

this tract in so eastern a longitude (probably long. 74°), is the more remarkable, as we find at four degrees of latitude further north, neither a rock nor a hill on the east of Xeberos, or the mouth of the Huallaga (long. $77^{\circ} 56'$).

We have just seen that the spur of Beni, a sort of lateral branch, loses itself about lat. 8° ; the chain between the Ucayali and the Huallaga terminates at the parallel of 7° , in joining, on the west of Lamas, the chain of Chachapayas, stretching between the Huallaga and the Amazon. Finally, the latter chain, to which I have given the designation of 'central,' after forming the rapids and cataracts of the Amazon, between Tomependa and San Borja, turns to north-north-west, and joins the western chain, that of Caxamarca, or the Nevados of Pelagatos and Huaylillas, and forms the great knot of the mountains of Loxa. The mean height of this knot is only from 1000 to 1200 toises: its mild climate renders it peculiarly favourable to the growth of the cinchona trees, the finest kinds of which are found in the celebrated forest of Caxanuma and Uritusinga, between the Rio Zamora and the Cachiyacu, and between Tavacona and Guancabamba. Before the cinchona of Popayan and Santa Fe de Bogota (nor. lat. $2\frac{1}{2}^{\circ}$ to 5°), of Huacarachuco, Huamalias, and Huanuco (south lat. 9° to 11°), became known, the group of the mountains of Loxa had for ages been regarded as the sole region whence the febrifuge bark of cinchona could be obtained. This group occupies the vast territory between Guancabamba, Avayaca, Oña, and the ruined towns of Zamora and Loyola, between lat. $5\frac{1}{2}^{\circ}$ and $3\frac{1}{4}^{\circ}$. Some of the summits (the Paramos of Alpachaca, Saraguru, Savanilla, Gueringa, Chulucanas, Guamani, and Yamoca, which I measured), rise from 1580 to 1720 toises, but are not even sporadically covered with snow, which in this latitude falls only above 1860 to 1900 toises of absolute height. Eastward, in the direction of the Rio Santiago and the Rio de Chamaya, two tributary streams of the Amazon, the mountains lower rapidly: between San Felipe, Matara, and Jaen de Bracamoros, they are not more than 500 or 300 toises.

As we advance from the mica-slate mountain of Loxa towards the north, between the Paramos of Alpachaca and Sara (in latitude $3^{\circ} 15'$), the knot of mountains ramifies into two branches, which comprehend the longitudinal