

from San Juan de la Frontera and San Juan de la Punta to the town of Cordova. The second spur, called the Sierra de Salta and the Jujui, of which the greatest breadth is  $25^{\circ}$  of latitude, widens from the valley of Catamarca and San Miguel del Tucuman, in the direction of the Rio Vermejo (longitude  $64^{\circ}$ ). Finally, the third, and most majestic spur, the Sierra Nevada de Cochabamba and Santa Cruz (from  $22^{\circ}$  to  $17\frac{1}{2}^{\circ}$  of latitude), is linked with the knot of the mountains of Porco. It forms the points of partition (divortia aquarum, between the basin of the Amazon and that of the Rio de la Plata. The Cachimayo and the Pilcomayo, which rise between Potosi, Talavera de la Puna, and La Plata or Chuquisaca, run in the direction of south-east, while the Parapiti and the Guapey (Guapaiz, or Rio de Mizque), pour their waters into the Mamori, to north-east. The ridge of partition being near Chayanta, south of Mizque, Tomina, and Pomabamba, nearly on the southern declivity of the Sierra de Cochabamba in lat.  $19^{\circ}$  and  $20^{\circ}$ , the Rio Guapey flows round the whole group, before it reaches the plains of the Amazon, as in Europe the Poprad, a tributary of the Vistula, makes a circuit in its course from the southern part of the Carpathians to the plains of Poland. I have already observed above, that where the mountains cease (west\* of the meridian of  $66\frac{1}{2}^{\circ}$ ), the partition ridge of Cochabamba goes up towards the north-east, to  $16^{\circ}$  of latitude, forming, by the intersection of two slightly inclined planes, only one ridge amidst the savannahs, and separating the waters of the Guaporè, a tributary of the Madeira, from those of the Aguapehy and Jauru, tributaries of the Rio Paraguay. This vast country between Santa Cruz de la Sierra, Villabella, and Matogrosso, is one of the least known parts of South America. The two spurs of Cordova and Salta present only a mountainous territory of small elevation, and linked to the foot of the Andes of Chile. Cochabamba, on the contrary, attains the limit of perpetual snow (2300 toises), and forms in some sort a lateral branch of the Cordilleras, diverging even from their tops between La Paz and Oruro. The mountains composing this

\* I agree with Captain Basil Hall, in fixing the port of Valparaiso in  $71^{\circ} 31'$  west of Greenwich, and I place Cordova  $8^{\circ} 40'$ , and Santa Cruz de la Sierra  $7^{\circ} 4'$  east of Valparaiso. The longitudes mentioned in the text refer always to the meridian of the Observatory of Paris.