

DERIVATION OF THE NAME.—This county derives its name from Marin, a famous chief of the Lacatuit Indians, who originally occupied this part of California, and who, aided by his people, after having vanquished the Spaniards in several skirmishes that took place between the years 1815 and 1824, was finally captured by his enemies. Making his escape, Marin took shelter on a little island in the Bay of San Francisco, and which, being afterwards called after him, communicated its name to the adjacent mainland. This chief having fallen into the hands of his foes a second time, barely escaped being put to death, through the interference of the priests at the mission San Rafael, who subsequently enjoyed the satisfaction of seeing him converted to the true faith. He died at the mission, which had been the scene of his conversion and rescue, in the year 1834.

TOPOGRAPHY.—Geographically speaking, Marin county is peninsular. It is bounded on the north by Sonoma county, easterly and southerly by the San Pablo bay, the Bay of San Francisco and the Golden Gate, and westerly by the Pacific ocean. Situated in the heart of the Coast Range, the whole face of the country is one unbroken wilderness of peaks. Only one, however, attains the dignity of a mountain, namely Tamalpais, whose picturesque summit reaches an altitude of twenty-nine hundred feet above the ocean at its base. To the north, east and west the elevations gradually decrease in height till they are lost in the extensive valley land of Sonoma county. The coast line is rugged and forbidding. From Saucelito to Bolinas bay the hills along the margin are worn into precipices, against which the breakers dash with a fury that precludes the possibility of even a row boat landing. Bolinas bay is available only for crafts of the smallest description, and then the passage over the bar cannot be effected except at flood tide. This stretch of coast is rendered additionally dangerous by several half-sunken reefs. Duxbury Reef in particular has brought more than one fine ship to grief. Following the contour of the shore, the same general characteristics prevail, but in a milder form. There are two indentations on the southerly side of Point Reyes, Drake's Bay and Limantour bay, both inconsiderable in extent and importance. Point Reyes itself is a bold, independent-looking promontory, and a conspicuous landmark for mariners. For this reason its extremity is the site for one of the most notable light-house stations on the Pacific coast. Immediately to the north of Point Reyes is the bay of Tomales, very long and very narrow. In few places exceeding a mile in width, it extends into the interior for a distance of sixteen miles. The upper portion is navigable for ships of ordinary draught, and is sometimes used as an anchorage during heavy storms. Toward the inland end it receives the waters of two considerable streams, the Olema creek and the Paper Mill, or Lagunitas creek. These, bringing down large quantities of detritus, have formed an extensive delta, and, in the course of time, will probably shoal the entire bay. Following the shore line to

Sonoma county, it presents no new feature except certain esteros, or branches of the ocean, which have the appearance of ordinary rivers. The first, commonly known as Keys creek, indents the northern shore of Tomales bay a short distance from the ocean. It is flanked on either side by steep hills, and extends some distance beyond the village of Tomales. Many thousands of dollars were expended to render it navigable for steamboats as far as the above-mentioned village, but without avail. The laws of nature were inexorable; the channel filled up, leaving the old steamer high and dry on the sand. In the process of time the estero will probably be raised above tide-water, and convey only the drainage of the surrounding hills. The two other esteros are the Estero San Antonio and the Estero Americano, the latter being a boundary between Marin and Sonoma counties. Both have the same general characteristics as Keys creek. The Estero San Antonio reaches about twenty miles into the heart of the country, the tide-water backing up that distance, while at any point a man could throw a stone across it. Neither are navigable.

The shore of the Bay of San Francisco presents a varied outline, with occasional islands, varying in size from mere rocks to several hundred acres in extent, as in the case of Angel Island. From the Golden Gate to what is known as California City, the hills approach directly to the water's edge, deep water being found a few feet out. From this point the hills retreat, and are replaced by long stretches of salt meadows, intersected by tidal creeks. The water is also very shoal, extensive mud flats being bared by the retreating tide. Point San Pedro terminates the Bay of San Francisco. Beyond it is San Pablo bay. The entire border, to the Sonoma line, is fringed with salt marsh land, having a depth of from one to four miles. The water likewise is very shallow.

Leaving the coast and striking into the interior, the country, as was said before, is one interminable mass of hills of varying altitude. The general direction of the ridges is northwest and southeast. The Tamalpais range extends continuously along the coast from the Golden Gate to Tomales bay. The remaining ridges arrange themselves in respectful parallelism, with occasional cross ridges or hog's backs. Topographically, the face of the country might be divided into four districts, having many features in common, but each possessing points peculiar to itself. First, the Tamalpais district. This is at once the most rugged and picturesque portion of the county. It would include along the coast from Saucelito to Point Reyes, and about fifteen miles into the interior. Nearly all this tract is covered with vegetation, either forest or underbrush (otherwise called chaparral.) Such land, either for the purposes of agriculture or dairying, is of little value. Valleys are of rare occurrence and small extent. There are several streams in it, the largest in the county. Among these may be mentioned the Paper Mill or Lagunitas, Olema and San Anselmo creeks, the valleys corresponding to the waterways in name and position. Second, the Point Reyes district, wooded in

places, but containing some of the finest open grazing land in the county. Third, the Tomales district. This section of the county is the least undulating, and is almost entirely without vegetation excepting grass. It is well adapted to agriculture and grazing. The hills, though still preserving the general parallel direction to the Tamalpais range, are somewhat irregular and billowy. Keys creek, the Estero San Antonio and the Estero Americano form the valley subdivisions of the district. Fourth, the Novato and San Antonio districts, gradually approaching and assimilating to the valley land of Sonoma county. There are two creeks of considerable size, the Novato creek and the Arroyo San Antonio. The hills approaching the latter creek become smaller and smaller, till the former site of the Lagunas de San Antonio are reached. Here the land is level, and physically forms a part of the valley surrounding Petaluma and Santa Rosa. The lagunas, or lakes, mentioned above, have been drained in recent times, and are now cultivated. Formerly they covered an area of several hundred acres.

The water-shed of Marin county is extremely simple. Draw an imaginary line, beginning at Lime Point near Saucelito, and following the summit of the ridge to the south of what is known as Big Lagoon Cañon to the top of the eastern peak of Tamalpais. From the top of Tamalpais continue the line along the ridge which divides the Lagunitas valley from the country lying to the north and east, cross the summit of White's Hill and pass over the low point in the ridge under which the North Pacific Coast Railroad has run what is known as the White's Hill Tunnel. Thence ascend to the summit of Lone Alta. Thence produce the line to the point where the Miller valley road crosses the ridge near the Big Rock. Follow the ridge northerly, which divides the Nicasio creek system from the land to the east. This would reach to the head-waters of the Arroyo San Antonio (not the Estero San Antonio), on the Sonoma county boundary. All water falling to the east of this line would be drained into the Bay of San Francisco. All water falling to the west of this line would be drained into the Tomales bay and Pacific ocean.

The principal forest tracts now uncut are in the Lagunitas Cañon and on Point Reyes. The whole slope of Tamalpais in early days was more or less wooded, but by far the greater portion has been denuded. There are about fifteen thousand acres of available timber remaining, nearly all of which is in the above localities. There are no streams which, by any stretch of courtesy, could be called rivers, nor are any navigable for the smallest crafts. On the whole, the topography of Marin county is tolerably uniform, the differences being of degree rather than of kind.

**GEOLOGY.**—The whole of Marin county is thrown up into rolling hills of moderate height, and the depressions between them have little level ground; nor is there much regularity in the distribution of the ridges, a circumstance which is due to the irregular dip and strike of the strata, and the still more irre-