PLATINUM.
Occurrences.

Obispo county; Santa Cruz, and occasionally between Santa Cruz and the Golden Gate. In accordance with Blake's statement, the richest beaches are further north, in Humboldt and Del Norte Counties. The beach mines of Gold Bluff north of Arcata, Big Lagoon, Stone Lagoon, Little River, Crescent City, Cal., and Gold Beach and Port Orford, in Curry county Oregon, have all yielded platinum in commercially appreciable quantities. Still further north, platinum is found at Yaquina beach, Oregon, but the sands there are poor."

Russia.—The metal is found in the Ural mountains sparsely disseminated in peridotite and serpentine masses. The platiniferous alluvial deposits are also characterized by the presence of loulders of olivinite and serpentine, which both contain chromite. Thus the source may be said to have been placed, the matrix being beyond doubt the serpentinized olivinite. It is even reported that a streak or zone of this rock some six feet wide in a massive olivinite, was actually worked for some time for its contents of platinum, but at a depth of about 35 feet it was no longer workable. It does not seem certain that platinum has been found in the perfectly fresh igneous rock which had not yet undergone ser entinization, hence there is a possibility that the same agencies that brought about the conversion of the olivine into serpentine also introduced the platinum into the rock. (Min. Ind. Vol. VI. Abstract.)

Over 90 per cent of the world's production of platinum is derived from the placer deposits of the Urals in Russia. The whole of the platinum producing portion of these mountains is contained within a length of 100 miles along the 60° meridian E. of Greenwich, between latitudes 57.30° and 59° and is all included within the government of Perm. Within this area there are two chief districts, Goroblagodatsk in the north and Nishni Tagilsk in the south. The platinum placers occupy the valley bottoms of a number of streamlets and their branches, the alluvions of the larger streams being rarely rich enough for working. In the Goroblagodatsk district, which lies wholly on the Asiatic side of the Urals, the placers are found on the river system of the Iss and its tributaries which, in its turn, discharges into the Tourna. The total length of the Iss and its affluents a about 60 miles.

In the southern district the main producing area lies on the European side of the Ural watershed in the river systems of the Vissine and the Martian. On these 18 placers are being worked. On the Asiatic side there are three fields of operation on the Chornaia and its tributary, the Chonge.