

2. *Disseminated Graphite.*

From the twenty-second lot of the sixth range of Buckingham. The property of the Buckingham Mining Company. Several important beds of disseminated graphite occur towards the front of this lot. They have as yet only been uncovered. The specimen examined was considered a fair average of one of the most important beds.—Authority, Mr. H. G. Vennor.

Analyses of
"Disseminated
graphite" from
Buckingham.

The graphite, which occurs in scales, is evenly distributed through the rock; the latter was very much decomposed, and coloured brownish-yellow to reddish-brown from the presence of ferric hydrate. The rock contained no calcite; a small quantity of pyrrhotite was, however, shown to be present. Hydrochloric acid, with the aid of heat, dissolved out from the powdered rock 19.467 per cent.; the solution was found to contain:

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

The rock contains:

Graphite	22.385
Rock matter, soluble in hydrochloric acid.....	19.467
Rock matter, insoluble in hydrochloric acid.....	56.408
Hygroscopic water.....	1.740

100.000

3. *Disseminated Graphite.*

From the twentieth lot of the eighth range of Buckingham. The property of the Dominion of Canada Plumbago Company. From a large bed of disseminated graphite, probably of considerable extent. The specimen examined was considered a fair average.—Authority, Mr. H. G. Vennor.

The graphite is pretty evenly disseminated in scales throughout the rock. The latter contains some calcite, as also small quantities of pyrrhotite. The powdered mineral is freely attacked by hydrochloric acid, which, with the aid of heat, dissolved out 21.285 per cent.; the solution was found to contain: