

453. China clay, from the Rajmahal Hills, Bengal.
 454. Sandy clay, from Jeypoor, Assam.
 455. Washed clay, from Jeypoor, Assam.
 456. Washed clay, from decomposing felspathic rock, from the bed of the Numbar River, Upper Assam.
 457. Washed clay, after a second washing.
 458. Kaolin, from Lovedale, Nilghiri Hills. (Three specimens.)
 459. Clays of various colours and degrees of fineness, from the neighbourhood of Mangalore, much used in the manufacture of tiles and common pottery by the industrial establishment of the German mission at Mangalore.
460. Kaolin, from same neighbourhood, used for pottery. G. S. I. Collection. Sent by H. S. Thomas, Esq., Collector of the South Canara district, Madras Presidency.
461. A box with 24 assorted specimens of minerals from Southern India. Sent by Dr. Bidie, Superintendent of Government Central Museum, Madras, to be given, after the Exhibition, to some museum in Vienna.
462. A box containing specimens of the building stones used in the Chanda district, Central Provinces. Sent by the Nagpore Committee.

CONTRIBUTIONS FROM OTHER SOURCES.

SECTION A.—MINERAL FUELS.

The Government borings for coal in Central India have proved successful. At a point 300 miles to the east of Bombay and 200 to the south of Nerbudda there is a well-ascertained coal-field. One of the shafts sunk has proved 52 feet of coal at a depth of 149 feet, and another 32 feet of coal at a depth of 180 feet. Every one of upwards of 20 bore-holes has also revealed coal. The area of the coal-field is as much as 60 miles in length by from 15 to 20 in breadth, and the quality of the coal is excellent for locomotive purposes.

Central Provinces Committee.

Coal from the Chanda, Belaspore, Chindwarra, and Husahu River districts.

The Local Committee remarks:—"It is believed that the Chanda coal will be delivered at the Wardha station of G. I. P. Railway for 18s. per ton. The coals of the Belaspore and Chindwarra districts will never find their way to market till the country is opened up."

SECTION B.—MINERAL ORES AND METALS.

The most important and plentiful of Indian mineral ores is that of iron. The reputation which attaches to the celebrated "Wootz" will be sufficient excuse for extracting from the Asiatic Journal some particulars of its manufacture:—

"The ore from which the wootz steel is made is the magnetic oxide of iron, combined with quartz; the ore varies much in its appearance, according as the grains of quartz and oxide of iron are large or small, but the proportion in which the component parts unite is nearly uniformly 48 of quartz and 52 of oxide of iron, in 100 parts by weight.

"It is found in many parts of the south of India, but the district of Salem is the principal seat of the steel manufacture. The ore occurs generally in the form of low hills, and the quantity of it which is exposed above the surface of the surrounding country is so considerable that it is not probable that it will ever become necessary to have recourse to underground operations, supposing the smelting of iron ore from this district to be carried on to any extent that can be contemplated.

"It is prepared for being smelted by stamping and separating the quartz from it, either by washing it in a current of water, or by winnowing it in the manner in which rice is separated from the husk; in most of the deposits of ore, parts are found in which the quartz is in a state of disintegration, and these, from the greater facility with which they are broken, are always selected by the natives for their furnaces.

"The furnace, or bloomery, in which the ore is smelted, is from three to five feet high from the

surface of the ground, and the ground is hollowed out beneath it to the depth of from eight inches to a foot; it is somewhat pear-shaped, being about two feet in diameter at the ground, tapering to about one foot diameter at the top; it is built entirely of clay, two men can finish one in a few hours, and it is ready for use next day. The blast is supplied by two bellows, each made of a single goat's skin, with a bamboo nozzle; the two nozzles meet in a clay pipe, which passes about half way through the furnace at the level of the ground, and by working the bellows alternately a tolerably uniform blast is kept up; a semicircular opening, about a foot high and a foot in diameter at the bottom, is left in the furnace, and before each smelting it is built up with clay. The furnace is then filled up with charcoal, and a lighted coal being introduced before the bellows, the fuel in the interior is soon kindled; as soon as this is accomplished, a small portion of the ore previously moistened with water, to prevent it from running through the charcoal, but without any description of flux, is laid on the top of the fuel, and charcoal is thrown over it to fill up the furnace; in this manner ore and fuel are added, and the bellows plied for four hours or thereabouts, when the process is stopped; and the temporary wall in front of the furnace having been broken down, the bloom is removed by a pair of tongs from the bottom of the furnace; it is then beaten with a wooden mallet to separate as much of the vitrified oxide of iron as possible, and while still red hot, it is cut through the middle with a hatchet, in order to show the quality of the interior