

ALLUVIAL CINNABAR AT JANE RIVER DISTRICT.

Until this year no mercury minerals had been located in Tasmania. In September last small quantities of the mercury sulphide, Cinnabar, were detected in the gravels of small creeks running from the western foothills of Algonkian Mountain to Jane River.

Recently a sample of the mineral from the same area handed to the Mines Department by Mr. V. Kingston was analysed with the following result:-

	<u>Per cent</u>
Mercury	84
Sulphur	13
Non-volatile matter	2

It occurs as small irregular grains of an average size of 1/16th of an inch, and is found in association with the alluvial gold of the district. The mineral does not appear to be plentiful and at present it can only be regarded as of mineralogical interest.

Cinnabar is the only important ore of mercury. It is a bright red sulphide, usually occurring in a massive or granular condition. When pulverized it produces a distinctive scarlet coloured powder. Its hardness varies from 2 to 2.5 and its specific gravity from 8 to 8.2.

Queensland is the only place in Australia where mercury minerals are at present being exploited. It there occurs as alluvial cinnabar, and small quantities are being produced.

Mercury is the only metal which is liquid at ordinary temperatures. It has a silvery white colour and perfect metallic lustre. It freezes at about 39°C. forming a tin white ductile and malleable metal, and when heated it vaporizes at 360°C.

Mercury is used for many purposes, it enters largely into the manufacture of drugs and chemicals. Mercuric chloride and iodide are among the most powerful of all known antiseptics.

Fulminate of mercury is the detonating agent used for firing explosive charges in mines and quarries. During the war it was used in detonators for small arms ammunition, as well as for torpedoes, floating mines, high explosives shells and for the larger guns.

A large quantity of mercury is used in the manufacture of vermillion, a brilliant red pigment, and also in the form of red oxide of mercury for painting the bottoms of ships.

A certain amount of mercury is also consumed in electrical apparatus, including rectifiers for changing alternating into direct current, mercury vapour lamps and storage batteries.

The market unit for mercury by which it is quoted and sold is peculiar to itself, being the iron flask containing 75 lb. of the metal. The price of mercury is subject to considerable fluctuation. During the war there was an abnormal rise in the price, as it was needed for munition purposes. The average price from 1908 to 1914 inclusive, was about £8.6.4 per flask. The average London price per flask

rose to £14.15.0 in 1915, and reached as much as £20.10.0 in 1918.

Since 1918 the price has gradually fallen but has not yet dropped to the level of prices ruling before the war. Latest quotations show the price to be in the vicinity of £11³/₈ net per flask.

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