

CHAPTER VIII.

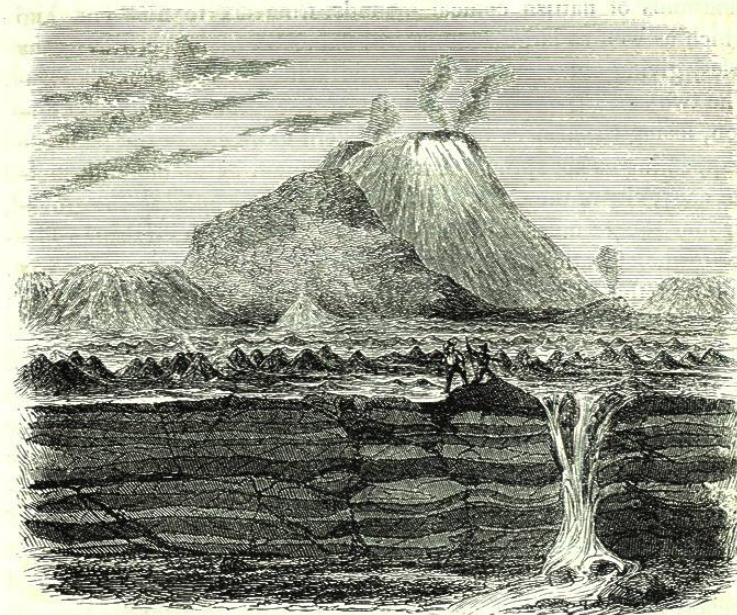
STATE OF MECOACAN — BOUNDARIES — ELEVATIONS — VOLCANO OF JORULLO — THEORIES OF HUMBOLDT AND LYELL — PRESENT CONDITION — RIVERS OF MECOACAN — CLIMATE — HEALTH — INDIANS — DEPARTMENTS — AGRICULTURE — TOWNS — MINES — JALISCO — BOUNDARIES — POPULATION — RIVERS — LAKES — DIVISIONS — MANUFACTURES — AGRICULTURE — FACTORIES — GUADALAJARA — TOWNS — SAN JUAN DE LOS LAGOS — TEPIC — SAN BLAS — MINES — ISLANDS — MINING REGION — INDIANS — CHARACTER AND HABITS — CHURCH AND SCHOOL — EDUCATION — BISHOPRIC — TERRITORY OF COLIMA — EXTENT — CLIMATE — PRODUCTIONS — TOWNS.

THE STATE OF MECOACAN.

THE State of Mechoacan is the old Spanish Intendencia of Valladolid, and includes a great part of the ancient Indian Kingdom of Mechoacan, or Mechoacan of the Tarascos. It is bounded on the north by Guanajuato, north-easterly of Querétaro, south-easterly by Mexico, westerly by Jalisco, and south-westerly, for a short distance, by the Pacific.

This State lies chiefly on the western slope of the Cordillera, and is cut up by hills and genial vallies. The highest point within its limits is the Peak of Tancitaro, which, in all probability, is an extinct volcano. East of this, and south of the village of Ario, the Volcano of Jorullo burst forth on the night of the 29th of September, 1759.

The great region to which this mountain belongs has been already described in our account of the geological structure of Mexico. The plain of Malpais forms part of an elevated platform, between 2,000 and 3,000 feet above the level of the sea, and is bounded by hills composed of basalt, trachyte, and volcanic tuff, clearly indicating that the country had previously, though probably at a remote period, been the theatre of igneous action. From the era of the discovery of the New World to the middle of the last century, the district had remained undisturbed, and the space, now the site of the volcano, which is thirty leagues distant from the nearest sea, was occupied by fertile plains of sugar cane and indigo, and watered by the two brooks, Cuitimba and San Pedro. In the month of June, 1759, hollow sounds of an alarming nature were heard, and earthquakes succeeded each other for two months, until, in September, flames issued from the ground, and fragments of burning rocks were thrown to prodigious heights.



THE VOLCANO OF JORULLO.

“Six volcanic cones, composed of scoriæ and fragmentary lava, were formed on the line of a chasm which ran in a direction from N. N. E. to S. S. W. The least of these cones was 300 feet in height, and Jorullo, the central volcano, was elevated 1,600 feet above the level of the plain. It sent forth great streams of basaltic lava, containing included fragments of rocks, and its ejections did not cease till the month of February, 1760.

“Humboldt visited the country more than forty years after this occurrence, and was informed by the Indians, that when they returned, long after the catastrophe, to the plain, they found the ground uninhabitable from the excessive heat. When he himself visited the place, there appeared around the base of the cones, and spreading from them, as from a centre, over an extent of four square miles, a mass of matter of a convex form, about 550 feet high at its junction with the cones, and gradually sloping from them in all directions towards the plain. This mass was still in a heated state, the temperature in the fissures being on the decrease from year to year, but in 1780 it was still sufficient to light a cigar at the depth of a few inches. On this slightly convex protuberance, the slope of which must form an angle of about 6° with the horizon, were

thousands of flattish conical mounds, from six to nine feet high, which as well as large fissures traversing the plain, acted as fumeroles, giving out clouds of sulphuric acid and hot aqueous vapor. The two small rivers before mentioned disappeared during the eruption, losing themselves below the eastern extremity of the plain, and reappearing as hot springs at its western limit. Humboldt attributed the convexity of the plain to inflation below; supposing the ground, for four square miles in extent, to have risen in the shape of a bladder to the elevation of 550 feet above the plain in the highest part. But this theory is by no means borne out by the facts described; and it is the more necessary to scrutinize closely the proofs relied on, because the opinion of Humboldt appears to have been received as if founded upon direct observation, and has been made the ground work of other bold and extraordinary theories. Mr. Scrope has suggested that the phenomena may be accounted for far more naturally by supposing that lava flowed simultaneously from the different orifices, and principally from Jorullo, united with a sort of pool or lake. As it poured forth on a surface previously flat, it would, if its liquidity was not very great, remain thickest and deepest near its source, and diminish in bulk from thence towards the limits of the space which it covered. Fresh supplies were probably emitted successively during the course of an eruption which lasted a year; and some of these, resting on those first emitted, might only spread to a small distance from the foot of the cone, where they would necessarily accumulate to a great height.

"The showers, also, of loose and pulverulent matter from the six craters, and principally from Jorullo, would be composed of heavier and more bulky particles near the cones, and would raise the ground at their base, where, mixing with rain, they might have given rise to the stratum of black clay which is described as covering the lava.

"The small conical mounds called 'hornitos' or little ovens may resemble those five or six small hillocks which existed in 1823 on the Vesuvian lava, and sent forth columns of vapor, having been produced by the disengagement of elastic fluids heaving up small dome-shaped masses of lava. The fissures mentioned by Humboldt as of frequent occurrence, are such as might naturally accompany the consolidation of a thick bed of lava, contracting as it congeals; and the appearance of rivers is the usual result of the occupation of the lower part of the valley or plain by lava, of which there are many beautiful examples in the old lava currents of Auvergne. The heat of the 'hornitos' is stated to have diminished from the first; and Mr. Bullock, who visited the spot many years after Humboldt,

found the temperature of the hot spring very low,—a fact which seems clearly to indicate the gradual congelation of a subjacent bed of lava which, from its immense thickness, may have been enabled to retain its heat for half a century. The reader may be reminded, that when we thus suppose the lava near the volcano to have been, together with the ejected ashes, more than 500 feet in depth, we merely assign a thickness which the current of Skaptar Jokul attained in some places in 1783.

"Another argument adduced in the support of the theory of inflation from below, was, the hollow sound made by the steps of a horse upon the plain; which, however, proves nothing more than that the materials of which the convex mass is composed are light and porous. The sound called "*rimbombo*" by the Italians, is very commonly returned by *made ground* when sharply struck, and has been observed not only on the sides of Vesuvius and of other volcanic cones where a cavity is below, but also in plains, such as the Campagna di Roma, composed in a great measure of tuff and other porous and volcanic rocks. The reverberation, however, may be assisted by grottoes and caverns, for these may be as numerous in the lavas of Jorullo as in many of those of Etna; but their existence would lend no countenance to the hypothesis of a great arched cavity, four square miles in extent, and in the centre 550 feet high.¹

"Mr. Burkhart, a German director of mines, who examined Jorullo in 1827, ascertained that there had been no eruption there since Humboldt's visit in 1803. He went to the bottom of the crater, and observed a slight evolution of sulphurous acid vapors, but the "hornitos" had ceased entirely to give forth steam. During the twenty-four years intervening between his visit and that of Humboldt, vegetation had made great progress on the flanks of the new hills, and the rich soil of the surrounding country was once more covered with luxuriant crops of sugar cane and indigo, and there was an abundant growth of natural underwood on all the uncultivated tracts."²

The State of Mechoacan is extraordinarily rich in rivers and streams. The Lerma, Balsas, Zitacuaro, Huetamo, Cluranúeco, Marquéz, Aztala, Tlalpujahuá, and some smaller streamlets and brooks are found in its vallies; while the lakes and ponds of Cuizco or Aaron, Patzcuaro, Huango, Tanguato, and Huaniqueo afford

¹ See Scrope on Volcanoes, p. 267.

² Leonhard and Brown's Neues Jarbuch, 1835, p. 36. See Lyell's Geol., Am Ed., 1 vol., p. 345.

supplies to numerous neighborhoods. The climate of Mechoacan is regular, not liable to extraordinary or sudden changes, and remarkably genial. On the Pacific coast and in its vicinity, as in the other middle and southern States of the Confederacy, agues and intermittent fevers prevail; but the population seems to have increased considerably since the beginning of this century, and even in a larger proportion than in some other parts of Mexico. In 1849, the number of inhabitants was estimated to be not less than 590,000. Three Indian tribes still dwell within its borders: 1st, the Tarascos; 2d, the Otomies; 3d, the Chichimecas. The whole southern half of the State is peopled with Indians.

Mechoacan is divided into 4 departments and 62 municipalities.

1. Department del Norte, with 14 municipalities.
2. " del Oriente, with 15 municipalities.
3. " del Sur, with 11 municipalities.
4. " del Poniente, with 22 municipalities.

These 4 departments contain the three cities of MORELIA, PATZCUARO, and TZINTZOUTZAN;—the three towns of Zitacuaro, Zamora, and Charo;—256 villages, 333 haciendas, and 1,356 ranchos, which are divided among 83 parishes.

The agricultural productions of Mechoacan are similar in character to those of the other Western States of Mexico lying within the same longitude. The best sugar plantations are about 12 leagues from Patzcuaro. At the foot of Jorullo, cotton, indigo, cacao and sugar are planted; and mainoc or cassava, potatoes and yams are sown in genial spots, whilst maiz, wheat, barley and magueys are cultivated in the higher and cooler regions. The finest tropical fruits are raised in the warm portions of the State.

The capital of Mechoacan is Morelia, sometimes called Valladolid, or Valladolid de Mechoacan. Its modern title is derived from the name of the insurgent leader Morelos.

MORELIA lies 6,398 feet above the level of the sea, in latitude 19° 42' North, 103° 12' 15" W. long. from Paris,—between the two streams which water the Valley of Olid. It is a small, but handsome town, possessing some fine churches, and a charming passeio and alameda. The climate is mild and wholesome, but snow falls occasionally during the winter.

PATZCUARO lies on the south-eastern bank of the lake of that name.

TZINTZOUTZAN is about 4 leagues from Patzcuaro, in a northerly direction, upon the banks of the same lake. It was once the capital of the ancient Indian Kingdom of Mechoacan, but is now only a

small village of 2,000 inhabitants, who have nevertheless bestowed on it the title of—"City." Some relics of the Tarascan architecture are said to be found at this place, but we do not possess any authentic accounts or drawings of them.

ZITACUARO is the capital of the old mining district 7 leagues south of Angangueo, 6,451 feet above the sea, and contains about 2000 inhabitants. Many small Indian villages are also found in the neighborhood, but they do not require special notice.

ANGANGUEO is a mining town 7 leagues south of Tlalpujahua, with about 1,900 inhabitants.

San Pedro y San Pablo de Tlalpujahua, also a mining village and district, 35 leagues north north-west from Mexico, eastward of Morelia, and about 6 leagues south of the left bank of the Lerma. It lies in a beautiful mountain region at the foot of the *Cerro del Gallo*, 8,386 feet above the sea. Two leagues north of Tlalpujahua, is the *Hacienda de Tepetongo*, remarkable for its warm springs, which rising amid volcanic rocks, maintain a temperature of 27° Reaumeur; and are freely resorted to by the neighboring Indians. Cuizco; Huaniqueo; Zamora; Tancuancicuaro; Tarecuato; Tlazazalca, Tanguato, are the remaining towns and villages in this part of the country deserving mention. In the Department *del Norte*, we find Sirisicuaro; Santa Anna; Araron; Copandaro; Teremendo; Pareachecuaro, and Tirepiteo. In the Department *del Oriente* lie San Felipé; Patambero; Enadio; Orocutui; Tusantla; Clirangangueo; Tichiqueo; Huetano Pungarahuato; and Cayuca. In the Department *del Sur*, are Ario; Tacambaro; Turicato; Churumuco; Santiago Coalcoman; Uruapan and Tancitaro. In the Department *del Poniente*, we find Chilchote, with about 4,700 inhabitants, and Tincuindui.

The mining districts of Mechoacan are Tlalpujahua, Angangueo, and Ozumatlan. Formerly, the mines of Zitacuaro, Ingnaran, and a few other districts were somewhat renowned for their value; but, at present, they are either entirely abandoned or only slightly worked.

THE STATE OF JALISCO.

The present State of JALISCO and former Intendency of Guadalupe, formed together with Zacatecas, the old Spanish kingdom of New Galicia. It is bounded on the north by Durango; on the north-west by Sinaloa; on the north and east by Zacatecas and

Guanajuato; on the south and south-east by Mechoacan and the Territory of Colima; and on the west by the Pacific coast, for a distance of 160 leagues. The State stretches from $19^{\circ} 5'$ to $23^{\circ} 55'$ of north latitude; and from $103^{\circ} 45'$ to $108^{\circ} 28' 30''$ west longitude from Paris. Its population is estimated at about 700,000.

The greater part of Jalisco lies on the western slope of the Cordillera; and its table lands, which resemble those of the great plateau of Mexico, are somewhat cut up by mountain spurs. The upper regions consequently are comparatively sterile, whilst the lowlands are rich and fruitful.

The Sierras of Bayona, in the north-west end of Chalchihuitéc, in the north-east of the State, are its most remarkable mountain ranges. The Rio Grande de Santiago is the principal stream in Jalisco; but during the six months of the dry season, its waters are either extremely shallow or disappear altogether. The Bayona is a boundary between this State and Sinaloa.

The LAKE OF CHAPALA, lies about fifteen leagues from the city of Guadalajara, and forms a basin among the mountains of 36 to 40 leagues in length by 5 to 8 in breadth. Its usual depth is about six and a half fathoms. Its scenery is remarkably beautiful, and it supplies the neighborhood plentifully with fish and water-fowl.

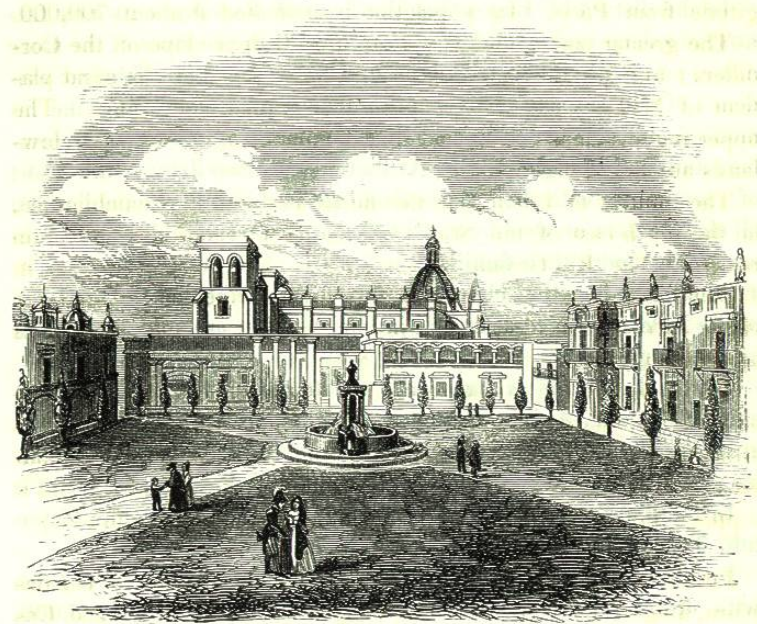
Jalisco is divided into eight Cantons or Departments: — Guadalajara, Lagos, La Barca, Sayula, Etzatlan, Autlan, Tepic and Colotlan; — containing 8 large cities and towns, 318 small villages, 387 haciendas or plantations, and 2,534 ranchos or farms.

The agricultural productions of Jalisco combine those of the *tierras calientas* and the *tierras templadas*. On the upper plateaus, grain and agaves are chiefly planted, and on the coast, sugar and cotton. A small quantity of cochineal is also raised, and in the district of Autlan de la Grana, plantations of the cacao-tree have been made. All the fruits of the tropical and temperate zones are readily grown; sheep, mules, horses, goats, neat-cattle, are raised in great abundance, and not less than 10,000 head of cattle are found on many haciendas de Gañado.

The manufactures of Jalisco are chiefly confined to rude cotton fabrics or some fanciful articles of dress. The people are celebrated for their gold and silver embroidery upon leather which is used in the manufacture of saddles and horse equipage.

Nearly all the importations into this State come either by land from San Luis Potosi, the city of Mexico, or San Blas, which is the chief port of Jalisco on the Pacific. A large portion of the

foreign wares are doubtless smuggled into the interior, or introduced through the corrupt connivance of custom-house officers along the line of the west coast.



PLAZA OF QUADALAJARA.

The city of GUADALAJARA, 150 leagues from Mexico, the capital of Jalisco, is situated upon an extensive plain. Its handsome streets are airy, and many of the houses well built. There are fourteen squares, twelve fountains, and a number of convents and churches, the principal of which is the magnificent Cathedral, whose towers were injured by an earthquake in 1818. An Alameda is beautifully laid out with irregular alleys, planted with trees, interspersed with flowers, while, in the centre, a fountain throws up a constant stream of excellent water.

Within the town, the *Portales* are the principal rendezvous, and contain numerous shops and stalls filled with European and East India fabrics, fruit of all kinds, earthenware from Tonalá, shoes, mangas, saddlery, birds, sweetmeats of Calabazato, and a thousand other varieties to attract the passers by. Each of the stalls pays a small ground rent to the convents of Guadalajara, and thus afford an ample revenue to the brotherhoods.

The population of the town may be estimated at 50,000. Its air is mild and wholesome, and during the season when the neighboring vegetation is refreshed by rains, the scenery of Guadalajara is considered as picturesque as that of the city of Mexico.

In the district of Lagos lies the town of SAN JUAN DE LOS LAGOS, in a deep ravine, almost upon a level with the river of the same name, and with its mud houses and wild scenery, offers no evidence of the gay and festive appearance it presents during the famous annual fair which is held in it, commencing the 5th of December, and lasting eight days. At that period, San Juan is the resort of merchants, with their wares from all parts of the Republic, and all the planters or wealthy rancheros within an hundred leagues, resort thither with their families.

There is a beautiful church in this town, dedicated to Our Lady of the Lake, and medals struck in honor of her are sold at the door of the temple.

In the district of *la Barca* are the towns of La Barca, Tlachichilco, Chapala, Axixis, Ojotepec, Aranda and Atotomilco.

In the district of *Etzatlán*, we find the capital village of Etzatlán, Cocula, San Martín, Améca, Tequila and Aguascalco.

In the district of *Sayula*, are Sayula, Zapotlán el grande, Zapotitli, Tuspan and Zacualco.

In the district of *Autlán*, we find Autlán de la Grana, a town with 4,000 inhabitants, La Villa de la Purificación, with 3,000, Mascota, San Sebastián and Tecolotlán, which are large villages.

In the district of *Tepic* lies the town of Tepic, a fine well built town in the midst of a rich mountain plain, 2,963 feet above the level of the sea, and next to the capital, the finest and most populous town in the State. Besides this, there are Pochotitlán, Compostella, Ahuacatlán, S. María del Oro, Santiago, Centispac, Acaponeta, and Guajicoria. Three leagues north-east of the latter, a warm spring is found in the neighborhood of the *Cerro de Huicalapa*.

The capital of the district of *Colotlán*, is San Antonio de Colotlán, containing about 4,000 inhabitants. In this district we also find Santa María, a large and populous village lying 5,659 feet above the sea, Huejucar, Cartagena, Tlaltenango and Bolaños, a mining town.

The best sea-port of Jalisco is that of San Blas, whose town lies in $21^{\circ} 32' 24''$ north latitude and $107^{\circ} 35' 48''$ west longitude from Paris, upon a rock of basaltic lava, 90 feet high, isolated entirely on three sides, and reached by a bad road on the fourth. The haven is land-locked, and the anchoring ground good and deep; but,

during the rainy season the levels around the rock which is the foundation of the town, become filled with stagnant pools until the whole adjacent country is covered with water. The burning sun of the coast acts rapidly upon these shallow marshes and fills them with insects and miasma. San Blas soon becomes uninhabitable, and its population betake themselves either to Tepic, Guadalajara, or the first elevations of the mountains in the interior.

The only mining region of any note in Jalisco is that of Bolaños. The mines of Hostotipaquillo, near Tepic, are now abandoned; those of Guichichila, Santa María del Oro, Santa Martín and Améca, in the district of Etzatlán, in the neighborhood of Cocula, are partially wrought. Among the unexplored sites of base and spurious metals in this State, we may mention those found in the vicinity of Compostella, those near the ranchos of *Rosa Morada* and *Buena Vista*, towards the coast, between the villages of Santiago and Acaponeta, and those near Guajicoria, north of the last named village.

The Islands of La Isabela, San Juanico and Marias, lie on the Pacific coast of Jalisco.

The aborigines of Jalisco, formerly warlike and devoted to a bloody religion, belong to the tribes of Cazcanes, Guachichiles and Guamanes. They are most generally tillers of the ground, adhering to the doctrines of the Catholic church, and they have particular fondness for settling a while in lonely and wild regions, and for changing their place of residence frequently. The manners and customs of the Guachichiles are in many respects peculiar. They still use the bow and arrow as weapons. Their quivers are made of deer and shark skins, and the points of their reed arrows are formed of a hard wood and rarely of copper. The garments of the men consist of a kind of short tunic, roughly made by themselves of blue or brown cotton material, with a girdle hanging down in front and behind, to which is generally added a pair of trousers of tanned goat or deer skin. Married persons, men as well as women, wear straw hats with broad rims and high crowns, ornamented with a narrow ribbon of bright colored wool and tassels. Their black bushy hair is worn very long, bound with bright colored ribbons and tassels, or plaited in queus. No unmarried person, male or female, dare wear a hat. The women are clothed with an under garment of rough wool or cotton and a mantle of the same material, which has an aperture on top through which they pass their heads. When

sober they are peaceable and easily controlled, but when intoxicated violent and quarrelsome. At marriage the husband has the right of taking his wife on trial and of sending her back to her parents after some time if she should not please him, and this, even if she should be pregnant by him. This, however, does not prevent such a female marrying afterwards. If she gives satisfaction, the husband has the ceremony performed by a priest or monk, who for this purpose makes a yearly circuit, and often performs the marriage and a baptism at the same time!

Church and school matters, particularly the latter, are provided for in the State of Jalisco in an inferior manner to other parts of the Mexican Republic. A few years ago, there were in the entire State only 113 elementary schools attended by not more than 6,167 children. The instruction was limited almost exclusively to reading, for of this entire number, according to official accounts, there were not more than 2,092 learning to write. For instruction in the higher branches there were in the entire State only two indifferent institutions located in the capital — one the Seminario Conciliar for instruction of the clergy, with thirteen chairs and a species of academy, founded since the revolution, called El Instituto, with chairs for anatomy, modern languages, mineralogy, mathematics, &c. The seminary was attended by 120 boarders and 329 day scholars. The institution had one director, ten professors, two assistant teachers, a secretary, etc.; the available funds of the same consisted, independent of a fee paid by the wealthier scholars, of scarcely any thing but an addition of two thousand and seventy dollars granted by the State treasury. Jalisco felt deeply this sad condition of public instruction, and numerous propositions for its amelioration and thorough reformation were made, but money was wanting and fit men for the professorships, and discretion and tact on the part of the authorities, and it is scarcely to be expected that since that time public instruction has been essentially bettered. The "Instituto" since then has been made a university. The State forms a separate bishopric. It was erected in the year 1548, and embraced at that time in like manner the present States of Durango and New Leon. The bishop had his seat first at Compostela; in 1569 it was transferred to Guadalajara. In 1631 Durango was separated from Jalisco, and in 1777 both were made distinct bishoprics. The episcopal chapter of Jalisco consisted of three dignitaries, four canons and four prebendaries.

THE TERRITORY OF COLIMA.

This territory is bounded north by Jalisco, south by Mechoacan, east by both of these States, and west by the Pacific. It extends between the degrees of $18^{\circ} 18'$ and $19^{\circ} 10'$ of north latitude, and $102^{\circ} 51'$ and $104^{\circ} 2'$ west longitude from Greenwich. Its surface is generally level, broken by hills, from among which rises the mountain of Colima, the westernmost of Mexican volcanoes. It lies in the north-eastern corner of the Territory, and reaches a height of 9,200 feet above the level of the sea.

The climate of Colima is warm — on the coast it is hot — but the territory is generally considered healthy and fruitful in all portions. Its population is estimated at about 45,000. Cotton, sugar, tobacco and cacao are produced by its agriculturists, while on the coast large quantities of salt are made from the waters of the sea. Rich iron deposits have been recently found, and individuals have commenced developing this important source of national wealth.

The chief town of the Territory is COLIMA, about two leagues south of the volcano, containing between fifteen and twenty thousand inhabitants. The other towns and villages are Almoloyan, with 4,000 people, Xala, Ascatlan and Texupa. The haven of Manzanillo, or port of Colima, as it is sometimes called, is seventeen leagues west of the capital; and with but small expense to government might be made one of the best anchorages in the Republic.



THROWING THE LAZO.