men in the mornings are accustomed to plaster themselves over with mud. This they say keeps out the cold; and accordingly when the sun grows hot they wash it off.

These people have their marriages, but they consist of no other ceremony than the consent of the parties, and they are only binding till they disagree or choose to part. They have no other mode of cancelling a marriage than by using the phrase, 'I throw you away.' It is nevertheless true that we found many couples, both young and old, who lived in great unity and peace; esteeming their children, and their children them. Parentage or relationship forms no obstacle to their intermarriages. It is very common for the wife to urge her husband to to marry her sisters, and even their mother: and the common custom is, when a man first marries that he takes the whole of the sisters for wives. These many wives of one husband live without jealousies or disputes, each looking on the whole of the children as if they were their own, and the whole living in one house. In fact the first baptisms made at this mission were of three children all born within two months, sons of an Indian man and of three sisters, to all of whom he was married: as well as to their mother." Father Palou adds, that this description of the natives found on the borders of the bay of San Francisco, may be applied, with

some local differences, to the whole of the Indians of Upper California; as, although those Indians spoke many different languages, yet their habits and customs differed but little.

The Tulé or bulrushes with which the rivers and lakes of the Indian country abound, are put by the natives to a variety of uses. One of the most important or singular of these is the structure of the rafts or boats, if they may be so called, with which they navigate their lakes and rivers and even the bays and shores of the ocean. This raft, which at the time of the arrival of the Spaniards, and even to this day, constitutes almost their sole means of transport on the river, is termed *Balsa*, and is, perhaps the rudest or most primitive mode of navigation found among any people. The balsas are entirely formed of the bulrush and are constructed by binding them together into bundles of about ten feet in length, of considerable thickness in the middle and gradually tapering to each end. These bundles or sheaves are then tied together at the ends until the whole mass is of sufficient size to buoy up two or more persons. The boat thus formed is about ten feet long, of considerable breadth in the middle, and tapering regularly to each end. They are propelled by paddles, and from their shape go equally well with either end foremost. In calm and smooth water the centre parts of the rafts may be dry, but more commonly

the rowers sit on them soaked in water, as they seldom rise above the surface. The greatest mechanical ingenuity displayed by the Indians is in the construction of their baskets and bows and arrows. Some of the former constructed of the barks of trees are water-tight and used for carrying water. They are likewise employed for roasting their grain before it is ground. This operation is performed by the women, over a little lighted charcoal, and is done with so much rapidity and address that the grain is thoroughly roasted without setting fire to the basket, although this is made of very combustible materials. Many of the baskets are ornamented with the scarlet feathers of the *Oriolus phœniceus* or with the black crest feathers of the Californian partridge, and are really very handsome. The Californian bow is of a good shape, from three feet to four feet and a half long, neatly wrought and strengthened with the tendons of deer. These not only support the wood but greatly augment its elasticity. The arrows, as well as the bows, are neatly wrought having points of obsidian or a kind of flint, which are let into the wood and bound fast with tendons. The Indians are extremely skilful in the use of these weapons, killing the smallest birds with them. In doing so, however, they exhibit fully as much cunning and patience as skill, as they steal along concealed till they are very near their game, seldom

stooping until within fifteen or twenty paces. They show particular ingenuity and skill in their manner of killing deer. This has been noticed by all travellers, and is still practised precisely in the same manner.

"We saw an Indian (says La Pérouse) with a stag's head fixed upon his own, walk on all fours, as if he were browsing the grass, and he played this pantomime to such perfection, that all our hunters would have fired at him at thirty paces had they not been prevented: in this manner they approach herds of stags within a very small distance, and kill them with a flight of arrows." The same exhibition was made to Vancouver and Langsdorff. Pérouse further says, "By these means they can, nearly to a certainty, get within two or three yards of the deer, when they take an opportunity of its attention being directed to some other object, and discharge their arrows from their secreted bows, which is done in a very stooping attitude." Captain Beechey says, in addition, that the Indian not only imitates the actions but the voice of the deer, and seldom fails to entice several of the herd within his reach.

Equal ingenuity is shown by them in catching water fowl. The following is the account of this given by Captain Beechey: "They construct large nets with bulrushes, and repair to such rivers as are the resort of their game, where they fix a long pole

upright on each bank, with one end of the net attached to the pole on the opposite side of the river to themselves. Several artificial ducks made of rushes are then set afloat upon the water between the poles as a decoy; and the Indians, who have a line fastened to one end of the net, and passed through a hole in the upper end of the pole that is near them, wait the arrival of their game in concealment. When the birds approach, they suddenly extend the net across the river by pulling upon the line, and intercept them in their flight, when they fall stunned into a large purse in the net, and are captured. They also spread nets across their rivers in the evening, in order that the birds may become entangled in them as they fly."*

It is difficult to come at the real religion of the natives, on account of the general ignorance of their language. La Pérouse says they have no knowledge of a god or future state: more recent travellers assert that they are idolators, worshipping the sun and believing in both a good and an evil spirit whom they seek occasionally to propitiate. Father Palou gives a somewhat different account of their religion. "In none of the missions (he says), has there been observed any idolatory whatever; only a mere negative infidelity; neither have they shewn the least difficulty in believing any of our mysteries. We have only observed amongst them some superstitions and vain observances; and occasionally, among the old, some pretensions to supernatural power; as that they had the power to send the rains, thunder, &c.; that they had dominion over the whales, &c. But these pretenders were seldom credited even by their own tribes, and they were believed to put forth these pretensions for the purpose of obtaining presents. One superstition however seemed firmly believed by all, viz. that any sickness with which they were afflicted arose from the incantations of their enemies."

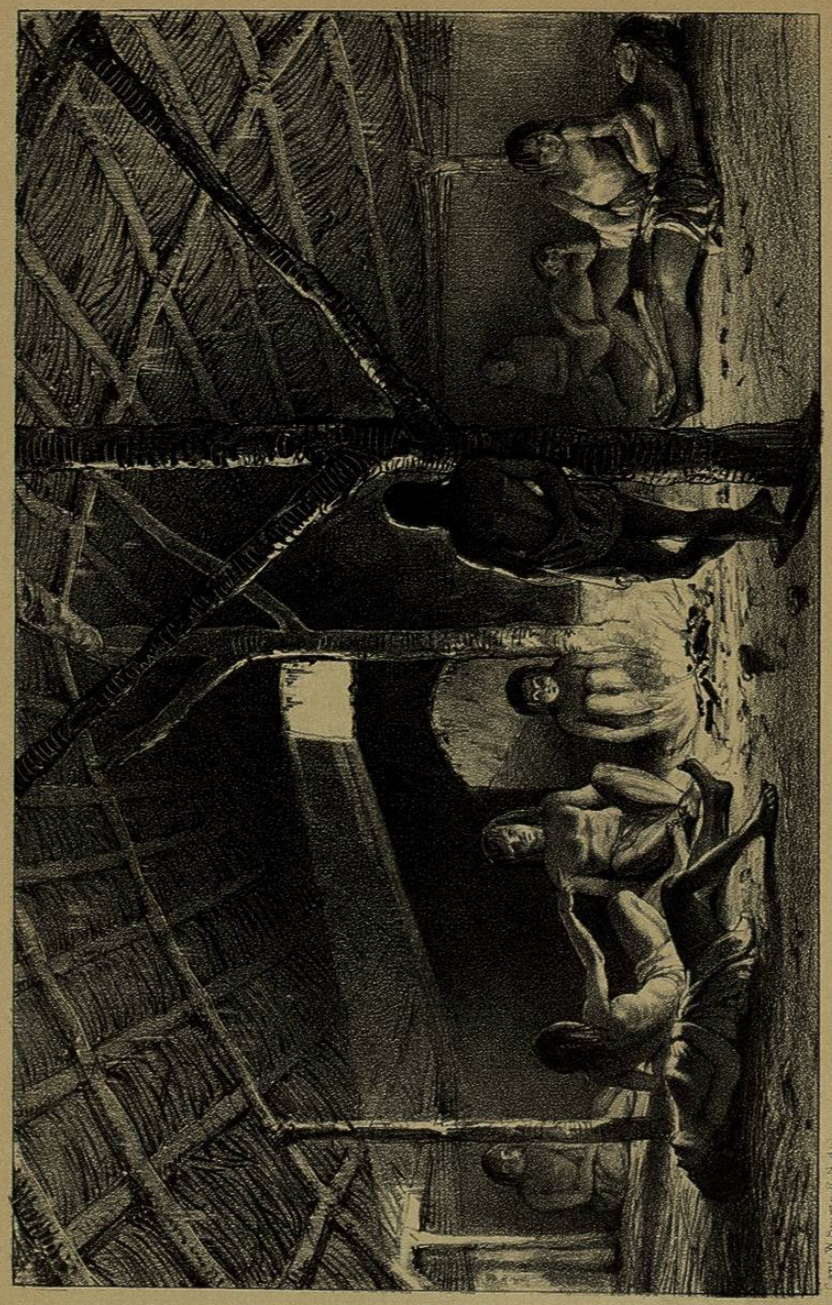
* Vol. II, p. 75.

The Indians seem to have some notion of a future state. About San Francisco they burn their dead, after adorning the corpse with flowers, feathers, &c. and laying beside it a bow and arrows. The ceremony is attended with loud shouting and other savage demonstrations of regret. More to the southward they always bury their dead; and Father Palou says that, in his time, there were near Santa Barbara, enclosed cemetries for the purpose.

It is but justice to these poor people to state that their affections seem very strong, as exhibited in the extreme tenderness and love shewn by the parents to their children and the general care of the sick and wounded, and also the remarkable strength of their friendships. Long after the loss of friends they shed tears on their being brought to their re-

membrance, and they conceive it to be a great offence for any one to name them in their presence. Pérouse says that although they neither eat their prisoners nor their enemies killed in battle, yet that when they had vanquished and put to death upon the field of battle, chiefs or very courageous men, they will eat some pieces of them, less as a sign of hatred or revenge than as a homage which they pay to their valour, and from the belief, common to them with many other savages, that this food will increase their own courage. The same authority informs us that they scalp their slain enemies, and pluck out their eyes, which they have the art of preserving free from decay and carefully keep as precious signs of their victory.

The Indians in their native state are very healthy, notwithstanding their filthy habits: it is very far otherwise in their domesticated state. Both with the wild and the domesticated tribes the hot air bath or *teméschal* is the sovereign remedy for most of their diseases. This is administered in the following manner. A round hovel or oven of mud, is built for the purpose. It has a small opening in the side to enter by and a smaller one at the top for the escape of the smoke. Several persons enter this at the same time, quite naked, and make a fire close to the door on the inside. They continue to add fresh wood to the fire as long as they can bear the



THE TEMESCAL OR HOT AIR BATH OF UPPER CALIFORNIA.

Capt. W. Smyth, R. N. del.

Pub.d by Smith, Elder & Co. Cornhill.

heat. This soon throws them into a profuse perspiration over their whole frame. "They wring their hair (says Capt. Beechey) and scrap their skin with a sharp piece of wood or an iron hoop, in the same manner as coach horses are sometimes treated when they come in heated; and then plunge into a river or pond of cold water, which they always take care shall be near the teméschal." A variety of this process—a hot sand bath in place of a hot air bath—is described by M. Rollin, but it seems to be more prevalent in the countries further north. "The manner of preparing the teméschal (he says) consists in scooping a trench in the sand, two feet wide, one foot deep, and of a length proportioned to the size of the patient. A fire is then made through the whole extent of it, as well as upon the sand, which was dug out of the hollow. When the whole is thoroughly heated, the fire is removed, and the sand stirred about, that the warmth may be equally diffused. The sick person is then stripped, laid down in the trench, and covered up to his chin with heated sand. In this position a very profuse sweat soon breaks out, which gradually diminishes according as the sand cools. The patient then rises and bathes in the sea or nearest river. This process is repeated until a complete cure is obtained."*

* La Pérouse, Vol. III.

It is impossible to form any trust-worthy opinion of the amount of the Indian population in the other parts of California, not in the immediate possession of the missions.