The ores of nickel are generally yellow when anhydrous, and green when hydrated. Their solutions are light green, and their soluble normal salts redden the litmus paper, and are decomposed at red heat.

The principal ores are :—

1. *Copper Nickel.—Nickeline.—Kupfernickel.—Arsenical Nickel.*—Of a pale copper-red colour.

It occurs massive, has a metallic lustre, and is extremely brittle ; specific gravity varying from 7·3 to 7·5. This mineral is essentially composed of 44 per cent. of nickel and of 56 per cent. of arsenic. Its formula is the following—NiAs.

2. *White Nickel* (*Rammelsbergite, Cloanthite*).—Is an arsenical ore which has been discovered at Reichelsdorf in Hesse-Cassel, at Schneeberg in Saxony, and in the Pyrenees, France, with Kupfernickel. Its composition is the following—nickel, 28% ; arsenic, 72%. Formula, $NiAs_2$.

3. *Nickel Glance.*—Another arsenical ore, containing sulphur. It occurs in the massive state and in cubical crystals ; it is of a steel-grey colour, and has been found in Sweden, in the Hartz, at Schlaming in Austria, in the Lower Pyrenees, France and in other places. Formula, NiAsS.

4. *Antimonial Nickel.*—Contains an average of 29 per cent. nickel, found in Andreasberg. Formula, NiSb.

5. *Millerite.*—Is a sulphide of nickel, of a brass-yellow colour. Has been found in small quantities in Bohemia, Saxony, Cornwall, South Wales, Sudbury. Contains 64 per cent. of nickel. Formula, NiS.