



San Francisco Island
Peak (highest)
S.W. mag. 200



Dolores Point
Highest peak



Habana Island
Off San Josef Island



Moreno Rocks

San Diego Island

CHAPTER II.

THE COAST AND ADJACENT ISLANDS FROM THE NORTHERN ENTRANCE TO SAN JOSEF CHANNEL TO CAPE VIRGENES.

The coast north of Nopolo Point, between it and San Telmo Point, recedes considerably, and is a succession of rocky bluffs, with intermediate sand beaches and deep ravines. A range of mountains about 2,500 feet high lies immediately back of the coast, and several prominent islands and rocks lie off it.

Two miles north-westward of Nopolo Point there is a conspicuous, broken, rocky cliff from 300 to 500 feet high, projecting slightly from the general coast line, which is known as Los Burros. Deep water extends close up to the cliff.

Three miles farther up the coast is another point of similar character to Los Burros, which is known as Dolores Point. Northward of the point a slight indentation in the coast line forms Dolores Bay. Near the point is a ranch, and a fertile slope, green with vegetation, stretches away toward the mountains. The point and bay take their name from the old mission *Virgen de Dolores*, which is situated a few miles inland. A conspicuous red-colored rocky bluff marks the north-western limit of Dolores Bay.

Habana Island, which is a barren rock about half a mile long east and west, a quarter of a mile wide, and 90 feet high, lies $2\frac{1}{4}$ miles north of the red bluff above mentioned and $8\frac{3}{4}$ miles N. 80° W. (W. mag.) from the north point of San Josef. It is covered with white guano, and between it and the nearest point of the main-land there is a channel a little over a mile wide, with from 10 to 17 fathoms of water. West of Habana Island is a small indentation in the coast line, with a gravel beach (sometimes known as Tambaliche Roads), back of which is an open valley.

The Moreno Rocks lie $5\frac{1}{2}$ miles N. 30° W. (NW. $\frac{3}{8}$ N. mag.) from Habana Island and half a mile from the nearest shore. Between them and the main-land the water is shoal. The

Los Burros.

Dolores Point and Bay.

Habana Island.

Tambaliche Roads.

Moreno Rocks.

highest and largest of these rocks is 40 feet high, and has a reef of rocks above and below water, extending about a quarter of a mile in a south-easterly direction from it. On the main-land, about 2 miles to the southward of the rocks, there is a lagoon.

The coast in this vicinity is a pebble beach, with occasional bluffs of a yellowish and reddish color, from 10 to 25 feet high. A prominent mountain 2,534 feet high, lying $4\frac{1}{2}$ miles from the coast, makes a good land-mark in this part of the gulf.

Black Rock. Black Rock, 55 feet high, lies $2\frac{1}{4}$ miles northward of the Moreno Rocks and about a mile from the shore of the main-land. The passage between the rock and the main-land is apparently safe for small vessels.

San Carlos Bay. The coast north of Black Rock recedes somewhat, forming the open bay of San Carlos, which affords good anchorage in from 5 to 7 fathoms water. At the bottom of the bay there is a narrow entrance to a lagoon, with a sand beach on either side.

San Telmo Point. San Telmo Point is a sharp, rugged point 30 feet high, projecting a quarter of a mile from the coast. There are numerous outlying rocks off it, close to. The bluffs on either side are of a reddish color. Six and four-tenths miles N. 84° W. ($W. \frac{1}{2}$ S. mag.) from the point, there is a conspicuous table mountain 2,818 feet high.

San Diego Island. San Diego Island, the centre of which lies $5\frac{1}{2}$ miles N. 6° E. ($N. \frac{1}{2}$ W. mag.) from the north point of San Josef, is nearly a mile long north-east and south-west, and its highest point is 722 feet above the sea level. A reef of rocks, many of which are above water, makes off eight-tenths of a mile from its south-western point, ending in a small rock awash, close to which 4 and 5 fathoms were obtained. Nearly half a mile farther off, in the same general direction as that of the reef, viz, south-westerly, $3\frac{1}{2}$ fathoms were found; thence the soundings increased suddenly, 140 fathoms being found within a mile. The sea generally breaks over the reef. (View opposite page 82.)

Passage. There is an apparently clear passage nearly 4 miles wide between San Diego and San Josef Islands, with from 30 to 44 fathoms water midway; but it should be used with caution, as it has not been thoroughly examined.

Santa Cruz Island. Santa Cruz is a high, barren, rocky island $3\frac{3}{4}$ miles long,

in a general NE. and SW. direction, about $1\frac{1}{4}$ miles wide and 1,500 feet high. Its eastern face is inaccessible, consisting of high, bold bluffs from 300 to 1,000 feet high. Its north-east part terminates in a sharp point. On the western face it slopes at an angle of 45° to the shore. The only landing place is at the south-west extreme, where there is a short stretch of gravel beach. (View opposite page 82.)

Between Santa Cruz and San Diego, which lies to the southward of it, there is a channel $3\frac{6}{10}$ miles wide which is apparently free from all dangers. No bottom was found at 100 fathoms midway between the two, and 195 fathoms, sand bottom, $1\frac{1}{4}$ miles from Santa Cruz. Chanel.

The coast between San Telmo and San Marcial Points, a distance of 14 miles, is nearly straight; it is in general rocky, with bluffs from 75 to 350 feet high, and a few short stretches of sand beach. The water is deep close to, from 10 to 30 fathoms and over being found within half a mile of the beach. High mountains rise immediately back of the coast.

In the place marked on former charts "*discolored water*" a sounding of 382 fathoms was obtained, bottom of green ooze, and no indications of hidden dangers could be found. The "*discolored water*" was most likely one of the patches of red water frequently found in the gulf. (See page 56.) Discolored water.

Between San Marcial Point and a steep, rocky bluff, $1\frac{3}{4}$ miles south of it, is the small bay of San Marte, formed by a slight indentation in the coast line. Vessels may find anchorage here in good weather, in from 10 to 12 fathoms, within a third of a mile of the small sand beach at the bottom of the bay. The land back of the bay is extremely mountainous. San Marte Bay.

South-eastward from San Marcial Point, the innermost rock, a quarter of a mile distant from it, is a dangerous reef of rocks awash, on which the sea breaks at all weathers. It extends about a third of a mile in a general ESE. and WNW. direction, with deep water close to. Between the reef and the point 9 and 10 fathoms were found and a quarter of a mile outside the reef 30 fathoms. Reef.

San Marcial Point is a moderately high, rocky cliff, surmounted by a peak 1,131 feet high. San Marcial Point and Rock.

San Marcial Rock lies $1\frac{1}{4}$ miles N. 16° E. ($N. \frac{1}{2}$ E. mag.) from the point. It is of small extent and 25 feet high, with

numerous smaller rocks surrounding it, and a small rock awash lying about a quarter of a mile NNW. from it.

Variation. Between San Marcial Rock and the nearest point of the main-land there is a passage three-quarters of a mile wide, with from 4 to 8 fathoms water. The magnetic variation at San Marcial Point in 1878 was $10^{\circ} 35'$ E., increasing about $2'$ annually. Tides rise about 4 feet.

Tides. From San Marcial Point the coast trends nearly north for half a mile and then turns abruptly to the westward. A mile and a half from where the coast turns to the westward is the small bay of Agua Verde, where there is good anchorage in ordinary weather, and fresh water may be obtained from a ranch near the beach. The best landing place is in the eastern part of the bay, near a bluff point, off the NE. side of which, close to, are one or two rocks awash at low water.

San Pasquel Point. San Pasquel Point, at the western limit of Agua Verde Bay, is a rocky bluff with a large white rock lying a cable's length to the north-eastward of it. A scant mile to the westward of Point San Pasquel is another rocky bluff point, off which to the NW. are two rocks above water. West of this last point is a stretch of sand beach about 2 miles in extent, on which are some ranches and an arroyo. Three-quarters of a mile west of the point the coast line assumes a north-westerly direction.

San Cosme Point. San Cosme Point is a rocky cliff, rising abruptly to a hill 225 feet high. About a mile to the northward of the point is a group of rocks, the westernmost and highest of which, San Cosme Rock, is 75 feet high. A third of a mile eastward of this is San Damien Rock, 45 feet high, and at about one-third of the distance between the latter and the point are some low rocks, from 2 to 4 feet above water, with some rocks awash near them. The soundings obtained between these rocks and the shore showed *no bottom* at 10 fathoms.

Conspicuous peak. Four miles to the south-westward of San Cosme Point is a conspicuous, sharp, twin peak, 3,808 feet high, which is an excellent land-mark.

From San Cosme Point to Candeleros Point, a distance of $10\frac{3}{4}$ miles, the coast trends about N. 25° W. (N. W. $\frac{3}{4}$ N. mag.) and is a succession of bluffs and sand beaches; the mountains immediately back of it rise to a height of 2,000 feet.

White Rock, which is 127 feet high and is surrounded by a number of smaller ones, both above and below water, lies 4 miles S. 40° E. (SE. $\frac{1}{2}$ E. mag.) from Candeleros Point, and about 2 miles from the nearest shore. There is a good depth of water on all sides of these rocks, at a short distance from them.

Monserrate, like all the other islands in this vicinity, is of volcanic origin and perfectly barren. It is 4 miles long in a north and south direction and from 1 to 2 miles wide; its highest peak is 734 feet high. The south point of the island bears N. 48° E. (NE. $\frac{3}{4}$ N. mag.) from San Cosme Point, which is the nearest point of the main-land, the channel between them being 7 miles wide, with from 50 to 80 fathoms of water. The southern and eastern shores of the island are a succession of bold, rocky bluffs, off which in several places are projecting rocky ledges, under water, extending from an eighth to a quarter of a mile off shore. Off the north and north-east points there are some outlying rocks, and on the north side there is a small bight, with a short strip of sand beach near the north-western point; the western side has a low, rocky shore with shelving points.

Las Galeras are two rocky islets lying $1\frac{3}{4}$ miles to the northward of Monserrate. The easternmost is the larger of the two, and is 70 feet high. A reef of rocks extends off from it to the SE. nearly half a mile. The western islet is about 40 feet high. Between the two is a passage about an eighth of a mile wide, full of rocky ledges, and with varying depths of water. The least water found between Las Galeras and the north end of Monserrate was 7 fathoms.

One and a quarter miles north of Las Galeras there is a dangerous rock, which is only about a foot above high water. The soundings between it and Las Galeras show from 11 to 22 fathoms.

Santa Catalina lies $11\frac{3}{4}$ miles to the eastward of Monserrate. It is $7\frac{1}{2}$ miles long, north and south, and about 2 miles wide; its highest peak is 1,534 feet high. No detailed examination has been made of this island, but its shores are said to be abrupt, with deep water close to. There is reported to be a landing place on a sandy beach at its southern end. No soundings were obtained in the channel between it and Monserrate.

Candeleros Point is a prominent steep bluff, about 50

feet high, the land back of it rising abruptly. The water is deep close up to the point; 95 fathoms, muddy bottom, were found within half a mile of it.

Los Candeleros. Los Candeleros are three pinnacle-shaped rocks, lying to the northward of the point and between it and Danzante Island. The one nearest to the point (half a mile distant) is about 100 feet high; the second, lying three-tenths of a mile north of the first, is 80 feet high; and the third, three-quarters of a mile north-west of the second and about the same distance from the south point of Danzante Island, is 40 feet high and has some outlying rocks on its south-east side. The soundings between Candeleros Point and Danzante Island vary from 12 to 26 fathoms, and the passage should be used with great caution, as it is thought there may be other rocks in it that have not yet been discovered.

Soundings.

Caution.

Soundings.

From Candeleros Point the coast makes a sweep to the westward forming an open bay between it and Punta Coyote, in which are several outlying rocks. The soundings along the shore of the bay are irregular; in some places only 2½ fathoms were found at half a mile distant from it. Back of the coast the land rises gradually to high mountains, the southern portion of the Sierra de la Giganta.

Rocks.

Three and a half miles N. 51° W. (NW. by W. ½ W. mag.) from Candeleros Point is a group of rocks, varying in height from 15 to 40 feet, the outermost of which is a mile off shore. Between these rocks there is a passage 1¼ miles wide, with about 16 fathoms water, apparently free from dangers; between them and the main-land is foul ground, with from 2 to 3 fathoms water.

Fresh water.

About 2½ miles to the southward of Coyote Point there is a strip of sand beach, behind which is a fertile green slope with a ranch at its foot. An abundance of good fresh water may be obtained here from wells 10 to 15 feet deep.

Punta Coyote.

Punta Coyote is a steep, bluff head-land 75 feet high, the eastern extremity of a pear-shaped peninsula about 1¾ miles long and seven-eighths of a mile wide at its southern end, on which is a hill 350 feet high. The northern part of the peninsula, where it joins the main-land, is a narrow neck of land on which are some low sand hills.

Puerto Escondido.

Puerto Escondido, or hidden port, is a perfectly land-locked and secure harbor for small vessels, in all weathers, the peninsula just mentioned forms its eastern and northern

sides. The entrance, which is only about 75 feet wide, lies between the southern end of the peninsula and the main-land, and only 9 feet of water will be found on the bar at high tide; inside the bar the water deepens to 4 and 7 fathoms. It is of small extent, being about a mile long north and south, and half a mile wide.

Danzante is a barren island lying a short distance off the coast between Candeleros and Coyote Points, its southern end bearing N. 26° W. (NW. ¾ N. mag.) from Candeleros Point, 2½ miles distant from it, and 1½ miles distant from the nearest point of the main-land. It is 3½ miles long, seven-eighths of a mile wide in its widest part, and its highest peak is 450 feet high. On the south-west side there is a strip of sand beach off which anchorage may be found; with this exception, the shores of the island consist of bold, rocky bluffs from 25 to 75 feet high, with deep water close to. About half a mile of the northern end of the island is detached from the main body by a shallow channel full of rocks, above and below water. Off the southern end is a detached pinnacle rock 25 feet high. Between Danzante and Carmen Islands there is a channel 1½ to 2¼ miles wide, free from all dangers, which is much used by vessels coming from the southward bound to Loreto. The tidal currents are very strong in this channel.

Danzante Island.

Channel.

Currents.

Chuenque Bay.

A mile and three-quarters north-westward of Punta Coyote, is a small bay known as Chuenque Bay, which affords protection from all winds except northerly ones. On its eastern side is a small island, about half a mile long and 40 feet high. To enter Chuenque Bay pass to the northward of this island, as the passage between its southern end and the main-land south of it is only three cables in width and quite shoal.

Nopolo Point is a bold rocky point 75 feet high, situated about 5 miles to the northward of Chuenque Bay. The intermediate coast consists of pebble beaches, and bluffs from 15 to 75 feet high, with deep water close to, 10 to 15 fathoms being found within a cable's length of the shore, deepening to 120 fathoms at a little more than half a mile distant.

Nopolo Point.

Westward of Nopolo Point there is a small shallow cove, open to the northward, which is sometimes used by small vessels.

Cove.

From Nopolo Point to the anchorage off Loreto, a distance

of 5½ miles, the coast is a low sand beach, immediately behind which is a fertile country. A mile and a half south of Loreto is a low sandy point projecting slightly from the general coast line, known as Primera Agua Point, off which shoal water (from 1 to 3 fathoms) extends about half a mile.

Loreto.

The mission of Loreto was founded in 1697, and the town was the ancient capital of the two Californias. It is situated at the entrance of a valley which extends inland to the high mountains of the Sierra de la Giganta. At the time of the *Narragansett's* visit it was a straggling village of adobe houses, mostly thatched with palm leaves, and containing about 150 inhabitants. The site was badly chosen, being on the bank of a water-course, often dry for several years in succession, but which after heavy rains in the mountains is apt to become in two or three hours a raging torrent, sweeping everything before it. From time to time portions of the town have been destroyed and the remains carried off by this stream, so that nearly all that now remains of the old town is the mission church and its adjoining buildings. The church, a large stone structure with an arched roof, and a dome at one end, is in pretty good repair. It contains some paintings and other ornaments worthy of notice; the altar and baptismal font are of pure alabaster.

Anchorage.

There is good anchorage in ordinary weather, off the town in 8 or 9 fathoms, half a mile from the beach; the best place to anchor is with the church and Sugar-loaf Peak (a conspicuous sharp peak 3,674 feet high) in line. Immediately south of the mouth of the water-course before-mentioned a sand spit with but 2 fathoms water over it makes off nearly a quarter of a mile from the shore.

Supplies.

Fresh beef, wood, water, vegetables, and fruit may be obtained at Loreto. Near the town, to the northward, are several small lagoons, which are a favorite resort of wild ducks at certain seasons of the year.

Remarks.

There is no fruit or vegetable, either tropical or of the temperate zone, that cannot be cultivated here in the open air; cabbages, cotton, lettuce, tobacco, wheat, corn, and onions were all seen growing together in a garden at Loreto, while the olive, date-palm, orange, lemon, and banana are met with in abundance, and the vineyards produce a wine unequalled by any of the wines of Upper California. The palma-christi, or castor bean, is here a large tree with a woody

trunk. Of the woods useful in the arts, the *uña de gato*, or cat's claw, is found here and at Mulege. It is a leguminous tree, the branches of which bristle with curved thorns resembling cat's claws; the wood is very firm and durable, taking as fine a polish as rosewood, and surpassing the latter in beauty.

Loreto was formerly the centre of a considerable pearl trade, and it is the sea-port of Comondu, with which it is connected by means of a road which passes over the Sierra de la Giganta; there is also a road to Mulege, about 70 miles up the coast.

The magnetic variation at Loreto in 1878 was 10° 55' E., increasing about 2' annually. Tides rise from 3 to 4 feet.

The Sierra de la Giganta, the highest peak of which, La Giganta, is 5,794 feet high, lies back of this part of the coast. The road from Loreto to Comondu passes over the mountain range, winding by zigzags up to what appear from below to be inaccessible cliffs, whence a slightly descending plain extends to Comondu. A copper mine at the foot of the mountains, known as El Sance, is said to be very rich, but it is not worked at present.

Comondu is an ancient mission, and contains the ruins of a church that was doubtless a superior building. Many of the houses in the village are of cut stone; the remainder are of bamboo, covered with palm thatch. The population is variously estimated at from 500 to 1,000. The valley in which Comondu is situated is about 6 miles long and rarely more than a quarter of a mile wide. It is very fertile, and most of it in a high state of cultivation, the principal products being *panoche* (the native sugar), wine, and fruits. A fine perennial stream of water flows through the valley, affording an abundant supply to the village.

At the head of the valley is a cañon cut in solid lava, 100 feet deep, with almost perpendicular sides.

Carmen Island, which is irregular in its outlines, is 17 miles long in a general NNE. and SSW. direction and 5½ miles wide in its northern portion, is of volcanic origin, and has a range of peaks, varying in height from 500 to 1,500 feet, extending through its entire length.* (View opposite page 98.)

On the 21st of August, 1873, eighteen violent shocks of earthquake were felt in succession, which would seem to indicate that the volcanic action that gave birth to the island has not yet ceased.

Variation.

Tides.

Sierra de la Giganta.

Comondu.

Carmen Island.

Punta Baja. Punta Baja, the south end of Carmen Island, bears N. 13° E. (N. ¼ E. mag.) from Candeleros Point, and is 5 miles distant from it. Shoal water, with stony bottom, extends for more than a quarter of a mile off the point, which is a low spit of gravel. The land back of the point slopes gradually toward the hills and is covered with grass and low bushes.

Western side of Carmen Island. Punta Arena is $2\frac{2}{10}$ miles north-west of Punta Baja, and is a low, sandy point, back of which are some sharp peaks from 600 to 900 feet high. The coast between the two points is a sand and gravel beach, with a few outlying rocks close to the shore, near Punta Arena. There is deep water a short distance off the point and some huts on the beach near it.

Marquez Bay. Three miles to the northward of Arena Point, the intermediate coast consisting of steep, rocky bluffs and deep ravines, is a small bay, known as Marquez Bay, at the head of which is a short sand beach, with some huts close to. North of Marquez Bay the coast is generally steep and rocky, with moderately deep water close to. Off the point which forms the northern limit of the bay there are a few outlying rocks at a short distance from the shore.

Puerto Ballandra. Puerto Ballandra is a small bay situated $8\frac{1}{2}$ miles to the northward of Marquez Bay. It is about 4 cables in extent each way, with a depth of from 5 to $5\frac{1}{2}$ fathoms in most parts. The entrance, which is scarcely 3 cables in width, is between high headlands. A small lagoon lies just back of the sand beach at the head of the bay.

Cholla Islet. A mile and three-quarters to the northward of Puerto Ballandra there is a bluff point (the NW. end of the island), off which, at a distance of a quarter of a mile, there is a small, low sand island about a third of a mile long and 20 feet high, known as Cholla Islet. Off the north-western end of the islet there are some outlying rocks. In the channel between it and the north-western end of Carmen Island the soundings show from 1 to 3 fathoms water, rocky bottom.

Oto Bay. From the NW. point of the island the coast line turns sharply to the eastward, and at a distance of about a mile and a quarter curves again to the northward, forming an open bay known as Oto Bay, in which vessels may anchor and find shelter from southerly winds. At the head of the bay there are a few deserted huts near an arroyo.

Northern end of the island. Tintorera Point, which lies $2\frac{3}{4}$ miles N. 50° 30' E. (NE. ½

N. mag.) from the NW. point of the island, is a steep bluff about 80 feet high, off which are some outlying rocks.

About $1\frac{1}{4}$ miles to the eastward of Tintorera Point there is a small open bay, semi-circular in shape, known as Puerto de la Lancha, where anchorage may be had, with protection from southerly winds. The soundings in this bay show from $2\frac{1}{2}$ to 7 fathoms water. The shores are, for the most part, gravel beaches.

A short distance eastward of Puerto de la Lancha, at the mouth of an arroyo, is a small, land-locked cove, a quarter of a mile long and a cable wide at the entrance, with from 3 to 5 fathoms of water; near its head are some deserted huts.

Lobos Point, the north-eastern extreme of the island, is a rocky headland 125 feet high, surrounded by detached rocks and connected with the body of the island by a low, narrow strip of land.

From Lobos Point the coast turns abruptly to the southward, and for over 6 miles, to Perico Point, is a succession of rocky bluffs with occasional detached rocks, the hills immediately back of the coast rising to heights varying from 400 to 700 feet.

Perico Point, so named from its supposed resemblance to a parrot's beak, is a sharp, rocky cliff, surmounted by a peak of reddish color 460 feet high. A round detached rock, 30 feet high, lies very near the point, and 150 yards to the southward of the rock is another, *below* the surface of the water.

From Perico Point the coast turns to the north-westward and runs in that direction for about $2\frac{1}{2}$ miles, when it turns to the westward and, gradually curving to the southward, forms Salinas Bay, where good anchorage may be found in from 5 to 6 fathoms, protected from all winds except those from the south-east.

Near the head of the bay, separated from the sea by a strip of shingle beach a little over a quarter of a mile wide, over which the water never flows, is a salt pond or lake, about $1\frac{1}{2}$ miles long and a mile wide, the water in which rises and falls with the tide, although there is no perceptible communication with the sea. The supply of salt (which is perfectly pure) from this pond seems inexhaustible, as what is taken away in one week is reproduced in the next. The salt is precipitated in the form of pure crystals and has only