APPENDIX.

CONTAINING

MINERALS THE COMPOSITION OF WHICH IS UNKNOWN OR DOUBTFUL, AND WHICH ARE OTHERWISE IMPERFECTLY DESCRIBED.

GOLD AMALGAM. — In small white globules, in the platinum stream-works of Columbia. Analysis by Schneider:— mercury 57·40, gold 38·39, silver 5·00.

KANEITE. — In granular masses. Lustre metallic. Greyish-white. G = 5·5. Mn^2As. Analysis by Kane:—manganese 45·5, iron a trace, arsenic 51·8. Saxony.

APHTHONITE. — Steel-grey, compact. G = 4·87. Melts easily before the blowpipe. Analysis by Svanberg:—sulphur 30·05, antimony 24·77, copper 32·91, silver 3·09, lead 0·04, zinc 6·40, iron 1·31, cobalt 0·49, stony matter 1·29, arsenic traces. Is found in Wermskog in Wermland in Sweden.

BRONGNIARDITE.—(Damour. Annales de Mines. t. xvi. 1849. 227.) Fracture uneven. No cleavage observed. Lustre metallic. Streak blackish-grey. H above 3. G = 5·950. In the matrass decrepitates, fuses and yields a slight orange sublimate in the lower part, and a white sublimate above. In the open tube emits fumes of sulphur, and deposits a white sublimate of oxide of antimony. Before the blowpipe on charcoal melts below redness, emits the odour of sulphur and white fumes, and leaves a globule of silver surrounded by a yellow areola of oxide of lead. Partially decomposed by nitric acid. Soluble in a large quantity of boiling hydrochloric acid. $\acute{P}b + \acute{A}g + \dddot{S}b$, sulphur 19·08, antimony 30·66, silver 25·65, lead 24·61. Mean of three analyses by Damour:—sulphur 19·24, antimony 29·77, silver 24·77, lead 24·91, copper 0·62, iron 0·26, zinc 0·36. Was found associated with pyrite in Mexico.