

THE
MODERN TRAVELLER.

A
POPULAR DESCRIPTION,
GEOGRAPHICAL, HISTORICAL, AND TOPOGRAPHICAL,
OF THE
VARIOUS COUNTRIES OF THE GLOBE.

COLOMBIA.

LONDON:
PRINTED FOR JAMES DUNCAN;
OLIVER AND BOYD, EDINBURGH; M. OGLE, GLASGOW;
AND R. M. TÍMS, DUBLIN.

1825.

LONDON :
PRINTED BY J. MOYES, BOUVERIE STREET.

CONTENTS.

	PAGE
BOUNDARIES OF COLOMBIA.....	I
ANCIENT AND MODERN NAMES OF THE TERRI- TORY	ib.
GEOGRAPHICAL EXTENT AND POPULATION	3
PROVINCIAL DIVISIONS	7
POLITICAL CONSTITUTION.....	11
PHYSICAL GEOGRAPHY	12
CUMANA	24
FROM CUMANA TO THE CHAYMA MISSIONS.....	58
CAVERN OF GUACHARO	78
BARCELONA	102
LA GUAYRA	105
FROM LA GUAYRA TO CARACAS	111
CARACAS	115
EARTHQUAKE OF 1812	121
STATE OF SOCIETY IN CARACAS	132
REVENUE AND SALE OF BULLS	144
ENVIRONS OF CARACAS	155
FROM CARACAS TO VALENCIA	160
LAKE OF VALENCIA	183
FROM VALENCIA TO PUERTO CABELLO	201
LAKE OF MARACAYBO	208
PROVINCE OF VARINAS	220

	PAGE
FROM VALENCIA TO SAN FERNANDO D'APURE ..	223
THE LLANOS	226
FROM VALENCIA TO BOGOTA	244
MERIDA	257
CUCUTA	266
TUNJA	277
CARTAGENA	282
SANTA MARTA	296
VOYAGE UP THE MAGDALENA	300
BOGOTA	311
FALL OF TEQUENDAMA	327
LAKE OF GUATAVITA	333
NATURAL BRIDGES OF ICONONZO	337
FROM BOGOTA TO CARTAGO	341
FROM CARTAGO TO CITERA	351
POPAYAN	356
PANAMA	357

DIRECTIONS FOR PLACING THE PLATES.

<i>MAP of COLOMBIA</i>	<i>to face the Title.</i>
<i>CHIMBORAZO</i>	13
<i>PASSAGE of the QUINDIU</i>	344
<i>RAFT on the RIVER GUAYAQUIL</i>	355

THE MODERN TRAVELLER,

ETC. ETC.

COLOMBIA.

[A republic of South America, lying between lat. $11^{\circ} 30'$ N., and $6^{\circ} 30'$ S. : bounded, on the N., by the Caribbean Sea ; on the E. by the Atlantic Ocean and Dutch Guiana ; on the S. by Brazil and deserts which separate it from Peru ; on the W. by Guatimala and the Pacific Ocean.]

THE well-chosen name of Colombia was assumed by the provinces formerly composing the vice-royalty of New Granada and the captain-generalship of Venezuela, on their incorporation into a Federal Republic in the year 1819. The country was discovered by Columbus ; and thus, more than three hundred years after his death, tardy justice has been done to his memory, by giving his name to that portion of the New Continent on which he first landed. The admiral, Herrera informs us, was so much delighted with the beauty and fertility of these regions, that, with the warm enthusiasm of a discoverer, he imagined it to be the paradise described in Scripture, which the Almighty chose for the residence of man.* It was in the year 1498, in his third

* Robertson's America, book ii.

voyage, that this great navigator discovered the coast of Paria and Cumana in the captaincy of Caracas. In the following year, Alonso de Ojeda, who had accompanied Columbus in his second voyage, pursuing the same track, explored the coast as far as Cape de Vela. Having observed, near the lake of Maracaybo, the huts of an Indian village built upon piles, in order to raise them above the waters which overspread the plain, they called the place *Venezuela*, or little Venice; and the name was soon extended to the whole province, of which Coro became the capital. Venezuela was first colonised, however, by the German merchants to whom the conquered provinces were assigned by Charles the Fifth. On their abandoning it in 1550, the Spaniards again took possession of the country. The city of Caracas, which subsequently became the seat of government, was founded by Don Diego Losada in 1567. It derives its name from the Indian nation who occupied the territory. Venezuela is the national name since adopted by the seven confederate provinces of the captain-generalship, the province of Venezuela being distinguished by the name of the metropolis.* The kingdom of New Granada was conquered by Sebastian de Benalcazar and Gonzalo Ximenes de Quesada, about the year 1536. The former, who commanded at that time in Quito, attacked it from the south, while the latter invaded it from Santa Marta. The Indian name of the territory was Cundinamarca. It was erected into a captaincy-general in 1547, and made a vice-royalty

* The captain-general of Caracas had the title of Captain-general of the Provinces of Venezuela and City of Caracas. Venezuela is now one of the ten departments of the Republic, including the provinces of Caracas and Varinas.

in 1718. That office was suppressed in 1724, but was finally re-established in 1740.

These two grand political divisions of Spanish America, though now united under one federal government, differ most essentially in their physical aspect, and must always be considered as, in fact, distinct countries. New Granada, which comprises the western provinces, is, for the most part, a mountainous region, consisting of the plateaus and valleys of the great Cordillera of the Andes, from Guayaquil to Merida, together with the plains of San Juan de los Llanos, and comprises every variety of climate. Venezuela comprises three distinct regions or zones; the mountains and cultivated lands which skirt the northern shore, the savannas or steppes which extend from the base of the mountain-chain to the banks of the Orinoco, and the region of interminable forests, into which the traveller can penetrate only by means of the rivers that traverse them. In these three distinct zones, the three stages of civilisation are found remarkably separate and distinct. The life of the wild hunter is pursued in the woods of the Orinoco; the pastoral life in the *llanos*, or savannas; the agricultural, in the high valleys and at the foot of the mountains on the coast. Missionary monks and a few soldiers occupy here, as throughout America, advanced posts on the southern frontiers. Industry, intelligence, and the mass of the population, are concentrated within the region bordering on the coast, which extends for above two hundred leagues along the Caribbean Sea, a sort of mediterranean, on the shores of which almost all the nations of Europe have founded colonies. Thus, though the captaincy-general of Caracas is considerably larger than

Peru,* containing nearly 48,000 square leagues (25 to a degree), the total population in 1800, was estimated by Baron Humboldt at not more than 900,000 souls, or about twenty inhabitants to a square league. Of these, the Indians are supposed to form a ninth; the Hispano-Americans, or Creoles, nearly a fourth; the European Spaniards, exclusive of troops sent out from the mother-country, not a sixtieth; and the slaves, a fifteenth.† M. Dupons estimates the total population of the seven united provinces in 1801, at not more than 728,000;‡ and Colonel Francis Hall,

* “Peru, since La Paz, Potosi, Charcas, and Santa Cruz de la Sierra have been separated from it, and joined to the vice-royalty of Buenos Ayres, contains only 30,000 square leagues.”—HUMBOLDT'S *Pers. Nar.* vol. iii. p. 422. This appears, however, to be an erroneous estimate. The Author of “Letters from Colombia,” (8vo. Lond. 1824,) cites some statistical calculations, contained in a letter addressed by Baron Humboldt to Bolivar, in which the extent in square leagues of *twenty* to a degree, is stated as follows:

Venezuela,	33,700
New Granada	58,250
Peru	42,150

And the Baron remarks, that the results differ from those inserted in the Pol. Essay on New Spain (vol. iv. 322). According to this estimate, Peru, instead of being little more than three-fifths of the extent of Venezuela, is nearly a third larger!

† In the province of Caracas, the slaves amounted to nearly 40,000, one-fifth of whom were mulattoes; in Maracaybo, to between 10 and 12,000; in Cumana and Barcelona, to less than 6,000; in the *llanos* of Calabosa, San Carlos, Guanare, and Barquecimeto, to between 4 and 5,000. M. Humboldt sets down the total at 60,000; to which add 100,000 Indians, 210,000 Creoles, 15,000 Europeans, and there will remain 455,000 for the castes and free negroes.

‡ Of these, he calculated that two-tenths were whites, four-tenths “descendants of freed men,” *three-tenths* slaves, and the remainder (one-tenth) Indians. — *Travels in South America*, vol. i. p. 106. For the gross inaccuracy of this statement, as regards the

a British officer in the service of the Republic, carries the population of Venezuela in 1810 no higher than 825,000, since which period, he adds, "*above half the inhabitants of Venezuela are supposed to have perished.*" The fertile provinces of Guayana, Cumana, and Barcelona are almost abandoned, and the flourishing towns and villages of the plains are reduced to a grass-grown wretchedness, which scarcely leaves room to conjecture their former prosperity." The population of New Granada, this writer thinks, may be reckoned to have remained stationary, the natural increase of the last twelve years being balanced by the drains made to supply the waste of the Spanish and Republican armies. According to the calculation which he cites, made prior to 1810, it amounted to 2,430,000. Pombo, a Creole writer, who published in 1811 a Statistical Essay on New Granada, makes the population amount to 2,500,000: the numbers in each province agree with the document cited by Colonel Hall, but 70,000 are added for Neyva and Veragua, which the latter omits. This calculation is considered by M. Mollien as an exaggerated one, because, adding 900,000 for Venezuela, which he assumes to be the agreed number of the inhabitants of the seven eastern provinces, it would form an aggregate of 3,400,000 souls,—an estimate, he remarks, "little conformable to the census recently made by order of the present government." But the population of Venezuela, as we have seen, must not be taken higher than 6 or 700,000. The following is given by

proportion of slaves, M. Humboldt can account only by supposing that the French Traveller was misled by an error in the figures. Instead of 218,000, the whole black population of the captain-generalship should have been 54,000, or, in round numbers, 60,000, as stated above.

M. Mollien as a statement of the present population of New Granada :

Whites	250,000
Mestizoes	400,000
Indians	450,000
Mulattoes	550,000
Free negroes and slaves ..	94,600
	<hr/>
	1,744,600

This agrees with M. Humboldt's calculation, who states the population in 1800, in round numbers, at 1,800,000, and the superficial extent of the viceroyalty at 64,520 square leagues, which gives not quite thirty inhabitants to the square league. In this statement, the province of Veragua is, we suspect, not taken into account. The minuter details furnished by Pombo and Col. Hall's authority, entitle their statements, however, to be received as a nearer approximation to the truth. Taking the medium, we may conclude that the population of New Granada does not fall short of two millions; and adding 650,000 for Venezuela, we may set down the aggregate at 2,650,000. This is, in fact, the estimate given by a recent English traveller, Captain Stuart Cochrane, apparently from official documents. The population of the whole Republic, he says, about two years ago, was 2,644,000 souls. Its extent of surface, it is difficult to ascertain with any degree of precision. Reckoning from the mouth of the Orinoco to the western extremity of the isthmus of Panama, the Republic occupies twenty-two degrees (1,320 miles) of longitude; while from Cape la Vela to the southern extremity of Quito, it extends over eighteen degrees (1,080 miles) of latitude; viz. eleven degrees and a half north of the equator, and six and a half southward of that line. The total number of square leagues in the vice-

royalty and captain-generalship, as given by Humboldt, is under 113,000; and, taking into account the whole of the territory now claimed by the Republic, including Veragua and the Atlantic coast northward up to Cape Gracias a Dios, the geographical extent can hardly fall short of from 118 to 120,000 square leagues,—a dominion equal to that of the Mexican Federacy. On this calculation, the proportion of inhabitants will be not quite 23 to the square league. Captain Cochrane states the actual extent of the Republic at 900,000 square miles, “being seven times the extent of the British Isles.” It has, he says, 2,000 miles of coast on the Atlantic, and 1,200 on the Pacific Ocean.*

The following are the names of the provincial subdivisions, with their supposed population, in 1810:

NEW GRANADA.†

	Inhabitants.
1. Veragua	30,000
2. Panama and Porto Bello	50,000
3. Rio Hacha	20,000
4. Santa Marta	70,000
5. Carthagená	210,000
6. Antioquia	110,000
7. Mariquita	110,000
8. Cundinamarca (or Santa Fé) ..	190,000
9. Neyva.....	45,000
10. Pamplona	90,000

* In Mexico, the proportion of inhabitants on the whole territory, is 49 to the square league; in Guatemala, 46; in Peru, 33; in Buenos Ayres, 8; in all Spanish America, 28. This is Humboldt's estimate in 1800.—See *Pol. Essay*, vol. iv. p. 322; *Pers. Narr.* vol. iii. p. 430; *Hall's Colombia*, pp. 10, 15; *Mollien's Travels in Colombia*, pp. 352, 431; *Cochrane's Travels in Colombia*, vol. i. p. 514.

† In Alcedo's Dictionary, the new kingdom of Granada is described as being eighty leagues in length and somewhat less in

	Inhabitants.
11. Socorro	125,000
12. Tunja	200,000
13. Los Llanos (or Casanare)	20,000
14. Popayan	320,000
15. Choco (or Citara)	40,000
16. Quito	500,000
17. Quixos y Macas	40,000

width, and as divided into five military and seven civil governments, viz.

1. Panama	}	Military Governments.
2. Portobello		
3. Carthagena		
4. Santa Marta		
5. Maracaybo		
6. Antioquia	}	Civil Governments.
7. Choco		
8. Maraquita		
9. Giron		
10. Neiba (Neyva)		
11. Llanos de San Juan		
12. Veragua		

Besides these territorial divisions, Alcedo gives the names of sixteen provinces; but they are either erroneous or obsolete, and nothing can be made of them. These provinces are stated to be subdivided into 51 *corregimientos*, comprising 301 settlements, in which are 18,359 Indians. Panama and Porto Bello, however, he says, belong to the kingdom of *Tierra Firme*. In Bounycastle's Spanish America, the vice-royalty is described as consisting of 16 provinces, viz. Jaen de Bracamoros, Quixos, Maynas, Quito, *Tucames*, Popayan, Antioquia, Santa Fé, San Juan de los Llanos, *Merida*, Santa Marta, Carthagena, Choco; and the three provinces of *Darien*, Panama, and Veragua in *Tierra Firme*. In this enumeration, the names of eight provinces are omitted; viz. Rio Hacha, Mariquita, Tunja, Neyva, Pamplona, Socorro, Cuenca, and Guayaquil, which are described as subordinate districts. The last two, and the province of Loxa, are included by this writer in Quito, which formerly bore in Spain the official title of kingdom, though its president depended, alike in civil and military affairs, on the viceroy of Santa Fé. Even in Colonel Hall's enumeration of the provinces of the vice-royalty, Veragua and Neyva are omitted, Coro is inserted apparently in the place of Choco, and Macas is written Marnes.

	Inhabitants.
18. Cuenca	200,000
19. Loxa y Jaen	80,000
20. Guayaquil	50,000
	<hr/> 2,500,000

VENEZUELA.

21. Merida	} 120,000	
22. Truxillo		
23. Caracas		460,000
24. Varinas (or Barinas)		90,000
25. Barcelona	} 100,000	
26. Cumana (New Andalusia) ..		
27. Margarita		15,000
		<hr/> 785,000
28. Guayana		40,000
		<hr/> 3,325,000
Deduct on New Granada	500,000	
..... on Venezuela and Guayana	175,000	
	<hr/>	675,000
		<hr/>
Actual population		2,650,000

These provinces, by the recent political arrangements, are now distributed into ten departments.

1. Department of Orinoco.
including (1) Province of Guayana.
(2) ——— Cumana.
(3) ——— Barcelona.
(4) ——— Margarita.
2. Department of Venezuela.
including (1) Province of Caracas.
(2) ——— Varinas.
3. Department of Zulia, or Sulia.
including (1) Province of Coro.
(2) ——— Truxillo.
(3) ——— Merida.
(4) ——— Maracaybo.
4. Department of Magdalena.
including (1) Province of Carthagena.
(2) ——— Santa Marta.
(3) ——— Rio Hacha.

5.* Department of Panama.

supposed to

- include (1) Province of Panama.
- (2) ————— Veragua.
- (3) Mosquito Coast.

6. Department of Boyaca.

- including (1) Province of Tunja.
- (2) ————— Socorro.
- (3) ————— Pamplona.
- (4) ————— Casanare.

7. Department of Cundinamarca.

- including (1) Province of Bogota.
- (2) ————— Antioquia.
- (3) ————— Mariquita.
- (4) ————— Neyva.

8.* Department of Cauca.

- including (1) Province of Popayan.
- (2) ————— Choco.

9.* Department of Quito.

supposed to

- include (1) Province of Quito.
- (2) ————— Guayaquil.
- (3) ————— Cuenca.
- (4) ————— Loxa.

10. Department of —————

supposed to

- include (1) Province of Quixos. } formerly
- (2) ————— Macas. } united.
- (3) ————— Jaen.
- (4) ————— Maynas.

* These departments we have ventured to fill up by conjecture. Captain Cochrane, after particularising the provinces contained in the other seven departments, enumerates the remaining ten as not yet classed in departments. From Colonel Hall's volume, however, we learn incidentally, that the Republic is now divided into *ten* departments; but he mentions specifically only the four maritime departments of Orinoco, Caracas, Zulia, and Magdalena, which occupy the whole extent of coast from the mouths of the Orinoco to the isthmus. This tract, he describes as in every respect the most eligible for the purposes of emigration. No notice is taken by any of the writers above cited of the district of Tolagalpa, or the Mosquito coast, extending from Cape Gracias a Dios to the River Chagres, which has, since 1803, been annexed to Colombia. (See *MOD. TRAV. Mexico*, vol. ii. p. 195.)

The ecclesiastical divisions differed materially under the colonial system from those of the civil and judicial administration. Santa Fé de Bogota and Caracas were each the seat of an archbishop, but the bishops of Panama, Mainas, Quito, and Cuenca, were suffragans of the archbishop of Lima, not of the archbishop of New Granada.* Santa Fé, Caracas, and Quito, were each the seat of a royal *audiencia*.† Those courts have now ceased to exist, and the ecclesiastical divisions will, no doubt, be rendered conformable to the political arrangements. The present constitution of Colombia was fixed by the congress of Cucuta in 1821. It proclaims the perpetual independence of the nation, the sovereignty of the people, the responsibility of magistrates, and equality of rights. It declares the legislative power to be vested in a senate and a house of representatives. The senate is composed of four senators for each department of the Republic, elected every eight years: its peculiar functions are those of a high court of justice in cases of impeachment by the house of representatives; its ordinary functions are the same as those of the latter, except that it cannot originate money-bills. The house of representatives consists of mem-

We have ventured to class it in the department of Panama. The other two departments are filled up from what appears a natural arrangement, subject to correction on better information.—See Cochrane's Travels in Colombia, vol. i. p. 515; Hall's Colombia, p. 100.

* The other bishoprics are those of Popayan, Carthagena, Santa Marta, Merida, Guayana, and Antioquia. Quito is now to be formed into an archbishopric.

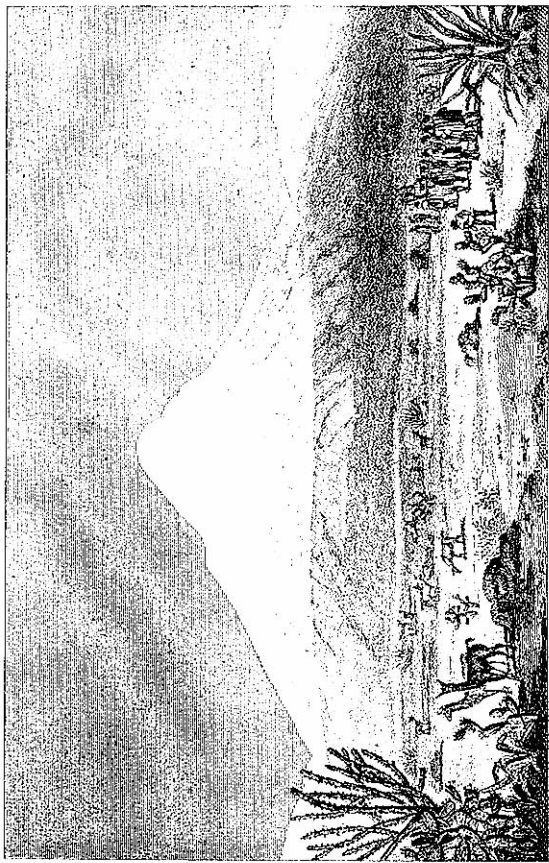
† There were twelve of these supreme courts of judicature, viz. those of Mexico, Guadalajara, Guatimala, the Havannah, Caracas, Bogota, Quito, Lima, Cusco, Charcas, Santiago (in Chili), and Buenos Ayres.

bers chosen by each province, in the proportion of one for every 30,000 inhabitants, who are elected for four years. "In every parish is held what is called a parochial assembly, composed of proprietors to the value of 100 dollars, or persons exercising some independent trade: these parochial assemblies elect the electors in the rate of ten for each representative, so that, taking the population of the Republic at 2,500,000, and supposing the whole representation graduated according to the law, the total number of electors will be about 700." The executive power is vested in the hands of a president, elected for four years, who is entrusted with the general administration of the government, the execution of the laws, the command of the army and navy, and the nomination to all civil and military employments. There is a council of government, composed of the vice-president of the Republic, a member of the high court of justice, whom he appoints, and the four secretaries of state for the home, foreign, war, and finance departments.* Further details will occur in the historical sketch which we reserve for the sequel. We now proceed to give, chiefly on the authority of Baron Humboldt, a general description of the

PHYSICAL GEOGRAPHY.

THE great Cordillera of the Andes, which traverses the whole of South America, enters the province of Loxa in lat. $4^{\circ} 30' S.$, where its height is moderate, and the ridge forms one body. In lat. $2^{\circ} 23' S.$, it spreads into a groupe of mountains,

* Hall's Colombia, pp. 17, 18.



CHIMBORAZO AS SEEN FROM THE PLAIN OF TAPIA.

Engraved by J. G. Smith, from a drawing by J. G. Smith.

called *El Assuay*, some of which are nearly 15,000 feet in height. Between the two parallel ridges into which it now divides, lies the elevated longitudinal valley in which are built the towns of Rio Bamba, Hambato, Latacungo, and the city of Quito: the plain is not less than 9,000 feet above the level of the sea, but differs essentially from the table-land of Mexico, inasmuch as it is strictly a valley, shut in by the two branches of the stupendous mountain-chain, whereas, north of the isthmus, it is the ridge itself that constitutes the plateau. To the right of this valley, tower the summits of Capaurcu (16,380 feet), Tunguragua (16,720), Cotopaxi (17,950), and Guyambu (18,180): to the left, the still more majestic peak of Chimborazo (20,100), Tlenisa (16,302), and Petchincha (15,380), all covered with perpetual snow. Near Tulcan, the cordillera, after having been irregularly united in one lofty groupe, again divides into two parallel chains, forming the elevated valley of *Los Pastos*, bordered by volcanic pinnacles: those of Azufsal, Gambal, and Pasto, are still active. Beyond Pastos, it diverges into three ridges, the most western of which follows the coast of the Pacific Ocean, and, traversing the isthmus of Panama at a low elevation, extends into Mexico, gradually increasing in height, till it there expands into a vast district of table-land, from 6,000 to 8,500 feet above the sea-level. This western chain divides the valley of the river Cauca from the province of Choco and the coasts of the Pacific. Its elevation is less than 5,000 feet, and between the sources of the *Rio Atrato* and those of the *San Juan*, it sinks so low, that we can scarcely trace its course into the isthmus. The central chain divides the valley of the Cauca, on the eastern side, from that of the Mag-

dalena, traversing the province of Antioquia, and terminating near Mompox on the banks of the latter river. The whole of the province of Antioquia is surrounded by mountains impassable even by mules: the usual mode of travelling is in chairs attached to the backs of the Indian *cargueros*. The eastern chain, which is the most considerable and the loftiest of the three, divides the valley of the Magdalena from the plains of the *Rio Meta*. It is here that the numberless streams originate which unite to form the Meta and the Apure, and to swell the waters of the majestic Orinoco. It forms the table-land on which stands Bogota, the capital of the Republic, at an elevation of nearly 9,000 feet. After rising into the line of bleak mountains known as the *paramos** (heights) of Suma Paz, Chingota (Chingasa?), Zoraca, and Chita, which enter the region of snow, it divides into two ridges at the *paramo* of Almoizadero, about lat. 6° 50' N. One of these ridges divides the waters of the Magdalena from the great lake of Maracaybo, and majestically terminates in the *Sierra Nevada* (snowy mountains) of Santa Marta. The

* *Paramo*, rendered *desert* in the dictionaries, signifies, in the colonies, neither a desert nor a heath, but, like the Peruvian word *puna*, denotes a mountainous place covered with stunted trees, exposed to the winds, and in which a damp cold perpetually prevails. Under the torrid zone, the *paramos* are generally from 10,000 to 12,000 feet high. They are, in fact, the lower summits of the cordilleras. Snow often falls in them, but it remains only a few hours. In this respect they are distinguished from the *nevados*, which enter the limits of perpetual snow. The *paramos* are almost continually enveloped in a cold, thick fog; so that when a thick, small rain falls, accompanied with a depression of the temperature, they say at Bogota, or at Mexico, *Cae un paramito*. Hence has been formed the provincial word *emparamarse*, to be as cold as if one was on a *paramo*. — HUMBOLDT, *Pers. Narr.* vol. ii. p. 252.

second branch, after forming the *paramo* of Cacota de Velasco, and the elevated valley of Pamplona, takes a north-easterly direction at Cucuta, forming the *paramo* called *Mesa de Laura*, and the lofty valley of La Grita, the valley of Bayladores, and the *paramo* of Las Porquenas, the valleys of Estanques and Merida, where its summits rise into the region of perpetual snow, the cold valley and *paramo* of Mucachies, the *paramos* of Niquitao, Bocono, and Las Rosas, and the valleys of Mendosa, Bocono, Truxillo, Cavache, and others whose waters descend into the lake of Maracaybo, which this chain of mountains encloses on the south and east. Separating now into two ridges, one branch, following a northerly direction, forms the Mountains of Carora, and ramifies into various small chains between Coro and Maracaybo. The other branch, running to the north-east, forms the Altar mountains, and the heights of Barquesimeto and Nirgua, whence diverge the smaller chains which surround the Lake of Tacarigua, or Valencia: after passing Nirgua and San Felipe, it approaches the coast near Puerto Cabello, and continues to skirt the ocean to La Guayra, where it forms the elevated ridge called the *Silla de Caracas*; it thence continues, sometimes approaching and sometimes receding from the coast, till, after forming the Brigantine chain near Cumana, it finally terminates in the Gulf of Paria.*

From the *Sierra Nevada* of Merida, and the *paramos* of Niquitao, Bocono, and Las Rosas,† this eastern branch of the Cordillera decreases in height so rapidly,

* Hall's Colombia, pp. 2—9; Humboldt's Researches, vol. i. pp. 61, 67; Pers. Narr. vol. iii. p. 528.

† So called from the roses that grow wild there.

that, between the ninth and tenth parallels of north latitude, it forms only a chain of small mountains or hills, which, stretching to the north-east, separate the head waters of the Apure and the Orinoco from the numerous rivers that fall into the Lake of Maracaybo or the Caribbean Sea. On this dividing ridge, which is metalliferous,* are built the towns of Nirgua, San Felipe el Fuerte, Barquesimeto, and Tocuyo. The first three are in a very hot climate; and from the *Silla de Caracas* to Tocuyo, a distance of seventy leagues, the mountains are too low to allow of the growth of ericineous plants. Tocuyo enjoys a cool climate, and the ground rises towards the south. Among the rivers that descend in a north-easterly direction towards the coast of Puerto Cabello, the most remarkable are those of Tocuyo, Aroa, and Yaracuy. The valleys of all these rivers are extremely unhealthy. The chain of mountains that borders the Lake of Tacarigua towards the south, forms the northern shore of the vast basin of the *llanos* or savannas of Caracas. The mountains of Guigue and Tucutunemo separate the basin of the Aragua from those immense plains, which are a thousand feet lower than the valley, and present the appearance of an ocean of verdure. A second chain or groupe of mountains, less elevated, but of much larger extent than the cordillera of the northern coast, reaches from the mouths of the Guaviare and the Meta to the sources of the Orinoco, the Marony, and the Essequibo,

* It was in this groupe of the western mountains of Venezuela, that the Spaniards, in the year 1551, wrought the gold mine of San Felipe de Buria, which led to the foundation of the town of Barquesimeto. But these works, like many other mines successively opened, were soon abandoned.—HUMBOLDT, *Pers. Narr.*, vol. iii. p. 528. The mines of Aroa, near San Felipe el Fuerte, still yield a small quantity of copper.

towards French and Dutch Guayana, between the parallels of 3° and 7° . This chain, Humboldt denominates the *Cordillera of Parime*. "It may be followed," he says, "for a length of 250 leagues, but is less a chain, than a collection of granitic mountains, separated by small plains, and not uniformly disposed in lines. This groupe narrows considerably between the sources of the Orinoco and the mountains of Demerara, in the *sierras* of Quimiropaca and Pacaraimo, which divide the waters of the Carony from those of the Parime or *Rio de Aguas Blancas*. This is the theatre of the expeditions undertaken in search of El Dorado and the great city of Manoa, the Tombuctoo of the New Continent. The Cordillera of Parime is not connected with the Andes of New Granada, being separated from them by a space eight leagues broad between Bogota and Pamplona. A third chain of mountains between the parallels of 16° and 18° S., unites the Andes of Peru to the mountains of Brazil. To this chain, which is distinguished as the Cordillera of Chiquitos, belong the famous *Campos dos Parecis*, which divide the head-waters of the Amazons from those of the Paraguay. These three transverse chains or groupes of mountains, stretching from west to east, within the limits of the torrid zone, are separated by tracts entirely level; the plains of Caracas or of the Lower Orinoco, the plains of the Amazons and Rio Negro, and the plains of La Plata.* The two basins placed at the extremities of South America, are savannas or steppes, pasturage without trees. The intermediate basin, which receives the equatorial rains during the whole year, is almost

* "I do not," says the learned Traveller, "use the word valley, because the Lower Orinoco and the Amazons, far from flowing in a valley, form but a little furrow in the midst of a vast plain."

entirely one vast forest, in which no other road is known than the rivers. That strength of vegetation which conceals the soil, renders also the uniformity of its level less perceptible; and the plains of Caracas and La Plata alone bear that name. The three basins just described are called, in the language of the colonists, the *Llanos* of Varinas and of Caracas, the *Bosques* or *Salvas* (forests) of the Amazons, and the *Pampas* of Buenos Ayres. The trees not only cover for the most part the plains of the Amazons, from the Cordillera of Chiquitos as far as that of Parime; they crown also these two chains of mountains, which rarely attain the height of the Pyrenees, except the westernmost part of the chain of Chiquitos between Cochabamba and Santa Cruz de la Sierra, where the summits are covered with snow.* On this account, the vast plains of the Amazons, the Madera, and the Rio Negro, are not so distinctly bounded as the *Llanos* of Caracas and the *Pampas* of Buenos Ayres. As the region of forests comprises at once the plains and the mountains, it extends from lat. 18° S.† to 7° and 8° N., and occupies an area of nearly 120,000 square leagues. This forest of South America (for, in fact, there is only one) is six times larger than France. It is known to Europeans only on the shores of some rivers by which it is traversed; and has its openings, the extent of which is in proportion to that of the forest." Among these, the learned Tra-

* This colossal groupe, however, the writer remarks, may rather be considered as belonging to the Andes of La Paz, of which it forms a promontory or spur in an eastern direction.

† "To the west, in consequence of the *Llanos* of Manso and the *Pampas* of Huanacos, the forests do not extend generally beyond the parallels of 18° or 19° S.; but, towards the east, in Brazil, as well as in Paraguay, they advance as far as 25° S.

veller specifies the marshy savannas between the Upper Orinoco, the Conorichite, and the Cassiquiare, in the parallels of 3° and 4° S., and those, in the same parallel, between the sources of the Mao and the *Rio de Aguas Blancas*, south of the *Sierra de Pacaraimo*, near the frontiers of Dutch and French Guayana.

The "enormous wall of mountains" which borders the western coast, at an average distance of about 150 miles, is rich in the precious metals, "wherever the volcanic fire has not pierced through the eternal snows." Summits of trappish porphyry here attain the elevation of more than 20,000 feet above the sea-level; and the mean height of the Andes in Colombia and Peru, is 1850 toises or fathoms (above 11,000 feet). Their greatest altitude is nearly under the equator. Of the three transverse chains, none of the summits enter the limit of perpetual snow, and they have no active volcanoes. The mean height of the Cordillera of Parime, and of the littoral chain of Caracas, is not above 3,500 feet, although some summits rise upwards of 8,000 feet above the level of the sea. The highest is the *Silla de Caracas*, which attains the height of 8,400 feet, and forms an enormous and frightful precipice fronting the Caribbean Sea. The *Sierra Nevada* of Santa Marta rises to the elevation of 16,000 feet, and the *Nevado* of Merida to that of 15,000 feet; but Humboldt does not consider the *nevados* and *paramos* of Merida and Truxillo as belonging to the chain of Caracas, which begins only to the east of long. 71°: they are rather a prolongation of the Andes of New Granada.

The *Llanos* which form the basin of the Orinoco, communicate with that of the Amazons and the Rio Negro, by the opening already mentioned, between

the mountains of Parime and the Andes. This channel, or (as Humboldt terms it) *land-strait*, is the plain of the Rio Vichada and the Meta. The basin of the Amazons is, however, five times higher than the Llanos of Caracas and the Meta, or than the Pampas of Buenos Ayres; and between the parallels of 4° and 7° , where the Orinoco, which flows in a westerly direction from its source to the mouth of the Guaviare, forces its way through the rocks on the edge of the Cordillera of Parime, and takes a course from south to north, all the great cataracts are situated. When the river has reached the mouth of the Apure, in that very low ground where the slope towards the north is met by the counter-slope towards the south-east, it bends again, and flows eastward. The area of these *Llanos*, calculated from the Caqueta to the Apure, and from the Apure to the Delta of the Orinoco, is 17,000 square leagues of twenty to a degree. The part running from N. to S. is almost double that which stretches from E. to W., between the Lower Orinoco and the cordillera of the coast,* and which is four times narrower than the great desert of Africa. Like the latter, the *Llanos* bear different names in different parts. Those of Cumana, of Barcelona, and of Venezuela, include the following subdivisions: in Cumana, the *Llanos* of Maturin, Terecen, Amana, Guanipa, Jonoro, and Cari; in Barcelona, those of Aragua, Pariaguan, and Villa del Pao; in Caracas, those of Chaguaramas, Uritucu, Calabozo or Guarico,

* The Pampas on the N. and N.W. of Buenos Ayres, lying between that city and Cordova, Jujuy, and the Tucuman, are of nearly the same extent as the Llanos of Caracas; but S. of Buenos Ayres, they stretch to the length of eighteen degrees, and their extent is so vast, that palm-trees flourish at one extremity, while the other, equally low and level, is covered with perpetual frost. See *MOD. TRAV., Brazil*, vol. ii. pp. 303, 336.

La Portuguesa, San Carlos, and Araure. Where the steppes run toward the S. and S.S.W., from the latitude of 8° , between the meridians of 70° and 73° , we find, from north to south, the *Llanos* of Varinas, Casanare, the Meta, Guaviare, Caguan, and Caqueta. These also are subdivided into the *Llanos* of Guanare, Bocono, the Apure, Palmerito (near Quintero), Guardalito, and Arauca; the Meta, Apiay (near the port of Pachaquiario), Vichada, Guaviare, Arriari, Inirida, Rio Hacha, and Caguan. The plains of Varinas present some feeble monuments of a nation that has disappeared, in the *Serillos de los Indios*, conical hillocks formed by the hands of men, and probably containing bones, which are found between Mijagual and the *Cano de la Hacha*. A fine road also is discovered near *Hato de la Calzada*, between Varinas and Canagua, five leagues in length, the work of the aborigines in remote times prior to the conquest. It is a causeway of earth, fifteen feet high, crossing a plain subject to inundation.

The *Llanos* and the *Pampas* are now filled with immense herds of cattle and horses; but, when Columbus arrived here, the horse and the cow had never been seen in the New World, and the pastoral life had no existence there. M. Humboldt indulges himself in speculating on the very different state in which the human race would have been found, had those animals been previously distributed over this portion of the globe. Nomade hordes, subsisting on milk and cheese, would have spread themselves over these vast regions, and, at the period of great droughts or inundations, would have fought for the possession of pastures. United by the common tie of manners, language, and worship, these nations would have risen to that state of semi-civilisation which is exhi-

bited by the pastoral nations of the Mongul and Tartar race. "America might then," he adds, "like the centre of Asia, have had its conquerors, who, ascending from the plains to the table-lands of the Cordilleras, would have subdued the civilised nations of Peru and New Granada, overturned the throne of the Incas and that of the *Zaque* of Cundinamarca, and substituted for a theocratic despotism, that despotism which results from the patriarchal government of a pastoral people. In the New World, the human race has not experienced these great moral and political changes, because the steppes, though more fertile than those of Asia, have remained without herds; because none of the animals that furnish milk in abundance, are natives of the plains of South America; and because, in the progressive development of American civilisation, the intermediate link is wanting, that connects the hunting with the agricultural nations."*

This general view of the physical aspect and provincial divisions of the territory, will serve as a sufficient introduction to the topographical details. Our business will now be, to follow the routes of the few travellers who have penetrated the equinoctial regions of America; and in pursuing this plan, we shall consider ourselves at liberty to take little further notice of the territorial boundaries, but shall adhere, for convenience' sake, to the grand twofold division of the country into the eastern and western portions so long distinguished by the names of New Granada and Venezuela or Caracas. We shall begin where Humboldt commences his personal narrative, and where Columbus first set his foot on the New Continent,—the north-eastern coast of Caracas.

* Pers. Narr. vol. iv. pp. 304—319; vol. iii. pp. 527—9.

VENEZUELA OR CARACAS.

THE period at which Baron Humboldt and his friend M. Bonpland commenced their travels in the New Continent, was the last year of the eighteenth century. Since then, these regions have been the theatre of one of the most sanguinary struggles that, perhaps, ever occurred in any political revolution, by which whole districts have been almost depopulated. "In the time of its greatest prosperity," remarks Col. Hall, "the country was comparatively a desert; but this desolation has been fearfully augmented during the revolutionary war." Internal dissensions, as Humboldt justly remarks, are the more to be dreaded in regions where civilisation is but slightly rooted, and where, from the influence of climate, the forests may soon regain their empire over cleared lands, if their culture be suspended. The account furnished by this learned Traveller, therefore, must be considered as portraying the state of the colony at the beginning of the nineteenth century. The same remark applies to the Travels of M. Dupons, formerly agent to the French Government at Caracas, where he resided during the years 1801, 2, 3, and 4. The Statistical Description of Venezuela drawn up by M. Lavaysse, a French colonist of Trinidad, comes down no later than 1807. Mr. Semple, an intelligent English traveller, has given a brief account of the state of Caracas in 1810. Since then, the only published travels that have reached us, descriptive of this country, are those of Captain Charles Stuart Cochrane, of the Royal Navy, who visited both Caracas and Bogota during the years 1823 and 4; but his work relates chiefly to the western portion of Colombia,

and he saw little of Venezuela. We shall therefore have to follow chiefly in the track of MM. Humboldt and Bonpland; and as their account dates prior to the Revolution, we have purposely reserved our historical sketch of the late events for the conclusion of the volume, as a more appropriate sequel than introduction.

CUMANA.

It was on the 16th of July, 1799, that the Travelers anchored opposite the mouth of the river Manzanares, on the banks of which the city of Cumana is built. "Our eyes were fixed," says the Writer, "on the groupes of cocoa-trees that border the river, and the trunks of which, more than sixty feet high, towered over the landscape. The plain was covered with tufts of cassias, capers, and those arborescent mimosas which, like the pine of Italy, extend their branches in the form of an umbrella. The pinnated leaves of palms were conspicuous on the azure of a sky, the clearness of which was unsullied by any trace of vapours. The sun was ascending rapidly towards the zenith. A dazzling light was spread through the air, along the whitish hills, strewed with cylindric cactuses, and over a sea ever calm, the shores of which were peopled with alcatras,* egrets, and flamingoes. The splendour of the day, the vivid colouring of the vegetation, the forms of the plants, the varied plumage of the birds, every thing announced the grand aspect of nature in the equinoctial regions."†

A vast plain, or salt marsh, called *El Salado*, consisting of whitish sand partially covered with low

* A species of brown pelican of the size of a swan.

† Pers. Nar. vol. ii. p. 183.

shrubs,* divides the suburb of the Guayqueria Indians from the sea-coast. The city of Cumana, the capital of the old government of New Andalusia, is a mile distant from the *embarcadere*, or battery of the *Bocca*, which is the landing-place. It stands at the foot of a volcanic mountain, part of a groupe stretching east and west from the summit of *Imposible* to Port Mochima, which appears to have formed at some remote period an island in the Gulf of Cariaco. There is no doubt, Humboldt thinks, that that gulf has been produced by an irruption of the sea, and the whole of the sandy plain on which the city is built, was at one time submerged by the waters.† The river Manzanares encompasses the city on the south and west, separating it, on the south, from the suburbs of the Guayquerias. This city, the most ancient of all in *Tierra Firme*, was built by Gonzalo Ocampo in 1520.‡ It was at first called New Toledo. “Fifty years ago, it was only a miserable village, that received

* *Mangle prieto* (*avicenna tomentosa*), *sesuvium*, yellow gomphrena, and cactus, — shrubs found only on the sea-shore, and on the elevated plains of the Andes within the torrid zone.

† That the gulf owes its existence to a rent of the continent, is stated to be a generally received opinion among the inhabitants; and it is related, that at the time of the third voyage of Christopher Columbus, the natives mentioned it as a very recent event. “In 1530, the inhabitants were alarmed by new shocks on the coasts of Paria and Cumana. The lands were inundated by the sea, and the small fort built by James Castellon, was entirely destroyed. At the same time, an enormous opening was formed in the mountains of Cariaco, on the shores of the Gulf, when a great body of water, mixed with asphaltum, issued from the micaceous schist.”—HUMBOLDT, vol. ii. p. 215.

‡ Ocampo's settlement was destroyed by the Indians, and the real founder of the colony, M. Lavaysse contends, was Governor Diego Castellon, who was sent out by the *audiencia* of San Domingo, in 1523, after the extermination of the colonists left by the admirable Las Casas a few years before.

annually two or three small vessels from Spain, which divided the trade of the country with the Dutch and English smugglers. When the edict of Charles III., dated Nov. 12, 1778, vulgarly called the free-trade law, which put an end to the monopoly of the Guipuscoa Company, revived the languishing agriculture and commerce, the population of this province more than doubled in twenty years, and the riches of the country augmented in a progression still more considerable. This province, its capital, and the other towns, are honourable monuments," continues M. Lavaysse, "of the prodigious influence of an enlightened, prudent, and disinterested governor on the prosperity of a colony. During nearly eleven years (from 1793 to 1804) that Don Vicente de Emparan was governor of the colony, the liberal protection which he granted to agriculture and commerce, had augmented, in 1805, the colonial produce to double what it was in 1799: every class of society was in good circumstances, and many persons had acquired considerable fortunes. The town had increased to triple its former size; houses elegantly built, with Italian roofs, had replaced hovels and huts; and a new quarter or suburb, that rivals the ancient town, took the venerated name of Emparan."* The number of inhabitants of every age and colour, in 1802, is stated by M. Dupons at 24,000, of whom a large proportion were white Creoles. When M. Lavaysse was there in 1807, it amounted to upwards of 28,000; and at the end of 1810, he says, it had risen to 30,000, "almost all industrious and laborious." M. Humboldt, however, considers this as an exaggerated calculation. In 1800, the local government estimated the population at less than 12,000; and in 1802,

* Statistical Account, &c. p. 94.

it could scarcely, he maintains, have exceeded 19,000. The births in 1798, were only 522; in the equinoctial regions of Mexico they are as 17 to 100; whereas, if the population in 1800 had been 26,000, the births would have been but as 1 to 43. M. Dupons states the total population of the provinces of Cumana and Barcelona at 80,000 souls. "The statements I read on the spot," says M. Lavaysse, in 1807, "declared this population to be 96,000 persons." The estimate cited by Col. Hall, rates the population of Cumana (including Barcelona) at 100,000 souls.

The town of Cumana contains two parish churches, (one of which was erected in 1803,) two convents, Franciscan and Dominican, and a theatre, constructed on the same plan as that of Caracas, but much smaller. Bull-baiting, cock-fighting, and rope-dancing are, however, the favourite amusements. "Four years ago," says M. Lavaysse, "there was no town-clock in Cumana. While M. Humboldt was in this town in 1800, he constructed a very fine sun-dial there. When a stranger passes by this dial, in company with a Cumanese, the latter never fails to say: 'We owe this sun-dial to the learned (*sabio*) Baron de Humboldt.' I remarked that they never pronounced the name of this illustrious traveller, without adding that epithet to it, and they speak of him with a mingled sentiment of admiration and regard. This town has no public establishment for the education of youth; it is, therefore, astonishing to find any knowledge among its inhabitants; yet, there is some information disseminated among many of the Creoles of Cumana. They are but seldom sent to Europe for their education: the most wealthy receive it at Caracas, and the greater number under schoolmasters, from whom they learn the Spanish grammar, arithmetic, the first ele-

ments of geometry, drawing, a little Latin, and music. I have remarked considerable talent, application, and good conduct in their youth, and less vivacity and vanity than among those of Caracas. Not being so rich as the latter, the Cumanese are brought up with principles of economy and industry; there are no idlers among them; in general, they are inclined to business. Some apply themselves to the mechanical arts; others, to commerce. They have also a great partiality for navigation and trading with the neighbouring colonies of other nations; and by their activity and prudence, they make considerable profits with small capitals. Their articles of exportation are cattle, smoked meat (*tassajo*), and salted fish, which commodities they have in great abundance. Two pounds of beef are sold at Cumana for twopence halfpenny, and twenty-two pounds of salt meat at from 3s. 4d. to 4s. 2d. Fish is never weighed there: some days, there is such a quantity caught by the fishermen, that they give ten, twelve, or fifteen pounds' weight for 5d. The poor go to the sea-side with maize, cakes, and eggs, and barter them for fish. Eggs are the small change in Cumana, Caracas, and other provinces of Venezuela, where copper coin is unknown, the smallest piece in circulation being a *medio-real* in silver, worth 2½d. If one goes into a shop to buy something worth less than 2½d., they give as change two or three eggs; for a dozen of eggs there are worth only a *medio-real*. This is also the price of a measure of excellent milk, about a quart. A sheep is sold for a dollar, a fine turkey for 20d. or 2s., a fowl for 5d., a fat capon 7½d. to 10d., a duck the same price. Game and wild fowl are frequently sold cheaper than butcher's meat; and all those articles are still cheaper in the small towns of the interior. I lived at the best and dearest hotel in

Cumana, at a dollar per day, including the expenses of my son and servant. They gave us for breakfast, cold meats, fish, chocolate, coffee, tea, and Spanish wine; an excellent dinner, with Spanish and French wines, coffee, and liqueurs; in the evening, chocolate. I was well lodged and lighted. I should have expended but half that sum if I had gone to board and lodge in a family. In short, there is not a country in the world where one may live cheaper than in the province of Cumana. An excellent dinner may be had there for 10*d.*, not including wine, which does not cost more than 5*d.* per bottle to those who buy a quantity of it. Poor people drink punch, which is at a very low rate, for it does not cost above 1*d.* per quart.

“ The inhabitants of Cumana are very polite; it may even be said that they are excessively so. There is not so much luxury among them as at Caracas; their houses, however, are tolerably well furnished. They are very abstemious. Those dinners and festivals which form one of the charms of society in Europe, and which, in the British and French colonies, are repeated almost every day from the first of January to the last of December, are unknown to the inhabitants of Cumana and the other provinces of Venezuela.

“ The retail trade of Cumana is almost entirely in the hands of the Catalans, Biscayans, and Canarians. These men are chiefly sailors, who have begun to open shop with a few dollars, and who, in a few years, acquire fortunes by their frugality and industry. If a man of that country lands without a farthing, the first Catalan he meets takes him to his house, gives him work, or recommends him to some of his countrymen. There are many countries in which one brother

would not do for another that which a Catalan is always inclined to do for his countrymen. It was the Catalans who taught the inhabitants to derive advantage from various local productions: for instance, from cocoa-nuts they make oil, an emulsion which is substituted for that of almonds, and very good orgeat. They make excellent cables of the bark of the *mahet* (*bombax*), and twine and cords of the aloe (*agave fœtida*).” *

The mode of catching ducks and other aquatic birds practised by the Indians of Cariaco, is not a little amusing to the stranger, though not peculiar to this part of the New World. The natives leave calabashes continually floating on the water, that the birds may be accustomed to the sight of them. “When they wish to catch any of these wild fowl, they go into the water with their heads covered each with a calabash, in which they make two holes for seeing through. They thus swim towards the birds, throwing a handful of maize on the water from time to time, of which the grains scatter on the surface. The birds approach to feed on the maize, and at that moment the swimmer seizes them by the feet, pulls them under water, and wrings their necks before they can make the least movement, or, by their noise, spread an alarm among the flock. The swimmer attaches those he has taken to his girdle, and he generally takes as many as are necessary for his family. Many have no other trade in the neighbourhood of some large towns, and daily take multitudes of these birds, which they sell at a low rate, though they are very good food.” †

All the houses of Cumana are low and slightly

* Lavaysse, pp. 104--106.

† Ibid. p. 112.

built, the frequent earthquakes to which the town is subject, compelling the inhabitants to sacrifice architectural beauty to personal security. The violent shocks felt in December 1797, threw down almost all the edifices of stone, and rendered uninhabitable those which were left standing. No steeple or dome attracts from afar the eye of the traveller, but only a few trunks of tamarind, cocoa, and date-trees, rise above the flat roofs of the houses. Earthquakes were very frequent during the sixteenth century; and, according to the traditions preserved at Cumana,* the sea often inundated the shores, rising from fifteen to twenty fathoms. The inhabitants fled to the *Cerro de San Antonio*, and to the hill on which the small Franciscan convent now stands; and "it is even thought," Humboldt adds, "that these frequent inundations induced the inhabitants to build that quarter of the town which is backed by the mountain, and stands on a part of its declivity." The elevation of the present town above the sea-level is only fifty-three feet.† The year 1766 was a fatal one to the colonists. A drought had prevailed for fifteen months, when, on the 21st of October in that year, the whole of the houses were overthrown in the space of a few minutes by horizontal oscillations of the earth, and the shocks were hourly repeated during fourteen months. The remembrance of that day was still perpetuated, at the beginning of the present century, by a solemn religious procession. "In several parts of the province, the earth opened and threw out

* No records exist at Cumana, owing to the continual devastations of the termites, or white ants, which go further back than a hundred and fifty years.

† Lavaysse, p. 102.

sulphureous waters. These irruptions were very frequent in a plain extending towards Casanay, two leagues to the east of the town of Cariaco, known by the name of the *tierra hueca* (hollow ground), because it appears entirely undermined by thermal springs. During the years 1766 and 7, the inhabitants of Cumana encamped in the streets, and they began to rebuild their houses when the earthquakes took place *only once a month!* What occurred at Quito, immediately after the great catastrophe of the 4th of February, 1797, took place on these coasts. While the ground was in a state of continual oscillation, the atmosphere seemed to dissolve into water. The rivers were swollen by these sudden torrents of rain; the year was extremely fertile; and the Indians, whose frail huts easily resist the strongest shocks, celebrated, from ideas of old superstition, with feasting and dances, the destruction of the world and the approaching epoch of its regeneration.” *

Another remarkable earthquake took place in 1794, characterised by the same horizontal oscillations. But the fatal one of December 1797, was attended, for the first time at Cumana, by a vertical motion, or raising up of the ground. More than four-fifths of the city were then entirely destroyed. The shock was attended by a very loud subterraneous noise, resembling the explosion of a mine at a great depth. Happily, it was preceded by a slight undulating motion, which gave warning to the inhabitants to escape into the streets, and a small number only perished of those who had assembled in the churches. Half an hour before the catastrophe, also, a strong smell of sulphur was

* Humboldt, vol. ii. p. 217.

perceived near the hill of the Franciscan convent; and at this spot, the subterraneous noise, which seemed to proceed from S.E. to N.W., was heard the loudest. At the same time, flames issued from the earth on the banks of the Manzanares, near the *hospitio* of the Capuchins, and in the Gulf of Cariaco, near Mariguitar. This last phenomenon, Humboldt states, is of frequent occurrence in the calcareous mountains near Cumanacoa, in the valley of Bordones, the island of Margarita, and the *mesas* (flats) of Cari and Guanipa in the Llanos of Cumana.* “In these savannas, flakes of fire rise to a considerable height; they are seen for hours together in the driest places; and it is asserted, that, on examining the ground which furnishes the inflammable matter, no crevice is to be found. This fire, which resembles the Will-o'-the-wisp of our marshes, does not burn the grass; because, no doubt, the column of gas which developes itself, is mixed with azote and carbonic acid, and does not burn at its basis. The people, although less superstitious here than in Spain, call these reddish flames by the singular name of the *soul of the tyrant*, imagining that the spectre of Lopez Aguirre, harassed by remorse, wanders over these countries sullied by his crimes.”† During his

* “At about a league and a half from the town of Cariaco, near the road to Carupano, is a lake, or rather marsh, of about half a league in length by nearly the same breadth, which is the resort of innumerable reptiles, toads, serpents, and crocodiles; it is there, also, according to the assertions of the inhabitants, that the tiger-cats go to quench their thirst. It was at ten o'clock at night that I first passed near this marsh; it exhaled a hydrogen-sulphurous odour extremely nauseous, and phosphoric fires appeared on its surface. I collected petroleum on the brink of this marsh.” — LAVAYSSE, p. 113.

† When, at Cumana, or in the island of Margarita, the people speak of *El Tiranno* (the tyrant), it is always to denote the infamous

residence in Peru, M. Humboldt observed that, at the end of violent earthquakes, the herbs that cover the savannas of Tucuman acquired noxious properties; an epidemic disease took place among the cattle, and a great number of them appeared stupified or suffocated by the deleterious vapours exhaled from the ground. Prior to an earthquake, dogs, goats, and swine, are observed to give warning of the approaching danger by their restlessness and their cries, which may very possibly, as he suggests, be occasioned by some gaseous emanation from the earth which they perceive. Very slight oscillations, also, and a hollow sound which does not escape the practised ear of a resident, generally precede a violent shock: the cry of "*misericordia, tembla, tembla,*" is then raised, and a false alarm is very rarely given by a native. The old and commonly received opinion, that there exists a perceptible connexion between earthquakes and the previous state of the atmosphere, M. Humboldt considers as unfounded. Violent shocks have been found to take place equally in dry and in wet weather, when the coolest winds blow, or during a dead and suffocating calm. "From the great number of earthquakes," he says, "which I have witnessed, both north and south of the equator, on the continent, and in the basin of the seas, on the coasts and at 2,500 toises height, it appears to me

Lopez d'Aguirre, who, after having taken part, in 1560, in the revolt of Ferdinando de Guzman, against Pedro de Orsua, commander of an expedition in search of El Dorado, and murdered Guzman himself, seized and devastated the island of Margarita, where the port of Paraguache still bears the name of the Tyrant's Port. Mr. Southey has done his best to give interest to the frightful and disgusting story of this insane desperado's brief but atrocious career, in his "*Expedition of Orsua.*"—fcap. 3vo. Lond. 1821.

that the oscillations are generally very independent of the previous state of the atmosphere.”* Nor does it appear that the depression of the barometer is by any means a constant presage or effect of these stupendous phenomena. “We can scarcely doubt,” remarks the same learned Writer, “that the earth, when opened and agitated by shocks, spreads occasionally gaseous emanations through the atmosphere, in places remote from the mouths of volcanoes not extinct. At Cumana, as already mentioned, flames and vapours mixed with sulphurous acid, spring up from the most arid soil. In other parts of the same province, the earth ejects water and petroleum. At Riobamba, a muddy and inflammable mass, called *moya*, issues from crevices that close again, and accumulates into elevated hills. At seven leagues from Lisbon, near Colares, during the terrible earthquake of Nov. 1, 1755, flames and a column of thick smoke were seen to issue from the flanks of the rocks of Alvidras, and, according to some witnesses, from the bosom of the sea. This smoke lasted several days, and it was the more abundant in proportion as the subterraneous noise which accompanied the shocks was louder. Elastic fluids thrown into the atmosphere, may act locally on the barometer, not by their mass, which is very small compared to the mass of the atmosphere, but because, at the moment of the great explosions, an ascending current is probably formed, which diminishes the pressure of the air. I am inclined

* It was observed, that previously to the earthquake which destroyed Aleppo in 1822, there was nothing remarkable in the weather or state of the atmosphere; and M. Volney's remark, that the earthquakes of Syria are almost wholly confined to the winter season after the autumnal rains, was shewn to be an erroneous assumption.—See MOD. TRAV. *Syria*, vol. i. p. 29.

to think, that, in the greater number of earthquakes, nothing escapes from the agitated earth; and that, where gaseous emanations and vapours take place, they oftener accompany, or follow, than precede the shocks. This last circumstance explains a fact which seems indubitable; I mean that mysterious influence, in equinoctial America, of earthquakes on the climate, and on the order of the dry and rainy seasons. If the earth generally acts on the air only at the moment of the shocks, we can conceive why it is so rare, that a sensible meteorological change becomes the presage of these great revolutions of nature.

“ The hypothesis according to which, in the earthquakes of Cumana, elastic fluids tend to escape from the surface of the soil, seems confirmed by the observation of the dreadful noise which is heard during the shocks at the borders of the wells in the plain of *Charas*. Water and sand are sometimes thrown out twenty feet high. Similar phenomena have not escaped the observation of the ancients, who inhabited parts of Greece and Asia Minor abounding with caverns, crevices, and subterraneous rivers. Nature, in its uniform progress, every where suggests the same ideas of the causes of earthquakes, and the means by which man, forgetting the measure of his strength, pretends to diminish the effect of the subterraneous explosions. What a great Roman naturalist (Pliny) has said of the utility of wells and caverns, is repeated in the New World by the most ignorant Indians of Quito, when they shew travellers the *guaicos* or crevices of Pichincha.

“ The subterraneous noise, so frequent during earthquakes, is generally not in the ratio of the strength of the shocks. At Cumana, it constantly precedes them, while at Quito, and, for a short time

past, at Caracas, and in the West India Islands, a noise like the discharge of a battery was heard a long time after the shocks had ceased. A third kind of phenomenon, the most remarkable of the whole, is the rolling of those subterraneous thunders which last several months, without being accompanied by the least oscillating motion of the ground."

Naturalists had supposed, that certain species of rocks are alone fitted to propagate the shocks; but M. Humboldt has shewn this opinion to be erroneous, by referring to the granites of Lima and Acapulco, the gneiss of Caracas, the mica-slate of the peninsula of Araya, the trappean porphyries of Quito and Popayan, and the secondary limestones of Spain and New Andalusia, as sharing equally in the convulsive movements of the globe. Yet, it appears that, in some instances, the superior strata have been found capable of resisting for a time the influence of the commotion. Thus, in the mines of Saxony, workmen have been known to hasten up, affrighted by oscillations which were not felt at the surface of the ground. At Cumana, before the great catastrophe of 1797, the earthquakes were felt only along the southern coast of the Gulf of Cariaco, which is a calcareous formation, as far as the town of that name; while the inhabitants of the peninsula of Araya, which is composed of mica-slate, found themselves in security. Since then, however, new communications appear to have been opened in the interior of the earth, and the promontory of Araya has become in its turn a particular centre of the shocks. The earth is sometimes strongly shaken at the village of Maniquarez, when, on the coast of Cumana, the inhabitants enjoy an undisturbed tranquillity.

The earthquakes of Cumana are connected with

those of the West India Islands ; “ and it has even been suspected,” Humboldt says, “ that they have some connexion with the volcanic phenomena of the Andes.” The eruption of the volcano of Guadaloupe, on September 27, 1797, was followed, on the 4th of November, 1797, by a destructive earthquake in Quito, in which nearly 40,000 natives perished, and, on the 14th of December, by the great earthquake of Cumana. During eight months, the inhabitants of the eastern Antilles were alarmed by shocks. On the 30th of April, 1812, the volcano of St. Vincent’s, which had not emitted flames since 1718, broke forth anew, and the eruption was preceded by repeated earthquakes during eleven months. The total ruin of the city of Caracas occurred on the 26th of March preceding, and violent oscillations were felt both on the coasts and in the islands. “ Several facts,” continues the learned Writer, “ tend to prove, that the causes which produce earthquakes have a near connexion with those that act in volcanic eruptions. We learned at Pasto, that the column of black and thick smoke which, in 1797, issued for several months from the volcano near this shore, disappeared at the very hour when, sixty leagues to the south, the towns of Riobamba, Hambato, and Tacunga were overturned by an enormous shock. When, in the interior of a burning crater, we are seated near those hillocks formed by ejections of scorix and ashes, we feel the motion of the ground several seconds before each partial eruption takes place. We observed this phenomenon at Vesuvius in 1805, while the mountain threw out scorix at a white heat ; we were witnesses of it in 1802, on the brink of the immense crater of Pichincha, from which, nevertheless, at that time, clouds of sulphureous acid vapours only issued.

“Every thing in earthquakes seems to indicate the action of elastic fluids seeking an outlet to spread themselves in the atmosphere. Often, on the coasts of the South Sea, the action is almost instantaneously communicated from Chili to the Gulf of Guayaquil, a distance of six hundred leagues; and, what is very remarkable, the shocks appear to be so much the stronger, as the country is more distant from burning volcanoes. The granitic mountains of Calabria, covered with very recent breccia, the calcareous chain of the Apennines, the country of Pignerol, the coasts of Portugal and Greece, those of Peru and Terra Firma, afford striking proofs of this assertion. The globe, it may be said, is agitated with greater force, in proportion as the surface has a smaller number of funnels communicating with the caverns of the interior. At Naples and at Messina, at the foot of Cotopaxi and of Tunguragua, earthquakes are dreaded only when vapours and flames do not issue from the crater. In the kingdom of Quito, the great catastrophe of Riobamba, which we have before mentioned, has led several well-informed persons to think, that this unfortunate country would be less often desolated, if the subterraneous fire should break the porphyritic dome of Chimborazo, and if this colossal mountain should become a burning volcano. At all times analogous facts have led to the same hypothesis. The Greeks, who, like ourselves, attributed the oscillations of the ground to the tension of elastic fluids, cited in favour of their opinion the total cessation of the shocks at the island of Eubœa, by the opening of a crevice in the Lelantine plain.”

In Cumana, as well as in Chili and Peru, the shocks follow the course of the shore, and extend but little inland. This cannot arise merely from the

lowness of the ground on the coast, as the *Llanos* by no means participate in the agitation, although they are scarcely fifty or sixty feet above the level of the sea. M. Humboldt considers the circumstance as indicating the intimate connexion between the causes that produce earthquakes and volcanic eruptions. In like manner, it is the coasts of Syria and of Asia Minor which are liable to these tremendous visitations. At the period of the earthquake of Lisbon, on November 1, 1755, the ocean inundated, in Europe, the coasts of Sweden, England, and Spain; in America, the islands of Antigua, Barbadoes, and Martinique. At Barbadoes, where the tides rise only from twenty-four to twenty-eight inches, the water rose twenty feet in Carlisle Bay, and became "as black as ink." In the West Indies, and in several lakes of Switzerland, this extraordinary motion of the waters was observed six hours after the first shock was felt at Lisbon. At Cadiz, a mountain of water sixty feet high was seen eight miles distant at sea, which threw itself impetuously on the coast, and beat down a great number of edifices; like the wave eighty-four feet high, which, on the 9th of June, 1586, at the time of the great earthquake of Lima, entered the port of Callao. These phenomena, M. Humboldt adduces as proofs of subterranean communications at enormous distances. The interest of the subject will sufficiently justify the length of this digression.

Cumana stands in lat. $10^{\circ} 27' 52''$ N., and long. $66^{\circ} 30' 2''$ W. of Paris.* The climate is very hot. From the month of June to the end of October, the temperature usually rises to 90° or even 95° of

* According to Humboldt. M. Depons states it to be in lat. $10^{\circ} 37' 37''$ N., and long. $66^{\circ} 30'$ W. of Paris. M. Lavaysse says, at. $10^{\circ} 37'$ N., and long. $64^{\circ} 10'$ W.

Fahr. during the day, and seldom descends to 80° during the night. The sea-breeze, however, tempers the heat of the climate. From the beginning of November to the end of March, the heats are not so great: the thermometer is then between 82° and 84° in the daytime, and generally falls to 77° and even 75° in the night.* There is scarcely ever any rain in the plain in which Cumana is situated, though it frequently rains in the adjacent mountains. "In very heavy showers," says Humboldt, "we hear in the streets, *Que hielo! estoy emparamado*, How icy cold! I shiver as if I was on the top of the mountains;—though the thermometer, exposed to the rain, sinks only to 21.5° (centigrade thermometer)." The heats are somewhat less oppressive on the side towards the sea-shore than in the old town, where the calcareous soil and the proximity of the hill of Fort San Antonio, combine to raise the temperature in an extraordinary degree. In the suburb of the Guayquerias, the sea-breezes have free access, and the soil, being clayey, is thought to be less exposed on that account to the violent shocks of earthquakes. The suburbs are almost as populous as the ancient town. On the road to the *Plaga Chica*, north of the city, is that of *Los Serritos*; towards the S.E. is that of San Francisco; that of the Guayquerias is the most considerable. These natives are a tribe of civilised Indians, the finest race of men, next to the Caribs of Spanish Guayana, in this country. They originally belonged to the Guaraouno nation, of whom some traces still exist in the swampy lands bordering on the Orinoco; but for a century past, no native of either Cumana or

* Lavaysse, p. 103. M. Depons says, the thermometer of Réaumur rises in July to 23° in the day, and to 19° in the night; the maximum is 27° ; the minimum 17° .

Margarita has spoken any language but the Castilian. The denomination of Guayquerias, like that of Peruvian, owes its origin to a mistake. "The companions of Christopher Columbus, coasting along the island of Margarita, where still, on the northern coast, resides the noblest portion of the Guayqueria nation, met a few natives who were harpooning fish. They asked them, in the Hayti language, their name; and the Indians, thinking that the question related to their harpoons, answered, *Guaïke, guaïke*, which signifies a pointed pole." They have been from the first the steady friends of the Spaniards, and have always been styled in official papers, the king's "dear, noble, and loyal Guayquerias." They differ very strikingly in physiognomy from the Chaymas and the Caribs, have apparently great muscular strength, and are of a complexion between brown and copper colour. They are chiefly fishermen.

On leaving the Indian suburb, and ascending the Manzanares towards the south, the traveller arrives at a grove of cactus,—"a delightful spot shaded by tamarinds, brasilettoes, bombax, and other plants remarkable for their leaves and flowers." The soil here affords rich pasturage, and there are dairy-houses, built with reeds, and separated from each other by clumps of trees, in which the milk is kept fresh in porous earthen vessels. "A prejudice prevalent in the countries of the north had long led me," says Humboldt, "to believe, that cows, under the torrid zone, do not yield rich milk; but my abode at Cumana convinced me that the ruminating animals of Europe become perfectly habituated to the most scorching climates, provided they find water and good nourishment. The milk is excellent in the provinces of New Andalusia (Cumana), Barcelona, and Venezuela (Ca-

racas); and the butter is better in the plains of the equinoctial zones than on the ridge of the Andes, where the Alpine plants, enjoying in no season a sufficiently high temperature, are less aromatic than on the Pyrenees, the mountains of Estremadura, and those of Greece." The waters of the Manzanares are limpid, and the banks are very pleasant, shaded by mimosas, erythrinæ, and other trees of gigantic growth. The children pass great part of their lives in the water. "The whole of the inhabitants, even the women of the most opulent families, know how to swim; and in a country where man is so near the state of nature, one of the first questions asked on meeting in the morning is, whether the water is cooler than on the preceding evening. The mode of bathing is various. We every evening (continues Humboldt) visited a very respectable society in the suburb of the Guayquerías. In a fine moonlight night, chairs were placed in the water; the men and women were lightly clothed, as in some baths in the north of Europe, and the family and strangers, assembled in the river, passed some time in smoking segars, and in talking, according to the custom of the country, of the extreme dryness of the season, of the abundant rains in the neighbouring district, and particularly of the luxury of which the ladies of Cumana accuse those of Caracas and the Havannah. The company were under no apprehensions from the *bavas* or small crocodiles, which are now extremely scarce, and approach men without attacking them. These animals are three or four feet long. We never met with them in the Manzanares, but with a great number of dolphins (*toninas*), which sometimes ascend the river in the night, and frighten the bathers by spouting water."

The longitudinal valley traversed by the river, is

formed by the lofty mountains of the interior and the southern declivity of the *Cerro de San Antonio*. This plain, which is the only thoroughly wooded part in the environs, is called the Plain *des Charas* (corrupted from *chacras*, garden-cottages), on account of the numerous plantations along the river. A narrow path leads across the forest, from the hill of San Francisco to the *hospice* of the Capuchins, a very pleasant country-house, built by the Arragonese monks as an asylum for aged and infirm missionaries. Advancing towards the west, the trees of the forest become larger, and a few monkeys (*machi*) are met with, which are rare in the neighbourhood of Cumana. The Manzanares, like all the rivers of this province, has its source in that part of the *llanos* distinguished by the names of the *mesas* or plateaus of Jonoro, Amana, and Guanipe. Were irrigation introduced, the whole of this plain might be rendered productive. As it is, all the plains, especially those on the coast, wear a melancholy, dusty, and arid appearance, except where the windings of the river are distinguishable by the fresh and luxuriant vegetation on its borders. "The hill of Fort San Antonio, solitary, white, and bare, reflects a great mass of light and radiant heat: it is composed of breccia. In the distance, towards the south, a vast and gloomy curtain of mountains stretches along. These are the high calcareous Alps of New Andalusia, surmounted by sandstone and other more recent formations. Majestic forests clothe this cordillera, which are joined by a wooded vale to the open clayey lands and salt marshes in the immediate vicinity of Cumana. A few birds of considerable size contribute to give a particular character to these countries. On the sea-shore, and in the gulf, are seen flocks of fishing herons and *alca-*

tras, a large species of pelican of a very unwieldy form, which swim, like the swan, raising their wings.* Nearer the habitations of men, thousands of *galinazos* (carrion vultures), the true jackals of the winged tribe, are ever busy in stripping the carcasses of animals." "After violent showers, the dried plain exhibits an extraordinary phenomenon. The earth drenched with rain, and again heated by the rays of the sun, emits that musky odour which, under the torrid zone, is common to animals of very different classes,—to the jaguar, the small species of tiger-cat, the thick-nosed tapir, the *galinazo* vulture, the crocodile, the viper, and the rattle-snake. The gaseous emanations which are the vehicle of this odour, appear to be evolved in proportion only as the mould, containing the spoils of an innumerable quantity of reptiles, worms, and insects, begins to be impregnated with water. I have seen Indian children of the tribe of the Chaymas, draw out from the earth and eat millepedes or scolopendras eighteen inches long and

* "Nothing can be more agreeable," says M. Lavaysse, speaking of the innumerable marine birds that frequent the gulf, "than to see at sun-rise all those birds issuing by thousands from the mangrove-trees, where they pass the night, and disperse over the surface of the water to seek their food. When their hunger is satisfied, some repose on the mud and sand-banks; some swim on the water for mere diversion; while others cover the branches of all the neighbouring trees. I have seen a bank of sand above 300 yards in length, and the little banks or islands near it, entirely covered with these aquatic birds. Those I recognised were flamingoes of all ages and colours, pelicans, herons, boobies, five or six kinds of ducks, of which one is larger than that of India, several kinds of water-hens, and a bird as white and as large as a swan, but which has a long beak, red and pointed, longer and more delicate legs, and feet formed like those of the swan; it swims like that bird, but flies much better. I also saw many other birds which, I am sure, have never been described by any naturalist."—LAVAYSSE, p. 110.

seven lines broad. Whenever the soil is turned up, we are struck with the mass of organic substances which by turns are developed, transformed, and decomposed. Nature in these climates appears more active, more fruitful, we might even say, more prodigal of life.

“ As the inhabitants of Cumana prefer the coolness of the sea-breeze to the appearance of vegetation, they are accustomed to no other walk than that of the open shore. The Spaniards, who are accused in general of having no predilection for trees or the warbling of birds, have transported their prejudices and their habits into the colonies. In Terra Firma, Mexico, and Peru, it is rare to see a native plant a tree merely with the view to procure himself shade ; and if we except the environs of the great capitals, walks bordered with trees are almost unknown in these countries. On the shore, we enjoy, especially at sun-rise, a very beautiful prospect over an elevated groupe of calcareous mountains. Storms are formed in the centre of this cordillera ; and we see from afar thick clouds resolve themselves into abundant rains, while, during seven or eight months, not a drop falls at Cumana. The Brigantine, which is the highest part of this chain, raises itself in a very picturesque manner behind Brito and Tataragual. It takes its name from the form of a very deep valley on the northern declivity, which resembles the inside of a ship. The summit of this mountain is almost bare of vegetation, and flattened like that of Mowna-Roa in the Sandwich Islands. It is a perpendicular wall, or, to use a more expressive term of the Spanish navigators, a table (*mesa*). The governor of Cumana sent, in 1797, a band of determined men to explore this entirely desert country, and to open a direct road to New Barcelona

by the summit of the *Mesa*. It was reasonably expected, that this way would be shorter and less dangerous to the health of travellers than that which is pursued by the couriers along the coast; but every attempt to cross the chain of the Brigantine is fruitless. In this part of America, as in the Blue Mountains of New Holland, it is not so much the height of the cordilleras, as the form of the rocks, that presents obstacles difficult to surmount.

“The port of Cumana is a road capable of receiving all the navies of Europe. The whole of the Gulf of Cariaco, which is 35 miles long and 68 miles broad, affords excellent anchorage. The great ocean is not more calm and pacific on the coasts of Peru, than the Sea of the Antilles from Puerto Cabello, and especially from Cape Cordera to the Point of Paria. The hurricanes of the West Indies are never felt in these regions; and the vessels are without decks. The only danger in the port of Cumana, is the shoal of *Morro Roxo*, which is 900 fathoms broad from E. to W., and so steep, that you are upon it almost without warning.”*

One of the excursions which M. Humboldt made during his residence at Cumana, was to the peninsula of Araya on the opposite side of the gulf. They embarked on the river Manzanares about two in the morning. “The night was delightfully cool. Swarms of phosphorescent insects glittered in the air. We

* Pers. Narr. vol. ii. p. 204—12. M. Lavaysse describes the gulf as twelve leagues long and from three to four in breadth throughout its extent. Even if Spanish leagues be meant, this is strangely at variance with Humboldt. He agrees with the latter in describing it as a magnificent port, where large ships may ride in safety from all weathers, offering in all parts good anchorage and natural wharfs. “Batteries of heavy mortars placed at each side of the entrance, could hinder the most formidable fleets from entering.” p. 100.

know how common the glow-worm is in the south of Europe; but the picturesque effect it produces, cannot be compared to those innumerable, scattered, and moving lights that embellish the nights of the torrid zone, and seem to repeat on the earth, along the vast extent of the savannas, the spectacle of the starry vault of the sky. As we drew near some plantations, we saw bonfires kindled by the negroes: a light, undulating smoke rose to the tops of the palm-trees, and gave a reddish colour to the disk of the moon. It was on a Sunday night, and the slaves were dancing to the noisy and monotonous music of the guitar. We landed about eight in the morning at the Point of Araya, near the new salt-works. A solitary house stands in a plain destitute of vegetation, near a battery of three guns, which is the only defence of this coast, since the destruction of Fort San Diego. The inspector of the salt-works passes his life in a hammock, whence he issues his orders to the workmen: a king's boat (*la lancha del re*) brings him every week his provisions from Cumana. It is surprising, that a salt-work which formerly excited the jealousy of the English, the Dutch, and other maritime powers, has not given rise to a village or even a farm: a few huts only of poor Indian fishermen are found at the extremity of the Point of Araya.

“ The abundance of salt contained in the peninsula of Araya, was already known to Alonzo Ninno, when, following the steps of Columbus, Ojeda, and Amerigo Vespucci, he visited these countries in 1499. Though, of all the people on the globe, the natives of America are those who consume the least salt, because they scarcely eat any thing but vegetables, it nevertheless appears, that the Guayquerias already dug into the clayey and muriatiferous soil of *Punta Arenas*. Even

the brine-pits, which are now called *new*, and which are situate at the extremity of Cape Araya, had been worked at very early periods. The Spaniards settled at first at Cubagua, and soon after on the coasts of Cumana, worked, from the beginning of the sixteenth century, the salt marshes which stretch away in the form of a mere to the north of Cerro de la Vela. As at that period the peninsula of Araya had no settled population, the Dutch availed themselves of the natural riches of a soil which appeared a property common to all nations. In our days, each colony has its own salt-works, and navigation is so much improved, that the merchants of Cadiz can send salt, at small expense, from Spain and Portugal to the southern hemisphere, a distance of 1,900 leagues, to cure meat at Monte Video and Buenos Ayres. These advantages were unknown at the time of the conquest; colonial industry had then made so little progress, that the salt of Araya was carried at great expense to the West India Islands, Carthagena, and Portobello. In 1605, the court of Madrid sent armed ships to Punta Araya, with orders to station themselves there, and expel the Dutch by force of arms. The Dutch, however, continued to carry on a contraband trade in salt till, in 1622, a fort was built near the salt-works, that afterward became celebrated under the name of the Castillo de Santiago, or of the Real Fuerza de Araya. The great salt marshes are laid down on the oldest Spanish maps, sometimes as a bay, and at other times as a mere. Laet, who wrote his *Orbis Novus* in 1633, and who had some excellent notions respecting these coasts, expressly states, that the mere was separated from the sea by an isthmus above the level of high water. In 1726, an extraordinary event destroyed the salt-works of Araya, and rendered the

fort, the construction of which had cost more than a million of piastres, useless. An impetuous hurricane took place, which was a very rare phenomenon in these regions, where the sea is in general as calm as the water in our large rivers. The waves overflowed the land to a great extent; and by the effect of this irruption of the ocean, the salt-lake was converted into a gulf several miles in length. Since this period, artificial reservoirs, or pits (*vasets*), have been formed, to the north of the range of hills which separates the castle from the northern coast of the peninsula.*

“ The province of Caracas possesses fine salt-works at *Los Roques*: that which formerly existed at the small island of *Tortuga*, where the soil is strongly impregnated with muriat of soda, was destroyed by order of the Spanish government. A canal was made, by which the sea has free access to the salt-marshes. Foreign nations who have colonies in the West Indies, frequent this uninhabited island; and the court of Madrid, from views of suspicious policy, was apprehensive, that the salt-works of *Tortuga* would have given rise to settlements, by means of which an illicit trade would have been carried on with *Terra Firma*.

“ The royal administration of the salt-works of *Araya* dates only from the year 1792. Before that period, they were in the hands of Indian fishermen, who manufactured salt at their pleasure, and sold it,

* Of between 9 and 10,000 *fanegas* (each 400lb. weight) furnished by *Cumana* and *Barcelona* in 1799, 3,000 only were produced by the salt-works of *Araya*: the rest was extracted from the sea-water at the *morro* of *Barcelona*, at *Pozuelos*, at *Piritu*, and in the *Golfo Triste*. In Mexico, the salt lake of *Penon Blanco* alone furnishes yearly more than 250,000 *fanegas* of unpurified salt.

paying the government the moderate sum of 300 piastres. The price of the *fanega* was then four reals; but the salt was extremely impure, grey, mixed with earthy particles, and surcharged with muriat and sulphat of magnesia. As the manufacture or labour of the salt-makers was also carried on in the most irregular manner, salt was often wanted for curing meat and fish; a circumstance that has a powerful influence in these countries on the progress of industry, as the lower class of people and the slaves live on fish and a small portion of *tasajo*. Since the province of Cumana has become dependent on the intendency of Caracas, the sale of salt is under the excise; and the *fanega*, which the Guayquerias sold at half a piastre, costs a piastre and a half.* This augmentation of price is slightly compensated by a greater purity of the salt, and by the facility with which the fishermen and farmers can procure it in abundance during the whole year. The salt-works of Araya yielded the treasury, in 1799, a clear income of 8,000 piastres."

The Travellers passed the night in a hut which formed part of a groupe of small habitations on the border of the salt-lake, the remains of a considerable village. The ruins of a church are seen buried in the sand, and covered with brushwood. The castle of Araya was totally dismantled in 1765, to save the expense of the garrison. Standing singly on a bare and arid mountain, crowned with agave, columnar cactus, and thorny mimosa, the ruins resemble less the works of man, than a mass of rock ruptured by some phy-

* "The fanega is sold to those Indians and fishermen who do not pay the duties (*derechos reales*), at Punta Araya for six, at Cumana for eight reals. The prices to the other tribes are, at Araya ten, at Cumana twelve reals."

sical convulsion. The few inhabitants who still linger in this wild and barren spot, are fishermen. They appeared satisfied with their lot; and when asked why they had no gardens, their reply was, "Our garden is beyond the gulf: when we carry our fish to Cumana, we bring back plantains, cocoa-nuts, and cassava." This indolent mode of life is followed throughout the peninsula of Araya. The chief wealth of the inhabitants consists in goats of a very large and fine breed; they are of a brownish yellow colour, are entirely wild, and are marked, like the mules, to distinguish them. "If, in hunting, a colonist kills a goat which he does not consider as his own property, he carries it immediately to the neighbour to whom it belongs." In the uninhabited islet of Cubagua, deer of a small breed are so numerous, that an individual may kill three or four in a day. "The *venado* of Cubagua," Humboldt says, "belongs to one of those numerous species of small American deer which zoologists have confounded under the vague name of *cervus Mexicanus*.* It does not appear to be the same as the hind of the savannas of Cayenne, or the *guazuti* of Paraguay. Its colour is of a brownish red on the back, and white under the belly, and it is spotted like the axis. In the plains of Cari, we were shewn, as a very rare thing in these burning climates, a variety quite white: it was a female of the size of a roe-buck of Europe, and of a very elegant shape. White varieties are found in the New Continent even among the tigers."

Among the mulattoes whose huts surround the salt-lake, M. Humboldt found a white, by trade a shoemaker, who boasted of Castilian descent: he appears

* See Mod. Trav., Mexico, vol. ii. p. 96.

to have been a most original personage. "He received us," says our Traveller, "with the air of gravity and self-sufficiency which, in those climates, characterises almost all who are conscious of possessing some peculiar talent. He was employed in stretching the string of his bow, and sharpening his arrows to kill birds. His trade of a shoemaker could not be very lucrative in a country where the greater part of the inhabitants go barefoot; and he complained, that, on account of the dearness of European gunpowder, a man of his quality was reduced to employ the same weapons as the Indians. He was the sage of the plain; he understood the formation of the salt by the influence of the sun and the full moon, the symptoms of earthquakes, the marks by which mines of gold and silver are discovered, and the medicinal plants, which he divided, like all the other colonists from Chili to California, into *hot and cold*.* Having collected the traditions of the country, he gave us some curious accounts of the pearls of Cubagua, objects of luxury which he treated with the utmost contempt. To shew us how familiar to him were the sacred writings, he took a pride in quoting to us Job, who preferred wisdom to all the pearls of the Indies. His philosophy was circumscribed to the narrow circle of the wants of life. A very strong ass, able to carry a heavy load of plantains to the *embarcadere*, was the object of all his wishes. After a long discourse on the emptiness of human grandeur, he drew from a leathern pouch a few very small and opaque pearls, which he forced us to accept, enjoining us at the same time to note on our tablets, that a poor shoemaker of

* "Exciting or debilitating, sthenic or asthenic of Brown's system."

Araya, but a white man, and of noble Castilian race, had been enabled to give us what on the other side of the sea * was sought for as a very precious thing. I acquit myself rather late of the promise I made to this honest man; and I am happy to add, that his disinterestedness did not permit him to accept of the slightest retribution. The *Pearl Coast* presents, it is true, the same aspect of misery as the countries of *gold* and *diamonds*, Choco and Brazil; but misery is not there attended with that immoderate desire of gain which is excited by mineral riches."

The islands of Margarita, Cubagua, and Coche, Punta Araya, and the mouth of the *Rio de la Hacha*, were as celebrated in the sixteenth century for the pearls which abound all along this coast, as the Persian Gulf and the island Taprobane were among the ancients. The island of Coche alone yielded, at the beginning of the conquest, pearls to the amount of 1,500 marcs every month. At a time that the whole of the mines of America did not furnish two millions of piastres per annum, the value of the pearls sent to Europe amounted on an average to upwards of 800,000 piastres. "Pearls were so much the more sought after, as the luxury of Asia had been introduced into Europe by two opposite channels; that of Constantinople, where the Paleologi wore garments covered with strings of pearls; and that of Grenada, where the Moorish kings displayed at their court all the luxury of the East. The pearls of the East Indies were preferred to those of the West; but the number of the latter which circulated in commerce, was not less considerable in the times that immediately fol-

* "Por alla, or, del otro lado del charco (properly, beyond the great mere), a figurative expression, by which the people in the Spanish colonies denote Europe."

lowed the discovery of America. In Italy, as well as in Spain, the islet of Cubagua became the object of numerous mercantile speculations. The pearl fishery diminished rapidly towards the end of the sixteenth century, and had long ceased in 1683. The industry of the Venetians, who imitated fine pearls with great exactness, and the frequent use of cut diamonds, rendered the fisheries of Cubagua less lucrative. At the same time, the oysters which yielded the pearls became scarcer, because their propagation had been checked by the imprudent destruction of the shells by thousands. At present, Spanish America furnishes no other pearls for trade, than those of the Gulf of Panama and the mouth of the *Rio de la Hacha*. On the shoals that surround Cabagua, Coche, and the island of Margarita, the fishery is as much neglected as on the coasts of California.*

“It is believed,” adds M. Humboldt, “that after two centuries of repose, the pearl *aronde* has again greatly multiplied.” In 1812, some attempts were made at Margarita to revive the pearl fishery. M. Lavaysse, indeed, states, that he saw an individual in 1807, who had procured about 400 pearls in the course of the preceding year. There seems reason to believe, however, that, from some cause or other, the oyster has degenerated, the pearls now found being much smaller and of less brilliancy than those obtained at the time of the conquest. The first Spaniards who landed in Terra Firma, found the savages decked with necklaces and bracelets of beautiful pearls. These treasures of the deep proved not less fatal to the natives than the gold of Brazil and the silver of Mexico. Indeed, the hardships endured by those who were

* See Mod. Trav., Mexico, vol. ii. p. 99.

compelled to labour in the mines, were not to be compared with the sufferings inflicted on the pearl-divers. Las Casas has described, "not without some exaggeration," says M. Humboldt, the cruelties exercised on the unhappy Indian and negro slaves employed in the pearl fishery. It is certain, however, that the waste of human life was most horrible.

Four hours' walk from the salt-water lake is the village of Maniquarez, celebrated for its potteries, which are entirely in the hands of the Indian women. Three centuries have been insufficient to introduce the potter's wheel on a coast which is not above thirty or forty days' sail from Spain. Being unacquainted with the use of ovens, they place twigs of cassia and other shrubs round the pots, and bake them in the open air. The clay, which is found in quarries half a league to the east of Maniquarez, is produced by the natural decomposition of a mica-slate reddened by oxide of iron.

Of all the productions on the coasts of Araya, that which the natives deem the most extraordinary, is the *piedra de los ojos* (stone of the eyes): according to their natural philosophy, it is both a stone and an animal. "It is found in the sand, where it is motionless; but, placed singly on a polished surface, for instance, on a pewter or earthen plate, it moves when excited by lemon-juice. Placed in the eye, the pretended animal turns on itself, and expels any other foreign substance that may have been accidentally introduced. At the new salt-works, and at the village of Maniquarez," continues Humboldt, "the 'stones of the eyes' were offered us by hundreds, and the natives were eager to shew us the experiment of the lemon-juice. They wished to put sand into our eyes, in order that we might ourselves try the efficacy of

the remedy. It was easy to perceive that these stones are thin and porous *opercula*, which have formed part of small univalve shells. Their diameter varies from one to four lines. One of their surfaces is plane, the other convex. These calcareous *opercula* effervesce with lemon-juice, and put themselves in motion as the carbonic acid is disengaged. By the effect of a similar re-action, loaves placed in an oven sometimes move in a horizontal plane; a phenomenon that has given rise to the popular notion of enchanted ovens. Introduced into the eye, the *piedras de los ojos* act like small pearls and different round grains employed by the American savages to increase the flowing of tears. These explanations were little to the taste of the inhabitants of Araya."

Proceeding along the southern coast to the east of Maniquarez, three strips of land are found running out into the sea very near each other, called *Punta de Soto*; *Punta de la Brea* (Tar Cape), and *Punta Guaratarito*. Near the second of these points, at eighty feet distance from the shore, a spring of naphtha rises, and covers the surface of the sea for a distance of more than a thousand feet. The smell spreads itself into the interior of the peninsula. This phenomenon is the more remarkable, as the bottom of the gulf is here formed of primitive mica-slate; whereas all the fountains of naphtha hitherto known originate in secondary formations, and have been supposed to be produced by the decomposition of vegetable and animal substances, or the burning of coal. It is observable also, that the same primitive rocks contain the subterraneous fires; that the smell of petroleum is frequently perceived on the brink of burning craters; and that the greater number of hot springs

in the American continent, issue from gneiss and micaceous schist. The largest reservoir of petroleum is that of the island of Trinidad.

FROM CUMANA TO THE MISSIONS OF THE CHAYMA INDIANS.

ANOTHER excursion made by the learned Travelers we are following, during their residence at Cumana, was to the missions of the Chayma Indians in the interior of the mountains. To the exertions of the religious orders by whom these institutions were founded, we must certainly attribute the introduction of a more humane system of civilisation, which put a stop to the effusion of blood, and laid the foundation of social communities in the recesses of the wilderness. But these same institutions have, in their result, proved hostile to the progress of civilisation. "The Indians have remained in a state little different from that in which they existed when their scattered dwellings were not as yet collected round the habitation of the missionary. Their number has considerably augmented, but the sphere of their ideas is not enlarged. They have progressively lost that vigour of character and that natural vivacity which, in every state of society, are the noble fruits of independence. In subjecting to invariable rules even the slightest actions of their domestic life, they have been rendered stupid by the effort to render them obedient. Their subsistence is in general more certain, and their habits more pacific; but, subject to the constraint and the dull monotony of the government of the missions, they discover by their gloomy and reserved looks, that they have not without regret sacrificed their liberty

to their repose. The monastic system, confined to the cloister, while it deprives the state of useful citizens, may sometimes contribute to calm the passions, to soothe incurable sorrows, and fit the mind for meditation; but, transplanted into the forests of the New World, and applied to the numerous relations of civil society, it has consequences so much the more fatal as its duration is prolonged. It enchains, from generation to generation, the intellectual faculties, interrupts the intercourse of nations, and is hostile to whatever elevates the mind or enlarges its conceptions." Such is the very just and striking picture which Humboldt draws, of the effects of the *hierocratic* government of the Romish missions, connected as it always has been with the fatal policy of accommodating Christianity to the prejudices and superstitions of its nominal converts. "From these united causes," he adds, "the natives who inhabit the missions, are kept in a state remote from all improvement, and which we should call stationary, did not societies follow the course of the human mind, and retrograde whenever they cease to go forward." *

The Travellers left Cumana on the 4th of September, 1799. The road, "or rather path," follows the right bank of the Manzanares. At the hospital of the *Divina Pastora*, it turns to the north-east, and lies for two leagues over a level tract bare of trees, along the southern side of hills which Humboldt supposes to have formed at one time an island. At the end of two hours, they arrived at the foot of the high chain stretching east and west from the Brigantine to the *Cerro de San Lorenzo*. Here, every object begins to assume a more majestic and

* Pers. Narr. vol. iii. pp. 4 — 6.

picturesque character. New rocks appear, and the vegetation wears a different aspect. The soil, watered by springs, is furrowed by channels in every direction, and trees of gigantic loftiness, covered with *lianas*, rise from the ravines. Their bark, black and burnt by the double action of the light and the oxygen of the atmosphere, forms a contrast with the fresh verdure of the long, tough, shining leaves of the pothos and dracontium. The forms and grouping of the rocks reminded the Travellers, as they advanced, of the scenes of Switzerland and the Tyrol. The path insensibly ascends through the thick forests which clothe the acclivity. Here and there, some trace of cultivation presents itself, and solitary huts are met with, inhabited by mestizoes, placed in the midst of enclosures of bananas, papaw-trees, sugar-canes, and maize.* Owing to the fecundity of the soil and the astonishing productiveness of the alimentary plants which constitute the food of the natives in these tropical regions, a small spot of cultivated land suffices to supply the wants of several families.† The spontaneous vegetation, therefore, still predominates in quantity over the cultivated plants, and determines the aspect of the landscape. "Man," says Humboldt, "here appears, not the absolute master, changing at will the surface of the soil, but a transient guest, who quietly enjoys the gifts of nature." At the end of ten hours, the travellers halted at Quetepe, a small hamlet built near a delicious spring,

* These cultivated spots are found, Humboldt says, wherever the Alpine limestone is covered with a quartzose sandstone, containing thin strata of a blackish clay-slate, which detain the water, and produce a humidity of soil favourable to vegetation.

† An acre planted with plantains, produces nearly twenty times as much food as the same space sown with corn.

distant from Cumana in a straight line about three leagues and a half: the plain is about 190 toises above the level of the sea. The road to Cumanacoa now lies in a south-west direction over the groupe of mountains which separates the coast from the *Llanos*. This part of the chain is destitute of vegetation, and has steep declivities both towards the north and the south. It is called *El Imposible*, "because it is believed, that, in case of an enemy's landing, this ridge of mountains would afford an asylum to the inhabitants of Cumana. When Cumana, after the capture of Trinidad by the English in 1797, was threatened with an attack, many of the inhabitants fled to Cumanacoa, and deposited what they possessed of most value in sheds hastily constructed on the summit." Here M. Humboldt and his companion passed the night at a military post, consisting of a hospital built by the side of a powder magazine, occupied by eight men under a Spanish serjeant. The *Llaneros*, or inhabitants of the plains, send their produce, chiefly maize, hides, and cattle, to the port of Cumana by the road over the *Imposible*, which may be considered as the key of the *Llanos*. From the summit is obtained a fine and extensive view, including the flattened top of the Brigantine, the port of Cumana, the rocky peninsula of Araya, and the *Laguna del Obispo*, or *Laguna Grande*, a vast basin surrounded with mountains, which communicates with the Gulf of Cariaco by a narrow channel, capable of admitting the passage of only one vessel at a time. This port is an uninhabited place, but is annually frequented by vessels laden with mules for the West India Islands. The elevation of the guard-house is 258 toises above the sea.

The descent from the *Imposible* is very dangerous

for beasts of burden ; the path is in general but fifteen inches broad, and bordered with precipices. In 1796, a fine road from the village of San Fernando was begun, and a third part of it finished, but, like almost all similar plans of improvement under the colonial system, it was made a job, and the people were rated for a road which had no existence, till the governor of Cumana put an end to the abuse. On the banks of the numerous mountain rivulets grow the *hura*, the *cuspa* (a species of *cinchona*, or cascarilla-tree, the bark of which is an excellent febrifuge), and the silver-leaved cecropia, or trumpet-tree. At the end of the ravine through which the road descends from the *Imposible*, the traveller enters a thick forest, traversed by numerous small rivers easily fordable ; and to the stranger newly arrived from Europe, the new aspect which nature assumes is striking and unexpected. “ The objects which surround him,” says M. Humboldt, “ make him feel at every step, that he is not on the confines, but in the centre of the torrid zone : not in one of the West India Islands, but on a vast continent, where every thing is gigantic, the mountains, the rivers, and the mass of vegetation. If he feel strongly the beauty of picturesque scenery, he can scarcely define the various emotions which crowd upon his mind ; he can scarcely distinguish what most excites his admiration, the deep silence of those solitudes, the individual beauty and contrast of forms, or that vigour and freshness of vegetable life which characterise the climate of the tropics. It might be said that the earth, overloaded with plants, does not allow them space enough to unfold themselves. The trunks of the trees are every where concealed under a thick carpet of verdure ; and if we carefully transplanted the orchideæ, the pipers, and

the pothos, which a single courbaril, or American fig-tree, nourishes, we should cover a vast extent of ground. By this singular assemblage, the forests, as well as the flanks of the rocks and mountains, enlarge the domains of organic nature. The same lianas that creep on the ground, reach the tops of the trees, and pass from one to another at the height of more than a hundred feet. Thus, by a continual interlacing of parasite plants, the botanist is often led to confound the flowers, fruits, and leaves which belong to different species.

“ We walked for some hours under the shade of these arcades, that scarcely admit a glimpse of the sky ; which appeared to me of an indigo blue, so much the deeper as the green of the equinoctial plants is generally of a stronger hue, with somewhat of a brownish tint. A great fern-tree, very different from the polypodium arboreum of the West Indies, rose above masses of scattered rocks. In this place, we were struck for the first time with the sight of those nests, in the shape of bottles or small pockets, which are suspended to the branches of the lowest trees, and which attest the admirable industry of the orioles, that mingle their warblings with the hoarse cries of the parrots and the macaws. These last, so well known for their vivid colours, fly only in pairs, while the real parrots wander about in flocks of several hundreds. A man must have lived in those climates, particularly in the hot valleys of the Andes, to conceive how these birds sometimes drown with their voice the noise of the torrents which rush down from rock to rock.

“ We left the forests at the distance of somewhat more than a league from the village of San Fernando. A narrow path led, after many windings, into an

open, but extremely humid country. In the temperate zone, the cyperaceous and gramineous plants would have formed vast meadows; here the soil abounded in aquatic plants, with sagittate leaves, and especially in basil plants, among which we noticed the fine flowers of the costus, the thalia, and the heliconia. These succulent plants are from eight to ten feet high, and in Europe their assemblage would be considered as a little wood. The delightful view of meadows and of turf sprinkled with flowers, is almost entirely wanting in the low regions of the torrid zone, and is to be found only in the elevated plains of the Andes."

A road skirted with a very elegant species of bamboo (*bambusa guadua*), more than forty feet high, led to the village, or, as it is termed, *pueblo de mision*. It is situated in a narrow plain, shut in by steep calcareous rocks. The plan on which it is built, is the same that is common to almost all the villages and missions in the Spanish colonies. A great square in the centre contains the church, the dwelling of the *cura doctrinero*, or parish priest, and the humble edifice dignified with the title of the *casa del Rey*, which serves for a caravanserai. The streets, which are wide and very straight, diverging from this square, cross each other at right angles. The huts are slightly constructed of clay, strengthened by lianas; they are detached, but not surrounded with gardens. The uniformity of their construction, the grave and taciturn air of the inhabitants, and the extreme neatness that reigns throughout their habitations, reminded the Travellers of the establishments of the Moravian brethren. Every Indian family cultivates, at some distance from the village, besides its own garden, that of the community, in which the

adults of both sexes work for one hour in the morning and one in the evening. This common garden (*conuco de la comunidad*), in the missions nearer the coast, is generally either a sugar or an indigo plantation. According to an old regulation, a white not an ecclesiastic is not permitted to remain more than one night in an Indian village. M. Humboldt, however, had provided himself with a recommendation to the friars who governed the Chayma missions, from their syndic at Cumana. "The missionary of San Fernando was a capuchin, a native of Arragon, far advanced in years, but strong and healthy. His extreme corpulency, his hilarity, the interest he took in battles and sieges, ill accorded with the ideas we form in our northern countries of the melancholy reveries and the contemplative life of missionaries. Though extremely busy about a cow which was to be killed the next day, the old monk received us with kindness, and permitted us to hang up our hammocks in a gallery of his house. Seated, without doing any thing, the greater part of the day, in an arm-chair of red wood, he bitterly complained of what he called the indolence and ignorance of his countrymen. He asked a thousand questions on the real object of our journey, which appeared to him hazardous, and, at all events, useless. Here, as at Oroonoko, we were fatigued by that restless curiosity which the Europeans preserve in the forests of America respecting the wars and political convulsions of the Old World.

"Our missionary, however, seemed well satisfied with his situation. He treated the Indians with mildness; he beheld his mission prosper; and he praised with enthusiasm the waters, the bananas, and the dairy produce of the canton. The sight of our instruments, our books, and our dried plants, drew

from him a sarcastic smile; and he acknowledged, with the *naïveté* peculiar to those climates, that of all the enjoyments of life, without excepting sleep, none was comparable to the pleasure of eating good beef (*carne de vacca*); so true it is, that sensuality obtains an ascendancy where there is no occupation for the mind. Our host repeatedly urged us to pay a visit with him to his cow, which he had just purchased; and on the morrow at sunrise, he would not dispense with our seeing it killed after the fashion of the country, that is, by ham-stringing the animal, and then plunging a large knife into the vertebræ of the neck. This disgusting operation served to shew us the great address of the Chayma Indians, eight of whom, in less than twenty minutes, cut up the animal into small pieces. The price of the cow was only seven piastres; but this price seemed to be thought very considerable. The same day the missionary had paid eighteen piastres to a soldier of Cumana for having succeeded, after many fruitless attempts, in bleeding him in the foot. This fact, though seemingly very unimportant, is a striking proof how greatly, in uncultivated countries, the price of things differs from that of labour.

“ The mission of San Fernando was founded toward the end of the seventeenth century, near the junction of the small rivers Manzanares and Lucas Perez. A fire, which consumed the church and the huts of the Indians, induced the capuchins to place the village in its present fine situation. The number of families is now increased to one hundred: the missionary observed to us, that the custom of marrying at thirteen or fourteen years of age, contributes greatly to the rapid increase of population. He denied that old age was so premature among the Chaymas as is

commonly believed in Europe. The government of these Indian parishes is very complicated : they have their governor, their major-alguazils, and their militia-commanders, who are all copper-coloured natives. The company of archers have their colours, and perform their exercises with the bow and arrow, in shooting at a mark : this is the *national guard* (militia) of the country. This military establishment under a purely monastic system, seemed to us very singular."

The road from San Fernando to Cumanacoa, passes through an open and humid valley interspersed with small plantations. The village of Arenas, which occurs in the route, is one of the missions founded by Arragonese capuchins ; but it has ceased to be under their government, and the natives, though of the same race as those of San Fernando, are better clothed and more civilised : it is the residence of a regular priest. In this village there was living at the time of Humboldt's visit, a labourer named Francisco Lozano, who had suckled a child from his own breast. The following particulars are given of this remarkable physiological phenomenon. " The mother having fallen sick, the father, to quiet the infant, took it into his bed and pressed it to his bosom. Lozano, then thirty-two years of age, had never remarked till that day that he had milk : but the irritation of the nipple sucked by the child, caused the accumulation of that liquid. The milk was thick and very sweet. The father, astonished at the increased size of his breast, suckled his child two or three times a day during five months. He drew on himself the attention of his neighbours, but he never thought, as he probably would have done in Europe, of deriving any advantage from the curiosity he excited. We saw the cer-

tificate, which had been drawn up on the spot, to attest this remarkable fact, eye-witnesses of which are still living. They assured us that, during this suckling, the child had no other nourishment than the milk of his father. Lozano, who was not at Arenas during our journey to the missions, came to us at Cumana. He was accompanied by his son, who was thirteen or fourteen years of age. M. Bonpland examined with attention the father's breast, and found it wrinkled like those of women who had given suck. He observed, that the left breast in particular was much enlarged; which Lozano explained to us from the circumstance that the two breasts did not furnish milk in the same abundance. Don Vicente Emparan, governor of the province, sent a circumstantial account of this phenomenon to Cadiz.

“It is not a very uncommon circumstance,” adds the learned Traveller, “to find, both among human-kind and animals, males whose breasts contain milk;” and he cites from Aristotle the observation, that men who have a small quantity of milk, yield it in abundance when their breasts are sucked. An inhabitant of Syria is mentioned by a medical writer of the fifteenth century, who, to calm the uneasiness of his child after the death of its mother, pressed it to his bosom, on which the milk came in such abundance, that he took on himself the nourishment of the child. Other examples are related by different writers. It has even been mentioned by travellers, among the signs of the pretended weakness of the Americans, that the men have milk in their breasts, which is not more true of any Indian tribe than of any European race. Among the lower orders in Russia, the circumstance has been observed to be

much more frequent than among the more southern nations; and the Russians are not chargeable with effeminacy. The labourer of Arenas is not of the copper-coloured race of Chayma Indians, but a white, descended from Europeans.*

The town of Cumanacoa is situated in a naked plain, nearly circular, surrounded by lofty mountains, having a dull and melancholy aspect. The houses are low and slight, and, with the exception of three or four, all built of wood. It was founded in 1717 by Domingo Arias, and was at first called San Baltasar de las Arias, but the Indian name has prevailed. In 1753, the number of inhabitants did not exceed 600: in 1800, it amounted to 2,300, and recent travellers, Humboldt says, carry the population as high as 5,000 souls, but, he thinks, on an erroneous computation. The plain is not more than 104 toises above the level of the sea, and yet the temperature is surprisingly low, owing to the proximity of the forests and the prevalence of fogs. The thermometer, during M. Humboldt's stay, kept at from 14.8° to 16° of Reaumur, which, to a traveller coming from the coast, has the effect of cold. The port of Cumana is only seven nautical leagues from Cumanacoa; and yet, while it scarcely ever rains at the former place, the latter has seven months of wintry weather. Every night a thick fog covered the sky, and almost every day, about two o'clock in the afternoon, large, black, and low clouds dissolved in torrents of rain, which would continue for two or three hours, during which the thermometer would be depressed five or six

* A similar case is mentioned by Captain Franklin; that of a Chipewyan, who, having lost his wife in child-bed, suckled the infant, and succeeded in rearing him.—See FRANKLIN'S *Journey to the Polar Sea*, 4to. p. 157.

degrees. About five o'clock the rain generally ceased, and the sun re-appeared a short time before setting; but, at eight or nine o'clock, the town would be again enveloped in a thick stratum of vapours. These changes follow successively during whole months, and yet, not a breath of wind is felt. The soil is very fertile, owing to the extreme humidity of the atmosphere and the number of rivulets. The most valuable production of the district is tobacco, next to that of the Isle of Cuba and the Rio Negro, the most aromatic that is produced in Spanish America. Here, as in Mexico, it was a royal monopoly under the colonial administration; and the cultivation was nearly confined, in Caracas, to the valley of Cumanacoa, as, in Mexico, it was permitted only in the two districts of Orizaba and Cordoba.* The royal farm (*estanco real de tabaco*) was established here in 1779. "All the tobacco that is gathered must," says Humboldt, "be sold to government. Guards scour the country to destroy any plantations without the boundaries of the privileged districts, and inform against those inhabitants who dare smoke segars prepared by their own hands. These guards are for the most part Spaniards, and are almost as insolent as those we see employed in similar cases in Europe. This insolence has not a little contributed to foster the hatred between the colonies and the metropolis. The growth being now confined to the space of a few square leagues, the whole produce of the harvest is only 6,000 *arrobas*. Yet, the two provinces of Cumana and Barcelona consume 12,000. The deficiency is supplied by Spanish Guayana. If the culture were free, Cumana might furnish a great part of Europe."

* See Modern Traveller, Mexico, vol. ii. p. 84, *note*.

Next to tobacco, the most important article of cultivation is indigo, which often nearly equals that of Guatemala.

Every thing indicates, says the learned Traveller, that the valley of Cumanacoa is the bottom of an ancient lake. The mountains which then formed its shores, are all perpendicular towards the plains, and the only outlet for the waters was on the side of Aretas. In digging foundations, beds of round pebbles are found, mixed with small bivalve shells; and at the bottom of the ravine of San Juanillo, there were discovered, about fifty years ago, two enormous femoral bones, (it is supposed, of an extinct species of elephant,) which weighed more than thirty pounds. On approaching the southern bank of this basin, the Turumiquiri, an enormous wall of rocks, the remains of an ancient cliff, is seen rising in the midst of the forest. Further westward, at the *Cerro del Cuchivano*, the chain of mountains seems broken by the effects of an earthquake. There is a crevice, a hundred and fifty toises in width, surrounded with perpendicular rocks, and filled with trees, through which flows a torrent called the *Rio Juagua*. This crevice is called *Risco del Cuchivano*; it is highly picturesque, and is inhabited by jaguars (*felis onca*), who attain the size of six feet in length. Opposite the farm of Bermudez, two spacious caverns open into it, from which, at times, flames rush out, that may be seen at night from a great distance, illuminating the adjacent mountains. This phenomenon is observed chiefly during the rainy season. At the time of the great earthquake of Cumana, it was accompanied by a subterraneous, dull, and long-continued noise; but M. Humboldt considers it to be altogether unconnected with volcanic phenomena. He supposes it to

be a column of inflamed hydrogen, produced by the decomposition of water on coming in contact with the pyrites scattered through the schistous marl which composes the rocks, and which, as the smell indicates, is both pyritous and bituminous. Near these caverns, rock-crystals are found enchased in beds of alpine limestone. On the right bank of the river Juagna, is an excavation which the natives took for a gold mine, owing to the appearance of the sulphurous pyrites which are found crystallised and disseminated in the marl rock. They are of a very clear golden yellow, and as the torrent, which is crossed by the marly stratum, washes out metallic grains, the natives imagine, from the brillancy of the pyrites, that it bears down gold. But M. Humboldt ascertained, that they are not auriferous; they are only mixed with fibrous sulphuret of iron and nodules of fetid carbonate of lime. "How much time did we lose," he says, "during five years' travels, in visiting, at the pressing solicitations of our hosts, ravines of which the pyritous strata have for ages borne the pompous name of *Minas de Oro*! How often have we been grieved at seeing men of all classes, magistrates, village pastors, grave missionaries, grinding, with inexhaustible patience, hornblende or yellow mica, in order to extract gold from it by means of mercury! This rage for the discovery of mines is the more striking in a climate where the soil needs only to be slightly raked, to produce abundant harvests."

The principal place in the Chayma missions, is the convent and village of Caripe. The road taken by our Travellers, led over the mountains of Cocollar and Turumiquiri. After crossing, for three leagues, the plain of Cumanacoa, they began to climb the acclivity, and continued to ascend for more than four

hours, during which they crossed the Pututucuar, a rapid torrent, two-and-twenty times. The *hato del Cocollar*, a solitary farm on the summit, is 2,400 feet above the sea-level, and the nightly temperature is seven degrees colder than that of the coast. "Nothing can be compared," says Humboldt, "to the impression of majestic tranquillity, which the aspect of the firmament inspires in this solitary region. Following with the eye, at night-fall, those meadows that bound the horizon, that plain covered with verdure and gently undulated, we thought we saw from afar, as in the deserts of the Orinoco, the surface of the ocean supporting the starry vault of heaven. The tree under which we were seated, the luminous insects flying in the air, the constellations that shone towards the south,—every object seemed to tell us, that we were far from our native soil. If, amid this exotic nature, the bell of a cow or the roaring of a bull was heard from the depth of a valley, the remembrance of our country was suddenly awakened by the sound. They were like distant voices resounding from beyond the ocean, and with magical power transporting us from one hemisphere to the other."

The Cocollar mountains, of which the Turumiquiri forms the summit, belong to the same groupe as the Brigantine, and were formerly called *Sierra de los Tageres*. The round summit, covered with turf, is 707 toises above the ocean. A ridge of steep rocks extends toward the west, broken, at the distance of a mile, by an enormous crevice, or ravine, that descends toward the Gulf of Cariaco. At the point where the ridge should recommence, two calcareous peaks shoot up, the northernmost of which, the *Cucurucho de Turumiquiri*, is upwards of 1,050 toises high. From the round summit, chains of mountains

are seen extending to the ocean, in parallel lines from east to west, enclosing longitudinal valleys, which, being intersected by small ravines formed by the torrents, give to the mountains the appearance of rows of paps and cones. The ground is a gentle slope as far as the *Imposible*: further on, the precipices become bold. The form of this mass of mountains reminded Humboldt of the Jura chain. The valley of Cumanacoa is the only plain that presents itself. Towards the north, the peninsula of Araya forms a dark stripe on the sea, beyond which the black rocks of Cape Macanao, rising amid the waters like a strong bastion, bound the horizon.

After resting for three days at the farm of Cocollar, M. Humboldt prosecuted his journey; and after passing two ridges of mountains extremely steep, called *Los Yepes* and *Fantasma*, arrived at a beautiful valley five or six leagues in length, in which are situated the missions of San Antonio and Guanaguana. The former is celebrated on account of a small church with two towers, built of brick in a tolerable style, and ornamented with Doric columns, "the wonder of the country." The prefect of the Capuchins completed the building in two summers, though he employed only the Indians of the village. The mouldings, cornices, and frieze are executed in clay mixed with pounded brick. The governor of the province, however, disapproved of the luxury of such constructions in the missions, and the further embellishment of the church was suspended! Guanaguana had as yet no church, though it had existed on this spot about thirty years, the missionary wisely insisting, that the missionary's house was the first thing to be attended to, the church the second, and the clothing of the Indians the third. The latter, who much prefer to be unencumbered

with clothes, are in no hurry that their turn should come. The spacious abode of the *padre* had just been finished, and, to the surprise of the travellers, the terrace roof was ornamented with a great number of *chimneys* that looked like turrets. This was done, their host told them, to remind him, amid the heats of the torrid zone, of the winters of his native Arragon. The Indians cultivate cotton, partly for their own benefit, and partly for that of the church and the *padre*. But here, as every where else where the beneficence of nature lessens the stimulus to industry, so small a portion of land has been cleared for the cultivation of alimentary plants, that the inhabitants are exposed to a scarcity in seasons of drought. The preceding year, they had for three months been *al monte*; that is, wandering in the neighbouring forests, living on palm-cabbages, fern-roots, succulent plants, and wild fruits. They did not speak of this as a state of privation; the missionary alone had felt the inconvenience, the village having been deserted, and his flock, on their return from the forests, were not quite so docile as before. Near the village of Punzeca, the Travellers noticed small bags formed of a tissue of silk, suspended from the branches of the lowest trees, —the *seda silvestre* (wild silk) of the country: it is of a beautiful lustre, but very rough. A ridge or dyke of calcareous rock, called the *Cuchilla de Guanaguana*, separates the valley from that of Caripe. The road over it is difficult, the path only fourteen or fifteen inches broad, and the ridge along which it runs, is covered with a short turf extremely slippery; but, as the flanks of the mountain are not precipitous, though steep, the traveller, should his mule stumble, would only have a slide down the grass declivity to the depth of 7 or 800 feet. The highest point of the *Cuchilla*

is 548 toises above the sea, being 329 above the house of the *padre* at Guanaguana. Descending from the ridge by a winding path, the traveller enters on a tract covered with thick forest; and the geological aspect of the country changes from the Alpine formation to the Jura limestone. The calcareous strata, becoming thinner, form graduated steps, which stretch out like walls, cornices, and turrets. The valley of Caripe is 200 toises higher than that of Guanaguana, and the climate is of a delicious coolness: it is the only one of the high valleys of New Andalusia that is well inhabited. An alley of persea leads to the Capuchin *hospicio*. It is difficult, Humboldt says, to imagine a more picturesque spot. "The convent is backed by an enormous wall of perpendicular rock, covered with thick vegetation. The stone, of resplendent whiteness, appears only here and there through the foliage. It recalled forcibly to my remembrance the valleys of Derbyshire, and the cavernous mountains of Muggendorf in Franconia. Instead of the beech and the maple of Europe, are seen the prouder forms of the *ceiba* and the *praga* and *irasse* palm-trees. Numberless springs gush out from the sides of the rocks which encircle the valley, the abrupt slopes of which present toward the south, profiles a thousand feet in height. These springs arise for the most part from a few narrow crevices. The humidity which they spread around, favours the growth of the great trees. Plantains and papaw-trees surround tufts of arborescent fern, and the natives, who love solitary places, form their *conucos* (plantations) along the sides of the crevices. The mixture of wild and cultivated plants gives the place a peculiar charm. The springs are distinguished from afar, on the naked flanks of the mountain, by the tufted masses of vege-

tation, which at first seem suspended from the rocks, and, descending the valley, follow the sinuosities of the torrent." The convent is founded on a spot anciently called Areocuar. Its height above the sea-level is nearly the same as that of the city of Caracas and of the inhabited part of the Blue Mountains of Jamaica. The mean temperatures of these three points is nearly the same. That of the valley of Caripe is about 18.5° of the centigrade thermometer, the temperature of September, in which month Humboldt was there, differing scarcely half a degree from that of the whole year: this is equal to that of June at Paris. The climate has been found particularly favourable to the cultivation of the coffee-plant. The *conuco* of the community, which presented the appearance of an extensive and beautiful garden, contained, besides many culinary plants, maize, and some sugar-canes, five thousand coffee-trees, which promised an abundant harvest. The natives are obliged to work in it every morning from six to ten, under the inspection of Indian alcaldes and alguazils. The produce is sold by the guardian, and the proceeds are distributed among the people. Humboldt found a numerous society here, consisting of some young monks just arrived from Spain, who appear to have been sent here to be seasoned to the climate, and several infirm missionaries who had come to seek for health in the fresh and salubrious air of the mountains of Caripe. In the cell of the superior was a pretty good collection of books, among which, near the *Teatro Critico* of Feijo, and the *Lettres Edifiantes*, our Traveller was surprised to find the *Traité d'Electricité* of the Abbé Nollet; and the youngest of the monks last arrived, had brought with him, to study in his retirement, a Spanish translation of Chaptal's Chemistry. The

monks were not ignorant that their visiter was a native of a Protestant country, but they betrayed no signs of intolerance.

“What gives most celebrity to the valley of Caripe,” says the learned Traveller, “is the great cavern of Guacharo. In a country where the love of the marvellous prevails, a cavern that gives birth to a river, and is inhabited by thousands of nocturnal birds, the fat of which is employed by the missionaries to dress food, is an everlasting subject of conversation. The cavern, which the natives call a *minc of fat*, is not in the valley itself, but at three short leagues’ distance from the convent, toward the W.S.W. It opens into a lateral valley, which terminates at the *Sierra del Guacharo*. We set out toward the Sierra on the 18th of September, accompanied by the alcalds, or Indian magistrates, and the greater part of the monks of the convent. A narrow path led us at first during an hour and a half toward the south, across a fine plain, covered with a beautiful turf. We then turned toward the west, along a small river, which issues from the mouth of the cavern. We ascended during three quarters of an hour, walking sometimes in the water, which was shallow, sometimes between the torrent and a wall of rocks, on a soil extremely slippery and miry. The falling down of the earth, the scattered trunks of trees over which the mules could scarcely pass, the creeping plants that covered the ground, rendered this part of the road fatiguing.

“At the foot of the lofty mountain of Guacharo, we were only four hundred steps from the cavern, without yet perceiving the entrance. The torrent runs in a crevice, which has been hollowed out by the waters; and we went on under a cornice, the pro-

jection of which prevented us from seeing the sky. The path winds like the river: at the last turning we came suddenly before the immense opening of the grotto. The aspect of this spot is majestic even to the eye of a traveller accustomed to the picturesque scenes of the higher Alps. I had before this seen the caverns of the Peak of Derbyshire, where, extended in a boat, we traversed a subterranean river, under a vault two feet high. I had visited the beautiful grotto of Treshemienshiz, in the Carpathian mountains, the caverns of the Hartz, and those of Franconia, which are vast cemeteries of bones of tigers, hyenas, and bears, as large as our horses. Nature in every zone follows immutable laws in the distribution of rocks, in the exterior form of mountains, and even in those tumultuous changes which the exterior crust of our planet has undergone. So great a uniformity led me to believe, that the aspect of the cavern of Caripe would differ little from what I had observed in my preceding travels. The reality far exceeded my expectations. If the configuration of the grottoes, the splendour of the stalactites, and all the phenomena of inorganic nature, present striking analogies, the majesty of equinoctial vegetation gives at the same time an individual character to the aperture of the cavern.

“The Cueva del Guacharo is pierced in the vertical profile of a rock. The entrance is toward the south, and forms a vault eighty feet broad and seventy-two feet high. This elevation is but a fifth less than that of the colonnade of the Louvre. The rock that surmounts the grotto is covered with trees of gigantic height. The mammee-tree, and the genipa with large and shining leaves, raise their branches vertically toward the sky; while those of

the courbaril and the erythrina form, as they extend themselves, a thick vault of verdure. Plants of the family of pothos with succulent stems, oxalises, and orchideæ of a singular structure, rise in the driest clefts of the rocks; while creeping plants, waving in the winds, are interwoven in festoons before the opening of the cavern. We distinguished in these festoons a bignonia of a violet blue, the purple dolichos, and, for the first time, that magnificent solandra, the orange flower of which has a fleshy tube more than four inches long. The entrances of grottoes, like the view of cascades, derive their principal charm from the situation, more or less majestic, in which they are placed, and which in some sort determines the character of the landscape. What a contrast between the Cueva of Caripe, and those caverns of the North, crowned with oaks and gloomy larch-trees!

“ But this luxury of vegetation embellishes not only the outside of the vault, it appears even in the vestibule of the grotto. We saw with astonishment plantain-leaved heliconias eighteen feet high, the praga palm-tree, and arborescent arums, follow the banks of the river, even to those subterranean places. The vegetation continues in the cave of Caripe, as in those deep crevices of the Andes, half excluded from the light of day; and does not disappear till, advancing in the interior, we reach thirty or forty paces from the entrance. We measured the way by means of a cord; and we went on about 430 feet without being obliged to light our torches. Daylight penetrates even into this region, because the grotto forms but one single channel, which keeps the same direction, from south-east to north-west. Where the light begins to fail, we heard from afar the

hoarse sounds of the nocturnal birds; sounds which, the natives think, belong exclusively to those subterraneous places."

The guacharo, which M. Lavaysse describes as a new species of caprimulgus, is of the size of a fowl, has the mouth of the goatsucker, but differs very specifically in the strength of its beak, which contains a double tooth, its force of voice, and its feet, which are without the membranes that unite the anterior phalanges. Its plumage is of a dark-bluish gray, with small streaks and specks of black. Large heart-shaped white spots, bordered with black, mark the head, wings, and tail. Its eyes, which are blue and smaller than those of the goatsucker, are hurt by the blaze of day. The spread of the wings is three feet and a half. It is the only instance of a nocturnal bird among the genus *passeres dentirostrati*, and almost the only frugiferous nocturnal bird that is known. The conformation of its feet indicates that it does not hunt like our owls. Like the nut-cracker (*corvus caryocatactes*) and alpine crow (*corvus pyrrhcorax*),* it feeds on very hard fruits, and is not known to pursue insects. It quits the cavern at night-fall, especially when the moon shines. "It is difficult," Humboldt says, "to form an idea of the horrible noise occasioned by thousands of these birds in the dark part of the cavern; it can only be compared to the croaking of our crows, which, in the pine forests of the north, live in society, and construct their nests upon trees, the tops of which touch each

* The alpine crow nestles, in like manner, in clefts of rocks, and is known under the name of the night crow. It builds its nest toward the top of Mount Libanus, in subterranean caverns, nearly like the guacharo, and has much the same horribly shrill voice.

other. The shrill and piercing cries of the guacharoos strike upon the vaults of the rocks, and are repeated by the echo in the depth of the cavern. The Indians shewed us the nests of these birds, by fixing torches to the end of a long pole. These nests were fifty or sixty feet high above our heads, in holes in the shape of funnels, with which the roof of the grotto is pierced like a sieve. The noise increased as we advanced, and the birds were affrighted by the light of the torches of copal. When this noise ceased a few minutes around us, we heard at a distance the plaintive cries of the birds roosting in other ramifications of the cavern. It seemed as if these bands answered each other alternately.

“ The Indians enter into the Cueva del Guacharo once a year, near midsummer, armed with poles, by means of which they destroy the greater part of the nests. At this season several thousands of birds are killed; and the old ones, as if to defend their brood, hover over the heads of the Indians, uttering terrible cries. The young which fall to the ground are opened on the spot. Their peritoneum is found extremely loaded with fat, a layer of which forms a kind of cushion between the legs. At the period called at Caripe the oil harvest, the Indians build huts with palm-leaves near the entrance and in the porch of the cavern. There, with a fire of brush-wood, they melt in pots of clay the fat of the young birds just killed. It is half liquid, transparent, inodorous, and so pure that it may be kept more than a year without becoming rancid. At the convent of Caripe, no other oil is used in the kitchen; and we never observed that it gave the food a disagreeable taste or smell. The quantity collected little corresponds to the carnage made every year in the grotto by the Indians. It

appears that they do not obtain above 150 or 160 bottles of very pure *mantecca* (lard); the rest, less transparent, is preserved in large earthen vessels.* At Caripe, the use of the oil of guacharoes is very ancient, and the missionaries have only regulated the method of extracting it. In conformity to their system, the Indians are obliged to furnish guacharo-oil for the church lamp: the rest, we were assured, is purchased of them. The race of the guacharoes would long ago have been extinct, had not several circumstances contributed to its preservation. The natives, restrained by their superstitious ideas, have seldom the courage to penetrate far into the grotto. It appears, also, that birds of the same species dwell in neighbouring caverns, which are too narrow to be accessible to man. Perhaps the great cavern is repeopled by colonies that abandon the small grottoes; for the missionaries assured us, that hitherto no sensible diminution of the birds had been observed. Young guacharoes have been sent to the port of Cumana, and have lived there several days without taking any nourishment; the seeds offered to them not suiting their taste. When the crops and gizzards of the young birds are opened in the cavern, they are found to contain all sorts of hard and dry fruits, which furnish, under the singular name of guacharo seed (*semilla del guacharo*), a very celebrated remedy against intermittent fevers. The old birds carry these seeds to their young. They are carefully collected and sent to the sick at Cariaco, and other places of the low regions, where fevers are prevalent.

“ We followed, as we continued our progress

* In Carolina, some thousands of barrels of pigeons' oil were formerly collected, obtained from the *columba migratoria*.

through the cavern, the banks of the small river which issues from it, and which is from twenty-eight to thirty feet wide. We walked on the banks as far as the hills, formed of calcareous incrustations, permitted us. When the torrent winds among very high masses of stalactites, we were often obliged to descend into its bed, which is only two feet in depth. We learned with surprise, that this subterraneous rivulet is the origin of the River Caripe, which, at a few leagues' distance, after having joined the small river of Santa Maria, is navigable for canoes. It enters into the River Arco under the name of *Canno de Terezen*. We found on the banks of the subterraneous rivulet, a great quantity of palm-tree wood, the remains of trunks, on which the Indians climb to reach the nests hanging to the roofs of the cavern. The rings formed by the vestiges of the old footstalks of the leaves, furnish, as it were, the steps of a ladder perpendicularly placed.

“ The grotto of Caripe preserves the same direction, the same breadth, and its original height of sixty or seventy feet, to the distance of 472 metres, or 1,458 feet, accurately measured. I have never seen a cavern, in either continent, of so uniform and regular a construction. We had great difficulty in persuading the Indians to pass beyond the outer part of the grotto, the only part which they annually visit to collect the fat. The whole authority of *los padres* was necessary to induce them to advance as far as the spot where the soil rises abruptly at an inclination of sixty degrees, and where the torrent forms a small subterraneous cascade. The natives connect mystic ideas with this cave inhabited by nocturnal birds; they believe that the souls of their ancestors sojourn in the deep recesses of the cavern. ‘ Man,’ say they, ‘ should avoid places which are enlightened

neither by the sun (*zis*), nor by the moon (*nuna*). To go and join the guacharoës, is to rejoin their fathers, that is, to die. The magicians (*piaches*) and the poisoners (*imorons*) perform their nocturnal tricks at the entrance of the cavern, to conjure the chief of the evil spirits (*ivorokiamo*). Thus, in every climate, the first fictions of nations resemble each other, those especially which relate to two principles governing the world, the abode of souls after death, the happiness of the virtuous, and the punishment of the guilty. The most different and most barbarous languages present a certain number of images which are the same, because they have their source in the nature of our intellect and our sensations. Darkness is every where connected with the idea of death. The grotto of Caripe answers to the Tartarus of the Greeks; and the guacharoës which hover over the rivulet, uttering plaintive cries, remind us of the Stygian birds.

“ At the point where the river forms the subterraneous cascade, a hill covered with vegetation, which is opposite the opening of the grotto, presents itself in a very picturesque manner. It appears at the extremity of a straight passage, 240 toises in length. The stalactites which descend from the vault, and which resemble columns suspended in the air, display themselves on a back-ground of verdure. The opening of the cavern appeared singularly contracted when we saw it about the middle of the day, illumined by the vivid light reflected at once from the sky, the plants, and the rocks. The distant light of day formed a somewhat magical contrast with the darkness that surrounded us in those vast caverns. We discharged our pieces at a venture wherever the cries of the nocturnal birds and the flapping of their

wings, led us to suspect that a great number of nests were crowded together. After several fruitless attempts, Mr. Bonpland succeeded in killing a couple of guacharoos, which, dazzled by the light of the torches, seemed to pursue us. This circumstance afforded me the means of drawing this bird, which hitherto had remained unknown to naturalists. We climbed, not without some difficulty, the small hill whence the subterraneous rivulet descends. We saw that the grotto was perceptibly contracted, retaining only forty feet in height; and that it continued stretching to the north-east without deviating from its first direction, which is parallel to that of the great valley of Caripe.

“ In this part of the cavern, the rivulet deposes a blackish mould, very like the matter which, in the grotto of Muggendorf in Franconia, is called the *earth of sacrifice*. We could not discover whether this fine and spongy mould falls through the cracks which communicate with the surface of the ground above, or is washed down by the rain-water that penetrates into the cavern. It was a mixture of silex, alumine, and vegetable *detritus*. We walked in thick mud to a spot where we beheld with astonishment the progress of subterraneous vegetation. The seeds which the birds carry into the grotto to feed their young, spring up wherever they can fix in the mould that covers the calcareous incrustations. Blanched stalks, with some half-formed leaves, had risen to the height of two feet. It was impossible to ascertain the species of plants, the form, colour, and aspect of which had been changed by the absence of light. These traces of organisation amid darkness forcibly excited the curiosity of the natives, in general so stupid and difficult to be moved. They examined them in that

silent meditation inspired by a place they seemed to dread. It might be thought, that these subterraneous vegetables, pale and disfigured, appeared to them phantoms banished from the face of the earth. To me, the scene recalled one of the happiest periods of my early youth, a long abode in the mines of Freiburg, where I made experiments on the effects of blanching (*étiollement*), which are very different according as the air is pure or overcharged with hydrogen or azote.

“ The missionaries, with all their authority, could not prevail on the Indians to penetrate further into the cavern. As the vault grew lower, the cries of the guacharoos became more shrill. We were obliged to yield to the pusillanimity of our guides, and trace back our steps. The appearance of the cavern was indeed very uniform. We find that a bishop of St. Thomas of Guyana had gone further than ourselves. He had measured nearly 2,500 feet from the mouth to the spot where he stopped, though the cavern reached further. The remembrance of this fact was preserved in the convent of Caripe, without the exact period being noted. The bishop had provided himself with great torches of white wax of Castile. We had torches composed only of the bark of trees and native resin. The thick smoke which issues from these torches in a narrow subterranean passage, hurts the eyes and obstructs the respiration.

“ We followed the course of the torrent to go out of the cavern. Before our eyes were dazzled by the light of day, we saw, without the grotto, the water of the river sparkling amid the foliage of the trees that concealed it. It was like a picture placed in the distance, and to which the mouth of the cavern served as a frame. Having at length reached the entrance, and seated ourselves on the bank of the rivulet, we

rested after our fatigues. We were glad to be beyond the hoarse cries of the birds, and to leave a place where darkness does not offer even the charm of silence and tranquillity. We could scarcely persuade ourselves that the name of the grotto of Caripe had hitherto remained unknown in Europe. The guacharoës alone would have been sufficient to render it celebrated. These nocturnal birds have been nowhere yet discovered, except in the mountains of Caripe and Cumanacoa.

“ The missionaries had prepared a repast at the entry of the cavern. Leaves of bananas and vijao, which have a silky lustre, served us as a table-cloth, according to the custom of the country. Nothing was wanting to our enjoyment, not even remembrances, which are so rare in those countries, where generations disappear without leaving a trace of their existence. Our hosts took pleasure in reminding us, that the first monks who came into those mountains to found the little village of Santa Maria, had lived during a month in the cavern, and there, on a stone, by the light of torches, had celebrated the mysteries of religion. This solitary retreat served as a refuge to the missionaries against the persecutions of a warlike chief of the Tuacopans, encamped on the banks of the River Caripe.”

The origin of caverns is an interesting geological question. The learned Traveller is of opinion, that their formation must be referred to causes totally different. With regard, however, to the largest and most remarkable class, those which are found in the limestone and gypseous formations, the horizontal direction of the galleries, and their gentle and uniform slope, obviously indicate that they are the result of the action of water, gradually enlarging, by erosion,

clefts already existing, and carrying off the softer parts. In the primitive rocks, real grottoes are found only in the calcareous formations. On examining the internal structure of the stalactites, we find all the characters of a chemical precipitate. A small quantity of carbonic acid is proved to be sufficient to give to water, after long contact, the power of dissolving some portion of carbonate of lime. The Jura limestone, Humboldt remarks, to which the grottoes of the valley of Caripe belong, abounds so much with caverns in both hemispheres, that it has been called by some German geologists *hohlenkalkstein*, cavern-limestone. It is this rock which so often interrupts the course of rivers, by ingulphing them into its bosom. The form of grottoes depends partly on the nature of the rocks, partly on the exterior agency which has produced them. "From what I have seen," says Humboldt, "in the mountains of Europe and the cordilleras of America, caverns may be divided, according to their interior structure, into three classes. Some have the form of large clefts, or crevices, like veins not filled with ore; such as the cavern of Rosenmüller in Franconia, Elden-hole in the Peak of Derbyshire, and the *sumideros* (sewers) of Chamacasapa, near Tasco and Tehuilotepic in Mexico.* Other caverns are open to the light at both ends; these are rocks really pierced through,—natural galleries, traversing a solitary mountain: such are the Hole-berg of Muggendorf, and the famous cavern of Danto in Mexico.† A third form, and the most common, exhibits a succession of cavities placed nearly on the same level, in the same direction, and communicating with each other by passages of greater

* See *Mod. Trav. Mexico*, vol. i. p. 357.

† See *ibid.* p. 355, and 357, *notc.*

or less breadth.”* What in the calcareous rocks is produced by the action of the waters, appears to be, in the volcanic rocks, the effect of gaseous emanations, acting in the direction in which they find the least resistance. Sometimes, fire acts like water in carrying off substances; as a cavern in the Isle of France is supposed by Captain Flinders to have originated in the melting of a mass of glance-iron by a volcanic eruption. The caverns in the mountains of gypsum often contain mephitic and deleterious gases. It is not, in this case, Humboldt says, the sulphate of lime that acts on the atmospheric air, but the clay slightly impregnated with carbon, and the fetid limestone, which are so often mingled with the gypsum. The caverns of the calcareous mountains are not liable to these decompositions of the atmospheric air, unless they contain animal remains. None have hitherto been discovered in that of Caripe. These general remarks are highly interesting, and will be found of no small use to future travellers. The cavern of Caripe is one of the most spacious that is known in limestone formations, being at least 2,800 feet in length. Some grottoes in Saxony, however, which are found in gypsum, are several leagues in length. The calcareous grottoes are more beautiful and richer in stalactites, in proportion as they are narrower and the circulation of air is less free. On this account, the cavern of Caripe is almost destitute of those incrustations, the imitative forms of which excite the curiosity of the vulgar. The light of day and the air of heaven are fatal to the spells of superstition.

On leaving Caripe, where the travellers remained

* See, for a description of the remarkable cavern of Mixco, *Mod. Trav. Mexico*, vol. ii. p. 253. See also, *ibid.* pp. 267, 268, and 300. Also, *Syria and Asia Minor*, vol. i. pp. 39, 53, 72, 309.

for some days, after crossing a ridge of hills to the north-east, they ascended through a vast savanna to the table-land of *Guardia de San Augustin*, the most elevated valley, probably, in Venezuela, yet totally uninhabited. From this high land, the road descends by a slope extremely steep and slippery, called by the monks, *Bavada del Purgatorio*, and soon enters a thick forest, known by the name of *Montana de Santa Maria*. Humboldt describes the descent as most tremendous, — a real *chemin des échelles* (road of ladders), through a sort of ravine, down which, in the rainy season, impetuous torrents tumble from rock to rock. “The steps are from two to three feet high, and the unfortunate beasts of burden, after having measured with their eye the space necessary to let their load pass between the trunks of the trees, leap from one rock to another. Afraid of missing their leap, we saw them stop a few minutes to examine the ground, and bring together their four feet like wild goats. If the animal does not reach the nearest block of stone, he sinks half his depth into the soft ochrey clay that fills up the interstices of the rock. When the blocks are wanting, enormous roots serve as supports to the feet of men and beasts. There are some of them twenty inches thick; and they often issue from the trunks of the trees much above the level of the soil. The Creoles have sufficient confidence in the address and happy instinct of the mules, to remain on their saddles during this long and dangerous descent. Fearing fatigue less than they did, and accustomed to travel slowly in order to gather plants and examine the nature of the rocks, we preferred going down on foot; and, indeed, the care which our timekeepers demanded, left us no liberty of choice.

“The forest that covers the steep flank of the

mountain of Santa Maria, is one of the thickest I ever saw. The trees are of a stupendous height and size. Under their bushy, deep green foliage, there reigns constantly a kind of half-daylight, a sort of obscurity, of which our forests of pines, oaks, and beech-trees, afford no example. It might be said, that, notwithstanding its elevated temperature, the air cannot dissolve the quantity of water exhaled from the surface of the soil, the foliage of the trees, and their trunks covered with an old drapery of orchideæ, peperomia, and other succulent plants. With the aromatic odour yielded by the flowers, the fruits, and even by the wood, is mingled that which we perceive in autumn in foggy seasons. Here, as in the forests of the Orinoco, fixing our eyes on the tops of the trees, we now discerned streams of vapour, whenever a solar ray penetrated and traversed the dense atmosphere."

Among the majestic trees of the forest, many of which are upwards of 120 feet in height, are seen the *curucay*, which yields a whitish resin, highly odorous, and much in request among the Indian sorcerers; the dragon's-blood-tree (*croton sanguifluum*), the purplish-brown juice of which flows down a whitish bark; arborescent ferns upwards of thirty-five feet high; and various species of palm-tree. The road was an uninterrupted descent for seven hours. The forest terminates in a large savanna, composed of several smooth flats rising one above another, in the midst of which is the mission of Santa Cruz, where the Travellers halted for the night, overcome with fatigue, having travelled nearly eight hours without finding water. The next day, passing through another thick forest, they reached the mission of Catuaro. The day following, accompanied by the missionary in

person, they descended the mountains by another ladder road extremely rugged and slippery, to Cariaco.

The town of Cariaco stands in the midst of a vast plain filled with plantations, scattered huts, and groupes of cocoa-palms, at the distance of a mile and a half from the river of the same name. In the Spanish official papers, it bears the name of *San Felipe de Austria*. In former times, it has been repeatedly sacked by the Caribs, but of late years it has augmented rapidly in population and importance. The number of inhabitants in 1800, was upwards of 6,000, having doubled within ten years; and in 1807, it had risen, according to M. Lavaysse, to 7,000, while 4,000 more inhabited the rest of the district. The cotton which is cultivated here, is of a very fine quality; there are also sugar and coffee plantations, which, being found more profitable, have superseded the cultivation of the cocoa-tree. "In 1807, the governor, Manoel de Cagigal, endeavoured to prevent the distillation of rum, under the false pretence that it would injure the trade in brandies with Spain; but the true reason was, that the rum trade, one of the branches of the English smuggling, brought large profits to his Excellency."* Since the Island of Trinidad has become an English colony, the whole of the eastern extremity of this province, especially the coast of Paria, has changed its appearance, owing chiefly to the enterprise of foreign settlers. The population has especially increased at Carupano in the beautiful valley of Rio Caripe, at Guiria, and at the new town of *Punta de Piedra*, built opposite Spanish Harbour in the Isle of Trinidad. The latter place, which, in 1797, was only a hamlet of fishermen, is now the

* Lavaysse, p. 110.

chief place in the district, and, from its advantageous position near the mouths of the Guarapiche and Orinoco, as well as the prodigious fertility of the territory, is an important spot. Carupano, which is not even mentioned by M. Depons, is described by M. Lavaysse as a very healthy place, built in the opening of two charming valleys watered by two fine rivers. The port is defended by a battery placed on an eminence. With the neighbouring district, it contained in 1807 a population of 8,000 souls. "The inhabitants," says M. Lavaysse, "divide their time between the occupations of agriculture, trading concerns, and dancing: it is completely a dancing town. There is a considerable trade there in horses and mules. At the foot of the neighbouring hills, there are quarries of gypsum, so that most of the houses are ceiled. In going by land from Carupano to Guiria and the Punta de Piedra, the smiling valley of Rio Caribe is crossed, watered by numerous rivulets: it is the Tempe and Campagna of this country. The town and valley of Caribe (Caripe) have a population of 4,500 persons."*

"The isolated situation of these settlements," remarks M. Humboldt, "has favoured the trade with foreign colonies; and from the year 1797, a revolution has taken place in the ideas of the people, the consequences of which might have been long in proving fatal to the metropolis, had not the ministry continued to thwart all their interests and oppose all their wishes. We found at Cariaco, a great number of persons who, by a certain ease in their manners, enlargement of ideas, and, I must add, a marked predilection for the government of the United States, discovered that they held frequent intercourse with

* Lavaysse, pp. 114, 15.

foreigners. There, for the first time in these climates, we heard the names of Franklin and Washington pronounced with enthusiasm. The expressions of this enthusiasm were mingled with complaints relative to the actual state of New Andalusia, with the enumeration, often an exaggerated one, of its natural riches, and ardent and anxious wishes that happier times might arrive. This disposition of mind was striking to a traveller who had just witnessed the great agitations of Europe. It foreboded, as yet, nothing hostile and violent, no determinate direction. There was that degree of vagueness in the ideas and expressions, which characterises in nations, as in individuals, a state of half-cultivation, an immature display of civilisation.” *

The movement towards independence which had nearly broken out at Caracas in 1798, had been preceded and followed by great agitation among the slaves at Coro, Maracaybo, and Cariaco. The vicar of Catuaro, who had insisted on conducting the Travellers to the coast, had for his errand, to offer his ghostly assistance to an unfortunate negro at Cariaco under sentence of death. On the road, he dilated on the necessity of the slave-trade, the innate wickedness of the blacks, and the benefit they derive from their state of slavery among Christians!! “The mildness of the Spanish legislation,” remarks M. Humboldt, “compared with the Black Code of the greater part of the other nations that have possessions in either India, cannot be denied. But, such is the state of the negroes dispersed in places scarcely begun to be cultivated, that justice, far from efficaciously protecting them during their lives, cannot even punish acts of barbarity that have

* Humboldt, *Pers. Nar.* vol. iii. pp. 196, 7.

caused their death. If an inquiry be attempted, the death of the slave is attributed to the bad state of his health, to the influence of a warm and humid climate, to the wounds which he has received, but which, it is asserted, were neither deep nor dangerous. The civil authority is powerless with respect to whatever constitutes domestic slavery; and nothing is more illusory than the effect so much vaunted of those laws which prescribe the form of the whip, and the number of lashes which it is permitted to give *at a time*. Persons who have not lived in the colonies, or have inhabited only the West India Islands, believe in general, that the interest of the master in the preservation of his slaves, must render their condition so much the milder as their number is less considerable. Nevertheless, even at Cariaco, a few weeks before my arrival in the province, a planter, who had only eight negroes, killed six by beating them in the most barbarous manner. He thus voluntarily destroyed the greater part of his fortune. Two of his slaves expired on the spot. He embarked with four, who seemed more robust, for the Port of Cumana, but they died on the passage. This act of cruelty had been preceded in the same year by another, the circumstances of which are equally horrible. Such great crimes remain almost always unpunished: *the spirit that dictated the laws, is not that which presides over their execution.*"

M. Humboldt and his companion were prevented making any stay at Cariaco by the unhealthiness of the season. They found a great part of the inhabitants confined to their hammocks with intermittent fevers. These fevers in autumn assume a formidable character, and run into alarming dysenteries. The mortality at such seasons is less considerable, however,

we are told, than might be supposed. The epidemic weakens the constitution, and leaves a great degree of debility, but this does not often issue fatally. The extreme fertility of the surrounding plains, in connexion with their moisture, and the constant decomposition of vegetable matter which is going forward, accounts for the insalubrity of the air. But the situation of Cariaco is in some respects peculiarly disadvantageous. To the north-west of the town, near the extremity of the gulf, is the great meer called the *Laguna de Campoma*, which receives the waters of the *Rio Azul*. This meer is, in dry weather, divided into three basins. From its stagnant waters, fetid exhalations continually arise, and the smell of sulphuretted hydrogen is mingled with that of putrid fishes and rotting plants.* When the north-west wind blows, which it frequently does after sunset, the effluvia which it bears cannot fail to be highly pernicious; and the learned Traveller states, that intermittent fevers are found degenerating into typhus, in proportion as we approach the *laguna*, which is the principal focus of the miasmata. Add to this, the sea-shore is covered with mangroves (*rhizophora*), avicennias, and other shrubs with bark of astringent properties, the roots and stocks of which being not always under water, but alternately wetted and exposed to the sun, give forth very noxious exhalations. Both to the east and west of the *Cerro del Meapire* (or *Cerro grande de Cariaco*), which divides the valleys of Cariaco and San Bonifacio, low and marshy lands extend to the coast without interruption, and they are continually enlarging by

* This appears to be the marsh referred to by M. Lavaysse: see page 33, *note*.

gaining on the sea. While standing on the summit of this ridge, the mountain currents may be seen running on the east side to the Gulf of Paria, and, on the west, to the Gulf of Cariaco. Both those gulfs, which are supposed to owe their origin to the sinking of the earth and the rents caused by earthquakes, formerly occupied a much more considerable space. At present, at all events, the waters are retiring, and the changes on the shore are more particularly observable on the coast of Cumana. Near that town, the battery *de la Bocca*, which was built in 1791 on the very edge of the sea, was already, in 1799, far inland. At the mouth of the *Rio Neveri*, near the *morro* of Barcelona, the retreat of the waters is still more rapid.

The low land which extends eastward of the *Sierra de Meapira*, from Carupano, by the valley of San Bonifacio, toward the Gulf of Paria, is for the most part uncultivated and equally unhealthy. It is here that the best chocolate is produced. The plantations, which have diminished in the western provinces, giving way before the cultivation of cotton and the cane, have increased on the newly cleared and virgin soil of these pestilential regions, being found the more productive as the new and humid lands, still surrounded with forests, are in contact with an atmosphere damp and loaded with mephitic exhalations. "We there see," says Humboldt, "fathers of families attached to the old habits of the planters, prepare for themselves and their children a slow but secure fortune. A single slave is sufficient to help them in their toilsome labours. They clear the soil with their own hands, raise young cocoa-trees under the shade of the erythrinæ or plantains, lop the grown trees, destroy the swarms of worms and insects that attack

the bark, leaves, and flowers, dig trenches, and resolve to lead a wretched life for seven or eight years till the cocoa-tree begins to bear. Thirty thousand trees secure a competency to a family for a generation and a half." * In the plain of San Bonifacio, there is a large lake, four or five leagues in diameter, called the *Laguna de Putacua*, communicating with the river *Areo*: it is surrounded by a mountainous district known only to the natives.

It was not without sensations of regret that our Travellers quitted the shores of Cumana to prosecute their travels in the western provinces of Venezuela. "It was the first land," says the learned Writer, "that we had touched under a zone toward which my wishes had been turned from my earliest youth. There is something so great, so powerful, in the impression made by nature in the climate of the Indies, that, after an abode of a few months, we seemed to have lived there during a long succession of years. In Europe, the inhabitant of the North, or of the plains, feels an almost similar emotion, when he quits even after a short abode the shores of the Bay of Naples, the delicious country between Tivoli and the Lake of Nemi, or the wild and solemn scenery of the Higher Alps and the Pyrenees. Yet, every where under the temperate zone, the effects of the physiognomy of the vegetables afford little contrast. The

* Pers. Narr. vol. iii. p. 194. The learned Traveller styles the cocoa-tree, "the olive of the country." All along the southern side of the Gulf of Cariaco, a tract covered with beautiful vegetation, but almost entirely uncultivated, large plantations are seen bordering the shore. Their appearance is highly picturesque. Among the plants cultivated by man, the cocoa-palm, the sugarcane, the banana, the mammee-apple, and the alligator pear, have alone the property of flourishing alike whether watered by fresh or by salt water.

firs and the oaks that crown the mountains of Sweden, have a certain family resemblance to those which vegetate in the fine climates of Greece and Italy. Between the tropics, on the contrary, in the lower regions of both Indies, every thing in nature appears new and marvellous. In the open plains, and amid the gloom of forests, almost all the remembrances of Europe are effaced; for it is the vegetation that determines the character of a landscape, and acts upon our imagination by its mass, the contrast of its forms, and the glow of its colours. In proportion as impressions are powerful and new, they weaken antecedent impressions, and their strength gives them the appearance of duration. I appeal to those who, more sensible of the beauties of nature than of the charms of social life, have long resided in the torrid zone. How dear, how memorable during life, is the land where they first disembarked! A vague desire to revisit that spot, roots itself in their minds to the most advanced age. Cumana and its dusty soil are still more frequently present to my imagination, than all the wonders of the Cordilleras. Beneath the fine sky of the south, the light and the magic of the aerial hues, embellish a land almost destitute of vegetation. The sun does not merely enlighten, it colours the objects, and wraps them in a thin vapour, which, without changing the transparency of the air, renders its tints more harmonious, softens the effects of the light, and diffuses over nature that calm which is reflected in our souls. To explain this vivid impression which the aspect of the scenery in the two Indias produces, even on coasts where there is little wood, it will be sufficient to recollect, that the beauty of the sky augments from Naples towards the equator, almost as much as from Provence toward the south of Italy.

“ We passed at high water the bar which the little river Manzanares has formed at its mouth. The evening breeze gently swelled the waves of the Gulf of Cariaco. The moon had not risen, but that part of the milky way which extends from the feet of the Centaur toward the constellation of Sagittarius, seemed to pour a silvery light over the surface of the ocean. The white rock crowned by the Castle of San Antonio, appeared from time to time between the high tops of the cocoa-trees that border the shore. We soon recognised the coasts only by the scattered lights of the Guayqueria fishermen. In these moments, we felt in all its force the charm of that spot, and the regret of leaving it. Five months had passed since we disembarked on that shore, as on a newly discovered land, strangers to all that surrounded us, approaching with mistrust every bush, every humid and shadowy spot. That coast now disappeared to our eyes, leaving remembrances which seemed of a long date. The soil, the rocks, the plants, the inhabitants, all now were become familiar to us.”

The passage from Cumana to the port of La Guayra is only sixty leagues, and often takes only from thirty-six to forty hours, the little coasting vessels being favoured at once by the wind and the currents. To avoid the latter in returning, the journey by land is sometimes preferred, which occupies nine days. The road from Cumana to Barcelona and Caracas is nearly in the same state as before the discovery of America. The traveller has to contend with all the obstacles of a miry country, large scattered rocks, and almost impervious vegetation; he must sleep in the open air, cross several rapid mountain torrents, and run the risk of catching nervous and miasmatic fevers in passing through the extremely unhealthy tract of low

country which extends from the Bay of Mochima to Coro. The passage by sea, taking the whole boat, costs 120 piasters. The boats are thirty feet long, and not more than three feet high at the gunwale; they have no decks, and their lading is generally from 200 to 250 quintals. Yet, although the sea is extremely rough from Cape Codera to La Guayra, and although the boats carry an enormous triangular sail, somewhat dangerous in case of the sudden gusts which come down from the mountains, there had not been an instance during thirty years of one of them being lost in this passage. The skill of the Guayqueria pilots is so great, that shipwrecks are very rare even in the trips from Cumana to Guadaloupe, or the Danish islands, surrounded with breakers.

Between Cumana and Cape Codera, where the sea forms a sort of shallow bay, two groupes of barren rocky islands, rising like bastions, appear to be fragments of the ancient coast, separated by some convulsion of nature: they are called the Caracas and the Chimanas.* Behind these islands are the gulfs of Mochima and Santa Fé, which are likely one day, Humboldt says, to become frequented ports.

At ten marine leagues from the port of Cumana, is New Barcelona, situated on the left bank of the River Neveri, (the Indian name is Enipiricuar,) which abounds with the species of crocodile so common in the Orinoco. This port, the name of which till lately was scarcely to be found in our maps, has had an active trade since 1795. From this place is

* "It may appear extraordinary," says the learned Traveller, "to find Caracas islands so distant from the city of that name, opposite the coast of the Cumanagotoes; but the denomination of Caracas denoted, at the conquest, a tribe of Indians, not any particular spot. Guadaloupe was formerly called Caracucira."

exported great part of the produce of the Llanos, consisting of salted provision, oxen, mules, and horses, for the West India islands, especially Cuba. The situation of Barcelona is particularly advantageous for this trade, as the animals have only three days' journey from the Llanos to the port, while it requires eight or nine days to cross the mountains to Cumana. In the years 1799 and 1800, no fewer than 30,000 mules are computed to have been shipped for the Spanish, English, and French islands, of which 8,000 were embarked at Barcelona, 6,000 at Puerto Cabello, 3,000 at Carupano, and the remainder at Coro, Burburata, and the mouths of the Guaripiche and the Orinoco. During the peace of Amiens, there were exported, M. Lavaysse states, from the port of Barcelona in one year, 132,000 oxen, 2,100 horses, 84,000 mules, 800 asses, 180,000 quintals of smoked beef (*tassajo*), 36,000 ox hides, 4,500 horse hides, and 6,000 deer skins. Barcelona was founded by Don Juan Urcin in 1634, prior to which the chief place in the district was the town of Cumanagoto, situated two leagues higher up the river, which is now only a miserable village. Though it enjoys a considerable trade, and contains some opulent houses, the town is badly built; the houses are of mud, and, in general, very meanly furnished. The streets are unpaved; they are consequently filthy during the rains, while, in fine weather, the dust is intolerable. It contains one church, a Franciscan hospital, and (in 1807) a population of 15,000 persons, of whom about half were whites. It lies in lat. $10^{\circ} 6' 52''$ N.; long. $67^{\circ} 4' W.$; about a league from the sea, and twelve leagues in a straight line W. of Cumana. Alcedo represents the temperature of this province to be the same as that of Cumana, though not so unhealthy.

M. Lavaysse says, the fact is exactly the reverse: "the climate of Cumana is very healthy, though hot, because it is extremely dry; that of the town of Barcelona is unhealthy from the opposite causes." Alcedo, however, speaks of the two provinces; the French Traveller compares the two towns; and both may be correct.*

The province of Barcelona, which lies between that of Cumana on the east and Caracas on the west, extending southward to the Orinoco, is thinly inhabited and scantily cultivated, but is less mountainous than the adjoining provinces. In the environs of the town, some maize, cocoa, indigo, and cotton are grown; but the exports of these articles are inconsiderable. Large fertile districts lie wholly neglected, and the inhabitants for the most part prefer the grazing system to the toil of cultivation. The only other town in the province is *Concepcion del Pao*, situated in the midst of savannas on the other side of the Brigantine, and containing, in 1807, 3,000 inhabitants. It is 45 leagues from Barcelona, 55 from Cumana, and 28 S.E. of Caracas.

On the right bank of the Neveri, a little fort has been built on a calcareous rock called *El Morro de Barcelona*, at an elevation of sixty or seventy toises above the sea-level, to command the landing-place. From the Morro to Cape Codera, the land becomes low as it recedes in a sort of cove toward the south; the forests come down to the beach, and the shores are to be dreaded for their insalubrity. Beyond the promontory, the coast becomes rocky and very high, and presents scenes at once savage and picturesque. The

* Lavaysse, p. 123; Alcedo's Dict. vol. i. p. 140; Depons' Travels, vol. ii. p. 266; Humboldt. Pers. Narr. vol. iii. p. 361.

mountains present perpendicular faces from 3 to 4,000 feet high, casting broad and deep shadows upon the humid land which extends to the sea, and which glows with the freshest verdure. Fields of maize and sugar plantations are seen stretching along narrow valleys, which resemble clefts in the rocks, and present the most singular contrasts of light and shade. The mountain of Niguatar and the Silla of Caracas are the loftiest summits of this chain. "It seems as if the Pyrenees or the Alps, stripped of their snows, had risen from the bosom of the waters; so much greater appears the mass of mountains when viewed for the first time from the sea." Near Caravalleda, the cultivated lands enlarge: we find hills with gentle declivities, and the vegetation rises to a great height. Further westward, a wall of bare rocks again presents itself towards the sea, on passing which, the village of Macuto is seen, pleasantly situated, with the black rocks of La Guayra, studded with batteries, rising in tiers one above another, and, in a misty distance, *Cabo Blanco*, a long promontory of dazzling whiteness, with its conical summits. Cocoa-trees border the shore, and give it, under that burning sky, an appearance of fertility.

CARACAS.

LA GUAYRA, the port of Caracas, is a mere roadstead, open to the north and east, and slightly sheltered to the west by Cape Blanco. But for this cape, it would have no pretensions whatever to be called a port; and as it is, those pretensions are very slight. Vessels anchor in from six and seven to five and twenty and thirty fathoms, according to their distance from shore, with a bottom generally of white sand.

The worm is very destructive to the bottoms of such vessels as are not coppered. There is almost constantly a swell, which is sometimes so violent as to prevent all intercourse with the shore for several days together; and the lading is at all times taken in with difficulty. "It is a singular spectacle," says an English Traveller with whom we shall now join company, "when the air is perfectly calm, to see upon the beach a continued line of high breakers, which succeed each other incessantly, and descend with a roaring which is heard far up the valleys. On account of this surf, the wharf of La Guayra, which is of wood, and upwards of 160 feet in length, stands in need of continual repair."*

The very singular situation of La Guayra is compared by M. Humboldt to that of Santa Cruz in Teneriffe. "The chain of mountains that separates the port from the high valley of Caracas, descends almost directly into the sea; and the houses of the town are backed by a wall of steep rocks. There scarcely remains 100 or 140 toises breadth of flat ground between the wall and the ocean. The town has 6 or 8,000 inhabitants, and contains only two streets, running parallel to each other east and west. It is commanded by the battery of *Cerro Colorado*; and its fortifications along the sea-side are well disposed and kept in repair. The aspect of this place has something solitary and gloomy; we seemed not to be on a continent covered with vast forests, but in a rocky island destitute of mould and vegetation. With the exception of Cape Blanco and the cocoa-trees of Maiquetia, no view meets the eye but that of the horizon, the sea, and the azure vault of heaven.

* Semple's Sketch of Caracas, p. 37.

The heat is stifling during the day, and most frequently during the night. The climate of La Guayra is justly considered as more ardent than that of Cumana, Puerto Cabello, and Coro; because the sea-breeze is less felt, and the air is heated by the radiant caloric which the perpendicular rocks emit from the time the sun sets.*

The town is irregularly and badly built, the lower street in a line parallel with the beach, and most of the others stretching up the side of the mountain, at the foot of which the town is built, and along the high bank of a ravine in which flows a small stream. After heavy rains, this becomes for a short time an impassable torrent, and has sometimes even overflowed its lofty banks, to the great danger of the lower part of the town. The only public building of any consequence is the custom-house, which is large and commodious. The church has nothing in it remarkable; "nor is there, indeed," adds Mr. Semple, "in the whole place, an object worthy of detaining the traveller a single hour." This gentleman visited La Guayra in 1810. Two years after, the earthquake which desolated Caracas, reduced La Guayra to little better than a heap of ruins; and according to the statement of a recent traveller, it had not recovered so lately as February 1823, from the effects of the dire

* The four hottest places on the shores of the New World are considered to be La Guayra, Cumana, the Havannah, and Vera Cruz; to which, Humboldt says, may be added, Coro, Carthagena, Omoa, Campeachy, Guayaquil, and Acapulco. The mean of the whole year is, at La Guayra nearly $28^{\circ}1'$; at Cumana $27^{\circ}7'$; at Vera Cruz $25^{\circ}4'$; at the Havannah $25^{\circ}6'$; at Rio Janeiro $23^{\circ}5'$; at Santa Cruz in Teneriffe $21^{\circ}9'$; at Cairo $22^{\circ}4'$; at Batavia and Madras not above 25° and 27° ; at Rome $15^{\circ}8'$ (cent. ther.) La Guayra is, therefore, one of the hottest places on the earth.—HUMBOLDT, *Per's. Narr.* vol. iii. p. 328.

visitation. It is described as presenting a most dismal aspect, and the coast was covered with wrecks. A violent swell from the N.E. had, in the preceding month, cast on shore every vessel that was lying off the port, except one; and no fewer than fourteen hulks were then on the beach.* Yet, the commerce carried on with La Guayra is considerable, and, as this Writer states, is daily increasing both with Great Britain and North America.

Notwithstanding the heat of the climate, the yellow fever, here called *calentura amarilla*, is stated to have been unknown at La Guayra prior to 1797; and many individuals, Humboldt says, preferred the ardent but uniform temperature of the port, to the cooler but extremely variable climate of the capital. That scourge of the equinoctial regions was confined, on this coast, to Puerto Cabello, Carthagena, and Santa Marta. Since 1797, however, it has committed great ravages at La Guayra. Here, there is no beach of mangroves; the soil is extremely dry and destitute of vegetation, and there would appear to be nothing to produce miasmata. The streets, moreover, are tolerably clean, and the aspect of the place would seem to exclude the idea that the fever can be strictly endemic, as at Vera Cruz; although it finds a limit, as in Mexico, at *La Cumbre* and the *Cerro de Avila*, the height of which a little exceeds that of Encero.† Intermittent, putrid, and bilious fevers, often prevail at Macuto and Caravalleda. To these the natives are subject, whereas the yellow fever appears to be the effect of the climate on the constitution of strangers; and it is remarkable, that hitherto it has been confined

* Letters from Colombia, p. 2.

† See Mod. Trav. Mexico, vol. i. p. 222.

almost entirely to the sea-ports. This has been accounted for by supposing that the persons bring the disease who disembark there; but how does this explain the circumstance, that whites and mestizoes coming from the interior, are still more liable to contract the disorder than Europeans who arrive by sea? Its appearance at La Guayra certainly seems to favour the idea, that it propagates itself by contagion; and yet, Humboldt asserts, that immediate contact does not augment the danger; and no instance has been known of the fever's being communicated by the sick, when removed to the inland country. The latter circumstance, however, would prove only, that, like the plague, this pestilential fever requires a certain temperature of the atmosphere, to communicate the infection. Humboldt cites the opinion of M. Bailly, some time chief physician to the colony of St. Domingo, as according with his own, that "the typhus is very often, but not always contagious." With this agrees the statement of Sir Gilbert Blane. "I saw enough," he says, "in the hospital at Barbadoes, and in the ships and hospital at Jamaica, to convince me of its contagious nature in certain circumstances; and from the best consideration I have since been able to give this subject, I remain persuaded, that whenever it is so aggravated as to appear in an epidemic and pestilential form, it is truly contagious."* Instances

* "Select Dissertations on several Subjects of Medical Science. By Sir Gilbert Blane, Bart., F.R.S., &c." p. 285. This very intelligent writer, whose extensive experience gives weight to his authority, makes a remark of great importance, but requiring to be verified by further observation. "It seems," he says, "to be a general rule, that no effluvia emanating from corrupted dead matter, even in a state of the rankest putrefaction, ever produces a fever of a contagious nature. It is presumable, therefore, when these exhalations do produce contagious fevers, or convert a com-

are cited by this writer, of the fever's being communicated from one ship to another *at sea*. The fact appears to be, that, under the names of yellow fever, *vomito prieto*, and *calentura amarilla*, two distinct distempers have been confounded, differing both in their origin and character, but resembling each other in their more obvious symptoms; the one strictly endemic and non-contagious, the other epidemic and pestilential, the true *typhus icterodes*. The yellow colour of the skin, which forms a conspicuous point of resemblance, is said to differ, however, in the two diseases: in the latter, it becomes of a dingy orange; in the former, it is a bright yellow. It appears, moreover, that there are instances of the endemic yellow fever degenerating into the contagious; and this transition, which is seen in other intermittent fevers, has contributed still more to their being confounded. Thus, the endemic *vomito prieto* of Vera Cruz has occasionally assumed a more virulent and infectious character, which the natives always trace to the arrival of shipping. At La Guayra, the yellow fever would appear to be *not* endemic; and it seems to have been the epidemic which committed such ravages. The Author of "Letters from Colombia" says: "Humboldt speaks of the yellow fever as prevailing at La Guayra: if it was known there in his time, it

mon fever into one of an infectious and malignant character, that they consist, in part at least, of the vitiated effluvia generated by the living human body, constituting some form of the typhous morbid poison."—*Ibid.* p. 289. The yellow fever cannot be traced further back than the middle of the seventeenth century, and it appears certain, that no such malady had previously existed. If all specific contagions take their origin from animals, is it not very probable, as the learned writer suggests, that this dreadful distemper may have arisen from *circumstances connected with the importation or treatment of the African slaves?*

has since disappeared, for there is no trace of it at present. An English physician directed his inquiries particularly to this point during a short stay at La Guayra and Caracas, but could not any where meet with or hear of the yellow fever." The apprehension, therefore, expressed by the learned Traveller, that, owing to the extreme equality of temperature which characterises this climate, the typhus, if it once established itself, would become permanent, appears to be groundless. No instance, we believe, exists of an epidemic distemper degenerating into one of an endemic character. During the five months that Mr. Semple remained in this country, La Guayra might vie, he says, in point of healthiness, with any settlement in the West Indies; although in the summer months, he was told, that the heat reflected from the hills renders the place intolerable to Europeans. La Guayra is in lat. $10^{\circ} 36' 19''$ N., long. $67^{\circ} 6' 45''$ W.

The road from the port to Caracas, resembles the passages over the Alps. It is infinitely finer, Humboldt says, than that from Honda to Bogota, or from Guayaquil to Quito, and is even kept in better order than the ancient road from Vera Cruz to Perote. With good mules, it requires but three hours to ascend, and only two hours to return. With loaded mules or on foot, the journey occupies from four to five hours. The elevation of Caracas is but a third of that of Mexico, Quito, or Bogota; and "among all the capitals of Spanish America which enjoy a cool and delicious climate in the midst of the torrid zone, Caracas stands nearest to the coast." For the first mile, the road continues along the shore to Macuta (or Maiquetia), a neat and pleasant village, where most of the wealthier inhabitants of La Guayra have houses. Here, the mountains recede a little from the

shore, leaving a small opening, better adapted, Mr. Semple says, for the situation of the port than the rude spot on which it has been built. The road then turns to the left, and ascends to a considerable height through a deep clay or rich mould, which, in rainy weather, would be impassable, were not the road in many places paved. In the steepest parts, it ascends by zig-zags, but is sometimes so narrow, that two loaded mules cannot pass each other, and the banks are high and steep on each side. "Wo betide the traveller," says Mr. Semple, of whose description we shall now avail ourselves, "who, in these passes, meets a line of mules loaded with planks, which stretch transversely almost from side to side. He must either turn about his horse's head, or pass them with the utmost caution, at the risk of having his ribs encountered by a long succession of rough boards, which, at every swerve of the mules, scoop out long grooves in the clayey banks.

"We continue constantly to ascend. On the road was the stone body of the statue of a saint on a miserable low sledge, which had been with great difficulty brought thus far, when the project seemed to have been abandoned in despair, as it continued here for several months. The head, we were informed, had already reached Caracas, where it was impatiently waiting the arrival of the body to be joined to it, and reared on high as an object of veneration to surrounding multitudes. The stoppage of this statue marked the increasing difficulties of the ascent. From clay, the road changes in many parts to rugged rock, which appears not merely to have been thus purposely left, but to have been formed in its present state. At the height of about a thousand feet, we begin to breathe already a lighter and cooler air; and, turning back,

enjoy the view of Macuta and the coast beneath our feet. We see the white breakers along the shore, and hear their noise, which now sounds like a hollow murmur among the woods which begin to crown the steeps. Opposite to us is a high and steep hill, covered with vegetation, and all the deep hollow between is dark with trees. Here and there, spots are cleared away, plantations are formed, and the experienced eye can distinguish the various hues of the fields of coffee, sugar, or maize. We pass also, from time to time, two or three miserable huts, where the muleteers are accustomed to stop and refresh themselves. In this manner we continue to ascend, the mountains still rising steep before us, till we arrive at a draw-bridge over a deep cut made across the narrow ridge upon which we have been advancing. On each side are deep valleys, clothed with tall trees and thick underwood, through which there is no path. This point is defended by two or three guns and a few soldiers, and forms the first military obstacle to the march of an enemy. In its present state, it is by no means formidable, but a very little care might render it so. Having passed this, the steepness increases, so that the mules, and even the foot traveller, can proceed only by crossing obliquely from side to side; and even that is attended with difficulty after rain or heavy dews, on account of the smooth round stones with which the road is paved. But the great and enlivening change experienced in the state of the atmosphere, removes all difficulties. Never within the tropics had I before breathed so pure and so cool an air. Instead of the stifling heat of the coast, where the slightest exertion was attended with profuse perspiration, I walked fast for joy, and thought myself in England. It was four o'clock in the afternoon

when I left La Guayra, and it was now become dark when I reached *La Venta* (the inn), a poor house, but well known upon the road as being about half-way between Caracas and the Port. It is situated at the height of about 3,600 English feet above the level of the sea, at which elevation the heat is never oppressive. Here, having supped and drunk large draughts of delicious cold water, I repaired to sleep, unmolested by heat or mosquitoes. Being still warm with my walk and my supper, I cared little that the frame on which I lay down was unprovided with a single article of covering; but, about midnight, I awoke shivering with cold, and astonished at a sensation so unexpected. At three o'clock, it being a fine moonlight morning, we resumed our journey, having still a considerable distance to ascend, although the worst of the road was now past. In an hour, we had passed the highest point of the road, and proceeded along an uneven ridge of two or three miles before beginning to descend towards the valley of Caracas. On the summit of the highest hill above the road is a fort, which completes the military defences on the side of La Guayra. This fort is visible only from certain points somewhat distant, as we wind close round the base of the hill on which it stands, without seeing any vestiges of it. When we had passed the ridge, and were descending towards Caracas, the day began to dawn. Never had I seen a more interesting prospect. A valley upwards of twenty miles in length, enclosed by lofty mountains, unfolded itself by degrees to my eyes. A small river which runs through the whole length of it, was marked by a line of mist along the bottom of the valley; while the large white clouds which here and there lingered on the sides of the hills, began to be tinged with the first beams of light. Beneath my feet

was the town of Caracas, although only its church towers were visible, rising above the light mist in which it lay buried. Presently the bells began to chime, and I heard all their changes distinctly, although, following the windings of the road, I had still four miles to descend, whilst, in a straight line, the distance did not appear more than one. At the foot of the hill is a gate, where a guard and officers are stationed, to examine the permits for merchandise, and sometimes the passports of strangers. Within this is an open space before reaching the town, which we entered about six o'clock. After passing the first rows of houses, I was struck with the neatness and regularity of most of the streets, which were well paved, and far superior to any thing I had yet seen in the West Indies. In the principal *posada* (inn), kept by a Genoese, I found every accommodation that could be reasonably expected. And indeed, for some days, the constant sensation of refreshing coolness in the mornings and evenings, as well as throughout the night, was of itself a luxury which seemed to have all the charms of novelty, and left no room for petty complaints."*

Santiago de Leon de Caracas, the ancient capital of the captain-generalship, is situated in lat. $10^{\circ} 36' 15''$ N., long. $67^{\circ} 4' 45''$ W., at the elevation of nearly 2,500 feet (414 toises) above the level of the sea, at

* The ascent begins with a ridge of rocks extremely steep, and stations that bear the name of *Torre Quemada* (burnt tower, indicating the sensation that is felt here in descending towards La Guayra), *Curucuti*, and *Salto* (the leap), a crevice which is passed on a draw-bridge. From Curucuti to Salto, the ascent is somewhat less laborious, owing to the windings of the road. Besides the *Venta Grande*, there were formerly several small inns along the road, which have since been destroyed. At nearly the highest point stood the *Venta del Guayaro*.

the entrance of the plain of Chacao, which extends above twenty miles east and west, and varies from four to six or seven in breadth; it is watered by the river Guayra. The mountains of Higuerota, in which this river has its origin, separate the valley of Caracas from that of Aragua. The valley narrows towards the west, where it is almost entirely shut in by the hills which, on the southern side, rise in gradations one above another, while those on the northern side, separating the valley from the coast, form one bold and continued range. The ground on which the town is built, slopes regularly down to the Guayra, which bounds it on the south; the custom-house of the *Pastora* being 400 feet, and the *Plaza Mayor* nearly 200 feet above the bed of the river. The declivity is not so rapid as to prevent carriages from going about the town, but the inhabitants make little use of them. Three small streams descending from the mountains, the Anauco, the Catuche, and the Caraguata, cross the town from north to south: their banks are very high, and, with the dry ravines which join them, furrow the ground in a manner somewhat resembling the *guaicos*, or crevices of Pichincha, in Quito. Of these three streams, which join the Guayra, the Catuche is the most valuable, as the chief supply of water is derived from it for the public fountains and private reservoirs; the richer class, however, have their water brought from La Valle, a village a league distant towards the south, the water of which is deemed very salubrious, because it flows over sarsaparilla. Besides its inclination to the south, the ground slopes also to the east; and after heavy rain every street pours a muddy torrent into either the Guayra or the Anauco; but, in a few minutes, all is again dry, and the whole town is suddenly rendered

cleaner than could be effected by the utmost labour, were it less singularly situated. The city is built in the Spanish fashion; the streets, which are in general a hundred yards wide, crossing at right angles, divide the whole town into square portions called *quadras*, which here and there are left to form open squares. The *Plaza Mayor* has the cathedral on the east side, the college on the south, and the prison on the west; but it is disfigured by ranges of low shops, which form a sort of inner square. Here is held the fruit, vegetable, and fish market, where the banana, the pineapple, and the sapadillo are mingled with the apple, the pear, and the potato, the produce of every zone with the fish peculiar to the tropical seas. Caracas contains eight churches, three convents, two nunneries, three hospitals, and a theatre that will contain from 15 to 18,00 persons. The pit, in which the seats of the men are separated from those allotted to the female part of the audience, is left uncovered, and there may be seen at once the actors and the stars. Nothing, as may be supposed, can be more contemptible than the performances. The cathedral is heavily built and badly planned; it is 250 feet long by 75 broad, and its walls are 36 feet high. Four ranges of columns, six in each range, without beauty or proportion, support the roof; but, to compensate for the inelegance of the architecture, the brick steeple contained the only public clock in the city. The most splendid church, in point of the richness of its ornaments, was that of *Alta Gracia*, built at the expense of the people of colour, as that of *La Candelaria* was by the *Islenos* from the Canaries. The church of the Dominicans boasts of a curious "historical picture," representing the Virgin suckling the sainted founder of their order, a grey-beard monk, to whom a

physician had prescribed woman's milk for a violent pain in his breast. Besides the two nunneries of Conception and Carmel, there is a much more useful institution for the education of young females, belonging to the congregation of *Las Educandas*. The college, the only public institution for the education of young men, was founded by the Archbishop Antonio Gonzales d'Acuna, so lately as 1778, and was erected into a university, by permission of the Pope, in 1792. In this university, reading and writing are first taught. Three Latin professors teach enough of that language to enable their scholars to read mass and study Duns Scotus. A professor of medicine lectures on anatomy, &c., by aid of a skeleton and some preparations in wax. Four professors are occupied in teaching theology, and one the canon law. One is charged with the exposition of the Roman law, the Castilian laws, the code of the Indies, and "all other laws;" and finally, there is a professor of vocal church music. "The routine of education," says Mr. Semple, "is such as it may be supposed to have been in Spain two hundred years ago; a few common Latin authors, catechisms, and the Lives of Saints, being the chief studies. A free mode of thinking is, however, rapidly spreading among the young men, and may hereafter produce the most important effects." M. Lavaysse explains what turn this free mode of thinking had taken. "I am informed," he says, "that the leaders of the independent party have introduced into the courses of instruction, the study of the philosophy of Locke and of Condillac, the physics of Bacon and Newton, pneumatics, chemistry, and mathematics, to the high displeasure of certain persons whose luxury and corpulence were maintained by the ignorance of their countrymen." The barracks, which stand above

the town, are large and commodious, capable of holding 2,000 men, and, from their situation, might completely command the town, were they not overlooked by the neighbouring heights.

Caracas was the residence, under the colonial system, of the captain-general, the intendant, an *audiencia*, an archbishop and chapter, and a *holy office*. The archbishop had for his suffragans, the Bishops of Merida and Guayana: his revenue was about 60,000 dollars, which, by the sale of indulgencies, dispensations, and bulls, was raised to 30,000 more. The captain-general and all the public officers lived in hired houses, the treasury and the barracks being the only edifices that belonged to the Government. The population, in 1807, amounted to 47,228 persons, of all colours; of whom, according to M. Depons, "the whites formed nearly one-fourth, the slaves a third, the Indians a twentieth, and the freed persons the rest." M. Humboldt, however, states that, of 45,000 persons, which the best-informed inhabitants believed it to contain in 1800, 18,000 were whites, and 27,000 persons of colour. The census of 1778 had made the number amount to nearly 32,000. Since then, it had continued to increase; and in 1810, the city contained, according to M. Lavaysse, 50,000 souls; the population of the whole province being 496,772.* Such was about the number, when, by the great earthquake of the 26th of March, 1812, 12,000 inhabitants were buried under the ruins of their houses; and the political commotions which succeeded that catastrophe, have reduced the number of inhabitants to less than 20,000 souls! More than half the town is now in ruins. "The houses of Caracas,"

* Lavaysse, p. 52.

says a recent Traveller, "once so rich in the costliness of their furniture and decorations,* can now barely boast of the commonest articles of convenience; and it is with the utmost difficulty that a table, chair, or bedstead, can at present be procured. That part which is nearest the mountain, presents a continued mass of ruins. For the full space of a mile, the streets are overgrown with weeds, and are entirely uninhabited."†

"On approaching the guard-house of the barrier to pay the toll exacted from travellers, I was struck," says another Writer, "with the wretchedness of its appearance, the filth which surrounded it, and the squalid figures of the soldiery, whose small stature, dirty, ragged clothing, half-polished muskets, and lack of shoes and stockings, afforded the most convincing proofs of the exhausted and miserable state to which intestine war has reduced this fine country. From this barrier, the road lies along a ridge to the entrance of the town, where the first object that attracted my attention, was a church on my left, which had been shattered by the earthquake. The walls only of the nave stood erect, although split in some places, and partly concealed by the wild vegetation, which, in this country, seems ever ready to take advantage of the desertion of any spot to recover it from human usurpation. The central tower had not entirely fallen, but stood deeply rent from the top, in a leaning position, threatening destruction to all within its reach. Many similar scenes of dilapida-

* M. Depons dilates on the beautiful glasses, crimson damask curtains, gilded bedsteads, down pillows in muslin cases trimmed with lace, rich carpets, brilliant lustres, rich and luxurious sofas, &c. &c. found in the houses of the principal inhabitants.

† Letters from Colombia, p. 8.

tion characterised this part of the town, roofless and shattered walls, leaning with various degrees of inclination, being met with at every step. A little further on, symptoms of renovation appear, in a few houses which are building; and at length, on reaching the southern part, few traces of the calamity are seen, the houses generally remaining entire, with merely occasional flaws in the walls. These are chiefly built of sun-dried clay, or mud (*tupia*) beaten down between wooden frames. The roofs are of tile, and the walls white-washed.”*

EARTHQUAKE OF 1812.

THE pen of M. Humboldt has supplied us with a vivid and affecting description of the awful convulsion which overwhelmed the town, and changed, in some places, the surface of the soil. A shock had been felt at Caracas in the month of December 1811. From that time, however, the inhabitants were undisturbed till, on the 7th and 8th of February, 1812, the earth was, day and night, in perpetual oscillation. A great drought prevailed at this period throughout the province. Not a drop of rain had fallen at Caracas, or for ninety leagues round, during the five months which preceded the destruction of the capital. The 26th of March, the fatal day, was remarkably hot; the air was calm, the sky unclouded. “It was Holy Thursday, and a great part of the population was assembled in the churches. Nothing seemed to pre-
sage the calamities of the day. At seven minutes after four in the afternoon, the first shock was felt; it was sufficiently powerful to make the bells of the

* Cochrane's Colombia, vol. i. p. 15.

churches toll; it lasted five or six seconds, during which time the ground was in a continual undulating movement, and seemed to heave up like a boiling liquid. The danger was thought to be past, when a tremendous subterraneous noise was heard, resembling the rolling of thunder, but louder, and of longer continuance than that heard within the tropics in time of storms. This noise preceded a perpendicular motion of three or four seconds, followed by an undulatory movement somewhat longer. The shocks were in opposite directions, from north to south, and from east to west. Nothing could resist the movement from beneath upward and the undulations, crossing each other. The town of Caracas was entirely overthrown. Thousands of the inhabitants (between 9 and 10,000) were buried under the ruins of the houses and churches. The procession had not yet set out, but the crowd was so great in the churches, that nearly 3 or 4,000 persons were crushed by the fall of their vaulted roofs. The explosion was stronger toward the north, in that part of the town situate nearest the mountain of Avila and the Silla. The churches of La Trinidad and Alta Gracia, which were more than 150 feet high, and the naves of which were supported by pillars of twelve or fifteen feet in diameter, left a mass of ruins scarcely exceeding five or six feet in elevation. The sinking of the ruins has been so considerable, that there now scarcely remain any vestiges of pillars or columns. The barracks, called *El Cuartel de San Carlos*, situate further north of the church of the Trinity, on the road from the custom-house de la Pastora, almost entirely disappeared. A regiment of troops of the line, that was assembled under arms, ready to join the procession, was, with the exception of a few men, buried under

the ruins of this great edifice. Nine-tenths of the fine town of Caracas were entirely destroyed. The walls of the houses that were not thrown down, as those of the street San Juan, near the Capuchin Hospital, were cracked in such a manner, that it was impossible to run the risk of inhabiting them. The effects of the earthquake were somewhat less violent in the western and southern parts of the city, between the principal square and the ravine of Caraguata. There, the cathedral, supported by enormous buttresses, remains standing. Estimating at 9 or 10,000 the number of the dead in the city of Caracas, we do not include those unhappy persons who, dangerously wounded, perished several months after for want of food and proper care. The night of Holy Thursday presented the most distressing scene of desolation and sorrow. A thick cloud of dust, which, rising above the ruins, darkened the sky like a fog, had settled on the ground. No shock was felt, and never was a night more calm or more serene. The moon, nearly full, illumined the rounded domes of the Silla, and the aspect of the sky formed a perfect contrast to that of the earth, covered with the dead, and heaped with ruins. Mothers were seen bearing in their arms their children, whom they hoped to recall to life. Desolate families wandered through the city, seeking a brother, a husband, a friend, of whose fate they were ignorant, and whom they believed to be lost in the crowd. The people pressed along the streets, which could no more be recognised but by long lines of ruins. All the calamities experienced in the great catastrophes of Lisbon, Messina, Lima, and Riobamba, were renewed on the fatal day of the 26th of March, 1812. The wounded, buried under the ruins, implored, by their cries, the help of the passers-

by, and nearly two thousand were dug out. Never was pity displayed in a more affecting manner; never had it been seen more ingeniously active, than in the efforts employed to save the miserable victims whose groans reached the ear. Implements for digging and clearing away the ruins were entirely wanting; and the people were obliged to use their bare hands to disinter the living. The wounded, as well as the sick who had escaped from the hospitals, were laid on the banks of the small river Guayra. They found no shelter but the foliage of trees. Beds, linen to dress the wounds, instruments of surgery, medicines, and objects of the most urgent necessity, were buried under the ruins. Every thing, even food, was wanting during the first days. Water became alike scarce in the interior of the city. The commotion had rent the pipes of the fountains; the falling in of the earth had choked up the springs that supplied them; and it became necessary, in order to have water, to go down to the River Guayra, which was considerably swelled; and then vessels to convey the water were wanting. There remained a duty to be fulfilled toward the dead, enjoined at once by piety and the dread of infection. It being impossible to inter so many thousand corpses, half-buried under the ruins, commissaries were appointed to burn the bodies; and, for this purpose, funeral piles were erected between the heaps of ruins. This ceremony lasted several days. Amid so many public calamities, the people devoted themselves to those religious duties which they thought were the most fitted to appease the wrath of Heaven. Some, assembling in processions, sung funeral hymns; others, in a state of distraction, confessed themselves aloud in the streets. In this town was now repeated what had been remarked in the

province of Quito, after the tremendous earthquake of 1797; a number of marriages were contracted between persons who had neglected for many years to sanction their union by the sacerdotal benediction. Children found parents by whom they had never till then been acknowledged; restitutions were promised by persons who had never been accused of fraud; and families who had long been enemies, were drawn together by the tie of common calamity. If this feeling seemed to calm the passions of some, and open the heart to pity, it had a contrary effect on others, rendering them more rigid and inhuman. In great calamities, vulgar minds preserve still less goodness than strength. Misfortune acts in the same manner as the pursuits of literature and the study of nature; their happy influence is felt only by a few, giving more ardour to sentiment, more elevation to the thoughts and more benevolence to the disposition.

“Shocks as violent as those which, in the space of one minute,* overthrew the city of Caracas, could not be confined to a small portion of the continent. Their fatal effects extended as far as the provinces of Venezuela, Varinas, and Maracaybo, along the coast; and still more to the inland mountains. La Guayra, Mayquetia, Antimano, Baruta, La Vega, San Felipe, and Merida, were almost entirely destroyed. The number of the dead exceeded 4 or 5,000 at La Guayra, and at the town of San Felipe, near the copper-mines of Aroa. It appears that it was on a line running E.N.E. and W.S.W., from La Guayra and Caracas to the lofty mountains of Niquitao and Merida, that

* “The duration of the earthquake, that is to say, the whole of the movements of undulation and rising (*undulacion y trepidacion*) which occasioned the horrible catastrophe of the 26th of March, 1812, was estimated by some at 50", by others at 1' 12".”

the violence of the earthquake was principally directed. It was felt in the kingdom of New Grenada from the branches of the high Sierra de Santa Marta,* as far as Santa Fé de Bogota and Honda, on the banks of the Magdalena, 180 leagues from Caracas. It was every where more violent in the cordilleras of gneiss and mica-slate, or immediately at their foot, than in the plains; and this difference was particularly striking in the savannas of Varinas and Casanara. (This is easily explained, according to the system of those geologists who admit, that all the chains of mountains, volcanic and not volcanic, have been formed by being raised up, as if through crevices.) In the valleys of Aragua, situated between Caracas and the town of San Felipe, the commotions were very weak; and La Victoria, Maracay, and Valencia, scarcely suffered at all, notwithstanding their proximity to the capital. At Valecillo, a few leagues from Valencia, the earth opening, threw out such an immense quantity of water, that it formed a new torrent. The same phenomenon took place near Puerto Cabello.† On the other hand, the lake of Maracaybo diminished sensibly. At Coro, no commotion was felt, though the town is situate upon the coast, between other towns which suffered from the earthquake. Fishermen who had passed the day of the 26th of March in the island of Orchila, thirty leagues north-east of La Guayra, felt no shock. These differences in the direction and propagation of the shock, are probably owing to the peculiar arrange-

* "As far as Villa de Los Remedios, and even to Carthagena."

† "It is asserted, that in the mountains of Aroa, the ground, immediately after the great shocks, was found covered with a very fine and white earth, which appeared to have been projected through crevices."

ment of the stony strata. These commotions were very violent beyond Caumimare, in the valley of Capaya, where they extended as far as the meridian of Cape Codera; but it is extremely remarkable, that they were very feeble on the coasts of Barcelona, Cumana, and Paria, though these coasts have formerly been often agitated by subterraneous commotions.

“Fifteen or eighteen hours after the great catastrophe, the ground remained tranquil. The night, as we have already observed, was fine and calm; and the commotions did not recommence till after the 27th. They were then attended with a very loud and long-continued subterranean noise (*bramido*). The inhabitants of Caracas wandered into the country; but the villages and farms having suffered as much as the town, they could find no shelter till they were beyond the mountains of Los Teques, in the valleys of Aragua, and in the llanos or savannas. No less than fifteen oscillations were often felt in one day. On the 5th of April, there was almost as violent an earthquake as that which overthrew the capital. During several hours, the ground was in a state of perpetual undulation. Large masses of earth fell in the mountains; and enormous rocks were detached from the Silla of Caracas. It was even asserted, and this opinion prevails still in the country, that the two domes of the Silla sunk fifty or sixty toises; but this assertion is founded on no measurement whatever. I am informed, that in the province of Quito, also, the people, at every period of great commotions, imagine that the volcano of Tunguragua is diminished in height.

“While violent commotions were felt at the same time in the valley of the Mississippi, in the island

of St. Vincent, and in the province of Venezuela, the inhabitants of Caracas, of Calabozo, situate in the midst of the steppes, and on the borders of the Rio Apura, in a space of 4,000 square leagues, were terrified, on the 30th of April, 1812, by a subterraneous noise, which resembled frequent discharges of the largest cannon. This noise began at two in the morning. It was accompanied by no shock, and, which is very remarkable, it was as loud on the coast as at eighty leagues' distance inland. It was every where believed to be transmitted through the air; and was so far from being thought a subterraneous noise, that at Caracas, as well as at Calabozo, preparations were made to put the place into a state of defence against an enemy, who seemed to be advancing with heavy artillery. Mr. Palacio, crossing the Rio Apura below the Orivante, near the junction of the Rio Nula, was told by the inhabitants, that the '*firing of cannon*' had been heard as distinctly at the western extremity of the province of Varinas, as at the port of La Guayra to the north of the chain of the coast.

“ The day on which the inhabitants of Terra Firma were alarmed by this subterraneous noise, was that on which happened the great eruption of the volcano in the island of St. Vincent. This mountain, near 500 toises high, had not thrown out any lava since the year 1718. Scarcely was any smoke perceived to issue from its top, when, in the month of May 1811, frequent shocks announced that the volcanic fire was either rekindled or directed anew toward that part of the West Indies. The first eruption did not take place till the 27th of April, 1812, at noon. It was only an ejection of ashes, but attended with a tremendous noise. On the 30th, the lava passed the

brink of the crater, and, after a course of four hours, reached the sea. The noise of the explosion 'resembled that of alternate discharges of very large cannon and of musketry; and, which is well worthy of remark, it seemed much louder at sea, at a great distance from the island, than in sight of land, and near the burning volcano.'

"The distance in a straight line from the volcano of St. Vincent to the Rio Apura, near the mouth of the Nula, is 210 leagues.* The explosions were consequently heard at a distance equal to that between Vesuvius and Paris. This phenomenon, connected with a great number of facts observed in the Cordilleras of the Andes, shews how much more extensive the subterranean sphere of activity of a volcano is, than we are disposed to admit from the small changes effected at the surface of the globe. The detonations heard during whole days together in the New World, 80, 100, or even 200 leagues distant from a crater, do not reach us by the propagation of the sound through the air; they are transmitted to us by the ground."†

From the beginning of 1811 to 1813, the vast area lying between the parallels of 5° and 36° N., and the meridians of 29° and 89° W., was shaken by almost simultaneous commotions, the effect of subterranean fires. On the 30th of January, a sub-marine volcano appeared near the island of St. Michael, one of the Azores, where the sea was sixty fathoms deep. This new islet was at first nothing more than a shoal. On

* Where the contrary is not expressly stated, nautical leagues of twenty to a degree, or 2,855 toises, are always to be understood.

† Humboldt, *Pers. Narr.* vol. iv. pp. 12—27.

the 15th of January, an eruption, which lasted six days, enlarged its extent, and elevated it to the height of fifty fathoms above the sea. This new land, of which formal possession was taken in the name of the British Government, was 900 toises in diameter. It received the name of Sabrina Island,—a name not less ominous than appropriate: Sabrina has again descended “to Amphitrite’s bower,”—the island has been again swallowed up by the ocean.* “When we consider geologically,” remarks M. Humboldt, “the basin of the Caribbean Sea and of the Gulf of Mexico, we find it bounded, on the south, by the littoral chain of Venezuela and the Cordilleras of Merida and Pamplona; on the east, by the mountains of the West India Islands and the Alleghany range; on the west, by the Mexican Andes and the Stony Mountains; and on the north, by the very inconsiderable elevations which separate the Canadian lakes from the rivers that flow into the Mississippi. More than two-thirds of this basin are covered with water. It is bordered by two ranges of active volcanoes: to the east, in the Caribbee Islands, between the parallels of 13° and 16°: to the west, in the Cordilleras of Nicaragua, Guatimala, and Mexico, between those of 11° and 20°. When we reflect, that the great earthquake of Lisbon, of the 1st of November, 1755, was felt almost at the same moment on the coasts of Sweden, at Lake Ontario, and at Martinique, it will not appear too daring a supposition, that all this basin of the West Indies, from Cumana and Caracas to the plains of

* Humboldt, vol. iv. p. 7. This was the third time that submarine volcanoes had presented this extraordinary spectacle; and the small ephemeral island of 1720, reached the same elevation as that of 1811.

Louisiana, may be simultaneously agitated by commotions proceeding from the same centre of action."

The moral, or, rather, political effects of the earthquake of 1812, were scarcely less disastrous than the actual destruction of life which it occasioned. The provinces of Venezuela had, on the 11th of July, 1811, by a public declaration of independence, thrown off the yoke of Spain. On the 23d of December, the new constitution had been agreed to by the congress, and its first session was to have been held at Valencia in March 1812. The cause wore at this period every appearance of prosperity. At the very moment of the earthquake, a battalion of troops under Colonel Xalon, stationed at Barquesimeto, were preparing to march in order to attack the royalists of Coro, when the barracks were thrown down, and a great part of the soldiers were buried under the ruins, their commander being severely wounded. The clergy of Caracas, who had been shorn of some of their privileges by the new constitution, immediately proclaimed that the earthquake was an evidence of the wrath of the Almighty.* A universal panic seized the minds of the people, and, unable to withstand the tide of public opinion which now set in against them, the congress adjourned their sessions. Miranda, on whom the supreme command of the army had devolved, found himself obliged to capitulate,—on honourable terms, indeed, but which were most atrociously violated by

* Two hundred and seventy-nine years before (A.D. 1533), the sudden overflowing of the Cotopaxi had struck terror into the Indians at the period of the arrival of the Spaniards, and the conquest of Quito was facilitated by the convulsion of nature. A panic terror, excited by the formal excommunication of the insurgents, is also believed to have paralysed the operations of Hidalgo in the first revolutionary movements in Mexico.—See MOD. TRAV. Mexico, vol. i. p. 105.

the royalists. Cumana and Barcelona submitted in consequence to the authority of the infamous Monteverde, and the old government was without difficulty completely re-established throughout Venezuela: Every gaol was filled with the patriots, and the horrible atrocities acted in Caracas, with the avowed object of intimidating the insurgents throughout the Spanish colonies, led to that re-action which has happily issued in the establishment of the national independence.*

STATE OF SOCIETY IN CARACAS.

WE have naturally been led to anticipate in some degree the history of that sanguinary struggle which has given liberty to Colombia; but we must now revert to the state and aspect of Caracas at the period of Baron Humboldt's travels in the equinoctial regions. He passed two months in this capital. Describing the manners of the inhabitants, he remarks, that in no part of Spanish America had civilisation assumed a more European physiognomy than in Venezuela and Cuba. "The great number of Indian cultivators in Mexico and New Granada, have im-

* "After the recital of so many calamities," says M. Humboldt, in concluding the melancholy detail of the effects of the earthquake, "it is soothing to repose the imagination on consolatory remembrances. When the great catastrophe of Caracas was known in the United States, the congress, assembled at Washington, unanimously agreed, that five ships laden with flour should be sent to the coast of Venezuela, to be distributed among the poorest inhabitants. So generous a supply was received with the warmest gratitude; and this solemn act of a free people, this mark of a national interest, of which the increasing civilisation of our old Europe displays but few recent examples, seemed to be a valuable pledge of the mutual benevolence that ought for ever to unite the nations of both Americas."

pressed on those countries a peculiar, I might almost say exotic, character. Notwithstanding the increase of the black population, we seem to be nearer Cadiz and the United States at Caracas and the Havannah, than in any other part of the New World. Caracas being situated on the continent, and its population being less mutable than that of the islands, the national manners have been better preserved than at the Havannah. Society does not present very animated and varied pleasures; but that feeling of comfort is experienced in domestic life, which leads to uniform cheerfulness and cordiality, united to politeness of manners.

“There exists,” he adds, “at Caracas, as in every place where a great change in the ideas of men is preparing, two races, we might say two distinct generations. One, of which but a small number remains, preserves a strong attachment to ancient customs, simplicity of manners, and moderation in their desires. America appears to them a property conquered by their ancestors. Abhorring what is called the enlightened state of the age,* they carefully preserve hereditary prejudices as a part of their patrimony. The other class, less occupied with the present than with the future, have a propensity, often ill-judged, for new habits and ideas. When this tendency is allied to the love of solid instruction, restrained and guided by a strong and enlightened reason, its effects become beneficial to society. I knew at Caracas, among the second class, several men equally dis-

* When, in June 1816, the Spanish general Morillo entered Bogota, every person, of either sex, *capable of reading or writing*, was treated as a rebel. Six hundred Creoles were hanged or shot, many of whom had never borne arms, but were guilty of science or literature.—See ROBINSON'S *Memoirs*, vol. ii. p. 224.

tinguished by their taste for study, the mildness of their manners, and the elevation of their sentiments.* I have also known men who, disdaining all that is excellent in the character, the literature, and the arts of the Spaniards, have lost their national individuality, without having acquired from their connexions with foreigners, any just ideas of the real bases of happiness and social order.

“ I found in several families at Caracas, a taste for instruction, a knowledge of the master-pieces of French and Italian literature, and a particular predilection for music, which is cultivated with success, and which, as it always happens in the pursuit of the fine arts, serves to bring the different classes of society nearer to each other. The mathematical sciences, drawing, painting, cannot here boast of any of those establishments with which royal munificence, and the patriotic zeal of the inhabitants, have enriched Mexico. In the midst of the marvels of nature, so rich in productions, no person on this coast was devoted to the study of plants and minerals. In a convent of St. Francis alone I met with a respectable old gentleman,† who calculated the almanack for all the provinces of Venezuela, and who possessed some precise ideas on the state of modern astronomy. Our instruments interested him deeply; and one day, our house was filled with all the monks of St. Francis, begging to see a dipping-needle. The curiosity that dwells on physical

* “ It appeared to me, that a strong tendency toward the study of the sciences prevailed at Mexico and Bogota; more taste for literature and whatever can charm an ardent and lively imagination, at Quito and Lima; more accurate notions of the political relations of countries, and more enlarged views on the state of colonies and their mother countries, at the Havannah and Caracas.”

† Father Puerto.

phenomena is augmented in countries undermined by volcanic fires, and in a climate where nature is at once so overwhelming and so mysteriously agitated.

“ When we remember that, in the United States of North America, newspapers are published in small towns with not more than 3,000 inhabitants, we may be surprised to learn, that Caracas, with a population of 40 or 50,000 souls, possessed no printing-office before 1806; for we cannot give this name to the presses which served only from year to year to print a few pages of an almanack, or the pastoral letter of a bishop. The number of those who feel the want of reading, is not very considerable, even in the Spanish colonies most advanced in civilisation; but it would be unjust to attribute to the colonists what was the effect of a jealous policy. A Frenchman, M. Delpeche, allied to one of the most respectable families* in the country, has the merit of having first established a printing-office at Caracas. It appears sufficiently extraordinary in modern times, to see an establishment of this kind, affording the greatest means of communication between men, follow, and not precede, a political revolution.

“ In a country that presents such enchanting views, and at a period when, notwithstanding some symptoms of popular commotions, the greater part of the inhabitants seem only to direct their thoughts toward physical objects, the fertility of the year, the long drought, or the conflict of the two winds of Petare and Catia, I believed that I should find many persons well acquainted with the lofty surrounding mountains. My expectations, however, were not realised; we could not discover at Caracas a single person who had visited

* “ The family of Montillas.”

the summit of the Silla. The hunters do not climb so high on the ridges of mountains; and no journeys are undertaken in these countries to gather alpine plants, to carry a barometer to an elevated spot, or to examine the nature of rocks. Accustomed to a uniform and domestic life, they dread fatigue and sudden changes of climate. It would seem as if they live not to enjoy life, but only to prolong its duration."

The inhabitants of Caracas generally, are pronounced by Mr. Semple superior in quickness of perception, activity, and intelligence, to the inhabitants of most of the other towns in the province. But, he adds, "the great want of a solid education, and the blind subjection to an ignorant priesthood, render all these natural advantages of small avail. That high Spanish sense of honour which reigns in some breasts, is, in too many others, supplanted by a mere blustering appearance, which ends only in falsehood and deceit. Even this hollowness is not always covered by mild manners or a plausible exterior; and high examples may be seen of great rudeness joined to great insincerity." The women, this Traveller describes as, upon the whole, handsome, sprightly, and pleasing. "They are uniformly kind and affable in their manners; and whatever faults an Englishman may frequently observe in their domestic conduct, these are not more than may be traced in the manners of Old Spain. In them, the Spanish character appears, perhaps, with less alteration than among the men." M. Depons paints them in still more vivid colours, styling them mild, tender, and seductive; with jet-black hair, alabaster skins, eyes large, and finely shaped, and carnation lips; they are generally below the middle size. "Their attire," he says, "is rather elegant. They feel a kind of vanity on being taken

for French, but, whatever resemblance there may be in the dress, there is too little in the gait, the step, and too little grace, to permit the illusion to subsist." Their education is limited to learning a number of prayers, reading badly, spelling worse, and playing by rote a few tunes on the guitar and piano-forte. Their principal morning occupation is going to mass, and a great portion of the rest of the day they pass at their windows. "In spite, however, of their defective education," adds the French Traveller, "the women of Caracas know how to unite social manners with decent behaviour, and the art of coquetry with the modesty of their sex." In this city, as in most others, there is a degraded and abandoned class. "More than 200 unfortunates pass the day, covered with rags, in the recesses of ruins, and never go out but at night, to draw from vice the gross subsistence of the morrow. Their dress is a white petticoat and veil," (the dress of slaves, all respectable females wearing black,) "with a pasteboard hat covered with silk, to which is attached a tuft of tinsel and artificial flowers."

"The class of domestic slaves in Caracas," says M. Depons, "is considerable. A man thinks himself rich only in proportion to the number of slaves in his house. It is necessary that he should have about him four times as many servants as their work requires; without which a littleness is manifested, that announces a poverty which all hide as well as they can. A white woman of moderate fortune goes to mass on church days with two female negroes or mulattoes in her suite, though she does not possess in other property an equivalent capital. Those who are notoriously rich are followed by four or five servant women, and there remain as many more for each white of the same

house who goes to another church. There are families in Caracas with twelve and fifteen female servants, exclusive of the footmen in the service of the men. The most effectual mode of lessening the injury which this species of luxury does to the labourers of the country, would be to impose on each superfluous domestic a tax heavy enough to reduce the number. If vanity should prefer to pay rather than to give up, the product employed in some public establishment would compensate society for the loss of their labour.

“It is probable, that there is not in the whole West Indies, a city where there are so many freed persons, or descendants from them, in proportion to the other classes, as in Caracas.

“They there exercise all those handicrafts that the whites despise. Every one who is a carpenter, joiner, cabinet-maker, mason, blacksmith, locksmith, tailor, shoemaker, goldsmith, &c., is, or was, a freedman. They excel in none of these trades, because, learning them mechanically, they constantly offend against their principles. Besides, indolence, which is in their nature, extinguishes in them that emulation to which the arts owe all their progress. Yet, the carpenter’s and mason’s work is tolerably regular; but cabinet-making is still in its infancy. All these artisans, depressed by an indifference that seems more peculiar to their race, but generally attaches to the soil they inhabit and the nation with which they are associated, work but very little; and what appears in some degree contradictory, is, that they work much cheaper than European artificers. They exist but by means of the greatest sobriety, and in the midst of all sorts of privations. In general, overloaded with children, they live heaped together in miserable shells, where

they have for their whole bed nothing but an ox-hide, and for sustenance only the provisions of the country. The exceptions are very rare.

“ In this state of poverty, no kind of work can be required but they instantly demand an advance. The smith never has either iron or coal. The carpenter never has wood—even for a table. They must have money to buy some. All have always the wants of a family, which he who orders their work must satisfy. Thus you begin by tying yourself to the workman you employ, and making yourself dependent upon him. It is no longer possible to threaten his sloth with applying to another, with whom, besides, the very same inconvenience would take place. The only resource, then, is that of pressing and superintending the work; and, in spite of all these attentions, there are always indispositions, journeys, festivals, which exhaust the patience of the most phlegmatic. One is then very badly, or, assuredly, very slowly served.

“ It is easy to perceive that this torpor in the trades-people arises only from their aversion to labour. In truth, the major part never recollect that they have a trade, till they are pressed by hunger. The reigning passion of this class of men is, to pass their lives in religious exercises. They form exclusively corps of the various fraternities. There are few churches which have not one or more, all composed of free people of colour. Each has its uniform, which differs from the others only in colour. It is a kind of robe, closed like the habit of a monk, the colour of which varies according to the brotherhood it belongs to. Some are of blue, some red, or black, &c. The fraternities assist at processions and burials. The members march in order, preceded by their banner. They gain by

this nothing but the pleasure of being seen in a habit they believe commanding. They have one, however, on which they lavish peculiar care ; it is that of *Alta Gracia*. Every free man of colour makes a sort of ostentatious display of this dress, and of the neatness and riches of the church of the same name. All the bearers of rosaries, who traverse the streets from night-fall till after nine o'clock, are composed solely of freed persons. There is no example of any of these persons having thought of cultivating the earth."

The festivals of the Romish calendar are so multiplied at Caracas, that there are very few days in the year in which some saint or virgin does not claim a turn in the devotional celebrations of the natives. "The most brilliant acts of these festivals are the processions, which always take place in the afternoon. The saint, as large as life, is richly dressed. He is carried on a table very handsomely decorated, and followed, or preceded, by some other saint of the same church less sumptuously adorned. A number of flags and crosses open the procession. The men walk two abreast. Each of the principal persons has in his hand a wax taper ; then come the music, the clergy, the civil authorities, and, lastly, the women, surrounded with a barrier of bayonets. The train is always very numerous. The frames of all the windows in the streets through which the procession moves, are ornamented with hangings floating in the air, which give to the whole quarter an air of festivity that exhilarates. The windows themselves are adorned with women, who crowd to them from all parts of the city to enjoy this exhibition." Fireworks, concerts, and dances, conclude, as elsewhere, these pious solemnities. In fact, in detailing the customs and superstitions of the Spanish Americans,

travellers continually fall into the error of describing as peculiarities what are common to both hemispheres, or to all Roman Catholic countries,* and of confounding what is exotic in civilisation, religion, or manners, with what is of indigenous growth. Thus, we find M. Depons particularising the custom of the *siesta*, the laws and phrases of Spanish etiquette, and other forms and customs which are not more characteristic of Caracas than of the mother country, or the other Spanish and Portuguese colonies. It is, on the whole, a dark picture which he draws of the state of society. "The Spaniards," he remarks, "are, of all people known, those who do the least to establish a police for public tranquillity. The sobriety which is natural to them, and still more, their phlegmatic character, render quarrels and tumults very rare. Hence, there is never any noise in the streets of Caracas. Every body there is silent, dull, grave. Three or four thousand persons go out of church without making any more noise than a tortoise walking on sand. So many French, restrained by the silence divine offices enjoin, would endeavour, whilst quitting the church, to obtain some compensation;—then, women and children would make, by their chattering, a noise that would be heard a long way. Four

* It is scarcely worth while, perhaps, to notice, as peculiarities of the country, the local or provincial legends which are mixed up with the various modifications of the Virgin-worship of the Romish church. In Caracas, as in Brazil, Our Lady, under a thousand various forms of invocation, is the favourite object of worship. The two principal idols are, *Nuestra Senhora de Copa Cobana*, and *Nuestra Senhora de Soledad*, the former belonging to the church of *San Pablo*, the other in the possession of the Franciscans; each famous for working miracles, and having an absurd legend attached to the invention of the image.

times as many Spaniards do not make the buzzing of a wasp.

“ But if the magistrate has nothing to fear from boisterous offences, he would fall very short if his vigilance were to be on that account less active. Assassinations, thefts, frauds, treacheries, demand of him steps, investigations, measures capable of putting to the proof the most ardent zeal, and baffling the most penetrating sagacity.

“ It is a fact, that almost all the assassinations which take place in Caracas, are committed by Europeans. Those with which the Creoles may be accused, are as rare as the thefts that may be imputed to the former. The whites, or pretended whites, of the country, whom idleness, and all the vices it engenders, keep in sottishness and the most abject condition, and the freed men, who find it too irksome to live by their labour, are the only persons that can be reproached with the thefts committed in Caracas.

“ False measures, false weights, adulteration of commodities and provisions, are also common offences, because these are regarded less as acts of roguery, than as proofs of an address of which they are vain.”

The negligence of the civil magistracy was strikingly exemplified, under the colonial government, by the want of all proper regulations for supplying the market. “ Would one believe,” says M. Depons, “ that the city of Caracas, the capital of provinces that might furnish horned cattle to all the foreign possessions of America, is herself, many days in the year, destitute of butcher’s meat ? ” — “ If filth does not accumulate in the streets,” he adds, “ the frequency of rain is to be thanked, not the care of the police.” Mendicity here, as at Mexico and other

great cities, puts on the most disgusting and appalling form.*

The principal public amusements of Caracas, besides the theatre, are, three tennis-courts, a cock-pit,† and a few billiard-tables; the latter are not much frequented. Gambling, the universal passion of the Spaniards, is under some slight check from the police; regulations having been made in 1800 for suppressing the practice. “But, for these three or four years,” says M. Depons, “it has been only the poor who have been watched, imprisoned, and fined by the police for gaming. Those above the common rank have a tacit permission to ruin each other at play, without the magistrate’s taking offence at it. The Spaniard loves only the play that ruins, not the play which amuses.” — “In Europe,” remarks M. Humboldt, “where nations decide their quarrels in the plains, we climb the mountains in search of solitude and liberty. In the New World, the cordilleras are inhabited to the height of 12,000 feet; and thither men carry with them their political dissensions and their little and hateful passions. Gaming-houses are established on the ridge of the Andes, wherever the discovery of mines has led to the foundation of towns; and in those vast solitudes, almost above the region of the

* As the description of the state of society in the other Spanish-American capitals will in great measure apply to Caracas, we may refer our readers for further information to Mexico, vol. i. pp. 249, 281, 304. Brazil, vol. i. pp. 4, 101, &c.; vol. ii. p. 313.

† Cock-pits formed a branch of the public revenue. One only was allowed in every town, which was rented of the crown. The proceeds from farming the cock-pits, as well as from the licenses to sell *guarapo*, (an intoxicating liquor, made from the fermentation of coarse sugar and water,) were appropriated to the maintenance of the hospital of St. Lazarus at Caracas. — DEPONS, vol. ii. p. 127.

clouds, in the midst of objects fitted to elevate the thoughts, the news of a decoration or a title refused by the court, often disturbs the happiness of families.”

M. Depons has furnished us with a detail of the various sources of revenue of which, under the old system, the government availed itself. Most of these are the same as were employed in the other colonies. The principal are,—

The <i>alcavala</i> ,* which produced about..	400,000 dollars.
The maritime <i>alcavala</i> (paid on entering and clearing from the ports)	150,000
The <i>almoxarifazgo</i> (customs)	200,000
The <i>armada</i> and <i>armadilla</i> (levied to meet the expense of armed coasting vessels)	50,000
Duties of the consulate and anchorage	
<i>Tafias</i> (levied on distillers)	32,000
<i>Pulperia</i> licenses.....	30,000
Composition and confirmation of lands	10,000
Ferry-boat on the Apure	300
Lances (produced by new patents of nobility)	3,500
Royal ninths (of the tithes)	
Indian capitation-tax	30,000
Sale of offices	7,000
Stamped paper	20,000
Fifth of the mines.....	50
Salt-works	14,000
<i>Corso</i> (another port duty)	150,000
Sale of tobacco	700,000
Sale of bulls	26,000

This last item requires explanation, and it will serve to illustrate the religious condition of the people.

* This tax, originally granted to the kings of Spain in the year 1342, as a supply towards the expenses of the war against the Moors, was established in Mexico in 1574, and extended to Peru in 1591. In Terra Firma, it was for a long time fixed at two per cent, but, about the middle of the last century, was raised to five. It is levied on every sale and transfer. — See *MOD. TRAV. Mexico*, vol. i. p. 97.

The bulls in question were, originally, bulls of dispensation for those Spaniards who engaged in the wars against the infidels. Their object has long been lost sight of, but the bulls have continued to arrive from Rome, and to be sold in Spain. "The blessings they afford are too precious, and the revenue the exchequer draws from them is too useful to be renounced. It is true that time, which alters or perfects every thing, has caused the popes to give to these bulls, virtues which they did not at first possess. At this day, four kinds of bulls are acknowledged; the general bull for the living, the bull for eating milk, the bull for the dead, and the bull of composition.

"The first, which lasts for two years, ought to be taken by every Spanish Christian, or other resident within the Spanish domains. The benefits of this bull are general. They extend to the particular objects of the other three kinds, though in a manner less direct; but its virtues are so pre-eminent that I cannot excuse myself from enumerating some. Every person who has this bull, may be absolved, by any priest whatsoever, of all, even concealed crimes. Obstinate and confirmed heresy is the only exception; an offence, however, that cannot be even suspected, because he who should be tainted with it, would set but little value on absolution. The possessors of this bull, their domestics, and relations, have, during the time the churches are shut up, a right to hear mass, receive the sacraments, and be buried in holy ground. With this bull the priest may say mass, and the lay person hear it, one hour before day, and one after twelve. There are, however, some authors who insist that this point cannot be granted, but by the commissary-general of the crusade. Every confessor may release him who has this bull from all kinds of vows, except-

ing those of chastity, becoming a priest, monk, or nun, and that of making a voyage to the Holy Land. Blasphemies against the Deity are no more able to resist the power of this bull, than a spot of oil upon linen can resist soap. By means of this bull are gained, in America, the indulgences which visiting the churches obtained in Rome. One single day of fasting, and a few prayers, are worth to the possessor of this bull fifteen times fifteen forties, or 9,000 of the penances imposed upon him. On fast-days, the lay person may eat of every thing, meat excepted, provided he has the bull. It even allows of meat, if the least weakness of constitution, or any other slight indisposition, should occasion any apprehension for his health. Since the 1st of January, 1804, it dispenses with fasting on Fridays, and for almost the whole of Lent. Whoever takes and pays for two bulls for the living, obtains double the advantages of one.

“ All the faithful, excepting ecclesiastics, from whom the church has a right to expect greater exactitude in the observance of her laws, have permission by the general bull for the living, to eat milk and eggs during Lent. It was necessary then, in order to exempt them from the prohibition of these articles during that period, to establish a special bull. This is the exact and only purpose of the bull *de laitage*. All ecclesiastics, under sixty years of age, ought to purchase it, independently of that of the living, if they wish not to provoke the wrath of Heaven, by transgressing the laws of the church respecting eggs and milk.

“ The bull for the dead is a species of ticket for admission into paradise. It enables to clear the devouring flames of purgatory, and conducts directly to the abodes of the blessed. But one of these bulls

serves for only one soul. Therefore, the instant a Spaniard expires, his relations send to the treasury to buy a bull for the dead, on which is written the name of the deceased. When the family of the departed is so poor as to be unable to pay for the bull, that is to say, when they are reduced to the most abject misery, two or three of its members detach themselves, and go begging through the streets to obtain the means of making the purchase. If their zeal is not crowned with success, they shed tears and utter shrieks of lamentation, expressive less of regret for the death of their relation, than of pain for their inability to furnish his soul with this essential passport.* The virtue of this bull is not confined to dispensing with the obligation of going into purgatory, but extends to extricating the soul, which, like the asbestos, is whitening in its flames. It has the faculty

* "I have more than once," says M. Lavaysse, "heard the poor in this country lament and utter the most frightful shrieks at the death of their relations. The grief for their loss was trifling in comparison with that which they felt from knowing that they were in purgatory for want of this trifling sum for delivering them. They run about in every direction, begging alms with tears, in the hope of procuring as much money as may enable them to buy bulls for releasing the souls of their relations from purgatory. I have more than once had the happiness of calming their grief, relieving a soul from that state, contributing to the comforts of a Spanish priest, and attracting to myself a thousand benedictions, for a quarter of a dollar. Yet, let it not be supposed that these bulls and indulgencies supersede the saying of masses for the dead. In all the churches of this country, there are pictures representing heaven and purgatory. In a corner of the picture is a priest saying mass; at the side are people giving money for the celebration of mass, and souls starting out of purgatory when masses have been said for them. They are received by the archangel St. Michael, who is depicted holding a pair of scales in his hand, one of which is full of the money for the masses, and appears to sink, while the red-hot souls, like boiled lobsters, throw themselves into the other scale, from which they fly to heaven."—LAVAYSSÉ, pp. 159, 160.

even to designate the spirit it is wished to liberate. It is enough to write upon the bull the name of the person it animated in this lower world, and that very moment the gates of paradise are opened for him. One bull must always be taken for each soul; they may, however, take as many as they please, provided they do but pay. With piety and money it would be easy to empty purgatory, which indeed would not long remain unpeopled, because death, whose harvests never cease, would at every instant renew its inhabitants.

“ The bull of composition is, without doubt, that whose effects are the most sensible, the nearest, and most remarkable. It has the inconceivable virtue of transmitting to the withholder of another's goods, the absolute property in all he has been able to steal without the cognizance of the law. For its validity they require only one condition, which is, that the expectation of the bull did not induce the theft. Modesty has done well to add, that of not knowing the person to whom the stolen goods belong; but, from the cases specified for its application, it appears that this last condition is illusive; for, in a volume on the virtue of bulls, printed at Toledo in 1758, by order of the commissary-general of the holy crusade, we find that the bull of composition befriends those who hold property they ought to return to the church, or employ in works of piety, or which they have not legally acquired by the prayers of which it was the price. It aids those debtors who cannot discover their creditors, or when the conditions of the loan are oppressive; and assists the heir who retains the whole of an inheritance loaded with legacies, were it in favour of a hospital. If a demand has not been made within a year, the bull of composition decrees to its possessor a moiety of the debt; but he is required to

pay the residue. It bestows the entire right on those who do not know the owner of that which they have obtained unjustly. Thus a watch, a diamond, a purse full of gold, stolen in the midst of a crowd, becomes the property of the pick-pocket who has filched it. Finally, it quiets the remorse of conscience of the merchant who has enriched himself by false yards, false measures, and false weights. The bull of composition assures to him the absolute property in whatever he obtains by modes that ought to have conducted him to the gallows. The party himself values the article which he is desirous of acquiring by means of the bull of composition, and has to purchase as many bulls as are necessary to make up their price, which is fixed at an equivalent to six per cent of the capital he wishes to retain. Only fifty bulls a year can, however, be taken by one person. If the amount of what they cost does not complete the six per cent of that which is withheld, recourse must be had to the most illustrious commissary-general of the holy crusade. He may extend the permission as much as he pleases, and even reduce the duty. No bull has any virtue till it is paid for, and the name and surname of the person on whose account it is issued, are written at full length in the blank which is left in the printed form. The bulls of the holy crusade are in Spanish, upon a sheet of very common paper, in demi-gothic letters, and wretchedly printed. Every two years, a new bull of the crusade is published with great pomp and solemnity at Caracas. The ceremony is performed in the cathedral on St. John's day; in the other churches, on that of St. Michael. The bulls are at first placed in the church of the nuns of the Conception. All the clergy, constituted authorities, and people, come in triumph to seek them, in order to remove and place them in the cathe-

dral, upon a table magnificently decorated. High mass is then performed, after which there follows a sermon entirely devoted to setting forth the infinite blessings of the bull. At this festival, the commissary-general of the holy crusade, who is usually a canon, occupies the first place. It has been so long transmitted to him, that under the perplexity of deciding whether he ought to relinquish it to the bishop, it has been found more convenient to advise the prelate not to assist at the celebration. Mass being finished, all the faithful approach the table on which the bulls are laid, that each may obtain one proportioned to his abilities and to his rank; for the price of the bulls varies according to the opulence and situation of those by whom they are taken. They are nevertheless, notwithstanding the difference of price, of equal virtue, provided there has been no fraud. He who takes a bull of a price inferior to that which his fortune or rank require that he should procure, enjoys none of the advantages attached to it.

“ You here have the latest duty imposed on the bull of the crusade. ‘ The price is a little raised,’ says the commissary-general of the crusade in his mandate, dated at Madrid on the 14th of September, 1801, ‘ but it is on account of the new expenses of government, and of the necessity of extinguishing the royal certificates which the scarcity of money in a time of war has compelled the king to issue.’ ” *

The prices of these bulls varied according to the rank of the purchaser. Thus, the general bull for the living cost a viceroy or his wife fifteen dollars; archbishops and all other dignitaries, noblemen, military men, magistrates, and gentlemen whose fortune

* Depons' Travels, vol. ii. pp. 130—6.

amounted to 12,000 dollars, paid five dollars; capitalists of 6,000 dollars paid one dollar and a half; and all inferior persons, two and a half reals. For the bull *de luitage*, the four degrees of clergy were severally rated at six, three, one and a half dollars, and three reals. For the bull of composition, every one, without exception, paid two dollars and a half. The price of the bull for the dead was six reals to the first three classes above specified, and two reals for the lowest class.

The average net receipts of the intendency of Caracas for the years 1793 to 1797, was 1,369,550 dollars: the expenditure, estimated by the average of the same five years, was 1,485,793 dollars, leaving a deficiency of receipts to the amount of upwards of 116,000 dollars; so that this colony was an actual burden to the mother country. In 1804, the gross revenue amounted to 1,800,000 dollars; but the whole receipts were consumed by the expenses of administration. The same was the case with regard to the captain-generalships of Guatemala, Chili, Cuba, the Philippine and the Canary Islands.* M. Lavaysse, indeed, states, that the intendant of Caracas received annually about 1,200,000 dollars from the treasuries of Mexico and New Granada. "Thus," he says, "the expenses of that government amounted annually to nearly 750,000*l.*; for, of all the imposts levied in that country, not a farthing passed into the royal treasury of Spain." This writer states the average

* Three millions and a half of dollars, being nearly a sixth of the whole revenue, were annually remitted by Mexico to other Spanish colonies (*viz.* Cuba, Florida, Porto Rico, Louisiana, Trinidad, St. Domingo, and the Philippine Islands), towards the expenses of their internal administration. — See HUMBOLDT, *Pol. Essay*, vol. iv. pp. 234, 240; DEPONS, vol. ii. pp. 149, 50.

value of the agricultural produce annually exported from the provinces of Venezuela to Spain and Mexico, up to 1807, at about 2,000,000 of dollars; but "I am sure," he adds, "that the smugglers carried off annually, on an average, more than 2,500,000 in produce, consisting of cocoa, cotton, indigo, a little cochineal, arnotto, woods for dyeing and cabinet-makers, copper, hides, maize, salted and smoked meat and fish, oxen, horses, mules, asses, monkeys, parrots, &c., and, since 1801, a small quantity of sugar and coffee,* besides about 6 or 700,000 dollars in specie. This increases the exports to about 5,200,000 dollars. The official statements of the intendency of Caracas† specified the importations, including the contraband trade, at only 5,500,000 dollars at the same period; but those statements are far below the truth. On an average, from 1789 to 1807, the annual importations amounted to nearly 6,500,000 dollars, including smuggling. Previously to the French Revolution, we had half of this trade. The French merchants of Martinique, the Dutch of St. Eustacia and Curaçoa, the Danish of St. Thomas's, and the Swedish of St. Bartholomew, had their share in this commerce. But, since the Island of Trinidad was taken by the British in 1797, they have obtained all the trade of that country, where they have established com-

* "Ten years ago," M. Lavaysse says, "there was scarcely as much sugar made as sufficed for the local consumption. I believe I do not exaggerate when I say, that, on an average, every individual, poor or rich, consumes at least one pound of it per day. It is mixed with almost all kinds of food and drink, and is indispensable for chocolate, which is taken three or four times a day."

† Though Caracas was governed by a captain-general, who was the supreme authority in all civil and military affairs, the intendant had the direction of all financial concerns.

mercial connexions even as far as the central point of South America, in Santa Fé de Bogota, the capital of New Granada, whose bishop, a dealer in human flesh, carried on, in 1788 and 1789, the negro trade, in conjunction with an English house at Dominica."*

The town of Caracas was founded by Diego de Losada in 1567.† The Spaniards, who were attracted thither by the reputation of the two gold-mines of Los Teques and Baruta, were not at that time masters of the whole valley, and they preferred fixing on a site near the road to the coast. It is to be regretted, Humboldt thinks, that it was not built further to the east, below the junction of the Anauco and the Guayra, on that spot near Chacao, where the valley widens into an extensive plain. The bishopric of Coro was transferred to this city in 1636:‡ it was made an archbishopric in 1803. Its climate has been called a perpetual spring. "What, indeed," says Humboldt, "can we imagine more delightful, than a temperature which, during the day, keeps between 16° and 28.8°

* Lavaysse, pp. 273, 4.

† Forty-seven years after the foundation of Cumana, thirty-nine after Coro, thirty-three after Barcelona, and fifteen after Barquesimeto.

‡ "In 1636," says Mr. Semple (without, however, citing his authority), "the archbishopric (bishopric) of Venezuela was transferred from the sandy shores of Coro, to the delightful valley of Caracas, by the flight of the dean and chapter, their prelate having given them the example many years before. It was not, however, until 1693, that this transfer was finally ratified by the Spanish government. The inhabitants of Coro protested in vain against this desertion of their pastor. The pious father, as far as regarded his own convenience, had good sense and power on his side; but justice was certainly on the side of the complainants. The effects of this transaction, however, are still felt; and 'a deadly animosity exists between the two cities, for which, I fear, much blood will yet be shed.' This prediction has been but too fully realised.

of Réaumur, and at night, between 12.8° and 14.4° ,* and which is equally favourable for the cultivation of the plantain, the orange-tree, the coffee-plant, the apricot, the apple, and corn? It is to be regretted, however, that this temperate climate is generally inconstant and variable. The inhabitants complain of having several seasons in the course of the same day, and of the rapid transitions from one season to another. These oscillations are common in the temperate clime of Europe; but, under the torrid zone, Europeans themselves are so accustomed to the uniform action of exterior stimulus, that they suffer from a change of temperature of six degrees. Moreover, these variations act on the human frame, at Caracas, more violently than could be supposed from the mere indications of the thermometer. In this narrow valley, the atmosphere is in some sort balanced between two winds; one that comes from the sea-side, and is known by the name of the wind of Catia, because it blows from Catia to the west of Cape Blanco; and the other from the east, or the inland country. The wind of Catia is only apparently a western wind: it is more frequently a breeze originating in the east and north-east, which, rushing with extreme impetuosity, engulfs itself in the *quebrada* (ravine) *de Tipe*. It is loaded with moisture, which it deposits as its temperature decreases, and the summit of the Silla is consequently wrapped in clouds when the *Catia* blows in the valley. This wind is dreaded by the inhabitants of Caracas, causing headaches to those persons whose nervous system

* Humboldt states the mean temperature of the year to be from 21° to 22° cent. ther.; that of the hot season, 24° ; of the cold season, 19° ; the maximum, 29° ; the minimum, 11° . At La Guayra, the maximum is 35° , and the minimum, 21° .

is irritable. I have known some who, to shun its effects, shut themselves up in their houses, as people do in Italy when the Sirocco blows. The wind of Petare, coming from the east and south-east by the eastern extremity of the valley of the Guayra, brings from the mountains and the interior a drier air, which dissipates the clouds, and the summit of the Silla then rises in all its beauty.

Rains are extremely frequent in the months of April, May, and June: they are always brought by winds from the east and south-east. Hail occurs almost every four or five years. In the season of drought (December, January, and February,) the savannas and the turf that covers the steepest rocks are sometimes set on fire in order to improve the pasturage. These vast conflagrations, viewed from a distance, have a most singular effect, the inflamed tracts appearing, on a dark night, like currents of lava.

The small extent of the valley in which Caracas stands, and the proximity of the high mountains of Avila and the Silla, impart, Humboldt says, a stern and gloomy character to the scenery, particularly in the months of November and December. The mornings are then very fine, and the two domes of the Silla and the craggy ridge of the *Cerro de Avila* are seen relieved against a clear and serene sky. But towards evening, the atmosphere thickens, and streams of vapour, clinging to the evergreen slopes of the mountains, seem to divide them into separate zones. These vapours are afterwards condensed into large fleecy clouds, which descend and creep along the soil, so that the traveller can scarcely imagine himself to be within the torrid zone. But this gloomy aspect

of the sky is never seen in the midst of summer, and the nights of June and July are delicious. Of the two peaks which form the summit of the Silla, the eastern is the most elevated. It was formerly supposed to equal very nearly in elevation the Peak of Teneriffe; but Humboldt ascertained it to be only 1,350 toises, or about 8,100 feet above the sea-level, which is 3,300 feet lower than the Peak of Teneriffe. There is a path leading over the ridge of the mountain, near the western peak, to Caravalleda, which is frequented by smugglers; but, at the time of Humboldt's visit, neither the most experienced guides, nor the most intrepid of the militia who were accustomed to pursue the smugglers in these wild spots, had ever been on the eastern peak. From the hollow between the two peaks, which has given the whole mountain the name of the *Silla* (saddle), a crevice, or ravine, descends towards the valley of Caracas. The eastern summit is accessible only by going to the west of this ravine, over the promontory, or spur, called the *Puerta de la Silla*, and proceeding straight forward to the lower summit, not turning to the east till you have reached the hollow between the two peaks. The first half of the ascent is up a steep acclivity of gneiss rock, covered with short grass, or turf, which yields but a slippery footing, and the traveller will require to have a stick shod with iron: it is attended, however, with more fatigue than danger. After proceeding for four hours across these "savannas," at an elevation of 3,000 feet, you enter a little wood of shrubs and small trees, called *El Pejual*, from a plant with odoriferous leaves, called *pejoa* (*gualtheria odorata*), with which it abounds. Here, too, are found the family of the alpine rhododendrons, thibaudias,

andromedas, vacciniums, and bifarias with resinous leaves. The latter, the alpine rose-tree* of equinoctial America, when in blossom, gives a purple glow to the zone of evergreen-trees, as seen from the valley. The bees are very fond of its fine purple flowers, which are extremely abundant. But what gives most celebrity to this small wood, is a corymbiferous plant from ten to fifteen feet high, which the natives call *incienso* (incense), on account of the agreeable odour of the flowers. It is a species of *trixis*, extremely resinous, but differs very much in smell from the *trixis terebinthinacea* of Jamaica. At the end of this alpine wood, the traveller finds himself again in a savanna, and must climb a part of the western peak, in order to descend into the hollow. There he encounters fresh difficulties from the strength of the vegetation which covers the valley, forming a forest, or thicket, of arborescent plants, of the *musa* or plantain family. These obstacles gradually diminish as he begins to climb the barren summit. In order to reach the eastern peak, it is necessary to approach as near as possible the great precipice that descends towards Caravalleda and the coast; but this part of the way "is not at all dangerous, provided that the traveller carefully examines the stability of every fragment of rock on which he places his foot." The absence of large trees on the two rocky summits

* *Rhododendron ferrugineum*. The learned Traveller searched in vain for any plant of the genus *Rosa*. "We did not," he says, "find one indigenous rose-tree in all South America; and it appears that this charming shrub is wanting in all the southern hemisphere within and beyond the tropics. It was only on the Mexican mountains that we were happy enough to discover, under the nineteenth parallel, American cglantines."

of the Silla, Humboldt ascribes to the aridity of the soil, the violence of the winds blowing from the sea, and the frequent conflagrations; as the limit of trees in this region is 400 toises still higher. Destitute of any other vegetation than small shrubs and gramina, these vast domes of rock increase by the nakedness of their surface the apparent height of the mountain, which, in the temperate zone of Europe, would scarcely enter the limit of perpetual snow. But, though not remarkable for its height, the Silla is distinguished from every known mountain, by the enormous precipice of from 6 to 7,000 feet which it presents towards the sea, — “a phenomenon far more rare,” says the learned Traveller, “than is generally believed by those who cross mountains without measuring their height, their bulk, and their slopes. The coast forms only a narrow border; and looking from the summit of the dome, or pyramid, on the houses of Caravalleda, this wall of rock seems, by an optical illusion, to be nearly perpendicular. The real slope of the declivity appeared to me, according to an exact calculation, to be $53^{\circ} 28'$.”* Those persons whose senses are affected by looking down a considerable depth, are recommended to remain in the centre of the small flat area which crowns the summit. From this elevation, the eye gazes on an extent of sea, the radius of which is thirty-six leagues. Toward the south, a range of mountains running parallel with the equator bounds the horizon like a rampart. The western dome of the Silla conceals from view the city

* A rock of 1,500 feet perpendicular elevation has in vain been sought for among the Swiss Alps. The declivity of Mont Blanc towards the Allée Blanche does not even reach an angle of 45° . That of the Peak of Teneriffe is scarcely $12^{\circ} 30'$.

of Caracas; but the villages of Chacao and Petare may be descried in the midst of coffee-plantations, and the course of the river Guayra is seen forming a slender streak of silvery light. The narrow band of cultivated ground presents a pleasing contrast to the wild and gloomy aspect of the surrounding mountains. M. Humboldt describes, in the following terms, the feelings which were excited in his own mind by the scenery: it is not every one, however, who possesses the same calm and philosophic temperament.

“ While we take in at one view the vast landscape, we feel little regret that the solitudes of the New World are not embellished with the images of past times. Wherever, under the torrid zone, the earth, studded with mountains and overspread with plants, has preserved its primitive characteristics, man no longer appears as the centre of the creation. Far from taming the elements, all his efforts tend to an escape from their empire. The changes made by savage nations during the lapse of ages on the surface of the globe, disappear before those that are produced in a few hours by the action of volcanic fires, the inundations of mighty floods, and the impetuosity of tempests. It is the conflict of the elements which characterises in the New World the aspect of nature. A country without population appears, to the people of cultivated Europe, like a city abandoned by its inhabitants. In America, after having lived during several years in the forests of the low regions, or on the ridge of the Cordilleras,—after having surveyed countries as extensive as France, containing only a small number of scattered huts, a deep solitude no longer affrights the imagination. We become accustomed to the idea of a world that supports only plants and animals; where the savage has never uttered

either the shout of joy, or the plaintive accents of sorrow.”*

FROM CARACAS TO VALENCIA.

A FINE road, partly scooped out of the rock, leads along the right bank of the Guayra to the village of Antimano, a distance of about two leagues. Between three and four miles from Caracas, the small village of La Vega, with the white tower of its church, is seen picturesquely situated in a recess among the hills. It was originally an Indian village, but few, if any, of the aboriginal families are remaining. Ascending toward Carapa, the traveller enjoys once more a sight of the Silla, which appears like an immense dome with a cliff towards the sea. Beyond the straggling village of Antimano, which, Mr. Semple says, is capable of being converted into a good military post, “the valley of Caracas narrows rapidly, and the space between the hills seldom consists of more than the flat through which the river flows, evincing by its level surface, that, after heavy rains, it is frequently covered with water. After some time we leave the small heights, and descend upon the Guayra, which we cross and recross several times,” (Humboldt says, seventeen times,) “until having passed a little stream which falls into it, we approach Las Juntas, a few houses at the foot of the mountains. This post” (so named from the junction of the two small rivers San Pedro and Macarao, which form the Guayra,) “is between three and four

* Pers. Narr. vol. iii. pp. 511—12. Since Humboldt led the way, two young Colombians, sent out by M. Zca to prosecute researches in natural history, have ascended the Silla.—See *Letters from Colombia*, p. 22.

leagues from Caracas, and a good *pulperia* affords the traveller the means of rest and refreshment.”*

The rich valley of Caracas which we are now leaving, was formerly celebrated for its fertility : it is at present “ in a state of comparative abandonment.”† The orchards of Antimano furnished a great abundance of peaches, quinces, and other European fruits, for the market of the capital. The Otaheitan sugar-cane is cultivated here with success, but the soil has been found not very favourable to the coffee-plant, for the cultivation of which there is a general predilection, because the berry will keep, after gathering, for several years, whereas cocoa spoils in the warehouses after ten or twelve months. The largest plantations in this province are near Valencia and Rincon. The cultivation of coffee was introduced into Caracas in 1789, and before the revolutionary wars, the produce of the whole province amounted to 50 or 60,000 quintals.‡ The banks of the Guayra are covered with a fine gramineous plant called *lata* (*gynerium saccharoides*), which sometimes reaches thirty feet in height. Every hut is surrounded with enormous alligator-pear-trees (*laurus persea*), and the neighbouring mountains are covered with thick forests.

After leaving Las Juntas, the road becomes very steep and rocky, crossing part of a groupe of lofty mountains called Higuerota, which separate the longitudinal valleys of Caracas and Aragua ; “ but, as

* Semple, p. 66.

† Letters from Colombia, p. 13.

‡ Humboldt, vol. iv. p. 65. The total exportation of coffee from America to Europe, is stated to exceed 106,000,000 lb. (French). The islands of Java, Mauritius, and Bourbon, and Arabia, are supposed to supply together about 35,000,000 more.

we ascended," says Mr. Semple, "we were amply repaid by the grandeur of the prospects which every step opened to our view. We continued to ascend for upwards of four miles, when we reached the summit of the first hills which shut in the head of the valley, from which we soon after looked back for the last time on the town, presenting, at the distance of twenty miles, a singularly interesting appearance at the foot of lofty mountains. The spot from which this farewell view (or, on approaching from Valencia, this first glimpse) of Caracas is obtained, is called *Buнавista*, and is marked by a single miserable *venta* or inn.* The road from thence leads over the high grounds, and we find ourselves in the midst of a mountainous country, the valleys of which are deep, dark, and solitary, without rivers, and the sides in general but partially covered with trees. To the south-west, the ridges gradually ascend, and terminate in a lofty peak, the summit of which appeared like a black spot far above the clouds. By degrees, our road led us through a wood composed of lofty trees, such as are common in the West India Islands;† having got clear of which, we at length began to descend into a

* The table-land of Buнавista is about 5,000 feet above the level of the sea, or more than twice the elevation of Caracas, which lies to the N.W. On the S.E., the view extends to the village of Los Teques.

† Among the beautiful vegetable productions of these mountains, Humboldt specifies the *plumeria*, or red jessamine-tree (the *frangipancier* of the French West India Islands); the *figus gigantea*, a new species of fig-tree, which attains the height sometimes of a hundred feet; the *figus nymphæifolia*; the *rosa del monte*, or *palo de Cruz* (*brounea*), bearing four or five hundred purple flowers in one thyrsis, each flower having eleven stamens, and this majestic plant reaches the height of fifty or sixty feet; the *guarumo*, or silvery-leaved cecropia; the *aguatiro*, which yields a wood of a fine red colour; and various species of arborescent ferns.

valley, near the bottom of which is scattered the miserable hamlet of San Pedro, consisting of fifteen or twenty houses, with an unfinished church, which, however, serves the country for many miles round. A clear stream, nearly the size of the Guayra, runs through the bottom, near which was fought the great battle with the Indian chief Guaytaipuro, which cleared the way for the Spaniards to the valley of Caracas.* Close to the stream, is a *pulperia*, where the traveller may obtain boiled meat, cakes of maize, eggs, and *guarapo*, the favourite drink of the country, made of coarse sugar and water. San Pedro is about four leagues from Las Juntas, and seven from Caracas. It is situated in a basin in which several valleys meet, and which is almost 1,800 feet lower than the table-land of Buenavista. Bananas, potatoes, and coffee are cultivated together in the neighbourhood of the village. The valley of San Pedro separates the two great masses of mountains, Higuerota and Las Cocuyzas.* The summit of the latter is scarcely thirty feet lower than Buenavista. The road, which leads over it, begins to ascend immediately from the banks of the river, in a western direction, passing the small farms or *pulperias* of Las Lagunetas and Garavatos. After riding about two leagues, the traveller begins to have a view of the country on the other side of the chain of hills he is traversing; and soon afterwards, the descent commences. The prospect at Las Lagunetas is extensive, but somewhat monotonous. "The mountainous and uncultivated ground between the sources of the Guayra and the Tuy, is more than

* The Cocuyzas, which Mr. Semple writes *Cucuisas*, is said by some to derive its name from a tribe of Indians; but, by others, from the aloes with which it once abounded.—(SEMPLÉ, p. 73.) Higuerota is evidently derived from *higüero*, a fig-tree.

twenty-five leagues square. We there found," says Humboldt, "only one miserable village, that of Los Teques, to the S.E. of San Pedro. The soil is in a manner furrowed by a multitude of small valleys, or ravines, which, running parallel with each other, terminate at right angles in the larger valleys. The back of the mountains is of an aspect as monotonous as the ravines: it has no pyramidal forms, no ridges, no steep declivities. From Las Lagunetas, we descended into the valley of the river Tuy. This western slope of the mountains of Los Teques, which bears the name of Las Cocuyzas, is covered with two plants with agave leaves, called the maguey of Cocuyza, and the maguey of Cocuy: the latter, which belongs to the genus yucca, yields a sweet fermented liquor by distillation, and the fibres of the leaves furnish excellent cordage. Leaving the mountains, we entered a highly cultivated country, covered with hamlets and villages, several of which would, in Europe, be called towns. From east to west, in a line of twelve leagues, we passed La Victoria, San Matteo, Turmero, and Maracay, containing together more than 28,000 inhabitants. The plains of the Tuy may be considered as the eastern extremity of the valleys of Aragua, extending from Guigue on the borders of the Lake of Valencia, to the foot of Las Cocuyzas. The Tuy, flowing from those mountains, runs first towards the west; then, turning to the south and east, it takes its direction along the high savannas of Ocumare, receives the waters of the valley of Caracas, and reaches the sea near Cape Codera." The stream here, is rather more considerable than the Guayra at Caracas: after its junction with the latter, the river becomes navigable for canoes to its mouth.

Mr. Semple describes the descent to the bed of the

Try as in some places more steep and rugged than any in his whole journey, being indeed more difficult to pass than the worst between La Guayra and Caracas. It is reckoned nearly four leagues from the summit to the few scattered houses at the bottom, which bear the name of the village of Las Coucuizas (Cocuyzas.) * At the *pulperia*, Mr. Semple met a number of Indians and other travellers collected, who were proceeding to the capital. "Among the Indians," he says, "were many young women of pleasing features, who were going together in parties, to seek for work in the coffee-plantations, where they are employed in picking the berries. They told me that, in the low countries, their usual wages were about two reals, or one quarter of a dollar per day, besides a small quantity of provisions; but that in the high lands of Caracas, they would not work during the coffee season under three reals, on account of its being there so extremely cold. The men who accompanied them were in general strong and stout, but, though large, yet not so well limbed as the Indians of North America. Their colour was of a yellowish cast, inclining to copper; their hair long, coarse, and black, growing low down upon a narrow forehead; the nose at the point suddenly becoming sharp, like that of a person worn out by long illness; the eyes black, melancholy, and inexpressive; the lips thick, and the mouth somewhat large. The general air of

* The Author of Letters from Colombia says: "We dined at a place called Las Alajas (Lagunetas?) commandingly situated on this summit, the highest point of the Cordillera. The distance hence to *Las Coquises* (Cocuyzas), named after a species of aloe which grows in abundance in its vicinity, is *three* leagues, but by such a steep descent, and so bad a road, resembling more the bed of a mountain torrent than the principal communication in the country, that it was late ere we reached it." P. 16.

these Indians was heavy, sad, and sullen. Some of them, while they rested their burthens, amused themselves by blowing into a species of flute, if it can be so called, without doubt one of the rudest ever sounded by the human breath. They consisted of single joints of cane with one longitudinal opening in the side, too long to be covered with the whole palm of the hand, when applied to it. They blew into the upper part of this aperture, and according as they covered more or less of the lower part with their hands, was the tone somewhat varied. The sound was like that of the wind sighing in the forests, or among rocks: sometimes rising almost to a scream, and then dying away into a whisper. This alternate rise and fall constituted the whole of the music; which, excepting the drum of the negroes, consisting of a solid piece of wood, beat by two sticks, was the rudest I had ever heard. It seemed, however, to afford infinite satisfaction to those for whose ears it was designed: they listened in silence, and when the performers reached the height of screaming, all eyes were turned towards us, to see if we were not yet touched by such master-pieces of melody. At length the doors of the pulperia opened, and the music ceased.

“Each of these Indians carried a burthen of a great weight. They in general consisted of a kind of tall round basket, or cage, formed of cane and rushes, upwards of six feet in height, with a conical top, and divided into five or six stages, full of fowls. I tried to lift some of them, and could not estimate their weight at less than two hundred English pounds. It is in these cages that the Indians bring every kind of fowl to market, as well as monkeys and parrots, carrying them on their backs, supported by a broad strap which

goes over the forehead. In this manner they travel over mountains and valleys, more than a hundred miles, to Caracas, with poultry. The boys begin with small cages, gradually increasing the size and weight, until they are able to carry the largest, on which point there is great emulation amongst them.

“ Close behind the village runs the river Tuy, in a narrow valley, through which is the road to Victoria. Here we pass this river, or rather go splashing along its bed for about fifty yards, when, after a short ride on its bank, we pass it again. In this manner we cross or wade along the bed of the river, more than twenty-five times in the space of two leagues, with the water generally up to the girth of the saddle; such is the narrowness of the valley, and the steepness of its sides. At some places only, fertile spots have been banked in and cultivated; but no attempt has yet been made to form a road along the side of the hills, although all the objects of commerce between Caracas and the valleys of Aragoa and Valencia pass this way. In other points of view, although not highly picturesque, the natural beauties of this valley are yet sufficient to compensate the traveller for its inconveniences. Sometimes the river, divided into several channels, runs through among the trees which border the sides of the valley; then, suddenly uniting into one, it pours along a clear and rapid stream over a bed of smooth, rounded stones. Here and there are scattered huge trunks of trees, which have been brought down by the torrents, and now form bridges over some divisions of the stream. The steep sides of the valley are generally green, or covered with weeds, amongst which we can notice trees, on which are large bosses of plastered earth, the nests of a species of ant, furnished with long winding passages

of the same material, by which to reach the ground. At length the valley widens; we leave the river, and proceeding along the side of the hills on our right, enjoy for some time a view of it as it flows amid various flourishing plantations. In other parts, it is concealed from us by tall reeds or canes, which grow along the banks to the height of twenty-five or thirty feet, and are swayed to and fro by one impulse of the slightest breeze. Not far from this, we arrive at El Consejo, sometimes called Mamou, consisting of about two hundred poor houses; but which indicate, by the new appearance of many of them, that the place is rapidly increasing."

It is scarcely worth while to mention, perhaps, that this village is one of the many which are celebrated for possessing a miraculous image of the Virgin. To the traveller who comes from the east, and who has been accustomed to the moderate temperature of the mountain regions, the plains of the Tuy will seem extremely hot, the valley of Aragua being 1,200 feet lower than that of Caracas; but the nights are of a delicious coolness. Maize, bananas, and the cane are the chief articles cultivated. Indigo was formerly grown in the *Quebrada Seca*, a ravine in the chain of the coast, to the N.W. of the *hacienda del Tuy*; but the cultivation of coffee has been substituted for it as better adapted to the soil.* The road from Consejo to La Victoria runs toward the S. and S.W. We soon lose sight of the Tuy, which leads to the E., forming an elbow at the foot of the high mountains

* In this ravine, a monstrous tree (*Inura crepitans*) attracted the attention of the learned Traveller; it lay on the slope of the mountain. Though its summit had been burnt, the length of its trunk was still 154 feet; it was eight feet in diameter near the roots, and four feet two inches at the upper extremity.

of Guayraima. As the valley opens, the ground becomes more level, looking like the bottom of a dry lake; and the cultivation improves as the traveller draws near the town.

“La Victoria,” says Mr. Semple, “is a scattered town,* situated mostly in a plain, and interspersed with gardens and trees; so that it is not easy to form an accurate estimate of its extent, until after traversing it in every direction, and viewing it from the surrounding heights. Some of the principal streets contain houses equal to those of Caracas; and the general appearance, although irregular, is pleasing, conveying the idea of something between a town and a very large village. The principal officers of the militia of the neighbouring valleys of Aragoa, reside here, thus making it as it were a seat of government, and contributing materially to form the manners of the inhabitants, such as they are. A large plaza, or public square, is marked out, but the houses are not yet completed. On one side stands the principal church, which, although not finished, is, in its interior, beyond comparison the most beautiful and best-proportioned public edifice that I saw in the whole country. Its form is oblong; and, besides being large and lofty, a simplicity reigns throughout the whole, which contrasts most favourably with all the other churches of the province. This beauty will probably vanish, however, in a great degree, with the growing prosperity of the town. Its walls and pillars will become covered with pictures, gilded statues of saints,

* In 1800, however, La Victoria, with 7,000 inhabitants, still ranked only as a village (*pueblo*). The inhabitants had long solicited the title of *villa* and the right to choose a *cabildo*, but the Spanish ministry opposed their request, though the pompous title of city had been granted, at the solicitation of the Franciscans, to a few groupes of Indian huts on the Orinoco.

and altars of a great variety of forms, adorned with lamps and candlesticks. Yet even then, in my opinion, the interior of the church of La Victoria will remain an honourable monument to the memory of the architect by whom it was planned.

“ A river as large as the Tny runs near the town, and supplies abundance of water for the purposes of irrigation. The plantations round are in general well cultivated; and I here, for the first time, saw the spectacle, so novel and so interesting to a European, of wheat and the sugar-cane growing close together. The wheat, which was still green, appeared as fine as any I had ever seen in England, and was not separated, even by the slightest trench, from extensive fields of Otaheitan sugar-canes, by which it was enclosed.

“ La Victoria was originally a village peopled with Indians, whom the missionaries had collected together; but the goodness of the soil, and the advantages of the situation, rapidly collected settlers from every part, until very few descendants of the first Indian families now remain. The population is about 8,000 souls, among which are many Creole families of distinction. The love of gaming, so general in all the colonies, is here carried to great excess. At the posada where I stopped, parties assembled for that purpose from morning to night; and I daily witnessed all the agitation which this miserable passion excites. The most violent quarrels, and even bloodshed, were sometimes the result; but in general, the anger of the parties was satisfied with horrid imprecations and the most desperate threats.

“ Although generally very healthy, La Victoria suffered about six years ago from a destructive epidemic disorder, which raged throughout the valleys of

Aragoa and the plains of Valencia. Those who were taken ill, seldom escaped, and their fate was soon determined. It frequently commenced its attacks by the head; the patient dropped down without the least previous complaint, and sometimes expired in less than an hour. So numerous were these instances, that persons were employed to go about the streets, to collect the bodies of those who died thus suddenly, and carry them away for interment. I was shewn a servant of the posada, who, being subject to epileptic fits, had dropped down in the street, and been carried away with the dead. The bodies were arranged in the church previously to interment, while the priest repeated the usual prayers; in the middle of which, the epileptic man recovered from his trance, and got up as suddenly as he had fallen down. The priest was disconcerted, and dropped his book; while the congregation, no less alarmed, hurried out of the church, or fervently crossed themselves as being unable to move."

The little river Calanchas, which traverses this town, falls into the Rio Aragua. This fine country, therefore, which produces both sugar and corn, belongs to the basin of the lake of Valencia. The height of the cultivated ground is from 1,600 to 1,800 feet above the level of the sea. Except in the interior of the Island of Cuba, we scarcely ever find European corn cultivated in large quantities in so low a region within the tropics. La Victoria and the neighbouring village of San Matteo yielded, in 1800, an annual produce of 4,000 quintals of wheat. It is sown in December, and reaped on the seventieth or seventy-fifth day. Wheat yields here, as at Buenos Ayres, three or four times as much as in northern countries, that is, nearly sixteen-fold, an acre producing

from 2,400 to 2,600 lb. weight. Yet, the culture of the sugar-cane is still more productive. Two commercial roads pass through La Victoria; that of Valencia or Puerto Cabello, and that of Villa de Cura, or the *camino de los Llanos*. From the little hill of Calvario near the town, the lofty mountains of La Palma, Guayraima, Tiara, and Guiripa, are seen bounding the view to the south and south-east, and concealing the immense steppes of Calabozo. This interior chain stretches to the west, along the Lake of Valencia, toward the Villa de Cura and the mountains of Guigue. Westward, the smiling valleys of Aragua form a vast area covered with gardens, cultivated fields, clumps of wild trees, farms, and hamlets. The latitude of La Victoria is $10^{\circ} 13' 35''$ N. The town has suffered from the combined effects of the earthquake and the revolution. The remains of a number of houses, destroyed by the same calamity that desolated Caracas, are the traces of the former, while to the latter must be ascribed the striking decrease of the population. In 1804, it is said to have amounted to 7,800: in 1823, the inhabitants are supposed not to have been a third of that number.*

From La Victoria, it is a distance of about two leagues to the small but pleasant village of San Mateo. The road crosses a small ridge, from which is obtained the first view of the Lake of Valencia and the grand plain in which it lies. "This view," says Mr. Semple, "may be classed among some of the most magnificent in nature. We beheld, at break of day, a rich plain extending before us to the westward more than fifty miles, a long, regular line at a great distance, which marked the lake, and the horizon

* Letters from Colombia, p. 11.

bordered with high mountains. After descending from this little height, we saw no more of the lake, until, after passing the straggling villages of San Matteo and Tulmero (Turmero), we approached Maracay, when it again appeared not far from us." Near San Matteo are seen the last wheat fields, and the last mills with horizontal hydraulic wheels. The road to Turmero, a distance of four leagues, lies through plantations of sugar, indigo, cotton, and coffee; and tobacco is grown near that village. The regularity observable in the construction of all these villages, reminds the traveller that they all owe their foundation to monks and missions. The streets are straight and parallel, crossing each other at right angles, a great square, in which the church is erected, occupying the centre. Since the missionaries have been succeeded by vicars, the whites have mingled with the Indians, and the latter, as a pure race, gradually disappear, while the castes increase. Humboldt still found, however, four thousand tributary Indians in the valleys of Aragua. Those of Turmero and Guacara were the most numerous. He describes them as of small stature, but less squat than the Chaymas, their eyes announcing more vivacity and intelligence,—the effect, probably, of a higher degree of civilisation. "They work by the day as free labourers, and are active and laborious during the short time that they allot to labour; but what they earn in two months, is spent in one week, in purchasing strong liquors at the small inns, of which, unhappily, the numbers daily increase." On quitting Turmero, a very remarkable object at a league's distance attracted the attention of the learned Traveller, which had the appearance of a tumulus in the horizon. "It is neither a hill nor a groupe of trees, but a

single tree,—the famous *Zamang del Guayre*, known throughout the province for the enormous extent of its branches, which form a hemispheric head 576 feet in circumference. The zamang is a fine species of mimosa, the tortuous branches of which are divided by bifurcation. Its delicate and tender foliage had a pleasing effect as displayed on the azure of the sky. We stopped a long time under this vegetable roof. The place where the tree is found, is called El Guayre. The trunk of this zamang is only sixty feet high and nine feet in diameter; its real beauty consists in the form of its head. The branches extend like an immense umbrella, bending toward the ground, from which they remain at a uniform distance of twelve or fifteen feet. The circumference of this head is so regular, that, having traced two different diameters, I found them 192 and 186 feet. One side of the tree was entirely stripped of its foliage, owing to the drought: on the other side, there remained at once leaves and flowers. Tillandsias, loranthæ, cactus-pitahayas, and other parasite plants, cover its branches, and crack the bark. The inhabitants of these villages, particularly the Indians, hold the zamang del Guayre in high veneration. The first conquerors found it almost in the same state in which it now remains; and since it has been observed with attention, no change has appeared in its bulk or height. It must be at least as old as the Orotava dragon-tree.*

* The dragon-tree (*dracana draco*) of Orotava, in the Island of Teneriffe, is between fifty and sixty feet in height; its circumference near the roots is forty-five feet; and at ten feet from the ground, its diameter is twelve feet. It had attained this gigantic size when the Spaniards first landed in the island, in the fifteenth century. The trunk is divided into a great number of branches, which rise in the form of a candelabrum, and terminate in tufts of

There is something solemn and majestic in the aspect of aged trees ; and the violation of these monuments of nature is severely punished in these countries, which are destitute of monuments of art. We heard with satisfaction, that the present proprietor of the zamang had brought an action against a farmer who had had the temerity to cut off a branch : the cause was tried, and the tribunal condemned the farmer. We find near Turmero and the *hacienda de Cura*, other zamangs, the trunks of which are larger than that of Guayre, but their hemispherical head is not of equal extent."

From Turmero, the road leads for three leagues and a half over an open country covered with bushes, which afford shelter to a vast number of deer, to the large village of Maracay, formerly the centre of the indigo plantations. Fifty years ago, it was but a small hamlet ; but in 1795, seventy tradesmen had established shops here, and the population had risen to 6,000 inhabitants. M. Depons makes it amount, in 1802, to 8,400. " It is now," says Mr. Semple in 1810, " a town containing nearly 10,000 inhabitants. The principal street is more than half a mile in length, and many of the houses are built of stone. It stands near the eastern end of the lake, but not immediately upon it. Charming plantations extend from it in all directions ; and there is a general air of

leaves, like the yucca of Mexico. At the time of Humboldt's visit, it still retained sufficient vigour to produce both flowers and fruit annually ; but in July 1819, one-half of its enormous crown fell. It is now a noble ruin ; but the wound has been plastered up, the date of the misfortune marked on it, and the great care taken of " the vegetable venerable," will probably ensure its surviving another century. — See HUMBOLDT, *Pers. Narr.* vol. i. p. 142 ; *Researches*, vol. ii. p. 209 ; and GRAHAM'S *Voyage to Brazil*, p. 85.

prosperity, and still more of activity, which I was puzzled to account for, until I learned that work here is chiefly performed by *free labourers*, and that the use of slaves for the great purposes of society is, comparatively speaking, but little known." Most of the houses have gardens attached to them; a custom little known in this country, and which of itself would seem to justify the reputation for industry which is enjoyed by the inhabitants of this village.

The *anil*, or indigo, of these provinces, has always been considered as equal, if not superior, to that of Guatemala. "This branch of culture," Humboldt states, "has, since 1772, succeeded to that of cocoa, and has given way, in its turn, to that of cotton and coffee. The predilection of the colonists has been alternately fixed on each of those four productions; but the cocoa and coffee are now the only important branches of commerce. To form an idea of the immense wealth derived from agriculture in the Spanish colonies, it must be recollected, that the indigo of Caracas, the value of which amounted, in 1794, to upwards of 6,000,000 of francs, was the produce of four or five square leagues. In the years 1789—95, between 4 and 5,000 freemen came annually from the Llanos to the valleys of Aragua, to assist in the culture and fabrication of indigo. They worked during two months by the day. The indigo-plant impoverishes the soil where it is cultivated during a long series of years, more than any other. The lands of Maracay, Tapatapa, and Turmero, are looked upon as exhausted; and, indeed, the produce of indigo has been constantly decreasing. In proportion as the cultivation has declined in the valleys of Aragua, it has increased in the province of Varinas,

and in the burning plains of Cucuta, where, on the banks of the Rio Tachira, virgin land yields an abundant produce, and of the richest colour.”*

“ Soon after leaving Maracay,” continues the English Traveller, “ we began to have occasional views of the lake, through the trees and bushes which border the road. Having proceeded about three leagues, passing a few houses called Tapatapa, we arrived at *La Cabrera* (the Goat-fold), where stood a pulperia, surrounded with a few houses, at the foot of a calcareous hill. As the sun was just about to set, we ascended this eminence by a winding path formed by the numerous goats that browse upon it, and enjoyed from the top, a view the most beautiful that can be imagined. The hills of *La Cabrera* advance into the lake, and thus enable us to see nearly the whole of its extent. This beautiful sheet of water, which is upwards of 1,300 feet above the level of the sea, extends about thirty miles in a direction from E.N.E. to W.S.W., and appears to be about twelve in its greatest breadth. It resembles *Loch Lomond* in the number of small islands scattered over its bosom, amounting to twenty-seven; but the mountains which surround it, although desert, have not the wild and rugged character of those which border the Scottish lake. The southern side, even viewed at this distance,

* Pers. Narr. vol. iv. pp. 118—20. The annual mean exports of indigo from 1774 to 1778, by way of *La Guayra*, was 20,000 lb. In 1796, they had gradually risen to 740,000 lb., exclusive of the contraband trade, which is supposed to have amounted to 160,000 lb. more. The total produce of Venezuela, in the most prosperous times, was 40,000 arrobas (or a million of pounds), the value of which exceeded 1,250,000 dollars. That of Guatemala did not exceed 60,000 arrobas. “ But the East India Company, which, in 1786, did not draw from its vast possessions more than 250,000 lb., sold in London, in 1810, upwards of 5,500,000 lb.”

is highly picturesque, the water approaching close to the foot of the hills ; which, being covered with forests of mimosas and broad-leaved bananas, have a softness and luxuriance which cannot be surpassed. At both ends of the lake, the country is level, soon terminating to the eastward in the hills which shut in the valley of La Victoria, but extending to the southwest beyond Valencia, further than the eye can reach. The whole of this grand scene was now enriched with all the soft tints which the sun, just sunk below the horizon, could impart in this delightful climate. The tops of the highest mountains still glowed with fire, but a purple light reigned in the valleys, and a soberer tint was spread over the surface of the lake. Upon it appeared at a distance, a small solitary sail, being the first that in the knowledge of man was here ever spread. From a knowledge of this circumstance we viewed it with some interest, as the germ of future improvement and utility. Nothing can shew more strongly the great room for improvement in this country, than the simple fact to which I have alluded, of boats with sails having never yet been used by the inhabitants of the borders of the Lake of Valencia. Although separated from the sea by only a single range of hills, and using small boats on the lake for the purpose of fishing, it is somewhat singular, that, in the course of more than two centuries, none of them should have thought of using a sail. A native of Biscay, settled in Valencia, had now first tried the experiment, and it formed no small part of the conversation of those who were assembled at the Pulperia of La Cabrera."

This place has subsequently acquired a mournful celebrity in the annals of the revolutionary war, each party having obstinately disputed the possession of

the fort, which commands the road to Valencia and the Llanos. An arm of the granitic chain of the coast, called the promontory of Portachuelo, here stretches southward into the plain, and would almost close the valley, were it not separated by a narrow defile from the rock of La Cabrera. The latter, which now forms a peninsula, was a rocky island in the lake as lately as the middle of the last century, the waters having gradually receded; and they are still diminishing.

In the course of the next five leagues, the traveller passes the small hamlets of Mariara, Agua Blanca, Cura, San Joaquín, and Guacara. The latter, as well as Turmero, Maracay, Cura, and almost every point of the valley of Aragua, has its mountain road, terminating at one of the small ports on the coast. Throughout this distance, though the route passes very close to the lake, it is concealed from view by the luxuriant vegetation. From Guacara to Valencia is a distance of four leagues, through a country mostly open and constantly level. The whole of the immense plain on which the traveller has now entered, presents, indeed, every appearance of having formerly been covered with water. It is in general level up to the very bases of the surrounding hills, and the soil has evidently been levelled and abandoned by the waters. As the road approaches Valencia, it winds near the foot of some high and steep rocks, forming a kind of pass, immediately beyond which is gained the first view of the town, situated on small slopes, and open on every side. The country has now assumed a very arid appearance. The white limestone hills, called the *Morros de Valencia*, contribute greatly, by reflecting the rays of the sun, to increase the heat of this place. "Every thing," says Humboldt, "seems

smitten with sterility. Scarcely are a few cocoa-plants found on the banks of the *Rio de Valencia*, and the rest of the plain is bare and destitute of vegetation. The appearance of sterility is here attributed, as it is every where in the valleys of Aragua, to the cultivation of indigo.

The city of New Valencia stands about three miles to the west of the lake. It is twelve years older than Caracas, having been founded in the year 1555, by Alonzo Diaz Morena, as a station from which to advance on the valley of Caracas. It was at first dependent on Burburata, which is now nothing more than a place of embarkation for mules. Its advantageous position, as a centre of communication between Puerto Cabello and the inland towns, has raised it into a place of considerable importance. At the time of Humboldt's visit, the population was only between six and seven thousand souls, but, in 1810, it amounted to upwards of 10,000. "The inhabitants," says M. Lavaysse, "are nearly all Creoles, the descendants of ancient Biscayan and Canary families. There is great industry and comfort in this town. It is as large as a European town of 24,000 souls, because the greater part of the houses have only a ground-floor, and many of them have gardens. Fifty years ago, its inhabitants passed for the most indolent in the country. They all pretended to be descended from the ancient conquerors, and could not conceive it possible for them to exercise any other function than the military profession, or to cultivate the land, without degrading themselves. Thus, they lived in the most abject misery on a singularly fertile soil. Their ideas have since completely changed; they have applied themselves to agriculture and commerce, and the grounds in the neighbourhood are well cultivated

Valencia is the centre of a considerable trade between Caracas and Puerto Cabello." * Humboldt states, that, when he was there, many of the Whites, especially of the poorer sort, would forsake their houses, and pass the greater part of the year in their little plantations of indigo and cotton, where they might venture to work with their own hands; "which, according to the inveterate prejudices of that country, would be a disgrace to them in the town." The industry of the inhabitants was beginning to awake, and the cultivation of cotton had considerably augmented, since Puerto Cabello had been opened, as a *puerto mayor*, to vessels direct from the mother country.

There is nothing striking, according to Mr. Semple, in the appearance of the town. Some of the streets, he says, are tolerably well built, but the houses are mostly low and irregular, and the principal church, † which stands on the eastern side of the great square, is by no means equal to that of La Victoria, either in its size or its proportions. The streets are very broad; the dimensions of the *plaza mayor* are "excessive;" and, the houses being low, the disproportion between the population and the space which the town occupies, is still greater than at Caracas. The Author of Letters from Colombia thus describes the appearance which it presented in 1823, at the time that it was the head quarters of the patriot army investing Puerto Cabello. There were then about two thousand troops in the town, among whom were most of the English who had survived the several campaigns. "The entrance

* Lavaysse, p. 59.

† There is but one parish, but a second church was built in 1804 by the Canarians, and the Franciscans have a very neat church attached to their monastery.

to the town is by a good bridge of three arches, built of stone and brick, and described as the best by far of any in the Republic. The *Glorieta* attached to it, is a large circular seat, enclosing an area where the inhabitants meet in the evening for dancing and festivity. This is, in fact, the only public promenade. Of the few benefits bestowed on the country by the Spaniards, this is one. The bridge and *Glorieta* were erected by Morales not many years since. The town contains many large houses, the best of which are occupied by the military: a greater number are in ruins, presenting a further memento of the ravages committed by the earthquake. The population is not proportioned to its present size. In this, as well as in respect to its resources, the prolonged and harassing war has left behind it most melancholy memorials."

It has been regretted, and "perhaps justly," Humboldt says, that Valencia was not made the capital, instead of Caracas, under the colonial government. "Its situation in a plain, on the banks of a lake, recalls to mind the position of Mexico. When we reflect on the easy communication which the valleys of Aragua furnish with the *Llanos* and the rivers that flow into the Orinoco, and recognise the possibility of opening an inland navigation, by the Rio Pao and the Portuguesa, as far as the mouths of the Orinoco, the Cassiquiare, and the Amazons,—it will appear, that the capital of the vast provinces of Venezuela would have been better placed near the fine harbour of Puerto Cabello, beneath a pure and serene sky, than near the unsheltered road of La Guayra, in a temperate but constantly foggy valley. Situated near the kingdom of New Granada, and between the fertile corn-lands of La Victoria and Barquesimeto, the city of Valencia ought to have prospered; but,

notwithstanding these advantages, it has been unable to maintain the contest with Caracas, which, during two centuries, has drawn away a great number of its inhabitants."

The advantages of the situation have one drawback, however, in the incredible number of ants which infest the spot where Valencia is placed. Their excavations resemble subterraneous canals, which, in the rainy season, are filled with water, and become very dangerous to the buildings, by occasioning a sinking of the ground. To set against this, there is an opening (*abra*) in the cordillera of the coast, in the meridian of Valencia, by which a cooling sea-breeze penetrates into the valley every evening: the breeze rises regularly two or three hours after sunset.

LAKE OF VALENCIA OR TACARIGUA.

THE valleys of Aragua form a narrow basin, enclosed by granitic and calcareous mountains of unequal height. On the north, the *Sierra Mariara* separates this basin from the sea-coast; towards the south, the chain of Guacimo and Yusma serves as a rampart against the heated air of the steppes; while groupes of hills, high enough to determine the course of the waters, close this basin on the east and west, like transverse dikes. These hills occur between the Tuy and La Victoria, and on the road from Valencia to Nirgua. "From this extraordinary configuration of the land," says Humboldt, "the little rivers of the valleys of Aragua form a peculiar system, and, instead of bearing their waters to the ocean, are collected in an inland lake, where, subject to the powerful influence of evaporation, they lose them-

selves, if we may use the expression, in the atmosphere. On the existence of these rivers and the lake, the fertility of the soil, and the produce of cultivation in these valleys, depend. The aspect of the spot and the experience of half a century prove, that the level of the waters is not invariable: the waste by evaporation, and the increase from the waters running into the lake, do not constantly balance each other. As the lake is 1,000 feet above the neighbouring steppes of Calabozo, and 1,332 feet above the level of the ocean, it has been suspected that there are subterranean communications and filtrations; and the appearance of new islands, occasioned by the gradual retreat of the waters, has led to the apprehension that the lake may one day become entirely dry.

“ The Lake of Valencia, called by the Indians Tacarigua, excels in magnitude the Lake of Neufchatel in Switzerland, but, in its general form, has more resemblance to the Lake of Geneva, which is nearly at the same height above the level of the sea. The slope of the ground in the valleys of Aragua, tends towards the S. and W.; that part of the basin, therefore, which has remained covered with water, is nearer the southern chain of mountains, those of Guigue, Yusma, and Guacimo, which stretch toward the high savannas of Ocumare. The opposite banks of the lake exhibit a singular contrast. Those on the south are desert and almost uninhabited, and a screen of high mountains gives them a gloomy and monotonous aspect. The northern shore, on the contrary, is cheerful, pastoral, and adorned with the rich cultivation of the sugar-cane, the coffee-plant, and cotton. Paths bordered with cestrums, azedaracs, and other shrubs always in flower, cross the plain.

and join the scattered farms. Every house is surrounded with clumps of trees. The ceiba-palm with its large yellow flowers, mingling its branches with those of the purple erithryna, gives a peculiar character to the landscape. This mixture of vivid vegetable colours contrasts with the uniform tint of an unclouded sky. In the season of drought, when the burning soil is covered with an undulating vapour, artificial irrigations preserve the verdure and fertility. Here and there, the granitic rock pierces through the cultivated ground. Enormous rocky masses rise abruptly in the midst of the valley, bare and forked, but nourishing a few succulent plants, which prepare mould for cultivation in future ages. Often, at the summit of these lonely hills, a fig-tree, or a chusia with its fleshy leaves, that has fixed its roots in the rock, towers over the landscape. With their dead and withered branches, they look like signals erected on a steep cliff. The form of these mounts betrays the secret of their ancient origin: when the whole of the valley was filled with water, and the waves beat at the foot of the peaks of Mariara, the *Rincon del Diablo* (devil's wall), and the cordillera of the coast, these rocky hills were shoals or islets.*

“ According to astronomical observations, the length of the lake, in its present state, from Cagua to

* Pers. Narr. vol. iv. p. 130, &c. This contrast between the opposite shores of the lake, recalled that which is presented by the cultivated and fertile Pays de Vaud and the mountainous and half-desert country of Chablais, on the opposite side of the Lake of Geneva. “ But I do not imagine,” says the learned Writer, “ that I present the reader with clearer images or more precise ideas, by comparing our landscapes with those of the equinoctial regions. It cannot be too often repeated, that Nature under every zone, whether wild or cultivated, smiling or majestic, displays an individual character.”

Guayos, is ten leagues, or 28,800 toises. Its breadth is very unequal, no where surpassing 6,500 toises: most commonly, it is but four or five miles across.* Oviedo, in his History of Venezuela, published in 1723, gives this 'inland sea' fourteen leagues in length and six in breadth. He states, that, at a small distance from the shore, the lead finds no bottom, and that large floating islands cover the surface of the waters, which are constantly agitated by the winds. No importance can be attached to estimates which, without being founded on any measurement, are expressed in leagues, reckoned in the colonies at 3,000, 5,000, and 6,650 *varas*.† What is more worthy of attention, is the assertion of the same writer, that the town of *Nueva Valencia d'el Rey* was built, in 1555, at the distance of half a league from the lake, and that the proportion of the length of the lake to its breadth, was as seven to three. At present, the town of Valencia is separated from the lake by level ground of more than 2,700 toises, which Oviedo would doubtless have estimated as a league and a half, and the length of the lake is to its breadth as 10 to 2·3, or as 7 to 1·6. The appearance of the soil between Valencia and Guigue, the little hills that rise abruptly in the plain, some of which (as *El Islote* and *La Isla de la Negra*, or Caratapona) have even preserved the name of islands, sufficiently prove that the waters have retired considerably since the time of

* M. Depons, on "the concurrent testimony of" his "own eyes, and that of the intelligent Spaniards residing in the vicinity," makes it extend thirteen leagues and a half from E.N.E. to W.S.W., and its greatest breadth, he says, is four leagues. (vol. i. p. 74.)

† The latter is the *legua nautica* (2054 toises), 20 in a degree. Cisneros, in 1787, makes the lake 18 leagues long and about six broad; and another Spanish writer assigns it 10 Castilian leagues, by 3½ in breadth.

Oviedo. With respect to the change in the general form of the lake, it appears to me improbable that, in the seventeenth century, its breadth was nearly half its length. The situation of the granitic mountains of Mariara and Guigue, and the slope of the ground, which rises more rapidly toward the N. and S. than toward the E. and W., are alike repugnant to this supposition.

“I have no doubt,” continues the learned Traveller, “that, in very remote times, the whole valley, from the foot of the mountains of Cocuyza to those of Torito and Nirgua, and from La Sierra de Mariara to the chain of Guigue, of Guacimo, and La Palma, was filled with water. Every where, the form of the promontories, and their steep declivities, seem to indicate the shore of an alpine lake, similar to those of Styria and Tyrol. The same little helicites, the same valvæ, which now live in the Lake of Valencia, are found, in layers of three or four feet, in the islands, as far as Turmero and *La Concesion* near La Victoria. These facts undoubtedly prove a retreat of the waters; but nothing indicates that this retreat has continued from that remote period to our days. The valleys of Aragua are one of the parts of Venezuela the most anciently peopled; and yet, there is no mention in Oviedo, or any other old chronicler, of a sensible diminution of the lake. Ought we simply to suppose, that this phenomenon escaped their observation, at a time when the Indian population far exceeded the white, and when the banks of the lake were less inhabited? Within half a century, and particularly within these thirty years, the natural desiccation of this great basin has excited general attention. We find vast spaces of land that were formerly inundated, now dry, and already cultivated with plantains, sugar-

canes, or cotton. Wherever a hut is erected on the bank of the lake, we see the shore receding from year to year. We discover islands which, in consequence of the retreat of the waters, scarcely begin to be joined to the continent, as the rocky island of Culebra, on the side of Guigue; other islands already form promontories, as the Morro between Guigue and Nueva Valencia, and La Cabrera, south-east of Mariara; others now rise in the islands, like scattered hills. Among these last, so easily recognised at a distance, some are only a quarter of a mile, others a league from the present shore. I shall cite as the most remarkable, three granitic islands, thirty or forty toises high, on the road from Hacienda de Cura to Aguas Calientes; and at the western extremity of the lake, the Serrito de Don Pedro, Islote, and Caratopona. On visiting two islands* entirely surrounded by water, we found, in the midst of brushwood, on small flats of four, six, and even eight toises height above the surface of the lake, fine sand mixed with helices, anciently deposited by the waters. In each of these islands may be perceived the most certain traces of the gradual sinking of the waters. But still further, and this accident is regarded by the inhabitants as a marvellous phenomenon, in 1796, three new islands appeared to the east of the island Caiguira, in the same direction as the islands Burro, Otama, and Zorro. These new islands, called by the people *los nuevos Penones*, or *las Aparecidas*, form a kind of banks, with surfaces quite flat. They rose already, in 1800, more than a foot above the *mean level of the waters.*"

* "Isla de Cura and Cabo Blanco. The promontory of Cabrera has been connected with the shore ever since the year 1750 or 1760, by a vale which bears the name of Portachuelo."

It is manifest, that the lake cannot have been constantly contracting at the present rate, from the first discovery of the country. For ages, the waters had contained themselves within the same limits, the equilibrium being maintained between the supply of the rivers and evaporation; and the first great change in the boundaries of the lake must be referred to a period long antecedent to historical times. The inhabitants, little acquainted with the effects of evaporation, have imagined that the lake must have a subterranean outlet; and even M. Depons is disposed to adopt this opinion as highly probable. "The waters of twenty rivers,"* he says, "are discharged into it without any visible outlet. It is six leagues from the sea, and the space which separates them is filled with inaccessible mountains. It is the more difficult to account for its having no visible outlet, as it receives rivers on all sides, which proves it to be a perfect basin." Modern science, however, has shewn, that evaporation is a cause quite adequate to explain the phenomenon of lakes fed by rivers, yet having no channel by which to discharge their waters.† The Lake of Tacarigua is 222 toises (1332 feet) above the ocean; the Caspian Sea is 54 toises (324 feet) lower than the ocean. With regard to both, the same hypothesis of a subterranean gulf or channel has been

* M. Humboldt says, "twelve or fourteen," of which he enumerates, the *Ríos* de Aragua, Turmero, Maracay, Tapatapa, Aguas Calientes, Mariara, Cura, Guacara, Guataparó, Valencia, and the Cano Grande de Cambury. Most of these deserve only the name of torrents or brooks.

† See the account of the Dead Sea in *Mod. Trav.*, Palestine, p. 233; and the Valley of Salt, Syria, &c. vol. i. p. 309. See also the account of the lakes Ak-Shehr and Bulwudun, *ib.*, vol. ii. p. 309. And for the account of the diminution of the Mexican lakes, see Mexico, vol. i. p. 263, &c.

had recourse to, though it is well known, that fluids, communicating by a lateral channel, must find the same level.

The present extent of surface in the Lake of Tacarigua is 106,500,000 square toises. The volume of water which it receives from the various torrents, it would be difficult to ascertain. It must vary considerably, not only as the streams are greatly swelled in the rainy season, but as, during the drought, a large portion of water is diverted from the rivers, for the purpose of irrigating the plantations. No mention, however, is made by any of the writers we have consulted, of the precise increase and decrease of the lake at different seasons of the year. But if heretofore the waste occasioned by evaporation has been constantly repaired by an equal supply from the rivers, how are we to account for the depression of the waters of the lake, which has been perceptibly going forward for the last fifty years? "Without having recourse to any occult cause," says M. Depons, "the reason of that rapid and continual diminution is found in the increased use which the inhabitants have made of the waters of the rivers to refresh their plantations. These waters, diffused over a considerable surface, evaporate, or become an elementary principle of vegetation, and are consequently lost to the general reservoir, which, as it receives less water, must necessarily decrease." M. Humboldt adverts to other circumstances which throw further light on the phenomenon. "The changes which the destruction of the forests, the clearing of the plains, and the cultivation of indigo, have produced, within half a century, in the quantity of water flowing in, together with the evaporation of the soil and the dryness of the atmosphere, present," he remarks, "causes sufficiently powerful

to explain the successive diminution of the lake. By felling the trees that cover the tops and the sides of mountains, men in every climate prepare at once two calamities for future generations,—the want of fuel, and a scarcity of water. Trees, by the nature of their respiration, and the radiation from their leaves in a sky without clouds, surround themselves with an atmosphere constantly cool and misty. They affect the copiousness of springs, not, as was long believed, by a peculiar attraction for the vapours diffused through the air, but because, by sheltering the soil from the direct action of the sun, they diminish the evaporation of the water produced by rain. When forests are destroyed, as they are every where in America by the European planters, with an imprudent precipitation, the springs are entirely dried up, or become less abundant. The beds of the rivers, remaining dry during a part of the year, are converted into torrents, whenever great rains fall on the heights. The sward and moss disappearing with the brushwood from the sides of the mountains, the waters falling in rain, are no longer impeded in their course; and instead of slowly augmenting the level of the rivers by progressive filtrations, they furrow, during heavy showers, the sides of the hills, bear down the loosened soil, and form those sudden inundations that devastate the country. Hence it results, that the destruction of forests, the want of permanent springs, and the existence of torrents, are three phenomena closely connected together. Countries that are situate in opposite hemispheres, Lombardy, bordered by the chain of the Alps, and Lower Peru, enclosed between the Pacific Ocean and the cordillera of the Andes, exhibit striking proofs of the justness of this assertion.

“ Till the middle of the last century, the mountains that surround the valleys of Aragua, were covered with forests. Great trees, of the families of mimosa, ceiba, and the fig-tree, shaded and spread coolness along the banks of the lake. The plain, then thinly inhabited, was filled with brushwood, interspersed with trunks of scattered trees and parasite plants, enveloped with a thick sward, less capable of emitting radiant caloric than the soil that is cultivated and therefore not sheltered from the rays of the sun. With the destruction of trees, and the increase of the cultivation of sugar, indigo, and cotton, the springs and all the natural supplies of the Lake of Valencia, have diminished from year to year.”

In fact, Humboldt says, since the increase of agricultural industry in the valleys of Aragua, the little rivers that run into the lake, can no longer be considered as real supplies during the first six months of the year. They remain dried up in the lower part of their course, owing to the trenches made by the planters to water their grounds. Moreover, the *Rio Pao*, a pretty considerable river which formerly joined the *Cano de Cambury*, having a course from south to north, has been turned into a new channel, and, instead of contributing its waters to the lake, now falls ultimately into the Portuguesa, a branch of the Apure. “ At the end of the seventeenth century, the proprietor of a neighbouring plantation thought proper to dig, at the back of the hill, a new bed for the *Rio Pao*. He turned the river, and, after employing part of the water for the irrigation of his fields, he caused the rest to flow at a venture toward the S., following the declivity of the Llanos. The river has scooped itself out a bed so deep and broad, that, in the rainy season, when the *Cano Grande de Cambury*

inundates all the land to the N.W. of Guigue, the waters of this *Cano*, and those of the Lake of Valencia, flow back into the *Rio Pao* itself; so that this river, instead of adding water to the lake, tends rather to carry it away." These circumstances, together with the great droughts which prevailed for the ten years preceding Humboldt's visit to the equinoctial regions, seem sufficiently to account for the diminution of the lake; but the apprehension that it would speedily be dried up, he treats as wholly chimerical. The question, indeed, was at one time under discussion at Caracas, whether it would not be advisable, in order to give greater extent to agriculture, to conduct the waters of the lake into the Llanos, by digging a canal towards the Pao. The project would not be impracticable; but how, he remarks, can it be doubted for a moment, that the lake alone spreads fertility over this country? "Deprived of the enormous mass of vapours which the surface of the waters sends forth daily into the atmosphere, the valleys of Aragua would become as dry and barren as the surrounding mountains."

The mean depth of the lake is from twelve to fifteen fathoms; the deepest parts are not above forty fathoms. In general, the southern part of the basin is deeper than the northern. The temperature at the surface, in the month of February, was constantly from 23° to 23.7° (cent. ther.), — a little below the mean temperature of the air. This tropical lake possesses one striking advantage over those of the Alps, in being full of islands, which embellish the scenery by the picturesque form of their rocks and their rich vegetation. These islands are fifteen in number, and form three groupes; viz. to the north, near the shore, the *Isla de Cura*; to the S.E., *Burro*,

Horno, *Otama*, *Sorro*, *Caiguira*, and *Nuevos Penones*, or the new *Aparecidas*; to the N.W., *Cabo Blanco*, or *Isla de Aves*, and *Chamberg*; to the S.W., *Brucha* and *Calebra*; in the centre of the lake rise, like small detached rocks, *Vagre*, *Fraile*, *Penasco*, and *Pan de Azucar*. They are partly cultivated and extremely fertile. *Burro*, the largest, is two miles in length, and is inhabited by some mestizoes, who rear goats, and live on the milk, with bananas, cassava, and a little fish, seldom visiting the neighbouring shore. The lake is in general tolerably well stocked with fish, but there are only three kinds, the *guavina*, the *vagra*, and the *sardina*, the flesh of all of which is soft and insipid. The *guavina* is extremely voracious, and destroys the other two species, which descend into the lake by the streams that flow into it. The *tava*, a small species of crocodile, from three to four feet in length, is also said to contribute to the destruction of the fish. It is believed to be otherwise harmless. There are no large alligators in the lake, or in the rivers that flow into it, though that dangerous animal abounds a few leagues off, in the streams that flow into the Apure, or the Orinoco, or immediately into the Caribbean Sea, between Puerto Cabello and La Guayra. The island of Chamberg is remarkable for its height. It is a rock of gneiss, with two summits joined in the form of a saddle, rising two hundred feet above the surface of the water. The whole effect of the lake and of its richly cultivated shores, is highly picturesque, particularly after sunset, when thousands of herons, flamingoes, wild ducks, and other aquatic birds, cross the lake to roost in the islands. Then, too, very frequently, the broad zone of mountains that closes the horizon, may be seen covered with fire. The inhabitants, in order to pro-

duce fresher and finer grass, set fire to the meadows ; and these vast conflagrations, extending sometimes over a tract six thousand feet in length, and reaching to the very summits of the mountains, which abound with gramineous plants, appear like streams of lava overflowing the ridge. When reposing on the banks of the lake in one of those beautiful evenings peculiar to the tropics, it is delightful, Humboldt says, to contemplate in the waves that beat the shore, the reflection of the red fires that inflame the horizon. M. Depons says : “ The birds which constantly abide in the vicinity of the lakes, afford continual delight by the diversity of their species, the vivid colours of their plumage, and the variety of their notes, some of which are exquisitely melodious.” A great many reptiles of the lizard kind are found on the borders, one of which, the *iguana*, is eaten by the natives. The immediate vicinity of the lake has been deemed unhealthy, but it becomes so, Humboldt says, only in times of great drought, when the retreating waters leave a muddy sediment exposed to the ardent heat of the sun. The lilaceous plants and other aquatic vegetation on its banks, remind the European of the marshy shores of his own lakes, though, on examination, they are found to differ specifically.

Among the rivers that fall into the lake, some originate in thermal springs, which gush out at three points of the granitic cordillera of the coast ; near Onoto, between Turmero and Maracay ; near Mariara, to the N.E. of the Hacienda de Cura ; and near Las Trincheras, on the road from Valencia to Puerto Cabello. In ascending the small river Cura, the mountains of Mariara are seen advancing into the plain in the form of a vast amphitheatre, composed of perpendicular rocks crowned with rugged peaks. It

is the central point of this range which bears the strange name of *El Rincon del Diablo*. The range stretching eastward, is called *El Chaparro*; that to the westward, *Las Viruelas*. Nothing can be more solemn and picturesque than this groupe of mountains half-covered with vegetation. During the rains, a considerable sheet of water rushes, in the form of a cascade, from the central cliffs. In the eastern range, which is much less lofty, is found the *quebrada de aguas calientes* (ravine of hot waters). There are five springs (*pozos*), which are slightly impregnated with sulphuretted hydrogen, and vary in temperature from 56° to 59° (cent. ther.) It is only in the rainy season that the waters form a torrent, and their heat is then greatly diminished. South of the ravine, in the plain that extends toward the shore of the lake, another hydro-sulphurous spring gushes out, of much lower temperature. The water is collected in a circular basin, surrounded with large trees, which is from fifteen to eighteen feet in diameter, and three feet deep. "The unhappy slaves," says Humboldt, "throw themselves into this bath at the close of the day, when covered with dust from having worked in the neighbouring fields of indigo and sugar-canes. Though the water of this bath is from 12° to 15° hotter than the air, the Blacks call it refreshing. We ourselves experienced its salutary effects. After getting out of the bath, while, half-wrapped in a sheet, we were drying ourselves in the sun, according to the custom of the country, a little man of the mulatto race approached us. After bowing gravely, he made us a long speech on the virtues of the waters of Mariara, on the numbers of sick by whom they have been visited for some years past, and on the fortunate situation of the

springs between two towns, Valencia and Caracas, where the neglect of moral conduct is increasing every day. He shewed us his house, a little hut covered with palm-leaves, and situate in an enclosure at a small distance, on the bank of a rivulet that communicates with the bath. He assured us, that we should there find all the conveniences of life ; nails to suspend our hammocks, ox-leather to stretch over benches made of reeds, earthen vases always filled with cool water, and what, next to the bath, would be most salutary to us of all, those great lizards (*iguanas*) the flesh of which is known to be a refreshing aliment. We judged from his harangue, that the poor man took us for sick persons who were come to stay near the spring. His counsels and offers of hospitality were not altogether disinterested. He entitled himself ‘ the inspector of the waters and *pulpero* * of the place.’ Accordingly, all his obliging attentions to us ceased as soon as he heard that we were simply come to satisfy our curiosity ; or, as they express it in the colonies, which are the land of idleness, *para ver, no mas*, ‘ to see, and nothing more.’ ”

The hot springs of *La Trinchera*,† which are found three leagues to the north of Valencia, are supposed to be, next to the springs of Urijino in Japan, the hottest in the world. Instead of gushing out to the south of the mountains, like those of Mariara and Onoto, they issue from the chain itself, almost at its northern declivity, and form a rivulet, which, even during seasons of the greatest drought, is two feet deep and eighteen wide. The temperature of

* Proprietor of a *pulperia*, or little shop, where catables and drinkables are sold.

† So called from the mud fortifications thrown up by some French freebooters who sacked Valencia in 1677.

the water is 90.3° cent. ther. Eggs plunged into it are boiled in less than four minutes. The spring is strongly impregnated with sulphuretted hydrogen, and the evaporation forms an incrustation of carbonate of lime. A luxuriant vegetation surrounds the basin. Mimosas, clusias, and fig-trees have pushed their roots into the bottom of a pool the temperature of which is 85°, and an arum rises in the very middle of a pool the temperature of which is 70°. The foliage of these trees, though extended over the surface of the water, which is constantly sending up hot vapour, displays the most beautiful verdure. Forty feet distant from the point where the springs gush out at a temperature of 90°, other springs are found entirely cold; and the natives shewed M. Humboldt, that, by digging a hole between the two rivulets, they could procure a bath of any given temperature. The sick who come to La Trincherá to use the vapour-bath, form a sort of arbour over the spring with branches of trees and slender reeds, on which they stretch themselves naked. The *Rio de Aguas Calientes* runs towards the N.E., and becomes, near the coast, a considerable river, abounding with large alligators, and contributing, by its inundations, to the insalubrity of the coast.

At the *hacienda* of Mocundo, on the shores of the lake, Humboldt saw four camels employed in the conveyance of sugar-canes to the mill. Three of the four were born in America. This invaluable animal had been recently introduced into these provinces from the Canary Islands. Soon after the conquest, a Biscayan, Juan de Reinaga, carried some of these animals at his own expense to Peru. They were at the time very common in the south of Spain. Acosta saw some of these at the foot of the Andes towards the end

of the sixteenth century ; but, as little care was taken of them, they scarcely ever bred, and the race soon became extinct. The introduction of the camel, attempted by Reinaga, was viewed with jealousy and alarm by the *encomenderos*,* or lords proprietors, who held the Indians in slavery, and let them out to travellers as beasts of burden ; and, in consequence of their interested representations, the colonies were deprived of the services of this useful animal, by which the inland communication would have been greatly facilitated. “ A few hundreds of camels,” Humboldt remarks, “ spread over the vast surface of America in hot and barren places, would in a few years have a powerful influence on the public prosperity. Provinces separated by steppes, would then be in effect brought nearer to each other ; several kinds of merchandise would fall in price on the coast ; and, by increasing the number of these ‘ *ships of the desert*,’ new life would be given to the industry and commerce of the New World.”

The cultivation and population of the plains increase as the traveller approaches Cura and Guacara on the northern side of the lake. In 1800, the valleys of Aragua contained, within an area thirteen leagues long by two wide, more than 52,000 inhabitants, which gives 2,000 to the square league, — a relative population almost equal to that of the most populous parts of France. The cotton of Aragua is esteemed finer than that of Cartagena, St. Domingo, or the West India Islands, and inferior only to that of Brazil. The plant grows wild on the borders of the lake. This production is likely to become in future a most important article of exportation. During his

* See Mexico, vol. i. p. 204.

stay at Cura, Humboldt was surprised to witness in every direction, not only the progress of agriculture, but the increase of a free laborious population, accustomed to toil, and too poor to rely on the assistance of slaves. White and mulatto farmers had every where small separate establishments. "Our host," (Count Tovar), he says, "whose father had a revenue of 40,000 piasters, possessing more lands than he could clear, distributed them among such poor families as chose to apply themselves to the cultivation of cotton. He endeavoured to surround his ample plantations with freemen, who, working as they chose, either on their own land, or in the neighbouring plantations, supplied him with day-labourers at harvest-time. Nobly occupied with the means best adapted to extinguish slavery among the Blacks in these provinces, Count Tovar flattered himself with the double hope of rendering slaves less necessary to the landholders, and of furnishing the freedmen with opportunities of becoming farmers. On departing for Europe, he had parcelled out and let a part of the lands of Cura, which extend toward the west at the foot of Las Viruelas. On his return to America four years after, he found on this spot, then in fine cultivation, a little hamlet of thirty or forty houses, which is called *Punta Zamuro*. The inhabitants are almost all Mulattoes, Zamboes, or free Blacks. This example of letting out land, has happily been followed by several other great proprietors. The rent is ten piasters for a *vanega* of ground, and is paid either in money or in cotton. I love to dwell on these details of colonial industry, because they prove to the inhabitants of Europe, what to the enlightened inhabitants of the colonies has long ceased to be doubtful,—that *the continent of Spanish America can*

produce sugar and indigo by free hands, and that the unhappy slaves are capable of becoming peasants, farmers, and landholders." *

FROM VALENCIA TO PUERTO CABELLO.

FROM Valencia, it is a distance of about four leagues, over the plain, to the guard-house at the foot of the Sierra which must be crossed in proceeding to the coast. The road then immediately becomes a steep ascent for two leagues. Near the summit is a small *venta*, where travellers usually halt, from which is obtained a delightful view of the lake and plain of Valencia, seen between the rugged summits of intervening hills, while, to the westward, plains, bordered by mountains, stretch away into the horizon. During the whole ascent, only a few stunted trees appear, but, having reached the summit, the traveller soon finds himself in a forest. "I had never before," says Mr. Semple, "passed over a road which, without affording very extensive prospects, was yet so calculated to inspire grand and gloomy ideas. The view was bounded by high mountains, except towards the north, which afforded at intervals a partial glimpse of the sea. All around were peaked hills and deep valleys, clothed with trees. At every step, we seemed to be descending, still more and more, into an immense amphitheatre, on the summit of which the clouds rested. The silence of the forest was broken, at intervals, by the cries of unknown birds, and, as we descended still more and more, by the fall and the rushing of water on our left. We looked down, and beheld an immense chasm, at the bottom of which the tallest trees appeared small, and where a considerable stream, by its windings and changes of form,

* Pers. Narr. vol. iv. pp. 126—8.

gave unceasing variety to the views. Sometimes it appeared below us, like a long, narrow lake of great depth, terminating at one end in a noisy cascade. Sometimes it rushed along through a deep channel of solid rocks, which it had evidently worn for itself, in the course of ages, or strayed amongst huge blocks of granite, which interrupted its course. The first objects which we saw to break the wildness of the scene, were solitary huts, formed of branches of trees, plastered with clay, surrounded by a little spot of cleared ground. These huts gradually increased in number, and improved in appearance as we descended, until they terminated at length in handsome houses and plantations. We passed the torrent by a bridge, still in an unfinished state, and found that the scenery had here lost none of its interest. I have seen many glens, but none to equal this, which winds from the summit of the lofty mountains almost to the sea-shore. At length we left the woods, and, after a continued descent of five leagues, came in sight of Puerto Cabello, situated in a flat close to the sea, amidst marshes, full of mangrove trees, and overflowed with the tide. We were struck with the mean appearance of the houses, which were all low, and, in many instances, seemed little superior to the huts we had passed in the woods. In the whole place we could not find a *posada*.”*

Puerto Cabello is, next to Cartagena, the most im-

* This road is reckoned a distance of eight leagues. Humboldt speaks of a new road that was being made to Puerto Cabello, through an *abra* in the cordillera, passing the farm of Barbula, and by an eastern branch of the ravine, which, he says, would be so much shorter as to require only four hours to reach the port. Las Trincheras is in this road, which is almost a continual descent from the banks of the lake to the coast. Mr. Semple makes no mention of it.

portant fortified place on this coast. It stands in lat. $10^{\circ} 28' N.$, long. $69^{\circ} 10' W.$ The town is quite modern. The port, Humboldt says, is one of the finest in the world: art has had scarcely any thing to add to the advantages which the nature of the spot presents. It is thus described by the English Traveller: "Puerto Cabello stands upon a small neck of land, which has been cut through, and thus formed into an artificial island. A bridge crosses this cut, and affords entrance to the original city, which is small, but tolerably well built and fortified. The harbour is formed by a low island to the north-west, and banks covered with mangrove trees, which shelter it on every side. It is deep and capacious. An excellent wharf, faced with stone, allows of vessels of a large burthen being laid close alongside of it; and as they can be easily and securely fastened to the shore, anchors are here seldom necessary. To this circumstance, in which it resembles the harbour of Curaçoa, Puerto Cabello is said to owe its name, as implying that vessels may there be secured by a single hair.* The island is strongly fortified; and the batteries, being low and mounted with heavy cannon, are capable of making a good defence. Towards the land, the works are not so strong, and the whole is within reach of bomb-shot from the first heights to the southward of the town, some of which are fortified.

"This harbour and La Guayra form a striking contrast. Here vessels lie, as in a small smooth lake, while the waves break high upon the outside of the

* Humboldt, however, is more disposed to adopt the opinion which derives the name of the place from Antonio Cabello, "one of the fishermen with whom the smugglers of Curaçoa had formed an intimate connexion, at the time when the first hamlet was constructed on this half-desert part of the coast."

island and along the shore. In return for this, the worm makes great ravages in the bottom of such ships as are not coppered. In no part of the world is it more destructive; and a small vessel, left unattended, in a very few months would founder at her moorings from this cause alone.

“ The plain in which Puerto Cabello stands, is bounded on the south by mountains, and on the north by the sea, and is no where more than two miles in breadth. To the west, a small river descends from the mountains, and empties itself into the sea. To the south-east of the town, the flats are annually flooded by the rains; and the exhalations from them are very probably the cause of the destructive fevers which so frequently rage here in the summer and autumn months. Few strangers can then visit this port with impunity, or at least without great danger; and there have been instances of vessels losing the greater part of their crews in a very short time. This, however, has not prevented the rapid increase of the place, which was originally confined within the works upon the small peninsula, out of which no houses were for some time allowed to be built. At first, low huts were erected, under the express condition of being demolished in case of an enemy's approach; and in a long interval of years, during which no hostile force appeared, these huts were gradually enlarged and increased. The suburbs now exceed the town in population and extent, but still retain their low and mean appearance, and are subject to the original stipulations in case of danger. A great proportion of the houses have no upper story; and the population being almost entirely coloured, a stranger is more apt to consider the whole as a large Indian village, than as part of a European settlement.

“About a league to the westward of Puerto Cabello, is the small bay of Burburata, used as a port previously to the establishment of the former. The road to it leads across the marshy plain of Puerto Cabello to the side of the hills, along which it winds for some time, until it again crosses a sandy flat, and brings us to the opening of the valley of Burburata. The bottom of this valley is level, or very gently sloped towards the sea, and consists of a deep, rich mould, every where covered with banana trees, mimosas, triplaris, and plantations of sugar, coffee, and cacao. The latter are easily distinguished by the tall erithrynas which shade the *cacao theobroma*, and are covered with clusters of red flowers. As they rise with a straight stem, they permit a free circulation of air beneath, while their tufted tops effectually exclude the scorching rays of the sun. Houses and clusters of huts are scattered about among the trees, and a kind of church marks what may be considered as the centre of the village of Burburata. A small stream serves to irrigate the numerous plantations. The population is entirely a coloured race, in which is a great proportion of Indian blood. The air of the valley is moist and hot; and snakes abound in the luxuriant herbage which every where covers the soil. One of these crossed my path, and another, large and yellow with dark spots, lay basking beneath a bush, into which he glided on my approach. Mountains, covered with wood, enclose this fertile flat on every side, except a small opening towards the sea. Here, lower down, was formerly the principal port on the coast. Vessels drawing ten or twelve feet water can anchor in a bight near the shore; the bottom is a fine white sand; and Burburata is still the chief port from which the mules, horses, and

cattle of Venezuela, are exported to Jamaica and other islands of the West Indies."

Of the tract of country which stretches westward of Valencia, towards the Lake of Maracaybo, comprising the provinces of Coro, Truxillo, and Merida, little is known. Humboldt states generally, that it displays a singular variety of scenery, and he gives the following outline of its physical features. A chain of low mountains, extending from the *nevado* of Merida to the N.E., separates the head waters of the Apure and Orinoco from the streams which fall into the Caribbean Sea, or the Lake of Maracaybo. On this dividing ridge are built the towns of Nirgua, San Felipe el Fuerte, Barquesimeto, and Tocuyo. The first three are in a very hot climate, but Tocuyo is built in a valley sufficiently elevated to allow of the cultivation of wheat and the rearing of sheep.*

The valleys which traverse this ridge are fertile, but hot and pestilential. The principal valleys are those of the rivers Aroa and Yaracuy, which, but for the miasmata that infect the atmosphere, would probably be scarcely less populous than the valleys of Aragua. The Aroa rises to the west of San Felipe, and, running eastward, enters the sea opposite the islands called *Los Cayos de San Juan*, beyond the bay of Burburata. In a lateral valley, opening into that of Aroa, the Indians have gold-washings, and the soil conceals rich copper ores, which no one has yet attempted to extract. The ancient copper-mines of Aroa, after being long neglected, had recently been

* Barquesimeto and Tocuyo lie in the road from Caracas to Bogota, and will be subsequently noticed.

wrought anew at the time of Humboldt's visit, and yielded from 1,200 to 1,500 quintals a year. The "Caracas copper" is said to be preferable to that of either Sweden or Chili. Some silver ore had recently been discovered between Aroa and Nirgua, in the mountain of San Pablo. Grains of gold are found in all the mountainous lands between the Yaracuy and the towns of San Felipe, Nirgua, and Barquesimeto; especially in the *Rio de Santa Cruz*, in which the Indians have sometimes found lumps of the value of four or five dollars. The Yaracuy rises 40 leagues S. of the Aroa, but does not become navigable till within two leagues of the town of San Felipe, where the produce of the valley of San Felipe and the plain of Barquesimeto is shipped for Puerto Cabello: it falls into the bay of Burburata, between that port and the point of Chichiribiche. The city of *Nueva Segovia de Barquisimeto* was originally founded, in 1552, on the banks of the River Buria, in the vicinity of the gold mines of the valley of Nirgua; but the insalubrity of the climate led to its being thrice removed. It now stands on an elevated plain, 77 leagues W.S.W. of Caracas, in lat. $9^{\circ} 35'$, long. $69^{\circ} 43'$ W.* Wheat, the cane, cocoa, and coffee, are cultivated in the fertile lands in its vicinity.

Nirgua is inhabited wholly by Zamboes, the mixed caste formed by negroes and Indians. The whole municipality is composed of men of colour, to whom the king of Spain was accustomed to give the title of "his faithful and loyal subjects, the Zamboes of Nirgua." The lieutenant *de justicia mayor*, was the only

* Depons makes it only forty leagues from Caracas, and one hundred and fifty from Santa Fé; Lavaysse says, ninety leagues from Caracas, and a hundred from Bogota!

officer who could be a white. This "republic of Zamboes," as the Spaniards styled it in derision, originated in an insurrection among the negro-miners of the *real* (mine) *de San Felipe de Buria*, which led to a short-lived petty African monarchy, like that of the Palmares negroes in Brazil.* King Miguel had the boldness to attack the town of Barquesimeto, but was repulsed by Diego de Losada, and perished in the fight. The city is now in decay; the population is stated by Depons at about 3,000 souls. He describes the inhabitants as robust, strong, and healthy, but lazy and addicted to drunkenness, theft, and every species of vice. Nirgua is in lat. 10° N., long. 71° 10' W. of Paris; about 48 leagues W. of Caracas.

LAKE OF MARACAYBO.

FROM Barquesimeto to the eastern shore of the Lake of Maracaybo, there extend barren savannas partly covered with cactus, and loaded with pestilential miasmata. No marshy ground is found there, but several phenomena indicate a disengagement of sulphuretted hydrogen. On a mountainous and uninhabited spot on the bank of the Rio Catatumbo, not far from its junction with the Rio Sulia, is found the luminous phenomenon known under the name of the *farol* (lantern) of Maracaybo, which is distinguished at the distance of 40 leagues, and serves as a light-house to navigators. In the *Llano* of Monai, travellers are shewn a cave (*Cueva del Serrito de Monai*), where "it is usual to frighten them by setting fire to the inflammable gas which is constantly

* See Mod. Trav., Brazil, vol. i. p. 44.

accumulated in the upper part of the cavern." In the *Quebrada de Moroturo*, there has been discovered a stratum of black clay, which emits a strong smell of sulphur, and inflames spontaneously when slightly moistened, and exposed for a length of time to the sun's rays : the detonation of this muddy substance is said to be very violent.* These insalubrious regions are separated by the mountains of Tocuyo and Nirgua from the plains of the Portuguesa, and the steppes of Calabozo.

The Lake of Maracaybo is a little mediterranean, communicating with a gulf of the same name, by a channel about two leagues broad and eight long. Its waters, nevertheless, are sweet, and fit for use ; but, when the wind blows inward with violence, the sea-water rushes into the lake, and communicates to them a brackish property. The lake is not subject to tempests ; the north-wind, however, occasionally produces a short and broken swell, which does injury to the smaller craft. Depons describes it as nearly of the figure of a decanter, extending from south to north, with its neck communicating with the sea.

* " On the *north-west* shore of the Lake of Maracaybo, is an extensive mine of asphaltum, of the same nature as that of Trinidad." — LAVAUSSE, p. 41. " To the north-east of the lake, in the most barren part of the borders, at a place called *Mena*, there is an inexhaustible mine of mineral pitch (*pix montana*). The bituminous vapours which are exhaled from this mine are so easily inflamed, that, during the night, phosphoric fires are continually seen, which, in their effect, resemble lightning. It is remarked, that they are more frequent in great heat than in cool weather. They go by the name of ' the Lantern of Maracaybo,' because they serve for a light-house and compass to the Spaniards and Indians, who, without the assistance of either, navigate the lake." — DEPONS, vol. i. p. 70. For an account of the *Yanar*, or volcanic flame of Deliktash, apparently a similar phenomenon, see *Syria* and *Asia Minor*, vol. ii. p. 245.

“ Its length, from the bar to its most southern recess, is, according to Oviedo, 50 leagues; its greatest breadth, 30; and its circumference, upwards of 150. The lake is easily navigated, and has depth of water for vessels of the greatest burden. All the produce and provisions of the interior, intended for consumption or shipping at Maracaybo, are conveyed by the rivers which discharge themselves into it.” Of these, there are above twenty, the most considerable of which are the Sulia (or Pamplona River), the Motatan, the Chama, the Catumbo, the Cuernos, the Torondoy, and the Perija.* All the different species of fish found in the rivers of South America, Depons says, abound in this lake; but the tortoise is not found here. There are *manatis* (sea-cows), of an extraordinary size. At a short distance from the lake there are still found several barbarous tribes. “ The sterility,” says the last-mentioned Traveller, “ and, what is worse, the noxious atmosphere of the borders of the lake, dis-

* The river Sulia, the chief of those which fall into the lake, rises in the province of Pamplona, and runs constantly northward, collecting the waters of many rivers: after forming a great lake, called El Baradero, near the city of Grita, it enters the Lake of Maracaybo by three mouths. This river now gives its name to a department comprising the whole basin of the lake. Lavaysse apparently refers to this river under the name of Subio. “ The most considerable rivers that fall into the lake,” he says, “ are the Subio and the Matacau (Motatan?); for the Souba and the Cuervos (Cuernos), though wide at their mouths, are only creeks fed by torrents.” (p. 40.) The latter, however, according to Alcedo, is a branch of the Palmas. Besides the rivers mentioned above, Alcedo's Dictionary enumerates the San Pedro, the Paurate, the Catumbo, which, it is stated, enters by three mouths, the Arinas, the Rio de Oro, the Sucui, and the Astillero; all, except the first, coming from the west. We in vain look for these in the maps. *Instead* of these names, we find in the map prefixed to Capt. Cochran's Travels, the Segba, the Rio Palmas, the Rio de la Cruz, the Arancao, the Perija, the Rio Negro, the Olaga, and the Pampano.

courage culture and population. The Indians themselves have at all times observed them to be so unhealthy, that instead of fixing their abodes there, they preferred dwelling on the lake itself. They chose for the stakes of the huts which they inhabited on the water, a very durable kind of wood, of the same species as the iron-wood. The Spaniards found on this lake several villages, built without order or design, but with solidity, to which they give the name of *Venezuela*. Alfinger, in the rage of devastation, carried desolation and death among the peaceable inhabitants. Only four villages escaped. It was for a long time believed, that these small settlements were formed upon the waters as a protection from ferocious beasts or some hostile nation. That this idea was erroneous, is now apparent from the refusal of the Indians, who live on the waters, to fix their habitation on land. Those villages are called *Lagunillas*, *Misoa*, *Tumopora*, and *Moporo*. They have a church upon the water, under the care of a curate, whose zeal is unequivocal, as it is rare for a person not to have his health affected within fifteen days after his arrival, and still rarer for his life to be prolonged beyond six months. These Indians go ashore in search of provisions, but their principal subsistence is derived from fishing and hunting wild ducks.

“The goodness of the soil in the western part has induced some Spaniards, regardless of the insalubrity of the air, to fix their habitations there, in order to raise cocoa and provisions. These settlements, which are very much dispersed, were not able to command sufficient funds for laying the foundation of a village, much less of a town. There is but one chapel, placed nearly in the centre of the scattered habitations, and a curate for performing divine service

and administering the sacraments. The southern extremity of the lake is uncultivated and uninhabited. The northern part is quite as hot as the other parts, but incomparably healthier. The city of Maracaybo is situated on the left bank to the west: opposite to it are two villages; the one called *Punta a Piedra*, inhabited by Indians, the other, *Allagracia*, further to the north, by Spaniards."

When the name of Venezuela was extended to the whole district of Caracas, the country surrounding the lake received that of the province of Maracaybo. *Santa Ana de Coro*, the original capital, was the first settlement of the Spaniards, after Cumana, on this line of coast. It takes its name from the aborigines, the Coriana Indians. The *audiencia* of San Domingo sent Juan de Ampues there in 1529, in the capacity of governor, principally with a view to restrain the robberies and cruelties of the Spanish traders who infested those coasts. Scarcely had the country begun to recover under his administration, when, by virtue of the contract made between Charles the Fifth and the Weltzers, it became for eight years the head quarters of a band of unprincipled adventurers, who spread desolation through the country. On its reverting to the Spanish government, it continued to be the residence of the governor till 1576. Coro had been made an episcopal city in 1532. The bishopric, as has been mentioned, was not formally transferred to Caracas till 1693. The town stands in a dry, sandy plain, destitute of water, and where no vegetation is seen, but the prickly pear and the "thorny taper," — sure signs of a sterile soil; but, at the distance of three leagues from the city, there are hills and valleys of some fertility. It stands near the isthmus which unites the peninsula of Paragoana to the main land,

one league from the sea, 80 leagues W. of Caracas, 33 N. of Barquesimeto, and 55 from Maracaybo; lat. $11^{\circ} 24'$ N., long. $69^{\circ} 40'$ W. Ten thousand persons of all colours, including scarcely 200 slaves, formed the population in 1807. All labour is performed by the Indians. The whites were distinguished by their indolence and loyalty. Many gloried in being descended from the first conquerors, and they would have felt their honour stained by any species of industrious exertion. Hence, there was at Coro "more nobility than wealth." As the city has neither spring nor aqueduct, water is brought in barrels from the distance of half a league. "Hence-tofore," says Depons, "the houses were well built. They cannot now be looked at without exciting melancholy, bearing the marks of the ravages of time and misery. Those of the Indians are still more pitiable. The streets, although straight, are not paved. The only public edifices consecrated to religion, are two parish churches, one of which still bears the title of a cathedral, a Franciscan monastery, containing seven or eight monks, and three chapels." The little commerce that is carried on, is in mules, goats, hides, sheep-skins, cheese, &c., from the interior, which are shipped for the neighbouring islands, especially Curacao, whence are brought back dry goods. The graziers of Paragoana smuggle over, also, numbers of beasts to that island. To these articles, Lavaysse adds indigo and cochineal from the district of Carora.

San Juan Bautista del Portillo de Carora is situated thirty leagues south of Coro, in the savannas, fifteen leagues east of the Lake of Maracaybo, twelve north of Tocuyo, and eighteen north-west of Barquesimeto, which lies in the road from Carora to Caracas. The town is tolerably well built, and contains a handsome

parish church, a Franciscan convent, and a hermitage. The temperature, though hot, is salubrious; but the soil is dry and sterile. It abounds, however, with the Indian fig (*cactus opuntia*) and other thorny plants, as well as some balsam-trees; and the vegetation supplies excellent pasture, especially for goats. There are numerous herds of oxen, which are bred chiefly for their hides, as well as of asses and mules; and the dwarf deer of South America is very common. The inhabitants, who are, for the most part, Mestizoes, Mulattoes, and Indians, are very industrious. They are graziers, tanners, saddlers, shoemakers, weavers, ropemakers; and make excellent packthread and very handsome hammocks of the fibre of the *agave fœtida*; carrying on a great trade in these articles and other products of their industry, with Coro, Maracaybo, and Cartagena, whence they are shipped for the neighbouring colonies. The town and district contained, in 1807, a population of about 10,000 souls.

Maracaybo, or *Nueva Zamora*, situated on the left bank of the lake, at six leagues from the sea, was founded in 1571. It stands in the midst of a sandy plain, without any stratum of vegetable earth, in lat. 10° 30' N., long. 74° 6' W. of Paris. The climate is intensely hot, and, during July and August, almost insupportable, the air feeling as if it issued from a furnace; yet, it is reckoned healthy, because there prevail no endemic complaints. The south wind, however, which sometimes blows in August and September, is much dreaded, and is called *El Virason* (the arrow), on account of its insalubrity. Violent storms are frequent. The thunder is dreadful, and the lightning frequently strikes and consumes houses, ships, and every thing that attracts it. The deluges

of rain which sometimes attend these tempests, produce rapid torrents which injure the town. The inhabitants have remarked, that, when these storms do not occur, earthquakes, still more dreaded, are likely to happen instead. The population in 1801 was computed to be 24,000, including about 2,000 Spanish refugees from St. Domingo. The slaves were calculated not to exceed 5,000; and the freed Blacks were very few, but the trades were chiefly carried on by them. The parish church is large and handsome. Alcedo mentions four monasteries, Augustinian, Mercedarian, Dominican, and Franciscan, four nunneries, and a hospital of San Juan de Dios; but the Franciscan convent is the only one, according to Depons, now existing. The only water is that of the lake, which is by no means bad in quality, except when the strong breezes of March and April drive up the water of the sea; and the rain-water collected in cisterns and jars. For upwards of twenty leagues towards the *serrania* (or mountain ridge), there is no other water for even the cattle, than the rain-water preserved in the wells (*xalhueys*) dug for that purpose. Depons draws a very favourable picture, in some respects, of the character of the inhabitants.

“The habit,” he says, “which the citizens of Maracaybo contract from their infancy, of sailing on the lake, whether for pleasure, fishing, or the transport of the articles its southern borders produce, gives them, at a very early period, a taste for navigation. Soon finding in this place no means of indulging in the practice of it, they repair in crowds to Puerto Cabello, Guayra, and the other ports, where a more active navigation serves at the same time to give them employment, and gratify their ambition. They perform with equal ability, coasting, or longer voyages.

In those intervals when war, suspends their commercial enterprises, they embark on board privateers. But, whatever line they pursue, they never belie the reputation they possess of being as good soldiers as sailors. The neighbourhood of the lake, in the waters of which they exercise themselves in their early years, renders them as excellent swimmers as expert divers.

“ Those who resist the attractions of the sea, raise herds of cattle, or take care of those of their fathers. Nothing better evinces their aptitude for this species of occupation, than the immense number of beasts with which the savannas of Maracaybo are covered. The principal ones are those of Jobo, Ancon, Palmares, and Cannades. I ought to mention, that there is more merit in raising cattle in the savannas of Maracaybo, than in any other place in these provinces; because, having neither rivers nor ponds that never dry up, drought occasions the death of many, in spite of the precautions they take, in cases of this sort, to drive them towards those parts where they can with convenience water them.

“ But what does more honour to the inhabitants of Maracaybo, is their singularly lively wit, their application to literature, and the progress they make, notwithstanding the wretched state of public education among them. While the Jesuits were charged with the instruction of youth, their schools produced individuals who spoke Latin with an elegance and fluency rarely met with; possessing perfectly the art of oratory, and masters of the rules of poetry; writing their language in a style as remarkable for its purity as the boldness of its ideas, and the order and perspicuity with which they were presented; in a word, endowed with every qualification that constitutes the man of letters. The expulsion of these learned preceptors

took from the youth of Maracaybo every means of instruction.

“ Notwithstanding the barrenness of resources which education finds at Maracaybo, we there see young persons so favoured by nature, that the slightest elementary instruction at once develops in them all the faculties which, in Europe, do not manifest themselves until after long study and the care of the best teachers. What adds to the singularity of the phenomenon is, that this excess of natural genius frequently becomes prejudicial to the tranquillity of the families of Maracaybo ; for it is enough for many of these young men to know the conjugation and government of the verbs, to be qualified to write pieces, whose subtilty would appear to the knavish advocate, better than the productions of the counsel who establishes his reasons on the principles of the civil law. Such suits as should never have been instituted, or which the tribunals would instantly have decided, become interminable and ruinous, by the sophisms with which these scribblers envelop in darkness, causes the most simple and clear. This disease, very prevalent at Maracaybo, is by no means a stranger to other Spanish territories. The penal laws which the legislature has been forced to enact, to lessen the number of these imps of chicane, whom they call *pendolistas* (quick writers), prove that the evil is general enough.

“ In allowing that the inhabitants of Maracaybo have activity, courage, and genius, we have nothing more to say in their favour. They are reproached with having very little regard to their word, and with thinking themselves not bound by their signature, until after they have in vain endeavoured to release

themselves from it by law. Their reputation in this respect is so well established, that all strangers whom business draws to Maracaybo, say, it is much better to form connexions of interest with the women than with the men, because they alone have there that good faith and firmness which, in every other part, is the peculiar heritage of the men.

“ Since the course of description has led me to speak of the women of Maracaybo, I ought not to let it be unknown, that they are in their youth paragons of modesty ; in marriage, faithful wives and excellent mothers of families. Affection for their husbands, the cares of their households, and the education of their children, are the objects which divide all their moments, and occupy all their solicitude.”

As M. Depons does not attempt to account for this very remarkable purity of morals in this particular settlement, we can only express our hope that his account may still be found applicable.

The government of Maracaybo, after it was made a distinct province, was bounded, on the west, by the government of Rio Hacha ; southward, it extended more than 100 leagues to that of Santa Fé, but the fertile land does not commence for more than 25 leagues south of the city ; on the east, it was bounded by Venezuela. At first, the seat of government was fixed at Merida ; but ultimately, Maracaybo became the capital, and gave its name to the province. The districts of Coro, Truxillo, Merida, and Maracaybo, now form separate provinces, comprehended in the department of Sulia.

Truxillo is said to have been one of the most beautiful and opulent cities in the country, before it was pillaged and burned by the pirate Gramont in 1678. The

greater part of the population then fled to Merida. Yet, the salubrity of the air, and the fertility of the soil, Depons says, have gradually attracted thither a population of 7,600 persons. The town is built in a very narrow valley, shut in by two mountains, which allow of only a single street in one part, and of two streets in the widest part. The adjacent lands produce sugar, cocoa, indigo, coffee, and wheat; the mutton is larger and finer than that of any other part of the province; the cheeses are held in high estimation; and the inhabitants are famed for the cleansing and carding of their wool. There is also a considerable trade in preserves, which are made by the women. The intercourse chiefly pursued is with Carora, across the pestiferous *llanos* of Llonay, and with Maracaybo, by the lake. The town contains a parish church, a chapel of Calvary, two monasteries, Dominican and Franciscan, a Dominican nunnery, and a hospital dedicated to Our Lady of Chiquinquira.

Merida, situated to the south-west of Truxillo, was founded in 1558, under the name of *Santiago de los Caballeros de Merida*. It stands in an elevated plain, surrounded by three rivers, the Mucujun (or Mucusin) on the east, the Albarregas on the south-west, and the Chama on the south, which, at the distance of three leagues, receives the other two. None of them are navigable. The climate is temperate, but variable, and liable to heavy rains: it is favourable to the cultivation of wheat, barley, and both the European and tropical fruits and vegetables. The cocoa and coffee raised in the environs are esteemed of excellent quality. Merida is an episcopal city, and possesses a college or seminary; it contained also a parochial church, four chapels, two monasteries, Augustinian and Dominican, and a nunnery of the

order of Santa Clara. The population is stated by Depons at 11,500. It is now reduced to between 3 or 4000. The inhabitants bore a high character for industry and intelligence, and there are said to have been no lazzaroni. There was a carpet-manufactory, and the natives fabricated various cotton and wool-len articles.*

PROVINCE OF VARINAS.

It was only so late as 1787, that the city of Varinas was detached from the government of Maracaybo, to become itself the seat of a separate government, comprehending a portion also of the province of Caracas. This fine territory, which, previously to that period, had been almost entirely neglected by the mother country, has since then increased very considerably both in cultivation and population, and contained, in 1807, upwards of 140,000 inhabitants. It still includes, however, besides the capital, only three towns, San Jayme, San Fernando d'Apure, and Pedraza; and may therefore be considered as little better than an immense wilderness. The city of Varinas, situated in lat. $7^{\circ} 33' N.$, long. $70^{\circ} 22' W.$, had a population of 12,000 souls; San Jayme 7,000; San Fernando 6,000; and Pedraza 3,000. "This country, in fact," M. Lavaysse remarks, "is still in its infancy, though its territory is not inferior in fertility to any other part of South America. It is only within the last twenty years, that sugar, coffee, indigo, and cotton, have been cultivated there. Formerly, the inhabitants grew only cocoa and the provisions necessary for their own consumption. Their articles

* See, for a further description, the route from Caracas to Bogota.

of exportation were cattle and tobacco, the latter famous in every market in the world. The inhabitants lead a pastoral life, surrounded with numerous herds. Though in the midst of abundance, great natural wealth, and all the necessities of life, they have not the means of purchasing any thing belonging to the luxury of dress, furniture, and European liquors, because they have no direct communication with the neighbouring colonies; and being placed in the interior of the country, they are obliged to sell their produce and cattle, at a miserable price, to the smugglers of San Tomé de Angostura, and of Caracas. But, when the present contest terminates, and freedom of trade follows, it will become one of the richest and best-peopled in this part of the world; for, in general, its climate is not less healthy than its soil is fertile. There are few indigenous natives in this province: they are almost all assembled in a mission of the Andalusian capuchins, situated at five or six leagues from San Fernando de Apure. I believe there may be about 600 of them. Other civilised Indians live with the whites and mestizoes in the pastures. There are scarcely 6,000 slaves in the population of the province of Varinas, and these are only slaves in name, for they live in the greatest familiarity with their masters, and are equally well fed, lodged, and clothed."

The principal channel of trade has hitherto been through Valencia to Puerto Cabello. There is a line of communication from Buria, through Merida, to the Lake of Maracaybo; but the distance is considerable, and the road almost impracticable. The communication with Coro through Barquesimeto is easier, but the distance is too great for commercial purposes. "There can be little doubt," Col. Hall

says, "that, in an improved state of the country, the water-carriage by the Apure and the Orinoco will be preferred, from the great difficulty and expense of transporting bulky articles of produce, on mules, to any of the northern ports." From Valencia to Varinas is a distance of 210 miles.* Almost the whole of this extensive tract consists of excellent pasture-lands. The borders of the rivers are finely wooded, and will be adapted, when cleared, to the growth of every species of tropical produce, while the neighbouring mountains furnish the productions of temperate climates. The principal rivers are navigable during the rainy season. The San Domingo and the Masperro descend directly into the Apure. The Bruno, the Guanán, and almost all the smaller rivers, unite with the Portuguesa, which falls into the Apure near San Fernando, whence the navigation is easy and direct to Angostura on the Orinoco.

The road from Valencia to San Fernando is described by Humboldt, who, with his friend Bonpland, traversed these immense savannas, and descended the Apure to its junction with the Orinoco in lat. 7° .

* Col. Hall gives the following itinerary from Varinas:

Leagues.		Leagues.	
From Varinas—		Brought over ----	
To Yucca	2½	To San Rafael	2
— Bananías	1½	— La Ceyba	4
— Bocono	4	— San José	3½
— Tucupis	4	— San Carlos	6½
— Guanare	3	— Tinaco	4½
— San Rafael	5	— La Palma	3
— Ospinos	4½	— Tinaquilla	3½
— Aparición	3	— Carabobo	7
— Acarigua	4½	— Tomito	2
— Araure	1½	— Valencia	3
— Aguas Hansas	2		
	<hr/> 35½		<hr/> 66½

We shall now again avail ourselves of his interesting narrative.

FROM VALENCIA TO SAN FERNANDO D'APURE.

THE Travellers bade adieu to the Valley of Aragua on the 6th of March (1807), passing over a richly cultivated plain, and crossing ground on the south-west side of the Lake of Valencia, which the waters had left uncovered. The soil was covered with calabashes, water-melons, and plantains. Between the ancient islets of Don Pedro and La Negra, they saw numerous bands of araguatoes, or howling monkeys,* going in procession from one tree to another with extreme slowness. A male was followed by a great

* The araguato of Caripe, Humboldt describes as a new species of the genus *stentor*, to which he gives the name of *alouate ourse*, or *simia ursina*. "It resembles a young bear. It is three feet long, reckoning from the top of the head, which is small and very pyramidal, to the beginning of the prehensile tail. Its fur is bushy and of a reddish brown; the breast and belly are both covered with a fine hair; the face is of a blackish blue, covered with a fine and wrinkled skin; the beard is pretty long; and, notwithstanding the direction of the facial line, the angle of which is only 30°, the araguato has, in the look and the expression of the countenance, as much resemblance to man as the marimondo (*simia belzebuth*) and the capuchin of the Orinoco (*simia chiropuces*). Its eye, voice, and gait denote melancholy. I have seen young araguatoes brought up in Indian huts: they never play like the little sagoins; and their gravity was described with much simplicity by Lopez de Gomara in the beginning of the sixteenth century. 'The *Aranata* of the Cumanese,' says this Author, 'has the face of a man, the beard of a goat, and a grave behaviour—*honrado gesto*.' I have observed, that monkeys are more melancholy in proportion as they have more resemblance to man: their petulant gaiety diminishes, as their intellectual faculties appear to increase." — *Pers. Narr.* vol. iii. pp. 170—2. The araguato of Aragua appears to be of the same species: the tongue is placed on a large boney drum, and the air, driven with force into this drum, produces the mournful sound which distinguishes the araguatoes.

number of females, several of which carried their young on their shoulders. The uniformity with which they execute their movements, is described to be very striking. "Whenever the branches of the neighbouring trees do not touch, the male that leads the band, suspends himself by the prehensile part of his tail, and, letting fall the rest of his body, swings himself till he reaches the neighbouring branch. The whole file perform the same action on the same spot." The assertions of Ulloa and other travellers respecting their sometimes forming a chain, in order to reach the opposite side of a river, the learned Traveller considers as unworthy of credit. The Indians have either a hatred or a predilection for certain races of monkeys. The little sagoins are their favourites, but the aragua-toes, on account of their mournful aspect and their monotonous howlings, are detested by them. They maintain that there is always one that chaunts as leader of the band; and the observation, Humboldt says, is pretty accurate. "During a long time, one solitary and strong voice is generally distinguished, which is succeeded by another voice of a different pitch. We may observe the same instinct of imitation among frogs and almost all gregarious animals. The missionaries assert, moreover, that when a female araguato is on the point of bringing forth, the choir suspends its howlings till the moment of the birth. I could not myself judge of the accuracy of this statement, but I believe it to be not entirely destitute of foundation. I have observed that, when some extraordinary incident, for instance, the moans of a wounded araguato, fixed the attention of the band, the howlings were suspended for some minutes." In damp and stormy weather more especially, their howling is heard to a considerable distance. A great number will seat

themselves on a single tree in the forests of Cumana and Guiana; and the force and volume of their blended voices are then astonishing.

The Travellers passed the night at the village of Guigne, 1,000 toises distant from the Lake of Valencia,—lat. $10^{\circ} 4' 11''$. The road then begins to ascend the mountains, and from a table-land of nearly 2,000 feet elevation, the last view is obtained of the valleys of Aragua. At the end of five leagues is the village of Maria Magdalena, and two leagues further, San Luis de Cura. This town, commonly called *Villa de Cura*, stands in a very dry and barren valley,* at an elevation of nearly 1,600 feet above the sea-level, in lat. $10^{\circ} 2' 47''$. The surrounding country, with the exception of some fruit-trees, is almost destitute of vegetation. The population, in 1800, was only 4,000 souls, but among them were found many persons of cultivated minds. The town is celebrated for the possession of a wonder-working idol, called *Nuestra Senhora de los Valencianos*, which was the subject of a long and scandalous contest between Cura and the neighbouring town of *San Sebastian de los Reyes*. Some grains of gold are occasionally found in the beds of the torrents which traverse the neighbouring mountains.

From the extensive table-land of the Villa de Cura, there are eight leagues of rather steep declivity to the beginning of the llanos, which are a thousand feet lower than the valley of Aragua. The geological features of the country now undergo a striking variation,† the gneiss of the coast being succeeded by

* So says Humboldt. Lavaysse represents it as situated in a fertile, though uncultivated valley, with a clayey soil.

† The *Sierra de Mariara*, in the cordillera of the coast, is a coarse-grained granite. To this, in the basin of Aragua, succeeds

metalliferous, serpentine, and trappean rocks. The road descends toward the bed of the Rio Tucutunemo, the longitudinal valley of which lies east and west, and then turns into a transverse valley, very narrow in several parts, passing the villages of Parapara and Ortiz. After skirting the *Cerro de Flores*, it enters the valleys of *Malpasso* (so called from the badness of the road,) and *Piedras Azules* (blue stones, from the colour of the slate which predominates). At the *Mesa de Paja*, in lat. 9°, the traveller enters the basin of the *Llanos*.

THE LLANOS OR PLAINS.

“THERE is something awful, but sad and gloomy,” remarks the learned Traveller, “in the uniform aspect of these steppes. Every thing seems motionless. Scarcely does a small cloud, as it passes across the zenith, and announces the approach of the rainy season, sometimes cast its shadow on the savanna. I know not whether the first aspect of the *llanos* excites less astonishment than that of the Andes. Mountainous countries, whatever may be the absolute elevation of the highest summits, have an analogous physiognomy; but we accustom ourselves with difficulty to the view of the *Llanos* of Venezuela and Casanare, the *Pampas* of Buenos Ayres and Chaco, which recall to mind continually, during journeys of twenty or thirty days, the smooth surface of the ocean. I had seen the plains of La Mancha in Spain, and the real steppes that extend from Jutland, through

gneiss and mica-slate, which, near Guigue and Cura, are auriferous. South of Cura, are found, in succession, transition green slate, black limestone, serpentine and gruenstein, amygdaloid, and phonolite.

Laneberg and Westphalia, to Belgium; but the plains of the West and North of Europe present but a feeble image of the immense *llanos* of South America. All around us, the plains seemed to ascend toward the sky; and that vast and profound solitude appeared like an ocean covered with sea-weeds. According to the unequal mass of vapours diffused through the atmosphere, and the various temperature of the different strata of air, the horizon was, in some parts, clear and distinct, in other parts, undulating, sinuous, and as if striped. The earth was there confounded with the sky. Through the dry fog and strata of vapour, the trunks of palm-trees were discerned at a great distance. Stripped of their foliage and their verdant tops, these trunks appeared like the masts of a ship discovered at the horizon.

“ The *llanos* and the *pampas* of South America are real steppes. They display a beautiful verdure in the rainy season, but, in the time of great drought, assume the aspect of a desert. The grass is then reduced to powder, the earth cracks, the alligator and the great serpents remain buried in the dried mud, till awakened from their long lethargy by the first showers of spring. These phenomena are observed on barren tracts of fifty or sixty leagues in length, wherever the savannas are not traversed by rivers; for, on the borders of rivulets, and around little pools of stagnant water, the traveller finds at certain distances, even during the period of the great droughts, thickets of mauritia, —a palm the leaves of which, spread out like a fan, preserve a brilliant verdure.

“ The chief characteristic of the savannas or steppes of South America is, the absolute want of hills and inequalities, the perfect level of every part of the soil. Accordingly, the Spanish conquerors, who first

penetrated from Coro to the banks of the Apure, did not call them deserts, or savannas, or meadows, but plains, *llanos*. Often, in a space of thirty square leagues, there is not an eminence of a foot high. This resemblance to the surface of the sea strikes the imagination most powerfully, where the plains are altogether destitute of palm-trees, and where the mountains of the shore and of the Orinoco are so distant, that they cannot be seen, as in the *Mesa de Pavones*. A person would be tempted there, to take the altitude of the sun with a quadrant, if the *horizon of the land* were not constantly misty, on account of the variable display of refraction. This equality of surface is still more perfect in the meridian of Calabozo, than toward the east, between the Cari, La Villa del Pao, and Nueva Barcelona; but it reigns without interruption from the mouths of the Orinoco to La Villa de Araure and Ospinos, under a parallel of 180 leagues in length; and from San Carlos to the savannas of Caqueta, on a *meridian* of 200 leagues.* It particularly characterises the New Continent, as it does the low steppes of Asia, between the Borysthenes and the Wolga, between the Irtisch and the Obi. The deserts of central Africa, of Arabia, Syria, and Persia, Cobi, and Casna,† present, on the contrary, many inequalities, ranges of hills, ravines without water, and rocks that pierce the sands.

“The *llanos*, however, notwithstanding the apparent uniformity of their surface, furnish two kinds of inequalities, that do not escape the observation of an attentive traveller. The first is known by the name of *Bancos*: they are real shoals in the basin of the

* “In strictness from N.N.E. to S.S.W.”

† “Or Karak, between the Iaxartes and the Oxus.”

steppes, fractured strata of sandstone or compact limestone, standing four or five feet higher than the rest of the plain. These *banks* are sometimes three or four leagues in length; they are entirely smooth, with a horizontal surface; their existence is perceived only by examining their borders. The second species of inequality can be recognised only by geodesical or barometric levellings, or by the course of rivers. It is called *mesa*, and is composed of small flats, or rather convex eminences that rise insensibly to the height of a few toises. Such are, toward the east, in the province of Cumana, on the north of the Villa de la Merced and Candelaria, the *Mesas of Amana*, of *Guanipa*, and of *Jonoro*, the direction of which is south-west and north-east; and which, in spite of their inconsiderable elevation, divide the waters between the Orinoco and the northern coast of Terra Firma. The convexity of the savanna alone occasions this partition: we there find the *divortia aquarum* as in Poland, where, far from the Carpathian mountains, the plain itself divides the waters between the Baltic and the Black Sea. Geographers, who suppose that there exists a chain of mountains wherever there is a line of division, have not failed to mark one in the maps, at the sources of the Rio Neveri, the Unare, the Guarapiche, and the Pao. Thus, the priests of Mongul race, according to ancient and superstitious custom, erect *oboes*, or little mounds of stone, on every point where the rivers flow in an opposite direction.

“The uniform landscape of the llanos, the extreme paucity of inhabitants, the fatigue of travelling beneath a burning sky and an atmosphere darkened by dust, the view of that horizon which seems for ever to flee before us, those lonely trunks of palm-trees which

have all the same aspect, and which we despair of reaching because they are confounded with other trunks that rise by degrees on the visual horizon; all these causes combined, make the steppes appear far greater than they are in reality. The planters who inhabit the southern declivity of the chain of the coast, see the steppes extend toward the south, as far as the eye can reach, like an ocean of verdure. They know, that, from the Delta of the Orinoco to the province of Varinas, and thence, by traversing the banks of the Meta, the Guaviare, and the Caguan, they can advance 330 leagues* in the plains, first from east to west, and then from north-east to south-east beyond the equator, to the foot of the Andes of Pasto. They know, by the accounts of travellers, the Pampas of Buenos Ayres, which are also llanos covered with fine grass, destitute of trees, and filled with oxen and horses become wild. They suppose, according to the greater part of our maps of America, that this continent has only one chain of mountains, that of the Andes, which stretches from south to north; and they form a vague idea of the contiguity of all the plains, from the Orinoco and the Apure to the Rio de la Plata and the Straits of Magellan."

After passing two nights on horseback, (for to travel over these bare savannas in the heat of the day, is next to impossible,) the Travellers arrived before the third night at the little grazing-farm (*hato de ganado*), called *El Cayman* (the alligator), otherwise, *La Guadalupe*. Here they found an old negro slave governing the establishment in the absence of the master. "He told us," says Humboldt, "of herds comprising

* This is the distance from Tombuctoo to the northern coast of Africa.

several thousands of cows; yet, we asked in vain for a bowl of milk. We were offered, in the shell of the tutumo, some yellow, muddy, fetid water, drawn from a neighbouring pool. The indolence of the inhabitants of the llanos is such, that they do not dig wells, although they know, that almost every where, at ten feet deep, fine springs are found in a stratum of red sandstone. After having suffered one half of the year from inundations, they patiently expose themselves, during the other half, to the most distressing want of water. The old negro advised us to cover the cup with a linen cloth, and drink as through a filter, that we might not be incommoded by the smell, and that we might swallow less of the fine yellowish clay suspended in the water. We did not then think that we should afterward be forced, during whole months, to have recourse to this expedient. The waters of the Orinoco are alike loaded with earthy particles, and are even fetid where dead bodies of alligators are found in the creeks, lying on sand-banks, or half-buried in mud."

The Travellers longed for the accustomed refreshment of bathing, but could find only a reservoir of feculent water, surrounded with palm-trees. They had begun, however, to enjoy the comparatively coolness of the water, when a noise on the opposite banks, occasioned by an alligator's plunging into the mud, made them leave their bath precipitately. They now attempted to return to the farm, from which they were only a quarter of a league distant; but they had neglected to observe the direction they had taken, and for two hours they wandered over these pathless plains, till, fortunately, an Indian, in collecting the cattle, fell in with them, and acted as their guide. At two in the morning, they set out for Calabozo. There

was no moon-light, but the masses of *nebulae* which adorn the southern hemisphere, enlightened, as they set, part of the horizon. "The solemn spectacle of the starry vault, displayed in all its immensity, the cool breeze which blows over the plain at night, and the waving motion of the high grass, all combined to recall to mind the surface of the ocean." At sunrise, the plain assumes a more animated appearance. The cattle, which repose at night along the pools, or beneath clumps of palms, assemble in herds, and these solitudes seem peopled with horses, mules, oxen, and *matacani*, a species of deer, who are seen peacefully browsing in the midst of horses and oxen. The phenomenon of *mirage* displays itself in these savannas under various modifications: in the instances observed by Humboldt, the objects were seen suspended, but not inverted. A drove of wild oxen appeared, part with their legs raised above the ground, the other part resting on it. The magical apparition of large lakes with an undulating surface, is frequently to be seen. In crossing the *Mesa* of Calabozo, the heat was excessive, especially when hot gusts of wind came loaded with dust. The centigrade thermometer would then rise from 31° or 32° to 40° or 41° .

The town of Calabozo, situated between the Rivers Guarico and Uritucu, in lat. $8^{\circ} 56' 8''$, long. $70^{\circ} 10' 40''$ W. of Paris, contained at this period only 5,000 inhabitants, whose wealth consisted in herds, but every thing denoted increasing prosperity. There are five villages, or missions, in its environs. Here, in the very midst of the *llanos*, the scientific Travellers found an individual of a kindred spirit, a M. Carlos de Pozo, who, without having ever seen a philosophical instrument, and with no other instruc-

tion than what he had obtained from De la Fond's *Treatise on Electricity* and Franklin's *Memoirs*, had constructed a complete electrical apparatus. Till now, he had enjoyed only the astonishment and admiration produced by his experiments on persons destitute of all information, and who had never quitted the solitude of the llanos. The arrival of the learned Europeans gave him a satisfaction altogether new. They had brought with them electrometers, and a small Leyden phial which could be charged by friction; and M. Pozo could not contain his joy at seeing, for the first time, instruments not made by himself, but which appeared to be copied from his own. Some galvanic experiments, also, highly delighted him by their novelty. "The names of Galvani and Volta had never before resounded in these vast solitudes."

Next to the electrical apparatus of this self-taught philosopher, nothing at Calabozo excited so much interest in the Travellers, as the animated electrical machine, the gymnotus, or American torpedo, on which M. Humboldt made a series of highly satisfactory experiments. These electrical eels inhabit the Rio Colorado, the Guarapiche, and several small streams which cross the Chayma missions, as well as the Orinoco, the Meta, and the Marañham; and in the llanos, particularly in the environs of Calabozo, the pools of stagnant water, and the streams which fall into the Orinoco, are filled with them. They are at once dreaded and detested by the natives. The muscular part of the flesh is tolerably good eating, but the electric organ, which fills more than two-thirds of the body, is slimy and disagreeable, and is, accordingly, carefully separated from the rest. The presence of the gymnoti is considered as the principal

cause of the want of fish in the ponds and pools of the *llanos*. They kill many more than they devour ; and all the inhabitants of the waters, lizards, frogs, and tortoises, dread and endeavour to escape from their society. The Indians sometimes take young alligators and gymnoti in the same net, and the latter are never found in that case to display the slightest wound, having evidently disabled the alligators before they could attack them. It was found necessary to change the direction of a road near Uritucu, because these electrical eels were so numerous in one river, that they killed a great number of mules every year as they forded the water.

Desirous of making some experiments on these remarkable fish, the learned Traveller repaired to a stream in which they abound, and where the Indians offered their services in *fishing for them with horses*. Having caught about thirty wild horses and mules, they forced them to enter the pool. " The extraordinary noise caused by the horses' hoofs, makes the fish issue from the mud, and excites them to combat. These yellowish and livid eels, resembling large aquatic serpents, swim on the surface of the water, and crowd under the bellies of the horses and mules. A contest between animals of so different an organisation, furnishes a very striking spectacle. The Indians, provided with harpoons and long, slender reeds, surround the pool closely ; and some climb upon the trees, the branches of which extend horizontally over the surface of the water. By their wild cries and the length of their reeds, they prevent the horses from running away and reaching the bank of the pool. The eels, stunned by the noise, defend themselves by the repeated discharge of their electric batteries. During a long time they seem to prove victorious.

Several horses sink beneath the violence of the invisible strokes which they receive from all sides in organs the most essential to life; and, stunned by the force and frequency of the shocks, they disappear under the water. Others, panting, with mane erect, and haggard eyes, expressing anguish, raise themselves, and endeavour to flee from the storm by which they are overtaken. They are driven back by the Indians into the water: but a small number succeed in eluding the active vigilance of the fishermen. These regain the shore, stumbling at every step, and stretch themselves on the sand, exhausted with fatigue, and their limbs benumbed by the electric shocks of the gymnoti.

“ In less than five minutes, two horses were drowned. The eel, being five feet long, and pressing itself against the belly of the horses, makes a discharge along the whole extent of its electric organ. It attacks at once the heart, the intestines, and the *plexus coeliacus* of the abdominal nerves. It is natural, that the effect felt by the horses should be more powerful than that produced upon man by the touch of the same fish at only one of his extremities. The horses are probably not killed, but only stunned. They are drowned from the impossibility of rising amid the prolonged struggle between the other horses and the eels.

“ We had little doubt that the fishing would terminate by killing successively all the animals engaged; but, by degrees, the impetuosity of this unequal combat diminished, and the wearied gymnoti dispersed. They require a long rest and abundant nourishment, to repair what they have lost of galvanic force. The mules and horses appear less frightened; their manes are no longer bristled, and their eyes

express less dread. The gymnoti approach timidly the edge of the marsh, where they are taken by means of small harpoons fastened to long cords. When the cords are very dry, the Indians feel no shock in raising the fish into the air. In a few minutes, we had five large eels, the greater part of which were but slightly wounded.

“ It would be temerity to expose ourselves to the first shocks of a very large and strongly irritated gymnotus. If by chance you receive a stroke before the fish is wounded, or wearied by a long pursuit, the pain and numbness are so violent, that it is impossible to describe the nature of the feeling they excite. I do not remember having ever received from the discharge of a large Leyden jar, a more dreadful shock than that which I experienced by imprudently placing both my feet on a gymnotus just taken out of the water. I was affected the rest of the day with a violent pain in the knees, and in almost every joint.

“ Gymnoti are neither charged conductors, nor batteries, nor electro-motive apparatuses, the shock of which is received every time they are touched with one hand, or when both hands are applied to form a conducting circle between two heterogeneous poles. The electric action of the fish depends entirely on its will; whether because it does not keep its electric organs always charged, or, by the secretion of some fluid, or by any other means alike mysterious to us, it is capable of directing the action of its organs to an external object. We often tried, both insulated and uninsulated, to touch the fish, without feeling the least shock. When M. Bonpland held it by the head, or by the middle of the body, while I held it by the tail, and, standing on the moist ground, did not take each other's hand; one of us received shocks

which the other did not feel. It depends upon the gymnotus to act toward the point where it finds itself the most strongly irritated. The discharge is then made at one point only, and not at the neighbouring points. If two persons touch the belly of the fish with their fingers, at an inch distance, and press it simultaneously, sometimes one, sometimes the other, will receive the shock."

The torpedo of Cumana and of Europe cannot be compared, in its electric powers, with the true gymnotus, although it is able to cause very painful sensations. They differ also, specifically, in some of their characteristics. In both the torpedo and the gymnotus, however, the action is a vital action, dependent on the will of the animal. It cannot be passively discharged like a Voltaic pile or a Leyden phial, but must be irritated to induce the shock. The Spaniards give them in common the name of *tembladores*, tremblers, *i.e.* producers of trembling; and it is remarkable, that the electrical fish of the Nile is called *rhadd*, which is said to signify what causes trembling.*

On the 24th of March, the learned Travellers quitted Calabozo, and proceeded southward. The ground became more bare and parched, and the palm-trees disappeared as they advanced. They forded the Uritucu, which abounds with alligators of remarkable ferocity, and on the following day, traversed the *Mesa de Pavones*—a level so perfect and so bare of trees, that, as far as the eye can reach, not a single object fifteen inches high can be discovered. They passed the night of the 25th near the small mission of *San Geronymo del Guayaval*, on the banks of the Guarico, which falls into the Apure. On the 27th, passing

* Humboldt, Pers. Narr. vol. iv. pp. 345—77.

over low grounds often inundated, they reached the Villa de San Fernando, the capital of the Capuchin missions in this province, where their journey over the llanos terminated. The following three months, April, May, and June, they passed on the rivers.

“It will scarcely be believed,” remarks the learned Writer, “that the Villa de Fernando de Apure, only fifty leagues distant in a straight line from that part of the coast of Caracas which has been the longest inhabited, was founded only in 1789. Its situation, on a large navigable river, near the mouth of another river that traverses the whole province of Varinas, is extremely advantageous for trade. Every production of that province, hides, cocoa, cotton, and indigo, passes through this town towards the mouths of the Orinoco. During the rains, large vessels ascend from Angostura as far as San Fernando, and, by the Rio San Domingo, as far as Torunos, the port of the town of Varinas. At that period, the inundations of the rivers, which form a labyrinth of branches between the Apure, the Arauca, the Capanaparo, and the Sinaruco, cover nearly 400 square leagues. Every thing here recalls the inundations of Egypt, and of the Lake of Xarayes in Paraguay. The swellings of the Apure, the Meta, and the Orinoco, are also periodical. In the rainy season, the horses that wander in the savanna, and have not time to reach the rising grounds of the *llanos*, perish by hundreds. The mares are seen, followed by their colts, swimming during a part of the day to feed upon the grass, the tops of which only wave above the waters. In this state, they are pursued by the crocodiles, and it is by no means uncommon to find the prints of the teeth of these carnivorous reptiles on their thighs. The carcasses of horses, mules, and cows attract an innu-

merable multitude of vultures. The *zamueros* are the ibises, or, rather, the aquiline vultures of this country. They have the mien of *Pharaoh's chicken*, and render the same service to the inhabitants of the *llanos*, as the *vultur perenopterus* did to the inhabitants of Egypt." *

There is a road, mentioned by Humboldt, from Valencia to Varinas, which leads through Guanare and Misagual, and appears partly different from the itinerary furnished by Col. Hall. The district of Misagual is noted for its indigo. Guanare is described by Lavaysse as a handsome town, situated in a magnificent plain on the banks of a river of the same name; ninety-three leagues S.W. of Caracas, and fifty-four from Valencia. It was founded as early as 1593, and contained within its district, in 1807, 20,000 inhabitants, who derived considerable wealth from their tobacco-plantations, till the cultivation was made a royal monopoly. Twenty leagues north-west of Guanare, on the Valencia road, is the town of Araure, situated between two branches of the river Acarigua, the right branch of which is navigable. This little town also is stated to be well built, and to have a handsome church, "the temple of a miraculous Madonna," who, it seems, has, since 1757, started into competition with the Virgin of Guanare. The priests of Guanare declare, however, that the Madonna of Araure is only a Capuchin fraud, and has never performed a miracle! This town and its district had, in 1807, a population of 11,000 persons. It is erroneously placed by the Spanish geographers in lat. $9^{\circ} 15'$, long. $70^{\circ} 20'$. According to Col. Hall's map, it stands in lat. $8^{\circ} 45'$, long. $69^{\circ} 10'$; and

* Pers. Narr. vol. iv. pp. 391—4.

Guanare, which Lavaysse states, on the authority of the Spanish writers, to be in $8^{\circ} 14'$ of N. latitude, and long. $72^{\circ} 5'$, stands in lat. 8° , long. $69^{\circ} 35'$ W. of Greenwich. From Varinas, two roads lead westward, one by the ravine of Callejones, to the *paramo de Mueuchies* and the mountains of Merida; the other to Pedraza, which stands at the foot of the mountains which separate the plains of Varinas from the basin of the Rio Sulia.

In the tract of country which forms the entrance to the llanos, on the banks of the Uritucu, and, more especially, in the districts of San Sebastian de los Reyes, and near Guigue, is grown some of the finest chocolate in Caracas. The *cacao*, or chocolate-tree (commonly, but incorrectly written, cocoa-tree),* is found wild in the forests south of the Orinoco; but there is reason to believe, that no beverage prepared from the seeds was in use among the natives prior to the arrival of the Spaniards, who first introduced cacao-plantations into Caracas. They obtained their knowledge of the use and cultivation of this tree from the Mexicans, who, in the time of Montezuma, not only cultivated it, but had even learned to reduce the chocolate to cakes. The savages of the Orinoco, on the contrary, only suck the pulp of the pod, and throw away the seeds, which are often found in heaps where they have passed the night. Down to the sixteenth century, travellers differ widely in their opinions respecting chocolate. Benzoni, in his History of the New World, published in 1572, styles it a drink fitter

* *Theobroma cacao*. The Mexicans called it *cacahuatl*. The small seed of the species called *Tlalcacahuatl*, were used as currency. Cortes calls them *cacap-trees*. In Humboldt's Political Essay, the tree is also written *cacari*, or *carava quahuatl*. (Vol. iii. p. 23.) His Translator calls it the cocoa-tree.

for hogs than for men ; and the Jesuit Acosta, speaking of the excessive fondness of the Spanish Americans for chocolate, says, that one must be accustomed to that black beverage, not to be sick at the mere sight of its froth, which swims on it like yeast on a fermented liquor. “ The cacao,” he adds, “ is a prejudice (*una supersticion*) of the Mexicans, as the coca is of the Peruvians.” Cortes praises it as an agreeable and nutritious drink. “ He who has drunk one cup,” says the page of the great *Conquistador*, “ can travel a whole day without any other food, especially in very hot climates, for chocolate is by its nature cold and refreshing.” The Mexicans, it seems, prepared the infusion cold, mixing with it a little maize-flour, some vanilla, and a spice called *mecaxochitl*. The Spaniards introduced the custom of preparing it by boiling water with the paste ; but they have a strong dislike to the mixture of vanilla with the chocolate, deeming it unwholesome. Humboldt bears testimony to the salutary properties of the beverage. “ Alike easy to convey and to employ as an aliment,” he says, “ it contains a large quantity of nutritive and stimulating particles in a small compass. It has been said with truth, that in Africa, rice, gum, and *shea*-butter, assist man in crossing the deserts. In the New World, chocolate and maize-flour have rendered accessible to him the table-land of the Andes and vast uninhabitable forests.” The cacao harvest is very variable and precarious. The plant is extremely delicate, liable to be injured by sudden changes in the temperature, though only of a few degrees, or by irregular showers, and exposed to various animal and insect depredators. The new planter may have to wait eight or ten years for the fruit of his labours, for the plantations do not begin to yield till the sixth, seventh, or

eighth year, and they cease to be productive after forty years. But, on the other hand, the plantations require a much smaller proportion of labour than most others. One slave is sufficient for a thousand trees, which may yield, on an average, twelve *fanegas* of cacao, worth from twenty-five to forty-five piasters the *fanega* (about a cwt.). The crops are gathered twice a year, at the end of June and December. They vary much, yet less than the produce of the olive and the vine in Europe. The provinces of Venezuela are supposed by Humboldt to furnish nearly two-thirds of the chocolate that is consumed in the western and southern parts of Europe. The annual produce, from 1800 to 1806, of the whole captain-generalship, is believed to have amounted to very nearly 200,000 *fanegas*, of which 145,000 found their way to Europe, while 60,000 were annually exported from Guayaquil. The total value of the exports of cacao is estimated by Humboldt at nearly 2,000,000 sterling.*

Before we take leave of the provinces of Venezuela, we must not forget to mention the very remarkable vegetable production that is indigenous to the cordillera of the coast, particularly from Barbula to Maracaybo, called the *palo de vaca*, or cow-tree, and (at Caucagua) the *arbol de leche*, or milk-tree. It belongs, apparently, to the genus *sapota*. As all the milky juices of plants are acrid, bitter, and more or less poisonous, it was not without some incredulity

* Humboldt, *Pers. Narr.* vol. iii. p. 192; vol. iv. pp. 231—42; *Pol. Essay*, vol. iii. pp. 23—6. The learned Writer gives, as the result of a great number of local statements, the computation, that Europe at present consumes annually, of chocolate, 23,000,000 of pounds weight; of tea, 32,000,000; of coffee, 140,000,000; of sugar, 450,000.

that Humboldt heard of the extraordinary virtues of this tree ; but he found that they were not exaggerated. " On the barren flank of a rock," he says, " grows a tree with dry and leather-like leaves ; its large woody roots can scarcely penetrate into the stony soil. For several months of the year, not a single shower moistens its foliage. Its branches appear dead and dried ; yet, when the trunk is pierced, there flows from it a sweet and nourishing milk. It is at sunrise that this vegetable fountain is most abundant. The blacks and the natives are then to be seen hastening from all quarters, furnished with large bowls to receive the milk, which grows yellow and thickens at its surface. Some empty their bowls under the tree, while others carry home the juice for their children. This fine tree rises like the broad-leaved star-apple. Its oblong and pointed leaves, tough and alternate, are marked by lateral ribs : some of them are ten inches long. We did not see the flower. The fruit is somewhat fleshy, and contains a nut, sometimes two. The milk obtained by incisions made in the trunk, is glutinous, tolerably thick, free from all acrimony, and of an agreeable and balmy smell. It was offered to us in the shell of the *tutumo* or calabash-tree. We drank a considerable quantity of it in the evening before we went to bed, and very early in the morning, without experiencing the slightest injurious effect. The viscosity of this milk alone renders it somewhat disagreeable. The negroes and free-labourers drink it, dipping into it their maize or cassava-bread. The *major-domo* of the farm (at Barbula) told us that the negroes grow perceptibly fatter during the season when the *palo de vaca* furnishes the most milk. This juice, exposed to the air, presents, on its surface, a membranous and strongly

animalised substance, yellowish, stringy, and resembling cheese, which, when separated from the aqueous liquid, is elastic, almost like India rubber, but undergoes, after some time, the same phenomena of putrefaction as gelatine. The people call the coagulum that separates on contact with the air, cheese: this coagulum grows sour in five or six days." * The viscosity observed in the fresh milk is, no doubt, adds the learned Writer, occasioned by the caoutchouc, which is not yet separated, and which forms one mass with the albumen and *caseum*, as the butter and *caseum* do in animal milk. The caoutchouc, or oily part, may therefore be considered as the butter of this vegetable milk; and in this combination of the albuminous and oily principles, it bears the closest analogy to the milk of mammiferous animals. The butter-tree of Bambarra, mentioned by Mungo Park, is suspected to be of the same genus as the *palo de vaca*.† It remains for future travellers to pursue the inquiry respecting the genus and habits of this remarkable natural production, and to ascertain how far it will admit of being extended by cultivation.

We must now for the present part company with this indefatigable and truly philosophical Traveller, in order to explore the western provinces of Colombia, and penetrate the recesses of the Andes.

FROM VALENCIA TO BOGOTA.

THE anonymous Author of the Letters from Colombia is the only modern traveller who has made the public acquainted with the route from Caracas to

* *Caseum*, the basis of cheese, has been recently detected in the emulsion of almonds.

† Humboldt, Pers. Narr. vol. iv. pp. 212—226.

Bogota. This journey, a distance, according to the computation of the country, of 1,200 miles, he performed in two months, without experiencing any sensible fatigue or other inconvenience. Disclaiming all literary or scientific pretensions, he has given an unadorned, but distinct and interesting account of his journey.

He left Caracas on the 22d of February, 1823. On the 25th he reached Valencia, distant from Caracas thirty leagues and a half. Here he obtained three additional saddle-mules, and on the 27th, the party, who formed a small cavalcade, set out for the capital. An almost suffocating ride of three leagues across a sayanna, brought them to Tocuyito, a pretty village in the midst of haciendas. Along this road, the Spaniards had a little before been pursued with considerable slaughter, after their signal defeat at Carabobo. By the road side, and scattered over the plain, were still to be seen the remains of the unfortunate *Godos* (Goths, so the Spaniards were called by the Patriots) who were killed in the retreat. The road beyond Carabobo becomes very precipitous, either winding along the side of mountains, or descending into deep dells, the beds of mountain rivulets. At six leagues from Tocuyito, is a solitary hovel called *El Hoyo*, where the wearied party halted for the night.* The animals being fastened to a cane fence, the hostess, a "half-starved Indian woman," made a fire, and prepared the chocolate which the Travellers had brought with them, ("a great resource, by the by," says the Writer, "in this land of bad living,") which was served up in calabashes: they then slung their hammocks in the small room which served for a kitchen, and slept as they could. From this place,

it is a distance of four leagues, along good roads, to Tinaquilla, and six leagues and a half further to Tinaco, another large village, which the Travellers reached in the evening. In this day's journey, the Writer's admiration was excited by the various and beautiful plumage of the birds, "the commonest of which would be considered as curiosities in Europe." Parrots and paroquets were seen in large flocks; also, the mocking-bird, the macaw, the scarlet cardinal, the guacharaca (a species of pheasant), and a small dove extremely tame. In every place, the population appeared to be decreased by the war, to the lowest ebb.

The third day, they only proceeded to San Carlos, a distance of four leagues and a half. The approach is very picturesque. Several white steeples and the remains of large edifices are seen rising above the rich foliage; in the immediate vicinity is a good deal of cultivation, chiefly indigo-plantations; and on the right, the lofty cordillera of the coast is seen stretching along to the north-east. "We were quartered," says our Traveller, "in one of the best houses in the town, exhibiting, in its gilded mouldings, the remains of former riches. Its principal inhabitants are now bats and spiders. The owner, Don Andres Herrera, a name distinguished among the conquerors of the New World, was one of the richest men of the place, but is now reduced to comparative poverty, from the depredations of one party, and the necessary exactions of the other for the support of their cause. The resources of this town were formerly immense; indeed, I am told, almost incredible, as there were individuals possessing wealth beyond their power of computation, from the amazing and incalculable increase in cattle,

the principal source of their prosperity; but a most destructive warfare has proved that the spring was not inexhaustible. There now barely remains a sufficiency for the common purposes of freight and conveyance; and unless timely measures be adopted to replenish the breeding stock, the country will sustain a most serious loss in the extinction of this branch of traffic. There are several churches in San Carlos, of neat and rather elegant exterior, one of which was built at the sole expense of an individual of the town. Some large houses have withstood the earthquake; more are in ruins, as well as the greater part of the town; but should the time arrive when the government or individuals may be enabled to rebuild or renovate this place, it may be made one of the prettiest towns in the province. The principal objection to it as a residence, is the excessive heat which prevails. During our stay, the glass was at 96° , a heat beyond any we have yet experienced. At times, I understand, it is much higher. The oranges grown here are considered by the natives as the best in the world; they are excellent, but not, in my opinion, equal to European fruit. The population is computed at 5 or 6,000, including, probably, the adjacent villages.”*

At less than a league's distance from this town, is the village of San José, and four or five leagues further is another small hamlet, called La Ceyba. The road passes for the most part over rich savannas, intersected by numerous rivulets, bounded by a range

* According to Lavaysse, San Carlos contained, in 1807, more than 15,000 inhabitants, consisting chiefly of settlers from the Canary Islands. The town is situated, he says, on the small river Aguaré, which falls into a branch of the Apuré. It was founded by the missionaries.

of low but picturesque hills. It then enters on a finely undulating country, which presented a "park-like scenery, enlivened by numerous birds of the most brilliant plumage, with wild deer browsing at a distance on the verdant hillocks." At the *Quebrada* (ravine) *de Camouraka*, five leagues from San Carlos, the road to Merida turns off to the westward from the great road to Varinas. At nine leagues from San Carlos is the straggling Indian village of Camaroucama. Here, the road enters a thick forest, and in about a league, crosses the *Rio Claro*, or *Cojedes*, at a ferry. Soon after, begins the ascent of the very difficult and precipitous pass over the Altar mountain. The party passed the night at a miserable pulperia, twelve leagues from San Carlos, where the only refreshment they could obtain, was cassava-bread and guarapo, and the animals were reduced to feed on the thatch of the hovel. This mountain is covered with a thick forest of palms and other trees, whose interlaced branches the sun, in some places, cannot penetrate: hence, marshy spots occur, which, in the rainy season, are frequently impassable.

Another fatiguing day's journey of twelve leagues brought the Travellers to Barquesimeto. After emerging from the gloomy forests of *El Altar*, an undulating country, partially cultivated, extends to *La Morita*, a distance of four leagues. On the left, a range of mountains, the lower ridge of the cordillera, extends north and south. Beyond *La Morita*, the road enters on the rich valley of the *Rio Claro*, crossing the river five or six times, before it begins to ascend the hills. Extensive plantations of indigo, cocoa, and sugar-cane, give a flourishing aspect to the vale; and the large and neat village of Augare (qu. Caudares?)

presented the very uncommon appearance of a redundant population.*

In no part of Venezuela did the disastrous earthquake of 1812 occasion such appalling ravages as at Barquesimeto, — not even in Caracas. Scarcely a house remained entire; and of its comparatively small population, the Writer was informed that 1,500 persons were buried in the ruins. “The inhabited part is now comparatively small, having been built since the awful visitation, from the materials that abound in every direction; and still, its fallen edifices present a mournful picture of desolation. The town is situated at the extremity of an extensive table mountain, which is again enclosed by still higher eminences, the fertile valleys intervening: hence, perhaps, the cause of the severity of the shock. Situated on this *plateau*, it has the benefit of constant breezes, which cool in some degree its excessively hot climate.” The population of Barquesimeto and its environs, is now supposed to be between 8 and 10,000 persons, of whom by far the larger portion inhabit the adjacent villages.† The remnants of the town were at this time filled with refugees from Coro

* Col. Hall gives the following itinerary of the road from San Carlos to Barquesimeto:

	Leagues.		Leagues.
From San Carlos —		Brought forward....	21
To the Quebrada de Camouraka	5	To Caudares	1
— Camouracama	4	— Barquesimeto	1
— El Altar	2		<hr/> 23
— Gamalotal	4	Add the distance from Valencia to San Carlos, as	
— La Morita	4	given at page 222	23½
— Rastrajos	2		<hr/> 46½
	<hr/> 21		

† Lavaysse estimates the population of the town, in 1807, at 15,000 persons.

and the borders of Lake Maracaybo, who had fled before the marauding bands of Morales.

At the miserable place called *Seritos Blancos*, the road again descends. From *Los Horcones*, three leagues from Barquesimeto, an arid tract stretches to the village of Chibor, the prickly pear, the aloe, and the dwarf-cedar, being the only vegetation. Here our Traveller found a great many more emigrants from Coro and other towns on the coast. The village itself presented symptoms of improvement: a neat church had been recently erected, and houses were undergoing repair, or rising from their ruins. The same uninteresting country extends beyond Chibor, till the road descends by a winding ravine to the bed of the Tocuyo, where the traveller finds himself enclosed on all sides by mountains, and the heat becomes excessive.

The Writer was detained at Tocuyo from the 5th to the 11th of March, in consequence of his luggage not having arrived from Caracas. He describes the site of the town as, next to Caracas, the best chosen of any he had seen; but the climate, he says, is at least ten degrees hotter, as there is seldom much air stirring. The mean heat during his stay, was 86° Fahr.* Yet, excellent wheat is grown in the district, together with the sugar-cane, maize, and plantains. The plain is about three leagues long by one in breadth. The river Tocuyo winds through it at the back of the town, between which and a chain of high calcareous mountains running N.E. and S.W., there is a considerable tract of fertile land. The town is regularly

* Lavaysse states, that the climate of Tocuyo "is cool, even cold, from November to April, while the wind blows from the north."

built, but contains few good houses. It formerly contained three churches and two convents, Franciscan and Dominican. Since the suppression of the monasteries, the Franciscan convent, which is described as the finest religious edifice which the Writer had seen in the country, with the exception of the cathedral at Caracas, has been converted into the *parroquia*, the churches having suffered from the earthquake. The population at present does not exceed from 3 to 4,000 persons.* In the evenings, there was a sort of *rendezvous* at the river, where the females make no scruple of bathing at the same time and place as the men. Tocuyo was formerly noted for the superior wool of its sheep, and for its tanneries, which formed a considerable branch of its trade.

Beyond Tocuyo, the most difficult passes commence. The road is level and good for the first four leagues, winding through a defile of rich, varied, and cultivated land, abundantly watered. The sugar-cane, maize, and plantains are the chief productions, but there are a few cocoa-plantations. A range of sterile mountains on either side of the rocky bed of the river, rise gradually in height as the traveller approaches Olmucaro Abaxo, a small Indian village of about forty detached huts. On these mountains is found "a species of wild lilac, of a fixed and much brighter colour than the European." Olmucaro is situated at the extremity of the plains, shut in on all sides by mountains, and immediately at the foot of one of immense perpendicular height, but at a considerable elevation above the bed of the river from which the ascent begins: the temperature was found to be

* Depous states the population at 10,200. He represents the inhabitants as singularly prone to suicide.

8° cooler than at Tocuyo. The next day's journey, from Ohmucaro to *Agua de Obispos* (bishop's water), is a difficult and fatiguing one. The road descends by a steep and craggy path, till it again meets the river Tocuyo at the bottom of a deep ravine. A rude bridge, formed by the trunks of trees lashed together, has been raised on stone buttresses at a considerable height above the stream, which, issuing from fissures in the mountains, foams down a rocky bed. It takes its rise a little above, receiving several tributary torrents which likewise issue from the mountains. The road now ascends a narrow defile, "threatened by overhanging rocks and cloud-capped mountains." The Writer had visited Wales the preceding year, and had seen some magnificent passes, with a greater body of water foaming down the rocky precipices; but, compared with this scene, he says, they dwindled into insignificance. The further he advanced, the greater was the admiration excited, as he wound "along avenues of luxuriant foliage of the most varied description, among which, overhanging the stream, were trees of gigantic size,—some loaded with a white kind of moss dropping from the branches, like pendent icicles, others covered with ivy, or festooned with arches of bignonia, stretching from tree to tree in verdant arcades, and forming rich contrasts with those bearing orange-coloured and deep-blue flowers; while flocks of paroquets, doves, tropiales, &c. added to the novelty and interest of the scene. We had now begun the ascent of one of the highest and most difficult passes in the route. The more ground we gained, the more distant appeared the summit we had yet to climb; but the sublimity of this mountain scenery would have repaid any fatigue. After four hours of continual ascent, we reached some sheds about the

middle of the mountain, which had been erected by Morillo as a covering for the troops who secured the pass. Here we made a halt, and had recourse to our canteens. The temperature was cool and agreeable, and we found a spring of delicious water close at hand." In three hours and a half more, they reached the summit, which afforded a stupendous prospect: mountain below mountain extended in lessening gradations beneath them, while clouds rolled on the lower eminences. After descending for an hour and a half, they reached the few detached huts called *Agua de Obispos*, near which are some patches of cultivation. The thermometer here fell, in the night, to 60°,—a difference of 36° between this place and San Carlos.

The next day's stage is to Carache. For an hour, the road is a steep ascent: it then lies along a ridge of high mountains, gradually descending for three hours by an even but narrow road, through scenery of the grandest description. At times, the pathway is so narrow, that a false step would precipitate the traveller down an almost perpendicular steep of incalculable depth. About mid-way, the narrow vale of Carache opens on the view, picturesquely embosomed in mountains, and reminding our Traveller of the valley of Chamouny. The descent to the town occupied three hours. No place through which the Writer had hitherto passed, presented so striking an appearance of desolation as this little village, which, having been occupied at different times by both of the contending armies, had been reduced to the lowest misery. Many of the houses were deserted, the inhabitants having sought shelter in the woods; and in the huts which were still occupied, there was scarcely an article of furniture,—in some not even a

door. With difficulty the Travellers obtained provisions of any kind, and they were informed, that “there was not in the town wine enough for the communion service.”

The vale of Carache, which may be about three leagues in extent, terminates at a high mountain, over which the road passes, and then descends into another valley lying nearly parallel, about four leagues in extent by one in breadth, watered by a small river, but apparently of much richer soil. At its further extremity is the Indian village of *Santa Ana*, containing at this time not more than fifteen or twenty families. Wheat, maize, potatoes, and plantains thrive under the mild temperature. Another summit, enveloped in clouds, had to be surmounted, to complete a hard day's journey of ten leagues to the miserable village of Mocoy, which lies at the foot of the mountain, and is reached by a most fatiguing descent of two hours. The road from this place lies southward along a rich valley, which opens as the traveller approaches Panpanito, a distance of two leagues and a half. This is the point of the road nearest to Truxillo, which lies a couple of leagues out of the route to Merida. An advanced guard from that city, consisting of a troop of cavalry, were stationed here. Their fine, athletic appearance ill agreed with their wretched accoutrements. Most of them were half-naked; none had either stockings or boots; and the principal badge of their profession was a kind of helmet made of bullock's hide, with a strip of blacked sheep-skin for a cockade. The Travellers now found the heat again oppressive,—the thermometer at 84°. The valley continues to expand, and exhibits signs of tolerable cultivation and the highest fertility. “The *coup-d'œil* of its full basin, from a wooded eminence at the

further extremity, heightened by the warm tints of the evening sun, was rich almost beyond precedent. In fact, this fine valley," says the Writer, "is hardly surpassed in beauty by those of Aragua." A *pulperia*, situated on an elevated *plateau* of considerable extent, called *Savanna Larga*, afforded lodging for the night. From this mountain plain, a winding road leads down to the bed of the river Motatan, flowing to the Lake of Maracaybo. The village of Valera, through which the road passes, is not more than ten leagues distant from the lake. Near that village, is an extensive *cocoa-hacienda*, and the whole tract is interspersed with fine estates, and others that have been suffered to go to decay, but which attest the richness of the soil. This day's stage terminated at the poor Indian village of Mendoza. Two leagues further, the road again enters the mountains. The first summit is of moderate elevation; and the road being tolerably good, the ascent occupied only two hours. The magnificence of the scene which presented itself when they had gained the highest point, the Writer says, is almost unequalled. "Beneath us, at an immense depth, lay the verdant vale of Timotes, through which we could trace for leagues a serpentine river. Rising above this is a range of hills of moderate dimensions, but almost perpendicular acclivity,—the summits, which are extensive table-lands, cultivated in parts, with the village of *La Mesa* at the eastern extremity. A second chain of immense height rises abruptly from the *Mesa* (the eminence so called), covered mostly with forest, but terminating above the clouds, which appeared to rest mid-way, in rocky and craggy summits of various forms." It occupied nearly four hours to descend into the vale. The mountain which they had for the next day's journey to cross, rises to the

height of a *paramo*. The ascent, though by a good road, occupied nearly four hours; and at the summit, the thermometer fell to $42^{\circ} 30'$. Beyond the straggling village of Chachopo, all useful vegetation ceases, "the only covering to the stony mountains being a kind of moss, and a plant somewhat resembling the aloe, but of a more woolly appearance. The morning," our Traveller adds, "was extremely favourable for crossing, being perfectly clear: at other times, the passage is often dangerous, and in stormy weather impracticable. The view from the height comprised a mass of barren and rugged mountains, more wild than interesting. Hence we descended by a gradual slope, and a tolerably good road, for four hours. The scenery possesses no novelty, except, indeed, the abundant sources of various rivers which take their rise in these mountains; and it is interesting to watch the increasing velocity of the currents as they proceed, receiving reinforcements from every ravine." At the end of eight hours, they reached Mucuchies, situated in the midst of a bare, uninteresting tract: not a tree is to be seen, but a considerable quantity of corn is grown here. The town has a neat church, and formerly contained 3,000 inhabitants; but the war, emigration, and the small-pox had lamentably diminished their numbers. The thermometer, which stood at 66° here in the day, fell at night to 46° ,—a change of twenty degrees in a few hours; and the cold was very sharp. The descent from this town, which follows the channel of the River Chama from its source, rolling over its rocky bed with great velocity as it approaches the small village of Mucucubar,—soon placed the Travellers again in the temperature of summer heat. The country had gradually become more fertile, and the scenery increases amaz-

ingly in richness and grandeur as the traveller draws near "the delightful city" of

MERIDA.

THIS city, of which we have already given a brief description, is commonly considered as about half-way between Caracas and Bogota; but the Traveller whom we are following, states, that there is, he believes, no accurate computation of the distance.* Next to Caracas, this was by far the largest city in Venezuela. At least two-thirds of it are now in ruins, the effect of the same awful convulsion of nature that desolated the capital. From 12,000 persons, the number of inhabitants in 1804, the Writer supposes that the population is now reduced to probably not more than a fourth of that number. "The distance is nearly 500 miles, and yet, the convulsion was simultaneous. Merida, in proportion to its size, has suffered more than Caracas: with the exception of two streets, at least a mile in length, it presents an unvaried picture of ruin and desolation.† Before the calamity of 1812, it possessed five convents and three parish churches: at present, one only of the former remains, the Dominican, which, since the abolition of religious orders by the decree of Congress, has been converted into the cathedral. A convent of nuns, of the order of St. Clara, still, however, exists; there is also a hospital and a public college, in which sixty students are instructed in Spanish, Latin, Natural Philosophy, and Theology." The site of this city, the Writer represents as the most delightful spot the imagination can

* As far as we can gather from the Writer's own computation by time, Merida must be about 83 leagues W. of Barquesimeto, which would make its distance from Caracas 160 leagues, and it is about 150 from Bogota.

† A similar catastrophe reduced the city almost to ruins in 1644.

paint. "What might not be made of it," he says, "if peopled by European families of enlightened ideas, and with sufficient capital to rebuild and beautify the city as its situation deserves!" Seated on an elevated table-land, three leagues in length and one in breadth, surrounded by three rivers, it unites with extraordinary felicity the three choicest gifts of nature,—a fertile soil, a temperate climate, and beauty of situation. Within view of the city, the land yields cocoa, coffee, and cotton, maize, plantains, and the tropical fruits, wheat, barley, and potatoes. In the vale of the Chama, at the foot of the mountains, the temperature is between 89° and 90° Fahr., while, immediately fronting the town, the summits of the mountains rise into the region of perpetual snow. The ascent to the city from the valley, is by a very steep, abrupt, and narrow pass. Having gained the summit, you are almost immediately in the city, which commences at the eastern extremity of the plateau, covering at least half a square league. On the north, south, and east, the sides of the mountain are perpendicular, having at their base the Rivers Macujun, Albarregas, and Chama. To the west, the table-land tends slightly to an inclined plane. On every side tower chains of lofty mountains: those to the south are the highest, and their snowy summits are seen rising out of a zone of dark green forests. In the immediate vicinity of the city, there is a great deal of land on the *Mesa*, which might be converted into beautiful gardens and pleasure grounds. The mean temperature here is from 67° to 70°.* The city is regularly laid out, like all

* According to Alcedo, the city enjoys, every twenty-four hours, the four seasons; viz. twelve hours of cold, from six in the evening till six in the morning; four hours of vernal warmth, from six to ten, A.M.; and eight of summer heat from ten, A.M. to six, P.M.

the Spanish towns, the streets intersecting each other at right angles, each having in the centre a clear stream of running water. The abundance of mountain rivulets presents every facility for mills and other species of machinery; and should it be found practicable to render the Chama navigable, the city would enjoy, from its proximity to Lake Maracaybo, almost the advantages of a maritime situation. The excessive insalubrity of that part of the lake where the Chama falls into it, is assigned, however, in Alcedo's Dictionary, as the reason why the difficulties of the river navigation have not been overcome. "It is indeed impossible," we are told, "to pass two hours at that place without catching a fever, the malignity of which generally proves fatal." Yet, how unhealthy soever the shores, the influence of the *malaria* could hardly extend to the craft on the waters. It remains, too, to be ascertained, whether this is uniformly the case, or only during the hottest season, or possibly, when, in the season of drought, the waters of the lake may retire, and leave a marshy tract uncovered. Butcher's meat is good and cheap at Merida, being supplied from Varinas and Pedraza. In the vicinity, according to Alcedo, there are gold mines, but they are not worked. The greatest drawback on the natural advantages of the situation, is its liability to earthquakes, from which it has repeatedly suffered; but this fearful condition of prosperity attaches to it only in common with Caracas, Valencia, and Bogota, with Guatemala and Lima, with Smyrna and Aleppo.

On the 23d of March, the Writer again set out, commencing what he terms the third division of his

These transitions are sometimes, however, rapid and severe, and occasion disorders. The west wind is especially dreaded. The rains fall at all seasons, and are very heavy.

long journey. The road proceeds westward along the plateau, till, at the end of about two leagues, it leads, by a short but steep and stony descent, to the vale of *Exjido*, crossing the Albarregas and the Montauban. This rich valley, about a league in extent, is in a state of pretty uniform cultivation. At the end of it, mountainous passes succeed; and a fatiguing ascent up a very rugged road, traversed by two or three rapid torrents, conducted the Travellers to the village of San Juan. Here there was formerly a convent of nuns, but the sisterhood have been dispersed in consequence of the party feelings introduced by the Revolution, and the building is in ruins. The *Godas* retired to Maracaybo; the patriotic sisters have found an asylum at Merida. In this neighbourhood, we are told, is a small lake, from four to five fathoms in depth, in the bed of which is found "a kind of salt of a rocky consistency, called *urado*, which, when mixed with *chimon*, an extract from tobacco, possesses very valuable properties, and is much used by the natives in fattening cattle, and for a variety of other purposes. The Indians obtain it in small portions by diving to the bottom of the lake, and detaching it from the bed. In this dangerous service many have perished, and it is only surprising that, for a few reals a day, they subject themselves to the risk. The *urado* is not known to exist in any other part of the Republic." What sort of salt it really is, it is impossible to gather from this vague account, evidently derived from hearsay information. Alcedo does not mention this remarkable production, though he refers apparently to this lake. "In the vicinity of Merida," he says, "is a mountain in which is a lake, and which is called the *Cerro de las Flores* (the mountain of flowers), from the variety which it produces, together with

laurels and other trees and plants, which cover it, and render it pleasing to behold, its charms being heightened by a great variety of birds." Our Traveller, describing the mountain-road to San Juan, says: "The acacia is in great abundance, together with wild jasmine and other beautiful mountain flowers, spreading a delicious fragrance."

The next five leagues, from San Juan to the *hacienda* of Estanques, comprise one of the most difficult and dangerous passes in this part of the country, over a double chain of mountains, between which, at a considerable depth, the Chama rushes along a rocky bed. The road, which runs from N. to S., alternately ascending and descending, consists of a narrow pathway cut in the almost perpendicular sides of the mountains, barely wide enough for the passage of the animals. The rocky summits on either side increase in height and wildness of aspect as the traveller advances. In one part, the defile is so narrow, that the slightest false step would precipitate the mule and the rider down a precipice of many hundred feet into the Chama, which flows at the bottom. The river is crossed by two curious bridges, consisting simply of long strips of hide, fastened on either side to poles fixed in the earth. "On the surface of these is placed a square piece of hide, on which the traveller seats himself, and, with the assistance of a cord to which it is fastened, pulls himself across." The river, though not deep, runs with such violence, that it would be impossible to ford it.

The *hacienda* of Estanques is a cocoa and coffee-plantation of considerable extent. "The agriculturalist in this country," remarks the Writer, "has an excellent method of availing himself of the services of his slaves, almost free of any expense. Each man,

or family, receives a certain portion of land, called a *conuco*, which he cultivates for his own support; for this purpose he is left at liberty a day in each week. A taste for husbandry is hereby acquired, which in the end is beneficial to the estate. Five days are devoted to the *hacienda*, and on Sunday they are again free. After hearing mass, in which they are very punctilious, the rest of the day is devoted to dancing, a recreation which the blacks are passionately fond of.

“ Amongst the most liberal laws adopted by the first national congress, is that of abolishing slavery after the present generation. A fund is also established for the purpose of annually redeeming a certain number from bondage, so that in a few years the unnatural distinction will no longer exist. From the period of passing the decree, the children of slaves are declared free, but bound to indemnify the master, who has been at the expense of clothing and feeding them, either by a certain number of years of personal servitude, or an equivalent to the expense incurred.

“ We were seated at dinner on the balcony which surrounds the house, when all the children belonging to the estate, to the number of about sixty—the boys in one line, the girls in another—descending by a winding path from the village, approached the church, singing in very good time a hymn or evening prayer: when in front of the house, they all knelt down in the same order, and, lifting up their hands, prayed aloud. All religious ceremonies are impressive; and in the present instance, that feeling was greatly enhanced by the *situation*—as it were, in the midst of the wilderness. Taken by surprise, the effect of so many young creatures addressing their Creator

in the same words and tone, joined with the consideration, how inestimable a blessing the introduction of Christianity, although so disfigured, is amongst a race of beings but lately barbarians, made it the most impressive sight I recollect to have witnessed."

The Writer does not mention the temperature of the valley, but, if it were not sufficiently indicated by the nature of the produce, the circumstance of our Traveller's being kept awake by "myriads of mosquitoes," in alliance with a small fly called *ejen*, more diminutive, but not less persecuting, than a flea, precludes the necessity of reference to the barometer. Heavy rains detained the party here next day till about noon. They then commenced their route by entering a forest, and fording a small river, which intersects the road by its windings at least a dozen times. But torrents of rain soon overtook them, and compelled them to halt for the night, at the end of two leagues, at Vijagual—an "Indian cottage," in the most romantic spot imaginable. "Situated on a gentle rise, it commands a view of the mountainous forest that encompasses it on all sides, for the most part impervious to man, and the residence of animals hostile to his nature. The gloomy silence is here broken by the impetuous course of the River Macuti, now much swollen by the rains." In this cottage in the wilderness, the Travellers met with the most hospitable treatment on the part of the inmates. A tolerably level and good road, following the course of the river, through the same magnificent forest scenery, conducts to the *parroquia* of Bayladores, a distance of six leagues. Here, for the first time, the Writer saw the tobacco-plant in cultivation, which is still a government monopoly; but the restrictions are to be

repealed as soon as the financial exigencies of the state will admit of it. A considerable quantity is grown in this neighbourhood, and there is a government establishment in the town for the manufacture of segars and snuff. This circumstance may possibly account for the reputed attachment of the inhabitants to the *Spanish interest*. A division of Spanish troops, under La Torre, was quartered here for eleven months. Another league brought the Travellers to *La Cebada*, so called from the quantity of barley grown there. Two ridges of wooded mountains enclose an extensive vale running E. and W., the greater part of which is sown with grain, leaving patches of rich pasturage. Several detached farm-houses, of neat appearance, add to the picturesque effect of the scenery. But in none of these could be found an inhabitant, and the Travellers were obliged to proceed to the extremity of the vale, called *La Pleyta*, where they were more fortunate. The owner of a solitary farm-house in this retired spot, proved to be the individual to whom they were furnished with recommendations from the family at Vijagual. Here, towards evening, they found it very cold; the thermometer was, at one time, as low as 55°. The next day's journey lay over the small *paramo* of Portachuelo to La Grita,—a distance of only five leagues, but the descent through the forest which clothes the declivity, is extremely tedious and fatiguing. La Grita, at one time the head town of the province of Maracaybo, was founded in 1576, with the dedicatory title of *Espiritu Santo* superadded to the name given to it by the natives in their battles. It is rather prettily situated on an eminence commanding the view of a large and cultivated valley, hemmed in by mountains. The district used to yield abundance of cocoa

and sugar, and large herds of cattle are bred in the pastures. The town is now too large for the population : many of the houses were found deserted. The women are for the most part tall, very plain, and much disfigured by goitres ; a disease very prevalent throughout this line of mountainous country. The river which rises opposite the city (for it bears this title), runs N.W., and falls into the Sulia.* A good and level road along the valley for five leagues, leads to *El Cobre*, so called from the copper mine in its neighbourhood.† The road then passes over the *paramo* called *El Zumbador* (the hummer), from the incessant violence of the wind on the summit, which often renders the passage extremely dangerous, driving the mules sideways, and frequently threatening to hurl both mule and rider into the abyss below. Our Traveller was, however, disappointed at being balked of the anticipated difficulties of the passage : the wind was calm, the temperature as high as 60°. The view from the summit is very grand, comprehending an immense tract of country, terminating in a high chain of mountains running S.W. and N.E., and apparently the highest from the level of the plain of any that the Writer had seen, not excepting, he says, the Silla of Caracas. At the foot of the mountain, on the other side, is a solitary house called *Los Cuncis* ; but, this being occupied, the Travellers pushed on to *Savanna Larga*, distant ten leagues from *Ia Grita*.

The rich and picturesque valley on which the Tra-

* In Alcedo's Dictionary, *La Grita* is stated to be forty-six miles from *Merida*, and sixty-seven from *Pamplona*. It must be at least eighty miles from the former, and 100 from the latter.

† Alcedo mentions mines of copper in the district of *La Grita*, which, he says, are not worked ; also, quarries of " a blue stone in high request among the painters."

vellers had now entered, is watered by the River Tormes. They halted at the village of Tariva, and in the evening proceeded three leagues further, to the village of Capachio, seated on an eminence commanding the whole vale. The next day, they passed the village of San Antonio de Cucuta,* and, a little beyond, crossed the Tachira,—a river that formerly divided Venezuela from New Granada. At the end of twelve leagues from *Savanna Larga*, they had the satisfaction of finding themselves at

CUCUTA.

“*ROSARIO DE CUCUTA* will ever be famed in the annals of Colombia, as the town in which the first general congress was held, and where the constitution was formed. In 1820, the deputies of Venezuela and New Granada assembled here: their session, which lasted three months, was held in the sacristy of the parish church. At present,” adds the Writer, “there is nothing to commemorate this important event; but the church in which it took place, is by far the neatest and in the best preservation of any we have hitherto seen: the architecture is somewhat in the Moorish style, and would do honour to a country more advanced in the arts. It is kept in the nicest order,—the least respect that can be paid to its important history. Amidst a quantity of trash, it contains a Madonna and child, painted by a Mexican artist of the name of Paez, and evidently copied from Raphael’s *Madonna del Pesce*, which surpasses what one might expect from a South American artist. It is

* This is apparently an error for *San Antonio de Tachira*, the name given it by Alcedo.

the offering of a late archbishop of Caracas, and was painted in 1774. The appearance of the town is extremely pleasing. Surrounded by rich *haciendas* in excellent cultivation, it stands, as it were, in the midst of a delightful garden. The perspective at the extremity of each street, terminates in a beautiful vista, with high mountains in the back ground. The town, which is not large, is neat and well built. It has not suffered from the earthquake. The houses, though not large, have a clean appearance. The streets are paved, and have a current of water running through the middle. The inhabitants appear to be very fond of dancing. Every evening, they assemble in the square to the number of fifty or sixty, and figure away with great animation to the most deafening music, by the light of paper lanterns, and the glare of innumerable segars. The chief instruments are calabashes filled with Indian corn, which are rattled to the thrumming of guitars."

This scanty information is all that we are able to furnish respecting this interesting spot, the Washington of the Colombian Republic; for this little town, the very name of which does not occur in Alcedo's Dictionary,* is understood to have been fixed on as the future capital of Colombia, under the name of THE CITY OF BOLIVAR. The department itself to which it belongs, (it is in the province of Pam-

* This town, however, is apparently referred to under the designation of *San Josef de Cucuta*, "a settlement within the jurisdiction of Pamplona; of a hot temperature, but healthy, and of great commerce, owing to the cacao with which it abounds. It contains," (it is added,) "more than 100 rich Indians, but is infested with snakes, lice, and other noxious insects and reptiles." In a description of the province of Pamplona by a native writer, given in the Appendix to Mollien's Travels, San Josef and Rosario de Cucuta are, however, mentioned as two different towns.

plona,) has received the appellation of *Boyaca*, in commemoration of the memorable victory gained on the field of Boyaca, in the province of Tunja, where the Spanish cause in New Granada received its death-blow from the hands of the Liberator, "aided by his brave British auxiliaries." Its central situation and, perhaps, its very inaccessibility, appear to have recommended it, in the first instance, as the Congress city. The idea of founding a capital as a monument of the National Independence, is a magnificent one. By a decree, however, dated the 8th of October, 1821, the Congress of Cucuta directed its sittings to be transferred to Bogota, reserving "for happier days to raise the city of Bolivar."*

At the distance of about a league to the N.W. of the town, a hot spring bubbles up the midst of a swamp. "The surplus water finds a drain under ground, and re-appears at twenty yards distance, of course cooled in its passage; but even here, the heat is so great, that you cannot bear your hand in it many seconds. The spirits of wine thermometer only indicated heat as high as 120° , to which it immediately rose on being immersed. I have no doubt," adds the Writer, "that, in the middle, an egg might be boiled. It evidently partakes of mineral properties; iron, I should think, both from the taste and the ferruginous sediment that is left in its course. It is singular, that vegetation is remarkably strong immediately round the spring. When its properties are correctly ascertained, it will, in all probability, be of important use. At present, it excites no attention." The Writer does not state, whether any vapour is formed on the surface of the water; but the spring would

* Why not give the name of Bolivar to Bogota?

seem, from this account, to be nearly as hot as the *Aguas Calientes* of La Trinchera, near Valencia, which Humboldt states to be one of the hottest springs in the world, and which is surrounded, in like manner, by a luxuriant and verdant vegetation.*

The road from Cucuta, in each direction, lies through verdant avenues, passing rich plantations of cocoa, sugar-cane, coffee, and cotton. Grapes of very good quality are grown in the neighbourhood. The climate is hot, and, to a European, therefore, or a native of the mountain *plateaus*, a less desirable residence than the cities which are built at a higher elevation. The cocoa of the valley of Cucuta is very highly esteemed: the greater part descends to Maracaybo by the Sulia, being brought by land to the bridge of Cachos, near the village of Limonsito, a distance of six leagues, and an extremely bad road. But part of the produce descends the Magdalena to Monpox and Cartagena, on which account the cocoa is called Magdalena cocoa. This road, however, is unhealthy and inconvenient. A regular intercourse is carried on through San Christoval† with Varinas, where a considerable quantity of specie, drawn from the province of Pamplona,‡ is expended in the purchase of mules and cattle. Although pasturage is abundant, oxen are not bred in these valleys.§ Salt is obtained from Chita in Casanare, or Zipaquira, near Bogota, but some is brought from the coast.

* See page 197.

† This city, which is not found in the maps, lies 20 leagues N.E. of Pamplona. It was founded in 1560. Alcedo states the population at 400 housekeepers. It was included in the government of Maracaybo, and is now in decay.

‡ Mollien's Travels, Note I. pp. 429—30. Alcedo states, that Cucuta was famed for an excellent breed of mules, who fed chiefly on "wild marjoram."

A steep and rocky ascent from the valley of Cucuta, leads to a beautiful plain about a mile in extent, at the extremity of which is the village of Carillo. Though this is higher ground, the place is much infested with a multitude of snakes of various descriptions and sizes, as well as with those tormentors of travellers—mosquitoes. The country people do not stir out after dusk without flambeaus to scare the reptiles. A new road, made within a year or two, leads from Carillo to Pamplona,—“the only effort of the kind,” says our Traveller, “we have met with.” A tolerable wooden bridge has been thrown across the River *San José*, which has its source in the mountains that the Traveller has now to climb. A very fatiguing and long ascent leads to a table-land enclosed by lofty summits. The Travellers halted, the second night after leaving Cucuta, at a place called Gallinazo, about five leagues from Carillo. The road continues gradually to rise, the mountains on either side receding, as far as the village of Chopo: it then winds round the hills, till, on turning the point of an eminence, the traveller suddenly comes in view of the city of Pamplona, situated in a vale about a league in extent, and “hemmed in on all sides by high hills of variously coloured earth. A great many churches enliven the effect; and to each house is attached a portion of garden-ground, which, at a distance, has a very pretty appearance. The surrounding fields are enclosed by stone walls in a very regular manner, giving an air of proprietorship which is not often met with. Several streams run through the vale from north to south.* The very picturesque effect from

* This should be, evidently, from south to north: the Pamplona river is the *Rio del Oro*, a branch of the Sulia.

the distant eminence was hardly realised on descending to the town ; for many of the houses are abandoned, the streets are overgrown with grass, and the gardens are neglected."

The city of Pamplona was founded by Pedro de Ursua, in 1549. It derived its former wealth and importance chiefly from the gold and copper mines in the vicinity. The gold mines of *Veta*, which are within two days' journey of the city, have not been regularly worked for the last century ; but the Indians occasionally bring grains to sell of a considerable size. Our Traveller was told by the commandant, (the city is now a military station,) that he had forwarded to the capital the preceding year, a mass of gold weighing upwards of six pounds. The parish church is reckoned one of the handsomest in the kingdom. It is a good deal ornamented, but the only article of merit or taste is a painting of St. Francis. The other churches contain nothing remarkable. The Jesuits had a college here ; the Franciscans, Augustinians, and Dominicans, each a monastery ; and there is a nunnery of the order of Saint Clara. All the convents, except the latter, are now vacated. The sisterhood, thirty-two in number, have the reputation of being very rich ; their church has a most splendidly ornamented altar-piece, and a multitude of indifferent paintings. These edifices, and the whole city, are stated (by Alcedo) to have suffered much from the earthquake of 1644. The population is now computed to be about 3,200, among whom are seen many objects frightfully deformed by goitres. It had recently been made a *depôt* for invalided soldiers, and upwards of 300 were at this time in the different hospitals. The climate is reckoned by the natives extremely cold. Our Traveller states the mean temperature of the day

at about 60°: at night, it became as low as 42°. It is about 180 miles W.S.W. of Merida, 131 W. of Varinas, and 270 N.E. of Bogota.

South of Pamplona, the country assumes a sterile appearance. The soil glitters with a species of mica, "so brilliant as to have all the appearance of silver." On the summit of a mountain, at the distance of three leagues, just above the "miserable village of Cacota," is a small lake in which the River Apure is said to have its source: the Writer did not observe any outlet, but a small current was observed at the foot of the hill. At two leagues from Pamplona, he had passed a delicious spring of cold water, which issued from the mountain. At the end of nine leagues, he arrived at the village of Chitaga, "situated on a high spot, commanding the vale." The River Chitaga is one of the heads of the Apure; but, as the elevation of these several spots is not given, it is impossible to decide which has the best claim to be considered as originating the Apure. That river, according to Depons, after running for forty leagues toward the S.E., bends more directly eastward, and finally turns to the south, to join the Orinoco, after a course of 170 leagues, 60 of which are navigable. The *serrania*, or mountain-ridge, over which the road now continues alternately to ascend and descend, is cold and barren. Nothing can be more dreary and sterile, says our Traveller, than the tract becomes after losing sight of Chitaga. It is an ascent of five hours to the summit of the *paramo* of Almocadero, which is much dreaded on account of the inclement state of the atmosphere which often prevails there. This is supposed to be the highest ground in the whole road from Caracas. Many a traveller, we are told, who has fallen a victim to the severities of the passage, lies buried on the

summit. "Human bones were even then lying about, and some hundreds of rude crosses have been erected by the passing traveller, either to commemorate a friend who had been *emparamado* (fallen a victim to the paramo), or as a grateful offering for having escaped the danger."* The only inconvenience which the Writer suffered, however, was chapped lips. The sun shone with cloudless splendour, and the glass did not fall below 62°. But at *Hato Jurado*, a farm and *pulperia* which he reached after a gradual descent of an hour and a half, the thermometer fell, during the night, to 52°.

The country gradually improves in fertility and cultivation, as the traveller descends to the valley of the Tequia. At a short distance from *La Concepcion*, is "a considerable formation of sulphur, which impregnates the surrounding atmosphere," but no use is made of it. At *Llano Anciso*, where the Tequia is crossed by a rude bridge, the Travellers were repeatedly saluted, as they rode through the village, with the exclamation, '*Mira! no tienen gotos*;' meaning, we are told, "See, they have no goitres,"—the almost universal disease in this place. A handsome premium

* In crossing the *paramo* of Chisba in 1819, many of the British and other troops in the patriot service miserably perished. "On this *paramo*, the air is so exceedingly rarefied, that it is very difficult to breathe, and those who are affected by it (or *emparamados*) become benumbed, froth at the mouth, and lose their senses, tear out their hair, and, bereft of every sense of feeling by degrees, ultimately perish. The natives recommend eating sugar and drinking water, in preference to spirits, on passing these places, and flagellation to those who shew symptoms of being affected, not letting them stop for an instant. Ignorant at the time of these remedies, and all except the flagellation being out of their power, fifty Englishmen, besides two officers, and upwards of a hundred of the native troops, fell a sacrifice, without the possibility of assistance being given them."—COCHRANE'S *Travels*, vol. i. p. 480.

is said to have been decreed by the legislature for the discovery of a remedy or antidote for this frightful disease. The road from this place, after leaving the Tequia, which continues to wind amid arid, rocky mountains, crosses two parallel ranges, to the valley of the Chichamache. Here, again, at the small village of Capitanejo, a large proportion of the inhabitants were seen disfigured by goitres, together with a species of elephantiasis, by which the limbs are swelled to an unnatural size. A new church had lately been built here, and a pretty bridge thrown across the muddy river, the water of which was found intolerably bad,—the only place where this had been observed. The Travellers were here “entertained” with a new species of vermin, called *cucurachos*, about the size of a large beetle, which found their way into their hammocks. The temperature varied, during their stay, from 82° to 86°. The following day, passing over another low mountain, they reached Soata. “The approach to this town,” we are told, “is one of the most imposing sights imaginable. At the back of the town, which is situated mid-way on a sloping eminence, the land, divided by hedges, like the sections of a map, is cultivated to the very summit. The mountains here appear to concentrate their chains, forming a vast amphitheatre of prodigious height and magnitude: one mass rises above another, till their heads are lost in the clouds.” A storm was impending over their dark summits as the Travellers approached the town; and the effect of the thunder, rolling from one chain to another, was extremely grand. In itself, Soata possesses little worthy of note. They were hospitably received by the alcalde, but all pleasurable feelings were neutralised by the unsightly objects which several of his family presented, through the

effect of goitres. At Satiou, which they reached early the next day but one, a village situated on an elevated plain backed by a semicircular mountain, the Travellers noticed, with high satisfaction, the comparative absence of this deformity.* It was Sunday and market-day; the village was consequently all bustle; and among the crowd, some pretty faces were distinguishable through the blue mantles worn by the women over the head and shoulders, and surmounted with a straw hat. The *tout ensemble* of this costume, with blue petticoats and sandals made of cord, is not unlike the dress of the Welch peasantry.

A gradual and slippery descent from this elevated plain, leads to the vale of Serinza. "Thus far," says our Traveller, "there is a striking difference between Venezuela and New Granada: the former is more wooded, less thickly peopled, and, generally speaking, more fertile. But, as we now gradually leave the chain of the Andes, the soil is better cultivated, numerous huts and cottages present themselves, each possessing a portion of ground more than sufficient to support the inhabitants; and the roads continue to improve as we advance. We descended into the vale of Serinza, presenting a different aspect from any of the varied scenes that have occurred during the journey. The contrast is most striking. An extensive and perfectly even flat, varying from a quarter to half a mile in breadth, is

* These endemic glandular complaints are very prevalent in many parts of Brazil, particularly on the banks of the Paraíba, and in the mining districts. — See MOD. TRAV. *Brazil*, vol. i. p. 246; vol. ii. p. 39. Almost all travellers agree in attributing them to the properties of the waters of the rivers, which are, for the most part, charged with earthy particles. The exclusive use of spring water, and plenty of salt, are recommended as the best preservatives.

bounded on each side by a range of moderately high mountains of arable land. The valley is in general cultivation, and remarkably fertile, producing fine crops of maize, wheat, beans, potatoes, peas, &c. all of which were in a state of spring-like verdure, and cultivated with the utmost regularity and cleanliness. Verdant meadow-lands intersect the tillage; the River Serinza (lower down, called the Chiquito,) slowly winding through the midst, with a placidity more resembling 'the soft-flowing Avon,' than a mountain-stream in America. The whole extent of the valley, which, with different windings, may be three or four leagues in length, is extremely well peopled. Many of the cottages were adorned with flowers, and very neat. The land belonging to each individual is partitioned off by mud-walls or hedges, giving a further appearance of civilisation and independence; and the pasturage is abundantly stocked with sheep, oxen, and horses. It is, upon the whole, a most interesting tract, and gives a favourable opinion of the kingdom of New Granada. We took a slight repast at the house of the village curate, which is about half-way in the vale. According to his account, the parish contains a population of upwards of 3,000 persons. In the early part of the Revolution, these people made extraordinary exertions in the cause of the patriots. When Bolivar arrived with his army, worn out with fatigue, from the banks of the Apure, they clothed them, remounted their officers and a great part of the cavalry, and supplied them with necessaries at their own expense. Its known patriotism brought upon it, during its subsequent occupation by the Spaniards, the greatest hardships and contributions without number."

The village of Serinza has, according to Alcedo, the

pompous dedicatory title of *Nuestra Señora de Belen del Valle*. Three leagues further, is the large and populous village of Santa Rosa; and two leagues beyond, in a rich and productive plain, the straggling village of Duitama. This place was formerly the head of a distinct *corregimiento*, and, previously to the conquest, is said to have been “a great and rich city of the Mozca nation, the capital of Tundama, one of the most powerful princes in the kingdom, who was routed in the battle of Bonza by Quesada in 1538, and afterward became tributary to the crown of Castile.” Three leagues beyond Duitama, is the village of Paypa, where the Spaniards had their head quarters previously to the affair at Vargas, which was followed, a few days after, by the decisive battle of Boyaca, which opened the way to Bogota. Four leagues further, the Travellers quitted the road, and crossed the plain to the village of Tuta. The next day, (the 11th from Pamplona, one of which was passed at Soata,) they reached the city of Tunja.

TUNJA.

THIS provincial capital, founded in 1539, was, at one time, one of the most opulent cities in the kingdom, and its inhabitants boasted of being descended from the first conquerors. The province of Tunja, (bounded on the S. by that of Bogota, on the W. by the River Magdalena, which divides it from Mariquita, on the E. by Casanare, and on the N. by Pamplona,) formed, prior to the conquest, the kingdom of Hunzusta, whose *zaques* (or sovereigns) were independent of the monarchs of Bogota and Zipa. Though generally of a cold and dry climate, it is fertile in

grain, and has yielded tobacco of excellent quality ; it abounds also in salt-petre, on which account the only government powder-manufactories were established here ; and it was celebrated for its gold mines and emeralds. The city is seated on an eminence in the same valley in which the Indian capital was placed ; and it is seen at a considerable distance, surrounded with stony heights and swampy meadows. Our Traveller was much disappointed on a nearer examination of the town. There is little worthy of notice except the churches and convents. The architecture of these edifices is of the simplest, frequently the rudest kind. The portal to the parish church of Santiago is, however, an exception ; it is carved in stone, and is of tolerable execution. In the interior are several very old pictures of some merit, apparently by Spanish masters. Alcedo mentions two other churches, Santa Barbara and Las Nieves, and three hermitages, dedicated to San Lorenzo, Santa Lucia, and Nuestra Señora de Chiquinquirá. The lofty plain on which the last of these is built, is called *Los Ahorcados* (the gallows), “ on account of its being, in the times of paganism, ornamented with the bones and skulls of persons offered in sacrifice.” There are two monasteries, Franciscan and Dominican ; and two nunneries, one of Santa Clara (a rich order), and one of La Concepcion. A third monastery, of the order of San Juan de Dios, has been converted into a military hospital, under the inspection of the order, who profess medicine, and give advice and medicine *gratis*. None of the religious orders appear to have been suppressed at Tunja. The monks, our Traveller says, shewed with alacrity all that was to be seen in their respective monasteries, the ornaments of which consist chiefly in a profusion of images and gilt work, very rich and

gaudy, and a great number of pictures, the larger part mere trash, but some few of merit. Besides these institutions, there have lately been established here, a public college called the *Colegio de Boyaca*, in which the higher classes are taught philosophy, mathematics, and divinity, and, for the poor of the town, a school on the Lancasterian plan. The latter was visited by our Traveller, who was struck with the regularity with which it is conducted, and the fine appearance of the youths, sixty in number, several of whom had made considerable progress. There is a salt-petre manufactory here, which formerly employed more than 200 persons. The earth from which the salt is extracted, is found in abundance in the vicinity, but the proportion of the mineral is only one per cent. The temperature of the air at Tunja was found very pleasant, varying from 58° to 70° ; but, in taking exercise, the whole party experienced an oppressive sensation at the chest from the rarity of the atmosphere. Alcedo says, the climate is dry and cold, being continually refreshed with winds, but healthy. There is a deficiency of fuel and water: the only supply of the latter is conveyed by an aqueduct from the height commanding the city. It is reckoned 54 miles N.N.E. of Bogota.

At two leagues from Tunja, on the road to the capital of New Granada, is the memorable field of Boyaca. The whole of this tract of country is bare and open. "The Spaniards had their centre in the plain, protected in front by a small river and ravine, their right occupying a rising ground, beyond which was the bridge of Boyaca, defended by the artillery. Here it was that their position was first forced by the English troops, who gained the bridge, and charged up to the mouths of the guns, all of which were taken,

together with the Spanish general Barreira, his staff, and a great number of prisoners.”*

Beyond Boyaca, the country improves, spontaneous vegetation re-appears, the roads are good and free from stones, and the soil is cultivated and tolerably peopled. Beyond the village of *Alto Viego*, the country widens into a rich plain, well cultivated with wheat and other grain, in the middle of which is the village of Choconta. The road then descends to the rich pasture-lands of San Vicente, watered by the River Bogota: these in some parts are very marshy, and abound with herons of beautiful plumage. After passing through several villages called the *pueblos*, the road at length turns the foot of a range of hills running N. and S., and enters the line of plain that conducts to the capital. It is of considerable width, and presents the appearance of high cultivation. In the midst runs the Bogota, while the horizon is bounded by distant mountains. The first glimpse of the capital is caught from an eminence four leagues distant from it. From the village of Susaquia, distant only four miles, is obtained a splendid view of the city and the plain which extends in front of it; but, as the traveller draws nearer, he is astonished at the neglected state of the valuable land in its immediate vicinity, and the bad state of the roads. At length, on the 23d of April, our Traveller had the satisfaction of finding himself in the capital of the Republic, after a journey of two months, forty-six days of which were spent on the road,† having completed a journey of

* This battle was fought on the 8th of August, 1819. The royalists are said to have lost 2,000 men in killed, wounded, and prisoners. On the 10th, Bolivar entered Bogota in triumph.

† The public despatches are generally forwarded from Caracas to Bogota in forty days. They are conveyed by men who travel on foot day and night, but are relieved at every village.

above 300 leagues from Caracas.* Before, however, we proceed to give a description of the city itself, we shall

* We have given at pp. 222 and 249, the itinerary from Valencia to San Carlos, and from San Carlos to Barquesimeto. Thus far the distances seem pretty well ascertained, viz.

	Leagues.
From Caracas to Valencia	30½
From Valencia to San Carlos	23½
From San Carlos to Barquesimeto	23
From Barquesimeto to Merida, the distances may be reckoned as follow :	
From Barquesimeto—	
To Tocuyo	15 leagues.
— Olmucaro	9 hours.
— Aguao d'Obispos	9½
— Carache	7
— Mocoey	10 leagues.
— Panpanito	2½
— Mendoza	8
— Timotes	7½ hours.
— Mucuchies	7½
— Merida	7
—	83
From Merida to Cucuta thus:	
To San Juan	6 leagues.
— Estanques	5
— Bayladores	3
— La Grita	7
— Savanna Larga	10
— Cucuta	12
—	48
	<hr/> 208
From Cucuta to Bogota, according to Col. Hall ..	103
	<hr/> 311

This ill coincides with the general computation of the country (p. 245) of 1,200 miles. The discrepancy arises, probably, from the equivocal meaning of the league. In Alcedo's Dictionary, the distance between Merida and Pamplona is stated to be only 112 miles. This is, perhaps, an error for 212, which is nearer the truth. Pamplona appears to be in fact about 12 leagues from Cucuta, and consequently 60 from Merida. We flatter ourselves that the above itinerary will be found sufficiently correct to serve the purpose of travellers.

trace the route of two other Travellers who reached Bogota, by way of Monpox, from Santa Marta and Cartagena.

CARTAGENA.

IN Nov. 1822, M. G. Mollien, a French Traveller already known to the public by his travels in the interior of Africa, landed at Cartagena. The port is a magnificent one. The bay is one of the largest and best on the whole coast, extending two leagues and a half from N. to S. ; it has capital anchorage, though the many shallows at the entrance require a careful steerage; and, being completely land-locked, is so smooth, that vessels ride here as on a river. The better to defend the approach, the Spaniards have blocked up the *Boca Grande*, by sinking old vessels in it. *Boca Chica* is a great distance from the anchorage. “Men-of-war,” Capt. Cochrane says, “sometimes anchor off the north side of the city, and send their boats in through *Boca Grande*, having previously obtained permission of the governor. So great was the fear of the Spaniards, lest they should be surprised by a foreign enemy, that they would rarely allow the boats to use this passage, wishing to keep all foreigners in ignorance of such an entrance; and, as an additional means of preventing vessels from passing in by this mouth, they sunk several ships, which blocked it up, only allowing depth sufficient for row-boats. There is no doubt that the Colombians will now remove these impediments to the entrance, by the use of proper machinery to raise the stones, and weigh the vessels which contain them; which being done, the current will soon carry off the accumulation of sand, and afford easy access to the city, by the *Boca Grande*, to vessels bound to the port. In

consequence of the blocking up of this entrance, ships are compelled to go round by *Boca Chica*, a circuit of thirty miles, to gain the usual road-stead for frigates, and which is three or four miles from the town. If a jetty were thrown out, or a chain-pier erected on the north side of the city, which is very feasible, constant communication might be kept up between vessels lying at anchor on that side of the town, and landing be easily effected." The *Boca Chica* (narrow mouth) is defended by two strong castles. The bay abounds with fish and excellent turtles. Sharks are so numerous as to render bathing highly dangerous, and they have been known to attack even boats. The Indian name of the place was *Calamari*, which signifies, we are told by Alcedo, the land of cray-fish. The city is built on a small peninsula, originally a sandy island, but now connected with the continent by an artificial neck of land. It has a suburb, called *Xiximani*, almost as large as the city, built on another island, and communicating with it by means of a wooden bridge. Both the city and the suburb are surrounded with strong fortifications of free-stone. At a short distance from the town, on the main land, is a hill commanding these fortifications, on which is a strong fort. This eminence, which is about 150 feet high, communicates on the east with a range of more elevated hills, terminating in a summit 550 feet above the sea, on which stands the Augustinian monastery of *Nuestra Senhora de la Popa*. "The height of *La Popa* is not fortified, which," says Capt. Cochrane, "is unaccountable, as it has several times been the cause of the fall of Cartagena, without almost a single shot being fired. The Colombians have now some idea of fortifying it. I found lying there a large brass eighteen-pounder that had been brought by Morillo,

and the remains of a fascine and mud-battery erected by Bolivar when he attacked Cartagena. Had Admiral Vernon landed a few cannon, and had them dragged here by a body of seamen, he must have captured the place, as the possessors of this point will always be masters of the city. On the summit, at the western extremity, is the Augustin convent of *Nuestra Senhora de la Popa*, which was formerly very rich. I saw the room where Bolivar was sitting during the siege, when a shot entering at the window, shattered the shutter, passed over his head, struck the wall, bounded back, and then, striking the side wall, bounced out at another window, without doing Bolivar any injury. The monastery is now almost in ruins, and is tenanted by one solitary friar, who occasionally makes a little money by letting one or two rooms to people who wish to enjoy cooler air than that of the town, which would be insufferable were it not for an almost constant sea-breeze."

The town produces by no means a pleasing impression, in contrast with the cheerful sea-ports of the United States, from which the French Traveller had recently sailed. "Cartagena, in fact," he says, "presents the melancholy aspect of a cloister. Long galleries, short and clumsy columns, streets narrow and dark, from the too great projection of the terraces, which almost prevent the admission of day-light; the greater part of the houses dirty, full of smoke, poverty-stricken, and sheltering beings still more filthy, black, and miserable;—such is the picture at first presented by a city adorned with the name of the rival of Rome. However, on entering the houses, their construction, singular at first sight, appears afterwards to be well contrived, the object being to admit the circulation of the fresh air. The rooms are nothing

but immense vestibules, in which the cool air, unfortunately so rare, might be respired with the utmost delight, were it not for the stings of thousands of insects, and for the bats, whose bites are not only more painful, but are even said to be venomous. A table, half a dozen wooden chairs, a mat bed, a large jar, and two candlesticks, generally compose the whole stock of furniture of these habitations, which are built of brick, and covered in with tiles. Two sieges which Cartagena has undergone, have ruined the resources of the majority of its inhabitants.

“ Cartagena is very strong, and of vast extent. Nine thousand men at least would be required to defend it at all points. The immense cisterns contained within its walls, are justly objects of admiration; and the water preserved in them is excellent. Cartagena is, therefore, rather a fortified than a commercial town, and will entirely cease to be the latter, when it is no longer the entrepôt of Panama. At a distance of 200 leagues from the equator, its temperature is hot and unhealthy, and the yellow fever makes frequent ravages there. The population of Cartagena, about 18,000 souls, is, for the most part, composed of people of colour, the greater proportion of whom are sailors or fishermen.* Many keep shops for the sale of mercery or eatables, others follow useful trades: they display a nascent industry, which, to prosper, requires, perhaps, only encouragement and emulation. Their shell-works are beautiful. They are skilful jewellers, good carpenters, excellent shoemakers, tolerable tailors, indifferent joiners, blacksmiths rather than whitesmiths, masons destitute of all ideas of proportion, and bad painters, but impassioned musicians.

* The population was formerly estimated at from 24 to 25,000.

“ The dangers of the sea, and an industry often praised and always well paid, have inspired the people of colour with a pride which often gives occasion for complaint. Their petulance and vivacity form a singular contrast with the indifference and mildness of those who are called Whites, so that, notwithstanding their idleness, they appear active and laborious. The contraband trade is exclusively confined to them, and the heartiness with which they engage in it, is a reproach to those whose duty it is to put a stop to the illicit traffic.

“ The women of colour, the offspring of negresses and white men, are tall, and much more agreeable than the mulattoes of our Antilles, who are generally too corpulent: daughters of the Indians and negroes, their physiognomy possesses greater delicacy and expression. If, on the one hand, the races become more enervated under the tropics as they become fairer, on the other, their personal appearance is improved. Thus it is, that the female mulattoes are very inferior in beauty to the whites, and lose much when seen near them, which often happens with the Spaniards, in whose churches there are no privileged places, as in those of the United States. With the Spaniards, all pray to God in common, without regard to colour; and an insurrection would doubtless be the consequence, should the following notice be officially affixed at the church-doors: *To-day instruction for men of colour.*”

Cartagena was founded by Pedro de Heredia in 1533. It was made an episcopal city in 1534. Owing to its fine situation, it soon attracted the attention of foreigners, particularly the French. It was sacked by a Corsican pirate in 1544. In 1583, Sir Francis Drake, after pillaging it, set it on fire, but it was rescued from the flames by a ransom of 120,000 ducats paid

him by the neighbouring colonies. It was invaded and pillaged a third time, by the French, in 1697. In the year 1741, it was invested by the English under Admiral Vernon and Sir Charles Ogle, who succeeded in destroying the forts; but, owing, as it is said, to a misunderstanding between the naval and military commanders, and a mortality among the troops, the enterprise was precipitately abandoned with considerable loss. It has suffered much in the revolutionary contest. The climate is very hot, especially during the rainy season, which lasts from May to November, and is attended by a continued succession of tempests and thunder-storms. The streets have then the appearance of rivers, and all the cisterns and tanks are filled, to which the inhabitants are indebted for their only supply of sweet water. From December to April, the weather is fine, and the heat is tempered by north-east winds. The black vomit is almost as fatal here to strangers as at Vera Cruz. The inhabitants are very subject to leprosy. Bats are so numerous, that they cover the streets in an evening, in clouds, and there is not a house in which these nocturnal visitors are not found. Beetles, centipedes, scorpions, *niguas*, and *morcielagos*, are among the insect annoyances of the place; besides which, Alcedo mentions the *culebrilla*, which breeds under the skin, causing a swelling which often terminates in gangrene, and produces convulsions. Merchandise is very liable to be destroyed by the moth. The inhabitants have in general a very unhealthy appearance, and yet, there are said to be many instances of longevity. Cartagena was the residence of the bishop, and of a captain-general dependent on the viceroy of Santa Fé. One of the

three tribunals of the Inquisition in America, was also established here: the two others were at Mexico and Lima. The Jesuits had a college here; the Franciscans, the Augustinians, the Mercedarians, the barefoot Carmelites, and the orders of San Diego and San Juan de Dios, had each a convent; there is a nunnery of the order of San Clara, and a hospital for lepers. It stands in lat. $10^{\circ} 26' 35''$ N., long. $75^{\circ} 26' 45''$ W.

On the 10th of Jan. (1823), the Author set out on his journey for Bogota, and proceeded as far as the village of Turbaco, six leagues from Cartagena. According to the travelling custom of the Spanish Americans, he had provided himself with a kettle, a frying-pan, and all the utensils and provisions not procurable on the road, together with a Spanish travelling-bed, contained in a small trunk easily carried by a mule. Turbaco is situated nearly 1,000 feet above the level of the sea, at the entrance of a majestic forest of vast extent. It is the site of the Indian capital of Calamari, which is said to have contained upwards of 200,000 inhabitants. The situation is delightful, and the temperature mild and salubrious. "All night long," says M. Mollien, "I felt it very cool; a proof that this place is very healthy for Europeans, who, from fear of the climate of Cartagena, should remain here till their vessels are ready to sail." In the neighbourhood of this village, there is said to be a singular marsh, (though it is not mentioned by this Traveller,) embosomed in a forest of palms, tolu-trees, &c. from which rise eighteen or twenty little conical mounts, twenty or thirty feet above the level of the swamp. They are formed of blackish clay, and each has a small crater filled with water at its apex.

“On approaching this pool, a hollow moaning is heard at intervals, followed in a few seconds by an explosion of gas. Five of these detonations take place in about two minutes, frequently accompanied with an ejection of muddy water. These cones are called *Los Volcanitos de Turbaco*, and are situated about three miles and a half east of the village, at the elevation of more than 160 feet above it. The people say that the plain formerly sent forth flames, but that a priest of great sanctity succeeded, by frequently casting holy water towards it, in extinguishing the fire, after which it became a water volcano.” This phenomenon is evidently of the same description as the *hornitos* of Jorullo.*

On the fourth day after leaving Turbaco, our Traveller reached Burranca, the town at which travellers ascending the Magdalena, embark in the dry season.† “Although, on the road from Cartagena to Barranca, there are neither rugged mountains nor deep rivers to cross, yet, the suffocating heat which prevails in the forests he has to traverse, occasions much suffering to the European traveller. It is true,” adds M. Mollien, “that, to make up for these evils, he is sure to meet with hospitality; nor is it a trifling advantage, to find, in the deserts of the New World, a lodging, a

* See *Mod. Trav.*, Mexico, vol. ii. p. 123.

† In the rainy season, the Dique, a branch of the Magdalena, is navigable, by means of which a water communication is effected with Cartagena; but it can only be passed, at present, from four to six months in the year. From Cartagena, the goods go by water to Mahates, and are then forwarded on mules to Barranca, where they are shipped on board *champanes* for Honda. A Mr. Elbers, however, a German gentleman, has undertaken to complete the water communication with Cartagena by rendering the *Dique* navigable during the whole of the year; and he has obtained an exclusive grant for navigating the river with steam-boats for a period of twenty years.

kitchen, and the power of procuring, at a small expense, fowls, eggs, and bread: beef is very seldom to be met with. The aspect of these countries is interesting to the admirers of wild and savage scenery. Trees of immense height and a rich vegetation cover the whole country; and the shade thus afforded would be delicious, could it be penetrated by cooling breezes. The mahagua (bombax) is especially worthy of engaging the traveller's attention. The trunk of this tree is very lofty, and bears upon its top a foliage extremely thick; the fruit contains a woolly substance, which the negroes gather very carefully for the purpose of stuffing their pillows. But few things have been planted on these vast tracts by the hand of man. A few cotton and maize fields, or a few square feet planted with indigo, compose the whole of their agricultural riches. Under a kind master, the negro here gives himself up to the idleness to which he is invited by the heat of the equinoctial line, and the multiplicity of his religious festivals. Bound to pay his landlord a fixed and moderate rent, he is punctual in discharging it, as much labour is not required to obtain its amount. Thus, in the space which separates Barranca from the seas, a territory is found, which is cultivated and inhabited similarly to those which I had traversed in Africa. I should even have been sometimes tempted to believe that I was still travelling upon that continent, had I not every where seen the authority in the hands of the Whites, or of people who affect that title, without possessing any real right to it. The road, although convenient enough, is not very level; the ground is hilly, so that the traveller is frequently ascending and descending. As this road is, during the dry season, the principal line of communication between the capi-

tal and the coast, its traffic is considerable. Yet, notwithstanding, no rich towns are to be met with. There are a few cattle, but, at this season, they are very poor. All animals in the tropical plains, like the plants, require the rains to invigorate them: these being over, they again droop and languish. Jaguars, monkeys, and parrots make the air re-echo with their cries; and stags and wild hogs abound in the woods. Nothing picturesque is to be found in these extensive forests, the dull uniformity of which is only now and then varied by numerous tribes of flowers. Upon approaching the Magdalena, the prospect becomes more inviting; the long tracts of granite (*grès*) which impart so sombre a character to the road from Cartagena to Barranca, disappear; alluvial lands seem to invite the inhabitants to bestow a better cultivation upon them; the verdure, more frequently watered, is less sickly; while the cattle, feeding upon more juicy pastures, are fatter and more prolific."

The noble river by which the provinces of Neyva, Popayan, Mariquita, Antioquia, Santa Marta, and Cartagena communicate with each other, (named the Magdalena from its being first discovered by Rodrigo Bastidas on St. Mary Magdalen's day, 1525,) issues from the lake of Papas, in the *paramo* of Guanacas, in the province of Popayan, in lat. $1^{\circ} 5' N.$, long. $14^{\circ} W.$ During almost the whole of its course, upwards of 300 leagues in length, it flows along the same meridian, gathering the waters of numerous confluent rivers, some of which are considerable rivers. Of these, the principal is the Cauca, which rises in the mountains of Mariquita further southward, and which would present similar advantages for navigation, did not its bed become gradually narrower, as it approaches the point of junction with the Magdalena,

which renders its course dangerous and in many parts impracticable. The Magdalena, on the contrary, becomes wider as it flows onward. Nature seems to have designed this river, remarks M. Mollien, as a channel of communication between the mountains and the sea; yet, it would have been nothing better than an unnavigable torrent, had not its course been arrested in many parts by masses of rock so disposed as to break its violence. Three very different temperatures prevail on this river. The sea-breezes blow from its mouth as far as Monpox. From that town to Morales, not a breath of air tempers the heat of the atmosphere, and, but for the abundant dews which fall at night, it would be insupportable. From Morales to the sources of the river, land-breezes from the south moderate the heat of the day, and render the navigation practicable. Along the whole course of the river, however, innumerable insect tormentors wage war upon the lord of the creation. Mosquitoes near the sea, and, further up, enormous flies called *tabanos*, “glut themselves with his blood.” Should the traveller wish to bathe, he is in danger of being devoured by alligators; and if he venture on shore, he has to dread the bite of venomous serpents. Nothing, therefore, according to this Traveller, can be more alarming than a voyage up the Magdalena. “Even the eye,” he says, “is rarely gratified; for the fertile banks of this river, which ought to be covered with cocoa, sugar, coffee, indigo, cotton, and tobacco plantations, and which should present the thirsty traveller with the delicious fruits of the tropics, are covered with thick bushes, bindweed, and thorns, from the midst of which shoot up the cocoa and other palm-trees. The solitude of the forests on its uncultivated borders, the heat that we experienced, and the blacks

who, at considerable intervals, were seen seated in their cabins of reeds, surrounded by fields of maize, or cleaving the current of the river in hollow trees, transported me in imagination to the wilds of Africa." The river in many respects reminded our Traveller of the Senegal. Other travellers, however, speak in very different terms of the scenery on the banks.* The confluence of the Cauca and the Magdalena, below Monpox, is especially interesting. "For a river scene," we are told, "nothing can be more grand than the junction of these two majestic streams, whose waters seem to contend with each other for the superiority; and it is not till after a distance of several leagues, that the clearer stream of the Cauca is ultimately engulfed in the more muddy Magdalena. At the point where they meet, the scenery is strikingly beautiful; the banks of each being clothed with wood. The picturesque little village of Pinto, built in a grove of coconut trees, and characterised by two mango-trees in the centre, (a peculiarity observable in most of the villages on the river,) forms a beautiful object on the west bank, at the spot where the rivers meet. Fine rising woodlands to the S.W., and the mountains to the N., add greatly to the grandeur and majesty of the scene."†

In the latter part of its course, the Magdalena divides the provinces of Cartagena and Santa Marta,

* The Author of Letters from Colombia, who descended the river from Honda to Santa Marta, thus speaks of the scenery which it presents: "This majestic river, in itself a mine of wealth to the luxuriant and universally fertile country through which it runs, surpasses, in its natural richness and grandeur of scenery, all that can possibly be imagined, studded with numerous beautiful islands, and receiving innumerable and magnificent tributary streams." p. 199.

† "Letters from Colombia," p. 195.

giving its name to the department which comprises those two provinces together with that of Rio Hacha, so named from the river which forms its eastern boundary. The provinces of Rio Hacha and Santa Marta, which are separated by no natural boundary, comprise together a tract of country about two degrees in longitude, and one and a half in latitude, intersected by the *Sierra Nevada* of Santa Marta. Between this lofty ridge and the sea, extend fertile and for the most part unoccupied lands, which it is thought would present eligible situations for foreign settlers. The Brazil-wood abounds in Rio Hacha, and might be rendered a very profitable article of commerce. "Another tract of country scarcely less advantageous," says Col. Hall, "lies between the Ocana and Santa Marta mountains, to the north and south, and the towns of El Valle and Chiriguana to the east and west. It communicates with the Magdalena by a series of small lakes; with the interior, by the Ocana mountains; and with the sea-coast by Santa Marta and Rio Hacha.* It contains a length of about thirty

* Col. Hall gives the following itinerary of the route from Rio Hacha to Santa Marta:

Leagues.		Leagues.	
From Rio Hacha—		Brought forward ..	
To Moreno	7	To Hato de Chimeles	8
— Fonseca	8	— San Carlos or Fundaci6n ..	9
— San Juan	3½	— Rio Aricutaca	8
— Badillo	6	— Rio Tucarinca	3
— El Valle	4½	— Rio Riguena	5
— Valencia de Jesus . . .	3	— Rio Frio	5
— Hato de Comperuche . .	9	— Serillano	3
— Guaycaras	10	— Ceinaga	1
(across the Alto de Minas)		— Santa Marta	7
	51		100

The greater part of the road is level, through thick forests, broken by occasional savannas. Mountain roads branch off from Fonseca and Valencia de Jesus.

leagues, with an indefinite breadth towards the mountains, consisting of alternate woods and savannas, watered by abundant streams. The climate, though warm, is healthy, and untroubled by the insects which swarm near the great rivers. Between Chiriguana and the Indian village of the *Cienaga*, on the sea-coast near Santa Marta, is a third tract of almost uninhabited country, extending about seventy leagues from north to south, nearly covered with superb forests, and abounding with lands of excellent quality, especially on the rivers, which descend from the snow mountains into the *Cienaga* or lake. The river Magdalena forms its western boundary. The few villages and farms scattered over it, though not numerous enough to impede fresh settlements, are sufficient to afford them such aid as their infant state necessarily requires.

“ The province of Cartagena contains excellent lands, especially on the banks of the Magdalena. There is, however, one spot which peculiarly claims attention: this is the port of Savanilla, at the mouth of the Magdalena. The lands here are finely timbered, and the temperature is refreshed by strong breezes; but the principal advantage consists in its being the natural port of the Magdalena, in which capacity there is little doubt it will one day become the emporium of the whole trade of the interior, though it is closed at present by order of the Government, for the purpose of favouring Santa Marta, which would be abandoned, should the commerce be left to its natural channel; the communication between the latter and the river being troublesome and circuitous, through the canals which unite with the *Cienaga*, whereas Savanilla is the mouth of the river itself. Its chief defect as a port is, the shallowness

of the river immediately above it, which is caused by the number of mouths through which the Magdalena discharges itself into the ocean. Even flat boats have, in the dry season, some difficulty in ascending from Savanilla to Barranquilla. It is probable, this defect might be remedied, by closing up the mouth called *Boca Vieja*; but the country is not, at present, ripe for such an undertaking." While the Author of Letters from Colombia was at Bogotá, the project of building a town at Savanilla, and making it a free port, was before the Congress; but "strong interest was opposed to the measure." If carried into effect, he says, it will most materially injure both Santa Marta and Cartagena, but it will prove at the same time a general benefit to the interior. The main trade had lately been carried on from Santa Marta, on account of the facilities it afforded to the contraband trade; but, since the Colombian Government has organised its custom-house system, the people of the interior are less inclined to go there, and it is thought that Cartagena will eventually become the preferable port.

SANTA MARTA.

Captain Charles Stuart Cochrane, who visited Colombia in 1823-4, landed at Santa Marta:—he thus describes the port. "The bay is small, and best adapted to the reception of merchant vessels of light draught of water, which are moored head and stern close in shore, with one anchor from the stern to the beach. Larger ships are much exposed to N.E. winds, by which they have sometimes been blown out through the passage between the castle and the island of the *Moro*. The castle is admirably situated for the defence of the bay, being on the summit of an almost

perpendicular insulated rock, above the angle at which a ship's guns could have much effect: it commands the town and the entrance to the harbour. Its importance seems, however, not to have been duly appreciated by the natives, as they have only a few guns mounted; and they abandoned it when attacked by the Indians a few months before my arrival, although it might have defended the town as long as its provisions and water lasted. There is a small battery on the level of the sea, in front of the town, mounted with five guns: another formerly existed at the N.W. extremity of the bay, but is now dismantled. The appearance of the town, as seen from a vessel standing into the bay, is neat and pretty, the houses being white-washed and, in general, covered with red tiles. To the eastward is a range of hills, steep and of conical form. The wind rushes with great violence through the intervals between them into the bay, and thus contributes to its insecurity. The town presented the most deplorable scenes of ruin. The Indians, who had kept possession of the place for three weeks, until General Montilla came down and retook it, had committed every species of wanton mischief, and had literally torn the place to pieces. The population, which formerly amounted to 8,000, is now reduced to a few hundreds, and the once flourishing commerce of the place has been annihilated."*

* Cochrane's Travels, vol. i. pp. 55—9. The Author of Letters from Colombia, who was at Santa Marta in July 1823 (a few months later), states the population at between 4 and 5,000 souls. The causes of its decline which he assigns are, the desolation produced by the war, and the number of families banished for their adherence to the Spanish cause. "Now," he adds, "there are not above a dozen merchants of any note in the place, and the business carried on is comparatively trifling." This looks, however, as if the state of things was improving.

The city of Santa Marta was founded in 1525, and was made an episcopal city four years afterward. The bishopric was suppressed by Paul IV. in 1562, but re-established by his successor in 1577. The place was repeatedly sacked by foreign pirates during the sixteenth and seventeenth centuries. The last time, Alcedo says, was in 1672, by an English and a French privateer, when the town was completely pillaged, and they had the wickedness to carry off the bishop. Latterly, however, it had risen into considerable importance as a commercial city, enjoying almost the exclusive importation of manufactures for the capital. The town contains some good houses. The cathedral is a very conspicuous object in the approach both by land and sea, but neither its architecture nor its internal decoration is deserving of notice. The Franciscans and the Dominicans had each a convent here. This city has one advantage over Cartagena, in being supplied with an abundance of sweet water from the River Gaira, which flows near the city. Alcedo states, that it enjoys a salubrious temperature, less hot than that of Cartagena; but the Author of Letters from Colombia, who was there in the month of July, complains of the excessive heat of the place, which, he says, is seldom below 90°, and prevents your stirring about by day. "The only recreations," he states, "are bathing morning and evening, and walking either on the beach or in extensive labyrinths of wood at the back of the town, which are cool and agreeable, but harbour a great variety and abundance of snakes. They extend for some miles in an easterly direction, and are terminated by mountains of a great elevation, which gradually rise till they attain the height of 16,419 feet above the level of the sea, the elevation of the

nevado. These form a back-ground to the town, all of them clothed with fine timber or brush-wood. The intermediate flat is interspersed with numerous *rosas*, or *quintas*, where fruits and vegetables are grown to supply the market; but, as they belong chiefly to poor people, few of them are in any kind of order. On ascending the head-land which protects the harbour from northerly winds, on the one side is a highly picturesque and panoramic view of the town and bay; on the other, a great extent of ocean, with the bold coast of Terra Firma stretching to windward. We used very much to enjoy the breezes on this spot, it being many degrees cooler than the town. Within a league of the city, are some natural salt-pits, from which salt is obtained in sufficient quantities to render it capable of being made an important article of trade. Silver, also, is said to have been found in the vicinity, and a mine of lead has been discovered under the citadel. Some particles of this, or some other metal, are sometimes found mixed with the fine sand of the beach. At the village of Ocana, 220 miles S. of Santa Marta, copper ores are found; but the mines in this province are either of little importance, or have hitherto received very inadequate attention.

From the port of Santa Marta, it is a distance of seven or eight leagues along the coast to the *Cienega* (the lake),* near which is the Indian village of *Pueblo Viejo*, whence there is a water-communication, through a succession of lakes and canals, to the villages of Barranquilla and Solidad. These two

* The lagoon, or *cienega*, of Santa Marta, has a communication with the sea by a channel sometimes navigable for canoes. These lagoons are navigated by canoes, and are so shallow, that, though drawing only two feet water, the canoes sometimes ground.

places, situated on navigable canals communicating with the Magdalena, are depôts for goods brought from Santa Marta to be conveyed up the river. Solidad is a place of considerable extent, built of sun-dried clay, containing nearly 2,000 inhabitants. The exports consist chiefly of cotton, which is exchanged for Osnaburg shirting, Russia duck, hard-ware, &c. The heat is almost intolerable by day. Here, on the 3d of April, Captain Cochrane embarked for Honda. There is a tolerable road, mostly through thick palm forests, from Barranquilla to Barranca; but, beyond the latter place, there is no tolerable route by land.*

VOYAGE UP THE MAGDALENA.

THE only craft employed on the Magdalena, are *piraguas* and *champans*. The former are, in general, employed by travellers who have not much baggage, and by the government-couriers: they are merely trees hollowed out with an axe. A *piragua* from sixteen to twenty varas in length, costs 200 dollars. Those which are engaged at Barranca or at Santa Marta, do not ascend higher than Monpox, a distance of forty-six leagues and a half from the former town, which occupies from three to five days; and more than twenty are required to go from Monpox to Honda. It is not at all uncommon, indeed, we are told, after the rainy season, to be delayed from fifty to sixty days in navigating from Santa Marta to Honda, owing to the violence of the current; whereas, in descending the

* The route from Barranquilla to Barranca is given by Col. Hall. The distance is twenty-five leagues and a half. At three leagues from Barranquilla, the road separates to Cartagena, distant thirty-four leagues. The next five leagues are over a level tract, which is subject to inundation in winter.

river, the post generally reaches the coast in seven days. *Champans*, which are employed in the conveyance of merchandise, are flat-bottomed boats, about the size of the fruit-boats used on the Seine, covered in with bamboos to preserve the cargoes from rain: this roof serves also as a deck for the *bogas*, or boatmen, on which they place themselves to push along the boat with their poles. A champan usually carries a hundred loads (*cargas* = 10 *arobas*, or 250 lb.), the freight of which, from Moupox to Honda, is nine or ten dollars per load. Down the river, the freight is only a dollar and a half. The crew of a champan consists of twenty-four *bogas*, at the rate of 20 dollars each, besides their "keep" and the hire of the boat, which is about four dollars a day. These *bogas* are represented as the very refuse of the population, —a mixture of individuals of every colour, who have retained nothing but the vices of their respective castes, and who, when dissatisfied with their passenger, have been known to abandon him on the shore, and take to the woods. This tedious, expensive, and inconvenient mode of navigation will be soon superseded, should it be found practicable to realise the project of establishing steam-vessels on the Magdalena. This wonderful invention is probably destined to accelerate, to an incalculable degree, the cultivation and civilisation both of the provinces of the Cordillera, and those of the vast plains of the Orinoco.* The navigation will not only be less

* The English, M. Mollien says, have entreated a license for ten years, to establish steam-boats both on the Orinoco and the Sulia. The Orinoco presents the double advantage of having a wide and deep stream, and of discharging its waters into the Atlantic. "Who knows," exclaims this Traveller, "if even the Orinoco

tedious and precarious, but the inconveniences will be not a little alleviated by the comforts which will, by this means, be placed within the reach of the European traveller. The following is the equipment for the voyage recommended by Captain Cochrane:—a small portable bedstead, with a *toldo* or covering of strong linen, to keep out the mosquitoes and sand-flies,—price, at Solidad, fifteen dollars; pillows, sheets, and blankets should be brought from Europe; two or three dresses of Holland sheeting, with footing of the same material, instead of stockings; shoes of strong Holland, with leather soles, and a pair of English shooting-shoes for landing in the mud; two broad-brimmed straw hats; a saddle with holsters; a sword, a dirk, and a pair of pocket pistols; two good mats,—one to lie on in the canoe, the other fitted to the sacking of the bed, to prevent the mosquitoes from penetrating it at night; cooking utensils—*e. g.* a large copper chocolate-pot, a copper vessel for making soup, ditto for stews, ditto for frying eggs, two block-tin plates, three dishes, two tin cups for drinking, and a small tin measure for serving out spirits to the *bogas*, who will not work well without a dram every morning of the anise of the country, of which a jar or two must be provided; *item*, knives, forks, spoons, and small duck table-cloths; *item*, “all wine, tea, coffee, chocolate, sugar, salt, dried beef, hams, tongues, live fowls, eggs, biscuits, *torcino*, or cured pork-fat, for frying eggs, and plantains and dried salt meat for the *bogas*.” Some of these articles, our French Traveller, who had explored the shores of the

shall not one day be the only means of communication between the ocean and the cordillera?” The navigation of the Atrato is also likely to prove of high importance.

Senegal, does not appear to have found indispensably necessary; but Captain Cochrane is writing for *Englishmen*, who, as well as the *bogas*, must eat. "Our ordinary repast," he says, "consisted of bread, soup, fried eggs, and sausages. At each place, for a quarter-dollar, we procured a female cook, which relieved us from all trouble on that score."

Ten leagues is reckoned, in ascending the river, a "good day's journey." At noon on the eighth day, the city of Monpox appeared in sight, pleasantly situated on the left bank of the river. At a distance, the white houses with their red roofs have a neat and clean appearance; but, on a nearer approach, this is exchanged for the general distressed look of Spanish cities. The town is above a mile in length; the streets are of a good breadth, crossing each other at right angles, and some are even furnished with foot-ways. The only decent-looking houses, however, are in the centre of the place, the rest being mere sheds. The population is about 10,000 souls.* "It formerly contained 18,000; but the miseries of an exterminating civil war have reduced the inhabitants to the present number." The country surrounding the city is entirely in a state of nature. Captain Cochrane could not discover a cultivated spot near the place. All is rich and luxuriant, but not through the labour of man. The chief exports are corn, hides, and Brazil-wood, in return for which are taken European commodities. Pamplona and Cuenta transmit some tobacco, sugar, and chocolate, to this *entrepôt*; Antioquia sends her gold, and Bogota, the produce of the Upper Magdalena. Were the expenses

* Including the neighbouring villages, the Author of Letters from Colombia says, it is estimated at 15,000.

attending the transmission of merchandise lessened; this place would most probably recover, in a very short time, its commercial importance. It is, at present, the grand *rendezvous* of the *bogas*, whose numbers on the banks of the river amount to nearly 10,000. This part of the population, it will be of no small advantage to the place to disperse, should steamboats be introduced. But nothing can make Monpox a desirable residence. "The climate," says M. Mollien, is burning, the thermometer ranging from 25° to 30° (of Reaumur);* the inhabitants consequently pass the evenings seated in the streets, to breathe the fresh air, and to escape the stings of the mosquitoes. The sky is constantly cloudy, and scarcely a day passes without showers. The nights, on the contrary, are beautifully clear and truly delicious. It is then a great pleasure to promenade the streets, and observe the lively parties which present themselves before the doors of the houses. Loud bursts of laughter are heard on every side, in which the passenger takes part without the least ceremony. Far from this familiarity being offensive, it gives great satisfaction, for the frankest cordiality presides at these meetings. Thus passes the life of the inhabitants of Monpox. The day is spent in their hammocks, the night in the street; and nothing would trouble their peaceable existence, were they not afflicted with goitres, which disfigure them in a horrible manner. Without this infirmity, which usually attacks them at the age of thirty or forty, they would possess an agreeable figure, though, indeed, with less lively expression than the inhabitants of Cartagena, and with

* Captain Cochrane says, "the thermometer in the shade was, on the average, at 96°."

less of that soft-coloured tint which distinguishes the natives of Bogota. The manner of living of the people of Monpox, differs little from that which the inhabitants of the *tierras calientes* of South America have adopted. All classes have a destructive fondness for ardent spirits.* The town is surrounded with swamps, and is liable to inundations. In 1762, the inhabitants were obliged to desert their houses, and take to their canoes. Alligators come up to the very banks, to feed on the offal thrown from the city. Several gun-boats are stationed here for the protection of the navigation.*

From about a mile and a half above Monpox, to the village of Santa Margarita, distant five leagues, the country is tolerably well cultivated for a tract about 200 yards in breadth, and the shore is bordered with orange and lemon-trees. The villages have a pretty effect, embowered in trees, and give the river a more cheerful aspect. At Piñon, the mountains of the interior, which the traveller is now approaching, add a new feature to the scenery. Considerable difficulty is now found in poling along the shore, as the depth of the water increases, and, frequently, the bogas are obliged to lay the poles in and haul along by the trees. In passing the rapids, some of the men have to land

* We give the following distances from Col. Hall's volume :

	Leagues.		Leagues.
From Barranca—		Brought forward	26 $\frac{1}{2}$
To Barranca Vieja	1 $\frac{1}{2}$	To Pinto	2
— Yucal	1	— Santa Ana	9
— Tenerife	10	— San Fernando	2
— Plato	4	— San Zenon	2
— Sambrano	1	— Monpox	5
— Tacamuche	9		<hr/>
	<hr/>		46 $\frac{1}{2}$
	26 $\frac{1}{2}$		

and haul the canoe by a hawser, while others remain to pole, and keep her head from being carried out by the stream. "If once the stream is allowed to catch the head of the canoe, it will be turned round, hurried into the midst of the current, where no pole will reach the ground, and rapidly carried down the stream a considerable distance, before the oar can be got out to enable it to regain the bank." At sunset, it is customary to moor the canoe for the night. The third day, the traveller may reach *Rio Viejo*; the fourth day, Morales, where it is usual to allow the men a day's rest. This is a miserable place, but well situated upon an island shaded with cocoa-palms: the neighbouring country produces a large quantity of palm wine. The climate here is more approaching to temperate than at Monpox, but still, the air is most oppressive, and the mosquitoes extremely troublesome. Beyond Badillo, the boundary of the departments of Magdalena and Cundinamarca, the shores begin to exhibit occasionally signs of cultivation; bananas and cocoa-plantations are now to be seen, and the number of alligators begins to diminish.* At San Pablo, a

* "Nothing so much bespeaks the inadequate population of this country, as the neglected and wild state of so desirable a tract of land as that watered by the Magdalena, capable of growing the most valuable produce, and with every facility for its exportation. In the space of some hundred miles that I have now descended (from Honda to Badillo), there are probably not more than thirty isolated and poor huts, none of which have above an acre of cleared land, over and above a few small villages."—*Letters from Colombia*, p. 190. The unhealthiness of these shores may perhaps in part account, yet not altogether, for their being abandoned to the wretched population who are found here, consisting of "bogas advanced in years, and weary of navigating the river, some enfranchised slaves, and deserters, of all races, or rather of all colours." These people, says M. Mollien, are very poor and wretched: "out of the ten plagues of Egypt, they have

clean-looking village on a gravelly soil, it is necessary to purchase provision for four days, as there is no other market between this point and San Bartolome. The Travellers found every thing here double the price it bore at Morales, and were informed, that as they proceeded, provisions would increase in cost. From San Bartolome, a bad road leads to the province of Antioquia. Near this place, the stream of the Magdalena is darkened by the muddy and fetid waters of a tributary river.* A little further is the promontory of *Remolino Grande*, which, when the waters are low, is doubled with difficulty, owing to the violence of the current. The *choro* or rapid of Angostura is also very dangerous when the river is either very high or very low, the current then forming several deep whirlpools. The rock is very lofty, and projects so far into the river as to narrow it considerably. A short distance higher up stands the town of Narie, the most frequented port of Antioquia, and a sort of *entrepôt* for the produce of the western cordillera, which is brought down by the river Juntas. Like most other places, Narie has suffered much from the war, and is almost desolate. No other place worthy of notice occurs, till, having passed the mouth of the river Miel, whose limpid waters contrast with the muddy stream of the Magdalena, and, some leagues further, that of the Rio Negro issuing from the mountains of Zipaquira, the traveller reaches the hamlet of Guarumo.

at least five,—putrid water, ulcers, reptiles, large flies, and the death of their first-born, for, in fact, they rear their children with great difficulty.”

* “We here procured,” says Capt. Cochrane, “a branch of the shrub called *alumbre*, by putting about eight inches of the stem of which into water, it causes all the mud and earth held in solution to sink to the bottom, and leaves the water sweet and clear.”

From this place, a new road was being made to Bogota, which will be of great advantage to the commerce of the country: "it is a better line of direction than the present road from Honda, and can be performed in the same time, thereby saving water-carriage of two or three days." The river, beyond Guarumo, becomes much narrower, and is filled with stones that roll from the tops of the mountains. Choked up between rocky heights, it impetuously pours forth its waters through the narrow channel it has opened for itself; and it would be impossible for the piraguas to stem the force of the current, were it not for the numerous angles formed by the projecting arms of the cordillera. At length, on the thirty-first day from Monpox, Capt. Cochrane landed at Honda. The distance is 115 leagues, which, in descending the river, may easily be accomplished in six days. By means of steam-boats, working day and night, the whole course of navigation upward from Barranca to Honda, might probably be effected in eight or nine days. "To persons navigating this river in a conveniently rigged vessel," says the Author of Letters from Colombia, "and so as to be protected from the heat of the sun, the voyage would be interesting and delightful beyond description, as its course is continually serpentine either through high chains of mountains, rocky passes, or the most luxuriant woods." Sometimes, the river assumes the aspect of a large lake, bordered with forest-trees. These forests abound with a variety of birds of beautiful plumage, with wild turkeys, guacharacas (the American pheasant), flamingoes, herons, parrots, macaws, and smaller birds, together with hordes of monkeys, who make a constant uproar with their howlings. Jaguars also are numerous, and they are formidable enemies

to the alligators, whom they frequently surprise asleep on the banks. If a young alligator, he is sure to fall a victim: the larger ones sometimes succeed in running with their antagonist into the river, where he is conquered by the numbers by whom he is immediately surrounded. Another inhabitant of this magnificent river is the turtle, which, as well as its eggs, is preyed upon both by the cayman and the jaguar.

Honda is prettily situated on rising ground enclosed by mountains. It was formerly flourishing, but was almost destroyed by the earthquake, and the civil war has greatly diminished its commerce. The convents (Alcedo enumerates four) and churches are now in a dilapidated state; and the population, which is said to have amounted to 10,000, now scarcely exceeds 3,000 persons. The temperature is very hot, but not unhealthy. A custom-house is established here. All large boats stop at the *bodegas*, or warehouses, on either bank, half a mile from the town, to avoid passing the mouth of the Gualc, a foaming torrent which rushes down the neighbouring mountains of Mariquita to join the Magdalena in the centre of the town. This torrent is crossed by a wooden bridge of one arch, boldly constructed on fragments of rock which serve as piers, but now in a very precarious state.

The distance from Honda to Bogota, is reckoned twenty-two leagues: it is a four days' journey. The worst parts of the road from Caracas to Bogota, cannot, we are told, compete in difficulty with the passes which occur in this high road to the capital, the most frequented, probably, in the country. It can scarcely indeed be called a road, being more like the bed of a mountain torrent. "You have every moment to climb rocks, many of which the mule can hardly reach with her fore-feet." On the summit of the *Sarjento*,

is an inscription, stating the elevation which the traveller has gained, to be 860 toises (5,160 feet) above the sea, and the distance from Bogota eighteen leagues. The descent to the picturesque valley of Guaduas is in some places equally difficult. This place, situated about 3,800 feet above the sea, enjoys a mild and salubrious temperature, and is famed for its excellent water. It is styled by Captain Cochrane, the Cheltenham of Bogota, being visited by the citizens of the capital for the benefit of their health. A manufactory of straw hats is carried on here, and a fine breed of horses and mules is reared in the neighbouring pastures. Rice, bananas, coffee, sugar, and oranges are grown in this district.* The steep summit of the *Alto del Trigo* has next to be surmounted by a zig-zag road, which has been paved, but is now out of repair: the descent conducts the traveller to the town and plain of Villietas. The *paramo* of Cerradera is an ascent not less difficult: from its summit, the traveller has the satisfaction of looking down on the plains of Bogota. The *venta* at the foot of the *paramo* is nine leagues from the capital, and about 7,500 feet above the level of the sea. Two leagues further is the small town of Facatativa, a day's journey of seven leagues (M. Mollien says, above ten French leagues) from the capital. The road now lies along a plain for the most part bare, and entirely level; in many places frequently inundated. At a distance of about twelve miles is gained the first glimpse of the capital. The white towers of the cathedral and the monasteries of Montserrat and Guadalupe, seated on lofty peaks in the back-ground, are

* "At the distance of three days' journey from Guaduas, is Palma, a village containing gold, iron, and emerald mines, which it is intended to work."—MOLLIEN, p. 61.

first discerned. Being built on rising ground, the city forms a sort of amphitheatre. The ascent to it is by an *alameda* or public walk, which was formerly beautifully planted, but the trees were cut down during the revolutionary contest. Altogether, the first appearance of Bogota is very imposing, and worthy of the capital of the Colombian Republic.*

BOGOTA.

THE city of Bogota (its former dedicatory title of Santa Fé is suppressed) was founded by Gonzalo Ximenes de Quesada, who, in 1538, built twelve huts, in honour of the twelve apostles, on the skirts of the two mountains which now bear the names of Montserrat and Guadalupe. It is situated on an elevated plateau 8,615 feet above the level of the sea, in lat. 4° 10' N., long. 73° 50' W., at the base of mountains towering nearly 17,000 feet above the sea. It was created a city, and made the seat of a royal *audiencia*, in 1548. In 1561, it was advanced to the honours of a metropolitan see. It was the capital of the kingdom of New Granada, and the residence of the viceroy. From its extreme boundaries, it extends about a mile in length, and, in the widest part, about half a mile in breadth, the ends tapering off to a single line of houses. The streets are generally narrow, but regular; all of them are paved, and the principal ones have foot-paths. "When seen from

* "The most important town of Colombia," says M. Mollien, "is Panama; the best fortified, Cartagena; the most agreeable, Santa Fé (Bogota); the best built, Popayan; the richest, Guayaquil; the most lively, Zipaquirá; the best situated, Maracaybo. Caracas is said to have eclipsed them all, but Caracas is now in ruins. Quito is, by all accounts, more populous than any."

the mountains at the back, the city has a very pretty effect. The streets, built at right angles, present an appearance of great regularity, and have a stream of water constantly flowing down the middle; there are also several handsome public fountains. Great as is the extent of the city, the churches and convents cover nearly one-half of the ground. Many of the convents are in part, and others wholly deserted since the Revolution. The ground that some of them cover is immense." There are nine monasteries and three nunneries; those of the Dominicans and of San Juan de Dios are the best endowed. Four-sixths of the houses in the city are said to belong to them. "The architects of Santa Fé," says M. Mollien, "have an excuse to justify the deformity of their edifices in the nature of the soil, which, being so frequently convulsed by earthquakes, compels them to sacrifice elegance and majesty to solidity. Thus it is, that the houses are so low, although the walls are prodigiously thick. The public buildings are also obliged to have enormous foundations, and the shafts of the columns of the churches are less in proportion to the weight they have to sustain, than to the shocks which they are required to resist.

"The architecture of some, however, is in a purer style. The cathedral in particular, erected in 1814, is remarkable for the simplicity of its interior, redeeming, in some degree, the bad taste to which its façade is indebted for an accumulation of lines produced without harmony, and intersecting each other without the least symmetry.

"The other churches of Bogota, to the number of twenty-six, are, on the contrary, resplendent with gold; no temple of the Incas was ever so dazzling. But, although the magnificence of the cathedral itself

is not so great, the treasures it possesses are more valuable. One statue of the Virgin alone, out of the many which adorn the altars, is ornamented with 1,358 diamonds, 1,295 emeralds, 59 amethysts, one topaz, one hyacinth, 372 pearls, and its pedestal is enriched with 609 amethysts: the artist was paid 4,000 piastres for his labours."

Some of the convents have hospitals dependent upon them, but they are in a most loathsome and disgusting state. There are three colleges, which are conducted in a superior manner: the principal one is that of the Jesuits, in which the majority of the professors are monks, a few only being laymen. The pupils are instructed in Latin, mathematics, natural and moral philosophy, and divinity. "Besides these, there is now forming a school of mineralogy, under the auspices of Dr. Mariano di Rivero, a most sensible, scientific, and clever man, a native of Peru, educated in the schools of England, France, and Germany, and recommended by Baron Humboldt to the Government. This gentleman, who is particularly skilled in the practical knowledge of the best methods of mining in all its branches, is also founding a national museum; which has, under his hands, made considerable progress, and for which he has travelled to increase the collection already amassed: out of the 4,000 dollars per annum allowed him by the Government, he has generously resigned 1,000 to augment the funds of the museum. They have established here a Lancastrian school on the most liberal principles, for which the natives are principally indebted to the praiseworthy exertions of the vice-president, General Santander, through whose strenuous endeavours to put in force the commands of the Congress, these schools have been established not only in

the capital, but in the most remote villages of the republic.

"It might be imagined," says M. Mollien, "from the pompous title of palace, given to the ancient residence of the viceroys, which is now occupied by the president of the republic, that a sumptuous edifice would present itself; it is, however, nothing more than a house with a flat roof: two adjoining ones, much lower, ornamented with galleries, together with the prison, constitute the whole of its dependencies; here are also the offices of the ministers of state. Upon entering the palace, stair-cases without the least pretensions to elegance, and galleries equally devoid of taste, present themselves; no hall leads into the presence-chamber: it is entered either from the president's bed-room, or from a small anti-chamber. A few sofas covered with red damask, a worn-out Segovia carpet, some lamps suspended from the cross beams, which, for want of a ceiling, give this part of the saloon the appearance of a barn, would make it difficult to conceive of its being a palace, were not the apartment decorated with a throne covered with red damask, a few looking-glasses, glazed windows, and some wretched paintings. The idea of regality is still further increased by a troop of twenty hussars guarding the avenues: these, notwithstanding their want of boots and horses, and the wretched plight of their uniforms, give the stranger a hint that he is within the precincts of royalty.

"The place dignified with the name of the palace of the deputies, is nothing but a large house, situated at the corner of a street, the ground-floor of which is let out in shops for the selling of brandy. The first objects which attract attention upon ascending the stair-case, are two Fames painted upon the wall, at

the foot of which is this inscription : ' No country without laws.' Having gained the inner gallery, the noise which escapes through a small door, indicates it to the visiter to be that of the hall of assembly. This consists of a long and narrow room, in the middle of which has been erected a wooden balustrade, upon which the spectators lean ; for no one is seated but the representatives, who are economically placed upon arm-chairs made of polished wood, with leather bottoms, ranged in long rows : within the balustrade, eight chandeliers, glazed windows, and a matting, compose the decorations of the palace of deputies.

" Upon quitting this, it is only necessary to cross the street to enter the palace of the senate, which is, perhaps, still more simple than that of the representatives. The Dominicans having granted this body one of the wings of their convent, it was fitted up in a similar manner to the hall of the deputies ; the walls are, however, ornamented with emblematical figures. Under one of these, which represents Justice, the ignorant painter has written *Policy*. There is neither *salle de réception*, hall, nor ante-chamber ; and when the ministers attend to make any communication, they are obliged to wait upon the staircase till the usher of the house, who is at the same time manager of the theatre, comes to disengage them of their umbrella, and invite them to enter.

" In their places of confinement, the Spanish Americans have established a system of excessive indulgence. The prisons are on the ground-floor, and the windows are sufficiently low to allow the passers-by to converse with those incarcerated : as to state prisoners. they are treated with greater severity." *

“ The mint is a large, plain building. In consequence of the mistaken policy of the Government, in giving merely a debenture for the uncoined gold brought to them by the natives, instead of returning, as in former times, a proportionate quantity of coined metal, the machinery, &c., of this place is at a standstill, and its treasury entirely exhausted. If, as formerly, they gave their coined gold for the gold dust brought to them, they would soon form a rich treasury from the quantities that would be produced by the people ; who now keep back their gold, and, consequently, can only dispose of it at a very great loss, or else keep it in hand, which prevents them from hiring more negroes to work their mines, or even to support those they have. In fact, this measure paralyzes every branch of the state, inasmuch as it gives a check to industry, and creates mistrust.

“ There are three sets of barracks, formed from the old and forsaken monasteries ; and two *cuarteles* ; one for the militia in the grand *plaza* on the left of the cathedral, the other in the square of San Francisco, for the president's body-guard when off duty. There is a *mestranza*, or artillery depôt, where all military furniture and equipments are made, but in a style which would be much benefited by the aid of European workmen to direct and improve the whole. This is the only place in Bogota where any repairs can be done to articles of European fabric.

“ The theatre is a well-constructed building, and its interior arrangements are better than might be expected : it is not difficult to hear in any part of it. The boxes are all let to families ; but, for two reals, you gain admission to the pit, which is half covered with chairs, and the back part left for standing-room. The company is mixed, but orderly and well behaved.

A soldier parades up and down during the performance, but I never witnessed any opportunity for his interference. It is the custom to walk from the pit to the boxes, and chat with any parties you may know; and all strangers of respectability pay their compliments during the evening to the vice-president. The performances are on feast-days only; the actors are decidedly bad. Sometimes the students of the college perform, and, of course, attract a crowded audience. The natives are much attached to theatrical amusements." *

The principal streets are the *Calle Real* and the *San Juan de Dios*. The former has a footway on both sides of the road, and is well paved; and, "as there are no carts or vehicles of any description,† the traffic being hitherto carried on exclusively by mules, it does not require frequent repair. The ground-floors of the houses are occupied by shops, with one story above, each habitation having a large wooden balcony, painted green." These two streets, which lead to the *alameda*, are the chief resorts of the loungers and fashionables of Bogota. The streets running east and west from the mountains, have streams of water flowing down them, which empty themselves into the small rivers of San Francisco and San Augustin, over which there are five bridges. At one extremity of the *Calle Real*, is the principal

* Cochrane, vol. ii. pp. 20—22.

† For this, there is an obvious reason: there is no passing in any vehicle more than a mile or two out of Bogota. "The vice-roy had formerly a carriage, but there is none now in the country, and only two gigs in the capital. There are, in the plains, a few clumsily contrived cars, with solid wheels, for carrying timber, but these can only be used from Facativiva to Bogota, and even there frequently stick fast in the mire."

plaza, where the daily market is held : one side is occupied by the cathedral, another by the palace of the president, &c. ; on the north side, are private houses with shops beneath, and on the south, are the *cuartel* of the militia and the record-office. The market is well supplied with beef, mutton, and pork, poultry, some few vegetables, and fruits of every climate (they reckon thirty sorts), in considerable perfection.* European manufactures are sold, for the most part, at extravagant prices : the merchants obtain them from Jamaica.

All the houses are low, in consequence of the apprehension of earthquakes : they are built of sun-dried brick, white-washed, and covered with tiles. "As to the interior," says M. Mollien, "the houses are not better arranged than ours were at the time of the discovery of America. Windows, very small, and always barricaded by large wooden bars, are seen by the side of others of an immense size ; the beams are rarely concealed by a ceiling ; the walls have enormous projections ; the doors are of all heights ; the use of locks is scarcely known : at least, those manufactured in the country afford but little security. The use of glazed windows is but of recent introduction ; a less barbarous taste is, however, observable in the construction of many modern habitations, and several improvements begin to appear. Light and convenient balconies have superseded the enormous heavy galleries ; the ceiling is no longer disagreeably intersected by beams ; the windows are without barri-

* Beef is 3*d.* per pound ; mutton 1*s.* per quarter ; a large chicken 6*d.* ; fruit, "reasonable." For the unfurnished house he inhabited, Captain Cochrane paid at the rate of 300 dollars *per annum*. A hat is 16 dollars, a pair of boots the same ; a coat of inferior cloth, 30 dollars ; of superfine cloth, 60 dollars.

cadoes, the street-doors better painted: a general neatness is, indeed, being introduced through all classes. In general, two gates are to be passed before arriving in the court-yard. The entry which separates it from the street, is but too often a receptacle for the uncleanness of the passengers. A gallery generally runs round the court, if the house consists only of a ground floor; but if of two stories, a covered terrace. The staircase is generally of stone, and of very rude construction. On the wall of the first square is generally painted a giant, carrying in one hand a child, and in the other a ball; this is St. Christopher, the household god of the country. Round the inner gallery is a long suite of rooms, which only receive daylight through the door. Every house has at least one saloon and an eating-room; for it is considered unpollite to receive friends, or to entertain them, in a sleeping-room. The kitchen is always of an immense size, less on account of the quantity of provisions cooked, than the number of useless servants assembled there: there is no chimney, as stoves only are used. No houses are seen without carpets: the ancient straw mats of the Indians are no longer used by fashionable people, but are superseded by carpets of European manufacture. Both of these are designed, if there be no fire, to warm the apartments, and to conceal the inequalities of the floor, where, unfortunately, the negligence of the servants permits the most loathsome insects to swarm in immense numbers. Some persons cover the walls of their chambers with dyed paper; and numbers have garlands of flowers and genii drawn upon it, in a style alike indicative of the bad taste of the painter and his employer. The furniture is simple, and usually consists of nothing more than two sofas covered with cotton, two small tables, a few

leathern chairs, after the fashion of the fifteenth century, a looking-glass, and three lamps suspended from the ceiling. The bed is tolerably well ornamented, but feathers are never used; it is formed of two wool mattresses. With some slight difference, all the houses resemble each other; nothing serves to distinguish those of the ministers, and it would be difficult to recognise the president's, were it not for the guard at the entrance."

"The shops are crowded together, dirty, and dark; the only admission for day-light is by the door. These, however, are places of resort for the idle. Seated upon his counter, smoking incessantly, and giving laconic answers to his customers, the Colombian merchant in many respects resembles those of Smyrna or Aleppo. Bogota cannot boast of ten merchants who can command 100,000 piastres, nor of five individuals living upon a revenue of that amount. The most common incomes are from 5 to 10,000 piastres. Almost every inhabitant" (not in the employ of government, in the church, or in the army) "is a shopkeeper."

The streets are very badly lighted. A paper lantern, placed at the end of each *quadra*, just serves to render darkness visible. A proposal, however, has been laid before the Government by Colonel Manby, for lighting the city with gas. There is not a common-sewer in the city. It was a saying of one of the viceroys, that Bogota had four police-officers to keep the town clean; the *gallinazos* (carrion vultures), the rain, the asses, and the pigs. But the streams of fresh water which flow down the streets would cleanse them, M. Mollien says, still more efficaciously, "if, at eight o'clock in the evening, the idleness of the inhabitants did not convert them into filthy and

infectious sewers." In many of the streets, the grass has grown so plentifully, from the thinness of population, as to afford grazing ground to the stray cattle.

"The costume of the people is remarkable, particularly that of the females. There is no distinction between rich and poor in the style of walking-dress. The mantilla, black or light blue, made *à la mode Espagnole*, is worn; a piece of blue cloth envelops the head, and frequently conceals the whole of the features except the eyes: this reaches to the waist, and the whole is surmounted with a broad-brimmed beaver hat. This is generally allowed to be a preposterous and unbecoming dress; but, as yet, no fashionable lady has had the courage to set a new style for the example of her countrywomen. They are sedulously careful to deck their feet in the most becoming manner, and with studied coquetry, as they are in general well formed and extremely small. Their step is very peculiar, all from hip to ankle without bending the knee, and a sidling motion of the body. How far this adds to the grace of appearance and ease of deportment, I will leave to abler judges to decide. The lower classes are generally barefooted, except the peasantry of the plains, who wear *alpargatés*, a kind of Roman sandal, made of the fibres of a tree. They wear likewise a full, large mantle, called *rouna*, or *roquilla*, made of the cloth of the country; the head passes through a hole in the centre, and the *roquilla* falls loosely and gracefully over the shoulders, completely covering the body, and concealing the arms. The *tout ensemble* is elegant, as it droops in easy and becoming folds. Some of the females assume a very peculiar garb; a petticoat of Spanish brown stuff, with a mantilla of white kerseymere, a black

beaver hat, and, round the waist, a broad, black, leathern girdle, one end of which hangs down from the hip nearly to the ankle. They are called *béates*, and attire themselves in this manner for many reasons, such as the commands of a confessor, the sickness of a husband, father, or any other relative; but, by many, it is worn merely from the desire of attracting attention.

“The Colombians have many repasts during the day. At seven in the morning, they have chocolate; at ten, a meal of soup, eggs, &c.; they dine at two, take chocolate again at five, and sup at an early hour. From about three to half-past four, they take their *siesta*, during which time all the shops are shut, the streets deserted, and the whole city is in profound silence. Business is carried on from nine till half-past one, and from half-past four to half-past five. Every house has silver goblets, in which the water is handed round to the guests. Napkins are not used, and the table-linen is coarse. It is the custom to wash hands after dinner; then smoking is introduced. The servants are generally females, very sluttish and dirty, of a race between the Indians and Mulattoes. There are very few male domestics, as all the able men were taken off for the supply of the armies. The emancipation of slaves has been very great at Bogota, and but few remain.”*

“Bogota is subject to a dreadful nuisance; every Saturday, the poor rush into the town as if to take it by assault; they besiege every door, and, to gain admittance, endeavour to excite compassion by the exposure of the most revolting infirmities. Old men, led

* Cochrane, vol. ii. pp. 35—36.

by children, form numerous groupés, which throughout the day obstruct the streets, and even block up the thresholds of the houses.

“ In the neighbourhood of Bogotá are some very agreeable walks, which, although shaded by willows, and ornamented with rose-trees and the beautiful *cardaminum*, are little frequented; the preference being given to a few select streets, the *trottoirs* of which offer a commodious promenade, as from them gentlemen on horseback may be seen traversing the town at full gallop. The greater part of these horsemen are bedizened with gold, and glittering in military uniforms; some with round hats ornamented with plumes of feathers, others with cocked ones, and a still greater number wearing *shakos* and helmets. Although their own appearance is upon the whole striking, that of their horses, which resemble Norman poneys, is so wretched as to lessen the effect considerably.”

The general routine of the day at Bogotá, commences with mass, which is attended by females and old men. The men in general, we are told, do not give themselves much trouble on this score, unless they have some particular object in view, more attractive than devotion. The greater part of the day, the ladies lounge on their sofas. At half-past five, they attend the *alameda*, whence they return to receive visits till between nine and ten o'clock, at which hour they retire. *Tertulias*, or evening parties, balls, masquerades, and the numerous religious processions, are their chief amusements. The number of saints' days and feast days, including Sundays, amounts to 180; “ but the Congress have it in consideration to reduce them as nearly as possible to the number of festivals celebrated in Protestant countries.”

“ Corpus Christi day is that which is celebrated with the greatest magnificence at Bogota ; it is announced the preceding evening by artificial fire-works. At each corner of the grand square, through which the procession is to pass, are erected four richly ornamented altars, while by a singular mixture of the sacred and profane, *mals de cocagne*, puppet-shows, and a great number of cages full of rare and curious animals, are ranged on all sides. The rejoicings and games cease the moment the bell is heard announcing the approach of the procession. Every one takes off his hat and kneels down in the streets.

“ At the head of the procession, are chariots dragged along by men ; in one is king David, with the head of Goliath in his hand ; in another, Esther ; in a third, Mordecai ; Joseph next makes his appearance upon a horse richly caparisoned, and followed by a great number of guards ; these, however, are only mounted on pasteboard chargers. All these personages are the children of the principal inhabitants of the city. To obtain the honour of acting a part in this imposing spectacle, is a great desideratum ; and those who are honoured, by having their children nominated, neglect no kind of expense : rivalling each other in splendour, they lay pearls, diamonds, emeralds, and rubies under contribution, and put their imagination to the rack, in order to render the dresses of the actors more magnificent. The clergy advance slowly amid the crowd of the faithful, with which the square is thronged. The most beautiful girls in the city walk between two rows of priests, some carrying the ark, and the show-bread, others incense or baskets of flowers. To these succeed young Indians, who, to the sound of a flute and tabor, perform wild fantastic dances. The procession is closed by a

detachment of troops, with arms and colours reversed."

Bull-fights, cock-fights, the theatre, and gambling are the chief amusements of the gentlemen.

"As far as I had an opportunity of judging," says the Author of Letters from Colombia, "Bogota is the most justly celebrated place in the whole Republic for beautiful women.* The change is the more striking, after the hideous population one meets with in many of the towns and villages in the great extent of country between the two capitals. It is not from a few instances that one is led to form such an opinion, the majority of the female sex here being fairly entitled to this reputation. From the coolness of the climate, their complexions are naturally fair and very clear. They inherit, at the same time, the fine, expressive, dark eyes and regular features of the Spanish women, although partaking but in a slight degree of their elegant figures, owing to their careless manner of dressing and setting off their persons. They have, however, pretty feet, and an easy carriage. From the superiority of their personal appearance, there is the more reason to regret the absence of those endowments of mind, and that conduct, which alone render beauty permanently attractive. There are, perhaps, few cities, (it is to be hoped so, at least,) where the

* Capt. Cochrane says: "The majority of the women are by no means handsome: they certainly have fine eyes and dark hair; but neither features, complexion, nor figure are good, when compared with those of Europeans. Some few have, when young, a little bloom on their cheeks; but, in general, a sallow or Moorish cast of face meets the eye. Occasionally, you do meet a young lady whose pretensions to beauty would be allowed even in Europe." The men, taken generally, he says, "are far handsomer than the women, and their dark complexions are more agreeable to the eye. They are also better educated, being generally able to *read and write!*"

women are so generally depraved; and although there are, no doubt, individuals of uncorrupted morals and virtuous conduct, it is too evident that their number is but small." Captain Cochrane expresses his apprehension that morality in Colombia is at a low ebb. After marriage, the ladies of Bogota deem themselves for the most part entitled, especially if their husbands are out of the way, to act exactly as inclination prompts. He admits that exceptions exist, and that there are many highly respectable, virtuous, and honourable families.

The capital is at present full of priests, monks, and clergy, in consequence of a decree abolishing all monasteries which did not contain above a certain number, and directing their inhabitants to reside in Bogota. This is considered as a stroke of policy, having for its object not merely to apply the revenues of the suppressed monasteries to the exigencies of the state, but to bring the clerical body more immediately under the eye of Government, and counteract the more easily their disposition to political intrigue. "It is not easy," M. Mollien says, "to say what are the political opinions of the inhabitants of Bogota. Like all those who reside in capitals, they are oppositionists, because they see the machine of government too near; but, after having given the revolutionary impulse, this capital will, for the future, receive it from the provinces."

The population of Bogota is said to have amounted, in 1800, to 21,464 inhabitants, "exclusive of strangers and beggars, whose residence was not known." The births exceeded the deaths in the same year by 247. The present population is estimated at from 30 to 35,000 souls. There exists a difference of opinion as to the superior eligibility of the site of the two capi-

tals, Bogota and Caracas. The Author of Letters from Colombia gives his decided opinion in favour of the former. The climate here is more congenial to English constitutions, and is favourable to great bodily exertion. The extreme rarity of the atmosphere, however, owing to the great elevation of the plain, is at first very oppressive to strangers, occasioning a difficulty of breathing, and an unpleasant sensation at the chest. After a few days, this subsides. The seasons here are divided into rainy and dry, forming two winters and two summers. The dry season begins with the solstices; the wet, with the equinoxes, varying ten or fifteen days. March, April, May, September, October, November, are reckoned winter months, during which fall almost incessant rains. The mornings, from day-break to eight o'clock, are then piercingly cold, the thermometer frequently down to 47° , though it in general keeps between 58° and 63° . In summer, during the warmest time, it varies from 68° to 70° . June, July, and August are showery. N.N.W. winds invariably bring storms. But, during the dry season, the heavens are for the most part beautifully serene and unclouded, and the dews are so light, that the usual lounge of the inhabitants is by moonlight. Upon the whole, the climate may be regarded as salubrious. Epidemics are unknown, and the diseases to which the natives are subject, are attributable to other causes than the air.

FALL OF TEQUENDAMA.

“THE elevated plain on which Bogota stands,” says M. Humboldt, “resembles, in a variety of circumstances, that which is surrounded by the Mexican lakes. Each of these plains is higher than the summit

of St. Bernard, the first being about 8,800 feet, and the second 7,440 feet above the level of the ocean. The valley of Mexico is bounded by a circular wall of mountains of porphyry, and its centre is covered with water ; for the numerous torrents which rush into the valley found no outlet, until the Europeans had dug the canal of Huchuetoca. The plain of Bogota is also encircled with lofty mountains ; and the perfect level of the soil, its geological structure, the form of the rocks of Suba and Facatativa, which rise like small islands in the midst of the savannas, seem all to indicate the existence of an ancient lake. The River of Funzha, usually called the *Rio de Bogota*, into which flow the waters of the valley, forced its way through the mountains to the south-west of Bogota. Near the farm of Tequendama, this river rushes from the plain by a narrow outlet into a crevice, which descends towards the basin of the River Magdalena. Were an attempt made to close this passage, which is the sole opening out of the valley of Bogota, these fertile plains would gradually be converted into a sheet of water like the Mexican lake."

This wonder of the country, the celebrated fall of Tequendama, was, of course, visited by each of our Travellers. The road to it lies across the plain, in a S.W. direction, to the village of Soacha, distant three leagues and a half, in the neighbourhood of which are said to have been found some fossil remains of elephants. Here there is an inn. About half a league farther, the traveller arrives at the River Bogota, on the banks of which is a village where he may be accommodated with fresh horses and a guide. From the river to the fall is nearly a league. The road lies over a ridge of mountains bounding the plain to the

south-west, from the summit of which is gained a commanding view of the level country. A large portion of it being inundated at the time that one of our Travellers visited it, it had all the appearance of an extensive lake, with variously-shaped hills rising abruptly from its waters. Having ascended the heights of Chipa, the country becomes all at once most luxuriant in wood, and wild shrubs of peculiar beauty. A long, winding descent leads from the corn-lands through a dark thicket, in which the oak, the elm, and other trees which recall the vegetation of Europe, mingle with the cinchona (bark-tree), the bigonia, and others peculiar to these regions. Here, at a considerable distance, is heard the roaring of the waters. Suddenly the traveller discovers, as from a terrace, far beneath him, a tract of country producing the palm-tree, the banana, and the cane. A quarter of a mile from the *Salto*, you leave your horses, and descend by a precipitous pathway to the brink of the precipice, where the river, which at a short distance is 140 broad, having contracted itself into a narrow but deep bed of only 40 feet in width, precipitates itself with violence down a perpendicular rock, at two bounds, to the immense depth of 650 feet. "This overwhelming body of water," says our Traveller, "when it first parts from its bed, forms a broad arch of a glassy appearance; a little lower down it assumes a fleecy form; and ultimately, in its progress downwards, shoots forth into millions of tubular shapes, which chase each other more like sky-rockets than any thing else I can compare them to. The changes are as singularly beautiful as they are varied, owing to the difference of gravitation and the rapid evaporation which takes place before reaching the bottom. The noise with which this immense body of water falls, is

quite astounding ; sending up dense clouds of vapour, which rise to a considerable height, and mingle with the atmosphere, forming in their ascent the most beautiful rainbows. The most conclusive proof of the extraordinary evaporation, is the comparatively small stream which runs off from the foot of the fall. To give you some idea of its tremendous force, it is an asserted fact, that experiments have more than once been made of forcing a bullock into the stream, and that no vestige of him has been found at the bottom, but a few of his bones. To give due effect to this mighty work, nature seems to have lavished all the grand accompaniments of scenery, to render it the most wonderful and enchanting of objects. From the rocky sides of its immense basin, hung with shrubs and bushes, numerous springs and tributary streams add their mite to the grand effect. At the bottom, the water which runs off rushes impetuously along a stony bed, overhung with trees, and loses itself in a dark winding of the rock. From the level of the river, where you stand to witness this sublime scene, the mountains rise to a great height, and are completely covered with wood ; and at one opening is an extensive prospect, which, on a clear day, encompasses some distant mountains in the province of Antioquia, whose summits are clothed with perpetual snow. Hovering over the frightful chasm, are various birds of the most beautiful plumage, peculiar to the spot, and differing from any I have before seen."

The crevice into which the river throws itself, communicates with the plains of the *tierra caliente*, and a few palm-trees have sprung up at the foot of the cataract ; so that, while the plain of Canoas is covered with grain, and other productions of the temperate zone, in the ravine beneath are seen the trees

of the equinoctial valleys; and the inhabitants of Bogota tell you, that the river falls at once from a cold climate to a warm one. The mere difference of height, however, Humboldt remarks, is not sufficient to account for this difference of temperature. It takes three hours to descend to the ravine of *La Povasa*. "Although the river loses, in falling, a great part of its water, which is reduced to vapour, the rapidity of the lower current* obliges the spectator to keep at the distance of nearly 450 feet from the basin dug out by the fall. A few feeble rays of noon fall on the bottom of the crevice. The solitude of the place, the richness of the vegetation, and the dreadful roar that strikes upon the ear, contribute to render the foot of the cataract of Tequendama one of the wildest scenes that can be found in the cordilleras." The column of vapour, rising like a thick cloud, is seen from the walks round Bogota at five leagues' distance.

The fall is not, Humboldt says, as is commonly believed, the loftiest on the globe, but there scarcely exists a cataract which, from so great a height, precipitates an equal mass of waters. The combination of sublimely picturesque scenery which it presents is absolutely unrivalled; and the traveller is not surprised, that the rude tribes of the aborigines should have ascribed the whole to a miraculous origin. The following is the legend connected with the place.

"In the remotest times, before the Moon accompanied the Earth, according to the mythology of the Muysca or Mozcá Indians, the inhabitants of the plain of Bogota lived like barbarians, naked, without agriculture, without any form of laws or worship.

* From the termination of the fall, the river assumes the names of *Río de la Mont*, *Río de Tocayma*, and *Río del Colegio*. It has still a fall of nearly 6,000 feet before it reaches the Magdalena, which is about 450 feet in every league.

Suddenly there appeared among them an old man, who came from the plains situate on the east of the Cordillera of Chingasa, and who appeared to be of a race unlike that of the natives, having a long and bushy beard. He was known by three distinct appellations, Bochica, Nemquetheba, and Zuhé. This old man, like Manco-Capac, instructed men how to clothe themselves, build huts, till the ground, and form themselves into communities. He brought with him a woman, to whom also tradition gives three names, Chia, Yubecayguaya, and Huythaca. This woman, extremely beautiful and not less malignant, thwarted every enterprise of her husband for the happiness of mankind. By her skill in magic, she swelled the River Funzha, and inundated the valley of Bogota. The greater part of the inhabitants perished in this deluge; a few only found refuge on the summits of the neighbouring mountains. The old man, in anger, drove the beautiful Huythaca far from the Earth, and she became the Moon, which began from that epoch to enlighten our planet during the night. Bochica, moved with compassion for those who were dispersed over the mountains, broke with his powerful arm the rocks that enclosed the valley on the side of Canoas and Tequendama. By this outlet, he drained the waters of the Lake of Bogota. He built towns, introduced the worship of the Sun, named two chiefs, between whom he divided the civil and ecclesiastical authority, and then withdrew himself, under the name of Idacanzas, into the holy valley of Iraca, near Tunja, where he lived in the exercise of the most austere penitence for the space of 2,000 years.*

In this Indian fable, there is a remarkable analogy to the traditions found among many nations of the Old Continent; and Bochica answers to the Quetzal-

* Humboldt, *Researches*, vol. i. pp. 72—5.

coat of the Mexicans, the Mango-Capac of the Peruvians, and the Paye Zome of the Brazilian tribes.

LAKE OF GUATAVITA.

ANOTHER of the natural curiosities in this province is the Lake of Guatavita, situated in a wild and solitary spot on the ridge of the mountains of Zipaquira, and supposed to have been held in religious veneration by the Indians, who repaired thither for the purpose of ablution. In this lake, according to tradition, lie concealed immense treasures, which the natives are said to have thrown into it when Quesada appeared with his cavalry on the plain of Cundinamarca; and the draining of it has always been a favourite project. Señor Pépe Paris, who is at present the director of the draining, has expended large sums of money in the process. The Spaniards had once got within fourteen feet of the bottom, when the sides fell in with a tremendous crash; and the lagoon having springs in it, the waters began to rise. But, by examining the banks, and washing the mud and soil, they procured a sufficient sum to pay the Government a quinta of 170,000 dollars (a quinta is three per cent); and one emerald procured, and sent to Madrid, was alone valued at 70,000 dollars.

An old Spaniard, sounding in the centre, drew up with the lead a small branch of a tree, covered with mud, in which was found a golden image worth about 100 dollars. This is the image, we apprehend, which the Author of Letters from Colombia saw at a gentleman's house at Bogota, and which had been recovered from the lake: "it was about three inches in height, and resembled the objects of Hindoo worship." "Having paddled round the shores of the lake," con-

tinues Capt. Cochrane, "we landed, and commenced examining the works which were now going on, as a kind of tunnel. We found the strata to be chiefly slate and grey sand-stone; but saw no volcanic appearances. I at once perceived why the sides had fallen in. The slate strata lay in flakes, at about twenty degrees from the perpendicular, against the edges of which the water struck, and gradually carrying away piece by piece, undermined the sides, which consequently fell in. I pointed it out, and proposed plank-ing the sides, in which Señor Rivero concurred; but we could not persuade our friend Pépe that this was requisite. The distance required to be cut, I found to be about forty yards, which might easily be done with proper care, and an expense of perhaps 2,000 dollars."*

On the edge of the conical summit in which the lagoon is situated, our Traveller saw "two of the sepulchres of the caciques hewn in the sand-stone." Capt. Cochrane subsequently visited "innumerable spots where the Indians used to bury their dead, and found," he says, "that the burial-places of the chiefs had been always chosen on commanding summits overlooking the plains, and that they were generally interred singly; whereas the lower class were buried in large caverns formed for that purpose some hundreds of feet below." He obtained permission to open a considerable number of these *guacas* or sepulchres, and he describes one which appears to have been made for a chief. "The spot was indicated by a small hollow appearance in the ground. After removing about a foot of turf and earth, we came to an amazingly large stone, about twelve feet long, eight feet wide, and

* Capt. Cochrane succeeded, by opening the canal, in lowering the lake ten feet, but he did not stay to complete the undertaking.

nine inches thick ; it was a kind of sand-stone ; this we were obliged to break, and with great difficulty removed, when in two pieces. It had rested on a shelf piece all round ; the grave was formed in sand-stone. We at first came to earth, and then to finely variegated sand, rammed down so hard, as to appear almost an integral part of the sand-stone, but manifestly different, as it crumbled to fine dust when once broken out, whereas the natural strata adhere more firmly together. After digging down for about eight feet, we came to earthenware, of a rough description, and rudely painted, some of which had been used for water, others for cooking utensils, from the evident marks of fire on them ; the whole contained nothing but sand. I was obliged to erect a windlass, and use buckets to send the sand up in. At about fourteen feet depth we met with some human bones, the thigh and arm-pieces, but no skull or teeth ; and after continuing our labour to the depth of thirty feet, we reached the original native strata. All the graves I opened, yielded nothing but earthenware, called by the natives *losa* ; from which I am led to believe, that, on the death of an Indian, all his riches were thrown into the Lake of Guatavita, in honour of the deity ; for in other parts, where they have no holy place of worship, their wealth has been found buried in their graves with them. In Peru, large fortunes have been made, by discovering the cemetery of a chief ; and some were so deep, as to render it necessary to work them by candle-light.* And here, tradition reports,

* The geological character of this cavernous tract of country deserves to be investigated. Some of these Indian caves contain nitre. The fact of their being used as places of sepulture by the aborigines is highly curious. The whole formation is probably sand-stone, which prevails in this neighbourhood.

that there exists a cave, connected with the worship of the lagoon, at the entrance of which formerly stood "two golden figures as large as life." A Spanish soldier who first wandered to the place, cut off one of the fingers, when he was attacked by the natives, wounded, and with difficulty made his escape. Having related what he had seen, a strong party proceeded to the spot, but no figures were to be found, nor could they discover the entrance to the cave! From this spot there is a magnificent view,—"verdant plains stretching at your feet, various collateral ridges of mountains in parallel lines appearing to the westward, and the rear closed by the Andes themselves." At the village of Yousa, distant a day's journey, are two salt springs: the waters from the evaporation of which the mineral is obtained, come from the direction of the famous rock-salt mines of Zipaquira. Both these springs and the salt mines were about to be worked by Col. Johnston and Mr. Thompson, under whose management they were expected to be rendered extremely profitable. Fine emeralds have been found in this neighbourhood.* At the village of Muniquira, near the small town of Liva, are copper mines, which, Captain Cochrane thinks, might be rendered very valuable. The ore is rich, yielding from sixty to seventy per cent. It is about three days' journey from Bogota. Not far from Liva is the celebrated church and monastery of Chiquinquirá, round which

* The emerald mines of Muso have been granted by Government on lease to Senor Rivero. "Small emeralds," Captain Cochrane says, "are so plentiful, that it is a common thing to purchase poultry, merely to kill them in search of emeralds, which they are fond of: several are often found in the entrails of a large fowl, and sometimes in a very pure and perfect state, though most generally flawed and very small, consequently of no intrinsic value."

a small town has sprung up, with a population of 1,000 souls. The church is a handsome building, but inferior to the cathedral of Bogota. The miraculous picture of the Virgin, which is the object of devotion to pilgrims, is a very bad painting, stuck over with a profusion of very small emeralds and some still smaller diamonds. It is concealed by a rich veil, which is drawn up with much ceremony to gratify the eyes of pilgrims. By this craft, the friars are said to gain immense wealth in presents of jewels, which, as trustees for the Virgin, they convert into cash as soon as they can, taking care to save appearances, by sending them for sale to some distant province. The hall of the monastery is hung round with some fifty or sixty small paintings, representing miracles performed by Our Lady of Chiquinquirá. On leaving this place, Captain Cochrane had proceeded about a league, when he met several persons dismounted and on their knees, their faces turned towards the towers of this famous sanctuary. He was told that it was customary for pilgrims to dismount at every mile, after coming in sight of it! A fine plain, about twenty leagues long by five broad, commences at this distance from Chiquinquirá, the greater part of which is occupied by a shallow lake, called the Lake of Foucany, which it is proposed to drain and cultivate.

NATURAL BRIDGES OF ICONONZO.

At two days' journey from Bogota, in the road to Popayan, are the famous natural bridges of Icononzo, described by Humboldt in his Picturesque Atlas. This spot was visited by M. Mollien. The road, which lies in a S.E. direction, is one of the most difficult and least frequented in the whole country. "The

traveller," says M. Humboldt, "must feel a passionate enthusiasm for the beauties of nature, who prefers the dangerous descent of the desert of San Fortunato, and the mountains of Fusagasuga, leading towards the natural bridges of Icononzo, to the usual road by the *Mesa de Juan Diaz*, to the banks of the Magdalena." Climbing, after much fatigue and difficulty, the *Atto de Honda*, M. Mollien arrived, at the end of two days, at the village of Mercadillo (or Pandi), founded a few years ago for the purpose of attracting thither the scattered Indian population of these burning valleys. In an hour from this place, he reached the bridge; but we must take our description of it from Humboldt.

"The valley of Icononzo,* or Pandi, is less remarkable for its dimensions than for the singular form of its rocks, which seem to have been carved by the hand of man. Their naked and barren summits present the most picturesque contrast with the tufts of trees and shrubs, which cover the brinks of the crevice. The small torrent which has made itself a passage through the valley of Icononzo, is called *Rio de la Suma Paz*: it falls from the eastern chain of the Andes, which divides the basin of the Magdalena from the vast plains of the Meta, the Guaviare, and the Orinoco. The torrent, confined in a bed almost inaccessible, could not have been crossed without extreme difficulty, had not nature provided two bridges of rocks. The deep crevice through which it rushes, is in the centre of the valley of Pandi. Near the bridge, the waters keep their direction from

* "Icononzo is the name of an ancient village of the Muisca Indians, at the southern extremity of the valley, of which only a few scattered huts now remain."

E. to W., for a length of between 4 and 5,000 yards. The river forms two beautiful cascades at the point where it enters the crevice on the west of Doa, and where it escapes in its descent towards Melgar. This crevice was probably formed by an earthquake, and resembles an enormous vein from which the mineral substance has been extracted. The neighbouring mountains are of grit-stone (*sand-stein*), with a clay cement. In the valley of Icononzo, this grit-stone is composed of two distinct rocks; one, extremely compact and quartzose, with a small portion of cement, and scarcely any fissures of stratification, lies on a schistous grit-stone with a fine grain, and divided into an infinite number of small strata, extremely thin, and almost horizontal. It is probable, that the compact stratum resisted the shock which rent these mountains, and that it is the continuity of this stratum which forms the bridge. This natural arch is forty-six feet in length and nearly forty in breadth: its thickness in the centre is about seven feet. Experiments carefully made, gave us 312 feet for the height of the upper bridge above the level of the torrent. The Indians of Pandi have formed, for the safety of travellers, (who, however, seldom visit this desert country,) a small balustrade of reeds, which extends along the road leading to this upper bridge.

“Sixty feet below this natural bridge is another, to which we are led by a narrow pathway, which descends upon the brink of the crevice. Three enormous masses of rock have fallen so as to support each other. That in the middle forms the key of the arch; an accident which might have given the natives an idea of arches in masonry,—as unknown to the people of the New World as it was to the ancient Egyptians. I shall not attempt to decide the question, whether

these masses of rock have been projected from a great distance, or whether they are the fragments of an arch broken on the spot, but originally like the upper natural bridge. The latter conjecture seems probable, from a similar event which happened to the Coliseum at Rome, where, in a half-ruined wall, several stones were stopped in their descent, because, in falling, they accidentally formed an arch. In the middle of the second bridge of Icononzo is a hollow of more than eight yards square, through which is perceived the bottom of the abyss. The torrent seems to flow through a dark cavern, whence arises a lugubrious noise, caused by the numberless flights of nocturnal birds that haunt the crevice, and which we were led at first to mistake for those bats of gigantic size so well known in the equinoctial regions. Thousands of them are seen flying over the surface of the water. The Indians assured us, that these birds are of the size of a fowl, with a curved beak and an owl's eye. They are called *cacas*; and the uniform colour of their plumage, which is a brownish gray, leads me to think, that they belong to the genus of the *caprimulgus*, the species of which are so various in the cordilleras. It is impossible to catch them, on account of the depth of the valley; and they can be examined only by throwing down rockets, to illumine the sides of the crevice.

“ The height of the natural bridge of Icononzo above the ocean, is 2,850 feet. A phenomenon similar to the upper bridge, exists in the mountains of Virginia, in the county of Rockbridge. The natural bridge of Cedar Creek, in Virginia, is a calcareous arch of fifty-six feet at its opening: its height above the waters of the river is 224 feet. The earthen bridge of Rumichaca, on the declivity of the por-

phyritic mountains of Chumbau, in the province of Los Pastos ; the bridge of *Madre de Dios*, or Danto, near Totonilco, in Mexico ; the pierced rock near Grandola, in the province of Alentejo, in Portugal ; are geological phenomena, which bear some resemblance to the bridge of Icononzo. But I doubt whether, in any part of the globe, a phenomenon has been discovered so extraordinary as that of the three masses of rocks, which support each other by forming a natural arch." *

In travelling from Bogota to the valley of the Cauca, there are two routes ; one either by the *Mesa* and Tocayma, or by Icononzo, traversing the valley of the Magdalena, and crossing the central chain by the *paramo* of Guanacas ; the other by Ibague and Cartago, and across the mountain of Quindiu, which is partially described by Humboldt. The latter was taken by Captain Cochrane in returning to the coast.

FROM BOGOTA TO CARTAGO.

ON the 11th of December, 1824, Captain Cochrane left the capital, and stopped for the night at the village of Fontabon in the plain. At three hours' distance from that place, the road enters the *Boca del Monte*, a gap in the parapet of hills, from which a spiral road winds down a deep and romantic glen to the depth of 3,000 feet. The beginning of the descent is formed by slanting steps of stone, ten feet wide, eight feet broad, and from a foot to eighteen inches deep ; in which, however, there are many gaps and great irregularities, so that the traveller will deem it

* Humboldt, *Researches*, vol. i. pp. 53—60.

prudent to lead his horse. At about 2,000 feet below the plain, the road leads along a ridge of mountains entirely covered with trees bearing the *campuna*, a species of white bell-flower. The climate is here from twelve to fourteen degrees hotter than at Bogota. Although there is much traffic along this route, the roads are so completely cut up, that the baggage-mules frequently stick fast in the ruts. Passing through Tenja, a small village, our Traveller reached in the evening the town of La Mesa. The next day, still descending, he arrived at Anapoyma, where he found the heat extremely oppressive, the thermometer at 85° in the shade. The fourth day, he crossed the Bogota twice, and lodged at night at the *hacienda* of Peñon. The fifth day, he crossed the Fusagasaga, and went on to the cottage called Cangreco. The sixth night, he slept at *Los Cosanos de la Honda*, and early the next morning, crossed the Magdalena, at the ferry to *La Villa de la Nuestra Senhora de Purificacion*, in the province of Neyva, reckoned half-way between Neyva and Tocaima.* About eight hours and a half from Purificacion, the route crosses the Quello (or Cuello), a rapid and strong river, on the banks of which travellers are sometimes detained for days till it is shallow enough to pass. Three hours and a half farther is the city of *San Bonifacio de Ibague* in Mariquita, an inconsiderable place, with a population of between 2 and 3,000. "About 130 years ago, the plains of Ibague were all corn-lands, and the superiority of their produce was such as to incur the jealousy of the viceroy, who, finding that the corn was preferred to that of his own territory,

* From Purificacion, Captain C. made an excursion to the gold mines of Apone, near Coyamo, but found them not worth the trouble of visiting them.

sent a mandate for the whole to be destroyed, and the mills dismantled." Such is the statement Captain Cochrane received, and he saw many of the mill-stones lying about the plain. Here he prepared for his arduous journey to Cartago across the Quindiu.

"The mountain of Quindiu,"* says Humboldt, "is considered as the most difficult passage in the Cordilleras of the Andes. It is a thick, uninhabited forest, which, in the finest season, cannot be traversed in less than ten or twelve days. Not even a hut is to be seen, nor can any means of subsistence be found. Travellers, at all times of the year, furnish themselves with a month's provision, since it often happens, that, by the melting of the snows, and the sudden swell of the torrents, they find themselves so circumstanced, that they can descend neither on the side of Cartago, nor that of Ibagué. The highest point of the road, the *Garito del Paramo*, is 1,450 feet above the level of the sea. As the foot of the mountain, towards the banks of the Cauca, is only 3,140 feet; the climate there is, in general, mild and temperate. The pathway which forms the passage of the cordilleras is only about a foot in breadth, and has the appearance, in several places, of a gallery dug, and left open to the sky. In this part of the Andes, as in almost every other, the rock is covered with a thick stratum of clay. The streamlets which flow down the mountains, have hollowed out gulleys 18 or 20 feet deep. Along these crevices, which are full of mud, the traveller is forced to grope his passage, the darkness of which is increased by the thick vegetation that covers the opening above. The oxen, which are the beasts of burden commonly made use of in this country, can

* In lat. 4° 36' N. long. 5° 12' of Paris.

scarcely force their way through these galleries, some of which are 2,000 yards in length; and if perchance the traveller meets them in one of these passages, he finds no means of avoiding them, but by turning back, and climbing the earthen wall which borders the crevice, and keeping himself suspended, by laying hold of the roots which penetrate to this depth from the surface of the ground.

“ We traversed the mountains of Quindiu in the month of October 1801, on foot, followed by twelve oxen, which carried our collections and instruments, amidst a deluge of rain, to which we were exposed during the last three or four days in our descent on the western side of the cordilleras. The road passes through a country full of bogs, and covered with bamboos. Our shoes were so torn by the prickles which shoot out from the roots of these gigantic *gramina*, that we were forced, like all other travellers who dislike being carried on men's backs, to go barefooted. This circumstance, the continued humidity, the length of the passage, the muscular force required to tread in a thick and muddy clay, and the necessity of fording deep torrents of icy water, render this journey extremely fatiguing; but, however painful, it is accompanied by none of those dangers with which the credulity of the people alarms travellers. The road is narrow, but the places where it skirts precipices are very rare. As the oxen are accustomed to put their feet in the same tracts, they form small furrows across the road, separated from each other by narrow ridges of earth. In very rainy seasons, these ridges are covered with water, which renders the traveller's step doubly uncertain, since he knows not whether he places his foot on the ridge or in the furrow.

“ The usual mode of travelling for persons in easy

circumstances is in a chair, strapped to the back of one of the native porters (*cargueros*), or men of burden, who live by letting out their backs and loins to travellers. They talk in this country of going on a man's back (*andar en cargueros*) as we mention going on horseback. No humiliating idea is annexed to the trade of *cargueros*; and the men who follow this occupation are not Indians, but mulattoes, and sometimes even whites. It is often curious to hear these men, with scarcely any covering, and following an employment which we should consider so disgraceful, quarrelling in the midst of a forest, because one has refused the other, who pretends to have a whiter skin, the pompous title of *don*, or of *su merced*. The usual load of a *carguero* is six or seven arrobas: those who are very strong carry as much as nine arrobas. When we reflect," continues Humboldt, "on the enormous fatigue to which these miserable men are exposed, journeying eight or nine hours a day over a mountainous country; when we know, that their backs are sometimes as raw as those of beasts of burden; that travellers have often the cruelty to leave them in the forests when they fall sick; that they earn by a journey from Ibaguë to Cartago, only twelve or fourteen piasters in from fifteen to twenty-five days; we are at a loss to conceive how this employment of a *carguero* should be eagerly embraced by all the robust young men who live at the foot of the mountains. The taste for a wandering life, the idea of a certain independence amid forests, leads them to prefer it to the sedentary and monotonous labour of cities. The passage of the mountain of Quindiu is not the only part of South America which is traversed on the backs of men. The whole of the province of Antioquia is surrounded by mountains so difficult to pass, that they

who dislike entrusting themselves to the skill of a bearer, and are not strong enough to travel on foot from Santa Fé de Antioquia to Bocca de Nares or Rio Samana, must relinquish all thoughts of leaving the country. I was acquainted with an inhabitant of this province so immensely bulky, that he had not met with more than two mulattoes capable of carrying him; and it would have been impossible for him to return home, if these two carriers had died while he was on the banks of the Magdalena, at Monpox or at Honda. The number of young men who undertake the employment of beasts of burden at Choco, Ibague, and Medellin, is so considerable, that we sometimes met a file of fifty or sixty. A few years ago, when a project was formed to make the passage from Naires to Antioquia passable for mules, the *cargueros* presented formal remonstrances against mending the road, and the Government was weak enough to yield to their clamours. The person carried in a chair by a *carguero*, must remain several hours motionless, and leaning backwards. The least motion is sufficient to throw down the carrier; and his fall would be so much the more dangerous, as the *carguero*, too confident in his own skill, chooses the most rapid declivities, or crosses a torrent on a narrow and slippery trunk of a tree. These accidents are, however, rare; and those which happen must be attributed to the imprudence of travellers, who, frightened at a false step of the *carguero*, leap down from their chairs.”*

* Researches, vol. i. pp. 61—9.

The annexed plate, copied from the learned Author's Picturesque Atlas, represents the entrance of the mountain near Ibague. In the fore-ground, a band of *cargueros* are coming up. A part of the town of Ibague, the great valley of the Magdalena, and the eastern chain of the cordilleras, are seen in the back-ground; and



Captain Cochrane was advised by the *alcalde* to take a mule in preference to a *sillero* (chairman), but he had reason sorely to repent of having followed this recommendation. On the second day, while his companion went on smoothly before, and quite dry, he found himself left behind, his mule being up to the girths in mud, and in momentary danger of stumbling or sticking fast. "The road was originally formed by the old Spaniards, about eight feet broad, with trees laid equally together and well secured, affording a very good passage; but, in consequence of neglect, the mountain-torrents have torn away the wood, which has not been repaired, and it has become in parts so bad and worn, that the present road is from twenty to thirty feet below the original level, with perpendicular sides, and so narrow, that I was frequently compelled to draw my feet from the stirrups, and lay them close to the ears of the mule, to prevent my knees from being crushed by the banks on both sides; the muleteer being obliged to go in advance of the laden mule, to cut the banks with a kind of straight hoe, in order to make room for the animal to pass, although the baggage was laid as much on the back as possible."

In other places, where he was compelled to walk, he observed the original line of road far above his head, the beams sticking out at the sides. Soon after passing a mountain torrent on the third day, his companion pointed out the spot where a Spanish officer met his deserved fate. The road here lies along the edge of an abrupt precipice, 1,500 feet in perpendicular depth to the river below. The officer, having fastened

the truncated cone of Colima, covered with perpetual snow, appears above the mass of granitic rocks. The small river, forcing its way across a thicket of palm-trees, is the Combeima.

on an immense pair of mule spurs, was incessantly darting the rowels into the bare flesh of the poor *sillero* who carried him. In vain his bearer assured him that he could not quicken his pace. Even Indian patience, however, may be exhausted, and, on reaching this spot, the *sillero* jerked his inhuman rider from his chair into the torrent below, and made his escape into the mountain. On the sixth day, Captain Cochrane found himself scarcely able to sit his mule, having been very ill in the night, with violent vomitings. This day, he passed the River Quindin three times. On the eighth, he had to descend declivities so nearly perpendicular, that "the mules, squatting on their hams, slid down twenty or thirty yards, without a possibility of stopping themselves, and with imminent peril to the rider." Twice, in going down such a steep, the crupper of the saddle broke, and threw him on the mule's neck, where he with difficulty kept his seat, owing to the poor animal's having neither time nor power for kicking. This night, he reached the small village of *La Balsa*, where he halted a day for the mules and peons. On the 10th day,* he crossed, at the end of three hours, the *Rio Vieja*, and, three hours farther, came in sight of Cartago, at the base of the mountain, which he reached by a descent of about an hour and a half.

Cartago, which bears the title of a city, is well situated on the left bank of the River *Vieja*, a little above its junction with the Cauca. There is a cathedral and two parish churches, in good repair, with tolerable organs, made by an ingenious native, who is almost self-taught. What gave our Traveller the greatest pleasure, he says, was a school established on the Lancastrian principle, for girls and boys, which

* Yet the post is said to go from Cartago to Ibaguë in four days.

appeared to be well conducted. The commerce of the place is nearly confined to sending dried beef and live pigs to *Choco*, where there are scarcely any cattle, as the pasturage there will not support them. Coffee is grown in great abundance, but only for home consumption. The cacao of the plains of Cartago is far superior to that of Guayaquil, and both the sugar-cane and tobacco flourish luxuriantly. The whole district is rich in mineral productions, and the hills contain nitre. But, owing to the want of convenient outlets, and the great expense of conveyance to Buenaventura, the nearest port, the produce of this fertile valley cannot be turned to account, and the cultivation is confined to the home demand. The magnificent River Cauca flows through the whole of these plains, but is navigable only in particular places. Among other natural productions in this valley, is the herb called *cabuca*, the juice of which is said to be a specific for all wounds, ulcers, and gangrenes. There are three species, the Mexican, the kind called *macho*, and the *embra*. In Venezuela, the plant is called *cocaïsa*.

FROM CARTAGO TO CITERA.

ON leaving Cartago, Captain Cochrane had to cross a second range of mountains to reach Choco. He now thought it prudent to provide himself with a *sillero*, but, owing to the desertion of one of his *peons*, he was obliged, on the third day, to dismount, and let the bearer carry his trunk, till the stock of provisions grew light enough to allow of a spare man of burden; he then had his *sillero* again. Incessant torrents of rain aggravated the difficulties and perils of the road. "How often," exclaims our Traveller, "while I was scarcely able to keep my seat from soreness of limbs,

and the rain falling in torrents, did I wish myself safe out of these mountains ; and vow never to cross them again !” Both he and his peons were sometimes so ill, as to be scarcely able to proceed. One day they were in want of water, when the *sillero* conducted our Traveller to a *guadua*-tree, in which he made an incision, and water flowed in abundance. “ Applying my mouth to the orifice,” he says, “ I quenched my thirst with the fluid, which was clear and delicious. Each joint of this tree contains about two gallons of water.” On the 10th day, the route lay directly along a ridge of mountains leading down to *Las Juntas*. “ My *sillero*,” continues Captain Cochrane, “ being sufficiently recovered to carry me, I was mounted in my chair, when suddenly, about noon, he turned round, and began descending an almost perpendicular declivity, backwards. My face was thus turned to the abyss below, the bottom of which was 2,000 feet from the place where we were, with a platform sixty feet beneath us, about twelve feet square. My *sillero* commenced his descent, holding by the roots of trees, sometimes with only one hand, whilst with the other he was scratching with his pole, of hardened wood pointed (which all the *peons* have in these mountainous parts), a place for his foot to rest on at his next step. I had been taken by surprise, and called out to him, as soon as possible, to set me down ; but he desired me to sit quite still, if I had any regard for my safety, with which I complied, and we eventually reached the small platform below without accident.

“ We here halted for some time before we again proceeded. The road continued along this lower ridge ; the path at first nearly fourteen feet wide, but gradually narrowing to about two feet, and continuing so with but little variation for some distance ; the

sides of the mountain being nearly perpendicular, and the trees growing thickly on them, up to the very edge of our path on either side. Occasionally, where the trees allowed, we had a picturesque and commanding view of the deep vales beneath, and the towering mountains that surrounded them; whilst a boisterous and foaming torrent dashed below, on both sides of the mountain we traversed, hurrying on the same course as ourselves to the termination of the ridge, at Las Juntas; and adding, by its silvery appearance and sparkling foam, to the magnificence of the striking scenery."

Las Juntas derives its name from the confluence of the mountain streams, which here form the River Tamina. Here he embarked in a canoe, and, for an hour and a half, glided with rapidity down the stream, passing many dangerous shoals and rapids, to *La Cabezera*. The river is then for two leagues navigable only by rafts, owing to the falls and rapids. At a place called Guaybal, our Traveller was glad to discharge his peons, except his *sillero*, on embarking for Novita. In that "miserable town," he was detained for six days, while a messenger was despatched to order a canoe to come to the *Tambo* of *San Pablo*, on the Citera side of the isthmus of San Pablo. The population of Novita is nearly all black, amounting to about 1,000 souls. At length he again embarked, and was rapidly carried down the Tamina for three hours to its junction with the River San Juan, by which, in three days, you may arrive at the Pacific Ocean.

At this junction, the San Juan is about 400 yards broad; but, as our Traveller now began to ascend it, changing his course from south to west, it became narrower, shallower, and more rapid. Soon after

sunset, he reached San Pablo, and, after passing some gold mines, crossed over to the *Tambo* on the Novita side. The next day, he had again occasion for his *sillero* in crossing the isthmus by a woodland path, originally formed of timbers placed lengthways, but horribly out of repair. In some places, the *sillero* had to cross over bridges of a single log, where, if his foot had slipped, his rider would have had his neck broken. After an hour's travelling, they reached the rising ground which divides the San Juan from the stream of Citera, between which it is proposed to cut a canal that would connect the two oceans. "I particularly inspected it," says Capt. Cochrane, "and found the distance from one stream to another to be about 400 yards, and the height of the ground to be cut through, about 70 feet. But, after digging a very few feet, you come to solid rock, which would make the undertaking expensive. Besides, it would be necessary to deepen each stream for about a league; so that, I think, the least cost would be 500,000 dollars, to make a good communication between the Atrato and the San Juan." It is an hour's walk from this place to the *Tambo* of Citera. Again embarking, he descended the very shallow and narrow stream of the *San Pablo* for two hours, till, being joined by the Rapadura from the north-east, the river becomes broader and deeper: a little lower, it assumes the name of the Quito. Early on the third morning, he reached Citera, a miserable town on the right bank of the Atrato, in the midst of swamps.* On the 12th

* From this place to the mouths of the Atrato, nearly the whole tract consists of *tierras baldias* (unappropriated lands); but, till within three days' journey of the entrance, there is no ground that could be cultivated: "on landing on either bank, and walking fifty yards, you arrive at an impenetrable morass."

of March, he embarked in a *champan* on this noble river; passed, during the night of the 15th, the mouth of the River Niapippi; and, on the 19th, sailed through the Barbacoa, one of the nine mouths of the Atrato,* into the Gulf of Darien. Contrary winds detained him for some days, but at length, on the 27th, he safely and joyfully landed at Cartagena.

With regard to the proposed communication between the two oceans by means of the Niapippi, Captain Cochrane conceives that Baron Humboldt must have been misinformed as to its feasibility. A Colombian officer, who had crossed over to Panama by that route, stated, that he found the Niapippi shallow, rapid, and rocky; that the land-carriage to the port of Tupica, (instead of being over level ground,) crosses three sets of hills; and that he could perceive no possibility of a communication between the Niapippi and the Pacific Ocean. As to the other line of navigation, M. Humboldt states, that the *curé* of a village near Novita, had actually employed his parishioners to dig a small canal through the *quebrada de la Raspadura*, and that by this means, during the rainy season, canoes had actually passed from sea to sea. "This interior communication has existed since 1788, unknown to Europe. The small canal of Raspadura unites, on the two oceans, two points 75 leagues distant from each other." This communication, however, Capt. Cochrane says, can never become of great utility, from its distance, and the brief season of the year in which it is practicable.

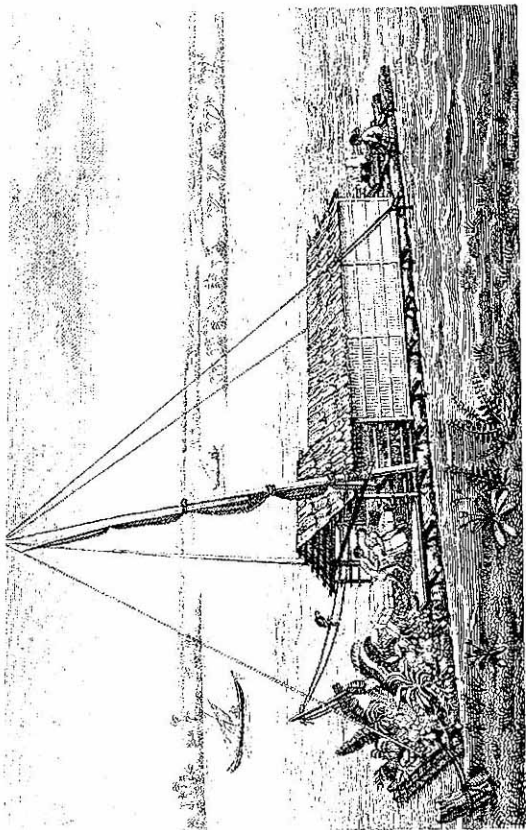
* The main mouth is La Candelaria, but it is beset with sand-banks. The Atrato is the same river as the Choco and Darien. Its navigation was formerly prohibited by the Spanish government, *on pain of death*.

POPAYAN.

M. MOLLIEN proceeded from Bogota to Popayan by way of Guaduas and the Magdalena. His account of the route is, however, so indistinct, and his orthography so doubtful, that we are not able to make any satisfactory use of it. The situation of Popayan is most delightful. The valley, he says, has not the gigantic magnificence of that of Bogota; but the air is so pure, the temperature so mild, the soil so fertile, that "he would be almost tempted to give it a preference over the plateaus of the other cordilleras, if the number of disgusting insects, particularly fleas, did not render the place almost uninhabitable." The houses are more handsome than those of Bogota, and there are some that would not disgrace the finest parts of our European capitals. But the place is in decay, and the population greatly diminished. Many families struck our Traveller as seeming, from their physiognomy, to be of Jewish origin. The number of negroes and mulattoes here, is double that of the whites.

From Popayan, M. Mollien took the road to Cali, traversing the valley of the Cauca. He then crossed the mountains to *Las Juntas*, a village so called from the confluence of the Pepita and the Dagua; and descended the latter river to the port of San Buenaventura, on the shores of the Pacific, where he embarked on board a schooner for Panama.

"The great ocean," says M. Mollien, "is almost solitary between Lima and Mexico: but few ships are met with." The commerce is almost confined to the ports of Callao, Guayaquil, Panama, San Blas, and Acapulco; but a coasting trade is carried on by the



ships of Païta. On the coasts of the South Sea, and at the mouth of the Guayaquil, large rafts (*balzas*) have been used by the Indians from time immemorial, for the conveyance of merchandise and for fishing. The annexed plate represents one of these rafts laden with the fruits of the country. They are composed of eight or nine beams of very light wood, and are from fifty to eighty feet in length.

PANAMA.

"GUAYAQUIL," says M. Mollien, "is built of wood; Buenaventura, of straw; Panama has retained something of both kinds of architecture.* At first sight, however, this town pleases the European: he sees houses of three stories, inhabited by several families; consequently, as in his own country, all is noise and bustle." But on a nearer view, the place presents very far from pleasing or attractive features. The streets are narrow,—much darker, and even much dirtier than those of Cartagena. The people are excessively uncleanly. The town is in ruins. "In some districts, whole streets have been allowed to fall into neglect, and even the military works are fast crumbling to decay. Every thing, in short, tells the same lamentable story of former splendour and of present poverty." "Panama," says Capt. Basil

* The French Traveller will be thought to have sacrificed here correctness to antithesis. Panama still presents the remains of magnificent public edifices, among which Captain Basil Hall particularises the Jesuits' College, a church and convent, and "a gorgeous bath by the side of a dried-up marble fountain." In fact, there remain "more genuine traces," he says, "of that luxurious and tasteful splendour which displays itself in fine public edifices," at Panama, than even in Lima, the "city of the kings," with all its tinsel and pretension.—HALL'S *Journal*, vol. ii. pp. 155—7.

Hall, "has flourished for a long series of years, but its sun has at last set with the golden flag of Spain; the signal of exclusion wherever it waved."

Here we must close our topographical description of the Republic of Colombia. Whole provinces yet remain to be explored by European travellers, before we can have materials for any thing like a complete account of this wonderful country. In the meantime, it is not improbable that the territorial boundaries and internal arrangements of the republic may undergo some modification. It was our intention, agreeably to the intimation given at page 12, to close this volume with a brief historical sketch of the sanguinary revolution which has ushered in the happy era of the national independence; but we the less regret the necessity under which we have found ourselves, of omitting this, inasmuch as a fairer opportunity will be afforded, in the description of Peru, of presenting a complete account of the contest, and, we trust, of its final and successful termination. At the same time, we shall probably be able to furnish some description of the southern provinces of Colombia, which were once politically, and may still be considered as geographically, connected with that vice-royalty.

THE END.

LONDON :

PRINTED BY J. MOYES, ROUVERIE STREET.