

a north-west and south-east direction, and gives evidence—contrary to what now is—of a former linear extension of New Zealand along such line far beyond the limits of the present land. This obtained during early Cretaceous times, and long prior to the appearance of the Southern Alps, or of the mountains of the main chain extending from Cook Strait to the Bay of Plenty in the North Island.

From the east side of the south part of peninsular Auckland springs the Cape Colville Peninsula. This is bounded on the east side by the ocean, and on the west side by the Hauraki Gulf and the Frith of Thames. Strictly speaking, the Peninsula may be considered as terminated along a line drawn between the mouths of the Thames and Tairua Rivers. Doubtless this is true, but it must be apparent to every one having knowledge of the district that the tract of broad low swampy plain across which the Thames and Piako Rivers find their way to the sea is of extremely modern date. This extensive plain is for many miles to the south but a few feet above the level of the sea, and is unquestionably due to the action of the Waikato River filling-in and reclaiming the southern portion of the Hauraki Gulf.

There is thus reason to believe that once, and (geologically speaking) at no distant date, the southern continuation of the mountains of the Cape Colville Range were peninsular to and beyond Mount Te Aroha, or, in other words, to where the range ceases and the high sloping plateau to the south and south-east begins. Hence the whole region may properly be treated of as included in and forming the Cape Colville Peninsula.

The surface of the Peninsula is generally broken, in some parts extremely rugged, and along the main axis the mountains rise to an elevation of 2,000 ft. to 3,000 ft. The culminating points are in the extreme north and south parts, Moehau and Te Aroha being mountains of about equal height. Te Aroha does not stand on the main axis or water-divide, but somewhat to the westward, and is built up of rocks belonging to the first and second periods of volcanic activity, as displayed on Cape Colville Peninsula. Moehau, on the other hand, of nearly equal height, terminates towards the north the main range, and is itself a mountain formed of Palæozoic or older Mesozoic strata, hence for it may be claimed the chief place among the mountains of the Peninsula. South of Moehau the mountains lessen in height, till on the road between Cabbage Bay and Port Charles the heights do not exceed 800 ft. to 1,000 ft., and the road crosses the range at an elevation of 500 ft. Further south the water-divide attains to 1,500 ft. above the sea, till the range is again broken a little south of the track from Cabbage Bay to Kennedy Bay. This may be called the Cabbage Bay Range.

South of the Cabbage Bay Range and the saddle mentioned the water-divide shifts a little to the westward, and suddenly attaining a height of 1,700 ft. is continued in a straight line along the Austral and Tokatea Ranges to the Tokatea Saddle (1,200 ft.). Along the Success Range the same line of elevation is continued to the saddle by which the Coromandel-Kuaotunu Road crosses the ranges, and further to the south in the same line the main line of height is continued along the Tiki and Castle Rock Ranges to the saddle at the source of the Waiiau by which the Tiki-Mercury Bay Road crosses the range here, also at a height of 1,200 ft. above the sea.

Yet farther south the range is continued in a direct line to the source of the Waiwawa, flowing north-east into Mercury Bay, and of Tapu and Puru Creeks, draining into Hauraki Gulf. Opposite the source of the Puru Creek the water-divide turns sharply to the eastward, and runs in this direction a distance of six miles across Table Mountain to the source of the Kauaeranga River. South of the source of the Puru the main range of the northern part of the Peninsula is continued as a spur range between the middle and lower parts of the Kauaeranga Valley and the east shore of the Hauraki Gulf to the Kauaeranga River.

In Table Mountain a new line of water-divide is established, which at first trends a little to the west of south, and divides the waters flowing eastward into the Tairua River from those flowing west along the Kauaeranga, Kerikeri, and Puriri Streams to the sea or the Thames River. This is a range distinct from that extending from Moehau to the Thames, and appears to be of younger date, denudation having barely sufficed to reduce and break into peaks and saddles what in the first instance was a high table-land, on which are yet represented, in its northern parts, the youngest of the volcanic rocks of the Peninsula. Beyond the source of the Puriri the water-parting trends slightly to the south-east, to the divide between the Hikutaia Stream and the source of the Tairua River, and thence in the same direction between the waters falling to the eastward and the Waitekauri, a tributary of the Ohinemuri River, on the west. The range of mountains beginning with Table Mountain terminates on the north side of the Hikutaia Valley, from which point the water-parting again departs to the east, and again takes up the south-east line, terminating at Waihi as already described.

Between the Hikutaia and Ohinemuri Rivers and west of the Marototo and the Waitekauri Streams, the southern continuation of the second main range commencing in Table Mountain is broken up into a series of high hills having no definite arrangement. The Komata Stream cuts deeply into the heart of these, while other lesser streams falling into the Hikutaia and Ohinemuri Rivers also break into and interrupt the continuity of these hills, so that they do not form a range, but a cluster of separate and distinct mountains. The Ohinemuri River, in its middle course, breaks through between these hills and Karangahake Mountain, and its upper valley opens out into the wide basin of the Waihi Plain, the actual water-parting receding nearly to the East Coast.

From the south side of the Waihi Plain the water-parting goes south-west to Mount Te Aroha, and includes between this and the crest of the Karangahake Range the watershed of the Whaita-wheta, the principal southern tributary of the Ohinemuri River. The Karangahake-Te Aroha Range thus lies on the western verge of the mountainous district, and is separated altogether from the water-parting between the East Coast and the valley of the Thames or Waihou River.

At the source of the Whaita-wheta and the Waiorongomai a high saddle connects Te Aroha with the mountain range to the east, which, as the main range, once more constitutes the true water-