

northern hemisphere. The peak of Tolima (lat.  $4^{\circ} 46'$ ), which is almost unknown even by name in Europe, and which I measured in 1801, is at least 2865 toises high. It consequently surpasses Imbabura and Cotocache in the province of Quito, the Chiles of the table-lands of Los Pastos, the two volcanos of Popayan, and even the Nevados of Mexico and Mount Saint Elias of Russian America. The peak of Tolima, which in form resembles Cotapaxi, is perhaps inferior in height only to the ridge of the Sierra Nevada de Santa Marta, which may be considered as an insulated system of mountains.

The eastern chain, also called the chain of Choco and the east coast (of the Pacific), separates the provinces of Popayan and Antioquia from those of Barbacoas, Raposo, and Choco. It is in general but little elevated, compared to the height of the central and eastern chains; it however presents great obstacles to the communications between the valley of Cauca and the shore. On its western slope lies the famous auriferous and platiniferous land,\* which has during ages yielded more than 13,000 marks of gold annually. This alluvial zone is from ten to twelve leagues broad; its maximum of productiveness lies between the parallels of  $2^{\circ}$  and  $6^{\circ}$  lat.; it sensibly impoverishes towards the north and south, and almost entirely disappears between  $1\frac{1}{4}^{\circ}$  north lat. and the equator. The auriferous soil fills the basin of Cauca, as well as the ravines and plains west of the Cordillera of Choco; it rises sometimes nearly 600 toises above the level of the sea, and descends at least 40 toises.† Platinum (and this fact is worthy of attention) has hitherto been found only on the west of the Cordillera of Choco, and not on the east, notwithstanding the analogy of the fragments of rocks

\* Choco, Barbacoas, and Brazil are the only countries in which the existence of grains of platinum and palladium has hitherto been fully ascertained. The small town of Barbacoas is situated on the left bank of the Rio Telembi (a tributary of Patias or the Rio del Castigo), a little above the confluence of Telembi and the Guagi or Guaxi, nearly in lat.  $1^{\circ} 48'$ . The ancient Provincia, or rather the Partido del Raposo, comprehends the insalubrious land extending from the Rio Dagua, or San Buenaventura, to the Rio Iscuande, the southern limit of Choco.

† M. Caldas assigns to the upper limit of the zone of gold-washings, only the height of 350 toises. *Semanario*, (tom. i, p. 18); but I found the *lavaderos* of Quilichao, on the north of Popayan, to be 565 toises high.