

SYSTEM
OF
MINERALOGY,

COMPREHENSIVE

**ORYCTOGNOSY,
GEOGNOSY,
MINERALOGICAL CHEMIS-
TRY,**

**MINERALOGICAL GEOGRA-
PHY, AND
ECONOMICAL MINERALO-
GY.**

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PHYSICAL SOCIETIES OF JENA, ETC.**

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1805.

Observations.

1. It may probably be placed in the System after Lead-Glance.

2. As it has received no name, it may, in honour of the distinguished mineralogist who first described it, be denominated *Bournonite*.

Columbite.

Columbium, *Hatchett*, Phil. Trans. for 1802. — Columbium, *Broch.* t. 2. p. 550. — Columbeisen, *Reufs*, 4. b. f. 632.

External Characters.

Colour dark steel-grey, which inclines to iron-black.

Occurs massive.

Internally it is shining, and its lustre inclines to femimetallic.

Longitudinal fracture imperfect foliated; cross fracture fine-grained uneven.

Is semihard.

Yields a dark yellowish-brown streak.

Is brittle.

Easily frangible; and

Heavy.

Specific gravity, 5.918, *Hatchett*.

Chemical Characters.

Mineral acids act but feebly on it, and extract a portion of its iron. Melted with five times its weight

weight of potash, an ebullition follows, and the mixture melts into a greenish-coloured mass.

Constituent Parts.

Columbic oxide,	78
Oxide of iron,	21
	<hr/>
	99

Geographic Situation.

This fossil was found by Mr Hatchett in the British Museum, amongst a collection of minerals sent from the province of Massachusetts in North America.

Observations.

1. Mr Hatchett found it to contain a metal, which, from its properties, could not be referred to any hitherto known; hence he was of opinion that it should be considered as a new genus, to which he gave the name *Columbium*, in honour of the discoverer of America.

2. As it does not contain the metal in a metallic state, I have, with Dr Thomson, denominated it *Columbite*.

3. Although this species contains a new metal, and that in great proportion, yet I doubt much if it can be considered as a distinct genus. Its external characters bear so great a resemblance to several ores of iron, that it would probably not be improper, for the present to place it in the Iron Genus.

Tantalite.