

TABLE III.

[Lustre metallic or sub-metallic. Hardness sufficient to scratch glass distinctly. Colour, iron-black, steel-grey, or metallic-brown.]

In most of their examples, the minerals of this Table (those of steel-grey colour excepted) present merely a sub-metallic aspect. None emit fumes or odour when ignited BB on charcoal.

FIRST GROUP: *Anhydrous species. No water produced by their ignition in a bulb-tube or test-tube.*

Magnetite (Fe 72.4, O 27.6). *Franklinite* ([ZnO, MnO, FeO] Fe₂O₃). *Chromotite* (FeO 32, Cr₂O₃ 68).

Hematite (Fe 70, O 30). *Ilmenite* (Fe₂O₃, Ti₂O₃). *Rutile* (TiO₂). *Anatase* (TiO₂). *Wolfram* (FeO, MnO, WO₃).

Magnetite (= *Magnetic Iron Ore*), *Franklinite*, and *Chromolite* (= *Chromic Iron Ore*), are the principal representatives of a group of oxides of the common formula [RO, R₂O₃] and of Regular or Isopolar crystallization—their common forms being the octahedron and rhombic dodecahedron. Massive and granular varieties are also common. In some of the rarer representatives of the group (*Ferro-magnesite*, &c.) part of the FeO is replaced by MgO. *Magnetite* is always strongly magnetic, often shewing polarity; and *Franklinite* is very commonly magnetic also. In *Magnetite* the powder is black; in *Franklinite* (when free from magnetite) it is usually dark-brown; and the latter species gives a strong Mn-reaction by fusion with carb. soda. It is generally in small rounded grains or crystals, with red zinc ore or pale-