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TIN ORE FROM THE BAUTSHI TIN FIELDS, NORTHERN NIGERIA.

This sample of tin ore is stated to have been taken from a depth of about 6 feet from the surface of a plain lying to the north of a range of hills about 70 miles south-west of Bautshi in Northern Nigeria.

The specimen weighed about one pound, and consisted of small fragments, most of them less than one-eighth of an inch in diameter. The material proved to be chiefly composed of cassiterite or oxide of tin. On microscopic examination a number of small garnets and red grains of rutile were seen to be present, and magnetite and topaz in very small quantities.

The mineral, as received, furnished on analysis the following results :—

Tin dioxide (SnO_2)	81·30	per cent.
(equal to metallic tin 64 per cent.		
Silica (from garnets) (SiO_2)...	1·0	,,
Titanium dioxide (TiO_2) ...	5·46	,,
Ferrous oxide (FeO)	6·63	,,
Alumina (Al_2O_3)	4·60	,,
Magnesia (MgO)	0·35	,,
Lead oxide (PbO)	0·25	,,

Calcium, copper, gold, and arsenic were absent.

It is evident that this is an excellent sample of tin ore, rich in tin and free from arsenic, which probably could be smelted direct after washing. It has been recommended that steps should be taken to ascertain the extent of the deposit, and a representative sample of about one hundredweight has been asked for in order to determine how far the composition of the deposit is uniform and also for technical trials as to the best method of smelting the ore.

FIBRES FROM SIERRA LEONE.

A number of fibres prepared in Sierra Leone were forwarded by the Government of the colony for chemical examination and commercial valuation. The specimens included the fibres of *Sansevieria guineensis*, *Furcræa cubensis* and *Elæis guineensis*; also a fibre named " Hibiscus fibre" by the natives, but probably derived from *Abutilon periplocifolium*, and varieties of banana and plantain fibres.

From the appearance of the fibres it was evident that they had been only roughly prepared, so that a portion of each sample was