.
Iron	large "	Cobalt	trace.
Manganese	small "	Alkalies	not sought for.

The rock contains:

Graphite	23·798
Rock matter, soluble in hydrochloric acid	21·285
Rock matter, insoluble in hydrochloric acid	53·741
Hygroscopic water	1·176
	100·000

4. *Disseminated Graphite.*

From the twenty-third lot of the sixth range of Buckingham. The property of the Buckingham Mining Company.

This deposit has been traced through into the seventh range. It would appear to be a bed whose position is conformable to the stratification of the beds of disseminated graphite, and connecting with the true fissure veins which cross these beds. The rock consists of quartz and a feldspar, and is traversed by more or less disconnected lenticular layers of a twisted, fibrous graphite. These layers, which vary greatly in thickness, may, perhaps, justly be regarded as interstratified veins. As yet the ground has only been uncovered, but it is considered probable that the rock, for a transverse measurement of some fifteen to twenty feet would yield largely. The specimen examined was considered a pretty fair average.—Authority, Mr. H. G. Vennor.

The rock contained no calcite; the presence of a small quantity of pyrrhotine was, however, established The powdered mineral was very little acted upon by hydrochloric acid; this acid, by the aid of heat, dissolved out only 2·475 per cent.; the solution was found to contain:

Silica	trace.	Lime	small quantity.
Alumina	small quantity.	Magnesia	" "
Iron	" "	Cobalt	trace.
Manganese	very small quantity.	Alkalies	not sought for.

The rock contains:

Graphite	30·516
Rock matter, soluble in hydrochloric acid	2·475
Rock matter, insoluble in hydrochloric acid	66·874
Hygroscopic water	0·135
	100·000