

ASPECT METALLIC.—*Not hard enough to scratch glass:*

- Malleable or ductile. 1, 2.
Yielding to the nail. 4, 6, 14, 21, 30.
Not yielding to the nail. 5, 7, 8, 9, 10, 11, 15, 22.

ASPECT NON-METALLIC (stony, glassy, &c.)—*Hard enough to scratch glass:*

- Infusible, very hard, not yielding to the knife. 19, 24, 25, 31, 32, 33, 34.
Fusible, not yielding water in the bulb tube. 26, 27, 28, 29, 31, 32, 34.
Fusible, yielding water in the bulb tube. 40, 41, 42, 43, 44, 47.

ASPECT NON-METALLIC (stony, glassy, &c.)—*Not hard enough to scratch glass:*

- Soluble, having a saline taste. 16.
Take fire when held in thin splinters in the flame of a candle. 3, 58.
Does not take fire, but burns with a red glow when heated. 3a.
Incombustible, streak colored. 18, 20, 21a, 23b & c, 52, 57.
Incombustible, streak white.—*Not yielding water in the tube:*
Yielding to the nail. 27c, 30, 35.
Effervesing strongly in cold acids. 53.
Effervesing feebly in cold, but sensibly in hot acids. 54, 55.
Fusible. 7, 49.
Infusible, 9, 49, 50, 56.

Incombustible, Streak white.—*Yielding water in the bulb tube:*

Yielding traces only, or a very small amount of water. 26a, 30, 35.

Yielding a considerable amount of water.

- B.B. Fuses on the edges with difficulty. 36, 37.
B.B. Exfoliates and crumbles. 51.
B.B. Fuses easily. 38, 39, 45, 46.
B.B. Infusible. 48.

NATIVE ELEMENTS.

1. GOLD.—I. H = 2.5 - 3; G = 15.6 - 19.5.—Color golden yellow. Seetile. Malleable. Not affected by any single acid, but soluble in a mixture of nitric and muriatic acids. Has been found in streams in the northern part of New Brunswick, and sparingly by analysis in ores of iron, zinc, &c., in Charlotte County. Used in jewelry, coinage, &c.

2. COPPER.—I. H = 2.5 - 3; G = 8 - 9.4.—Color copper red. Seetile. Malleable. Dissolves in nitric acid, and when metallic iron or steel is immersed in the solution it becomes coated with copper. Found sparingly at Little Salmon River, St. John, and at Clark's Point and Grand Manan, Charlotte County. This was the only metal used by the North American Indians of this region before the discovery of America, and was brought by them from Lake Superior, where there are very large deposits.

3. COAL.—H = 1 - 2.5; G 1.2 - 1.75.—Color black to dark brown. Combustible. B.B. entirely consumed except the mineral impurities called "Ash."—The varieties are:—

3a. *Anthracite* or Hard Coal. This consists of carbon with 4 to 7 per cent. of water and more or less ash.—There are small seams of this mineral in the grey sandstones near Saint John, and an important bed of granular anthracite with a heavy ash (specific gravity 1.84) occurs with similar sandstones at Lepreau Basin, Charlotte County, where it is mined.

Bituminous Coal. Carbon with 10 to 60 per cent. of bitumen and 3 to 20 per cent. of "Ash."—Of this there are several kinds, viz.:—

3b. *Pitch or Caking Coal*, which needs to be stirred to help combustion. Suitable for grate-fires and forges.—Mined at Newcastle and Coal Creek, Queens County.