and some were comparatively small affairs. In this frame of mind we summed up our want of comforts for passing the night on the mountain, and determined to return. Mr. Blackwood and I thought that we could avoid the circuit of the mountain, by descending directly to the base of the volcano, and crossing it, reach the camino real; but our guide said it was a tempting of Providence, and refused to accompany us. We had a very steep descent on foot, and in some places our horses slid down on their haunches. An immense bed of lava, stopped in its rolling course by the side of the mountain, filled up the wide space between us and the base of the volcano. We stepped directly upon this black and frightful bed, but we had great difficulty in making our horses follow. The lava lay in rolls as irregular as the waves of the sea, sharp, rough, and with huge chasms, difficult for us, and dangerous for the horses. With great labour we dragged them to the base and around the side of the volcano. Massive stones, hurled into the air, fell and rolled down the sides, so near, that we dared not venture further. We were afraid of breaking our horses' legs in the holes into which they were constantly falling, and turned back. On the lofty point from which we had looked down into the crater of the volcano sat our guide, gazing, and, as we could imagine, laughing at us. We toiled back across the bed of lava and up the side of the mountain, and when we reached the top, both my horse and I were almost exhausted. Fortunately, the road home was down hill. It was long after dark when we passed the foot of the mountain and came out upon the plain. Every burst of the volcano sent forth a pillar of fire; in four places were steady fires, and in one a stream of fire was rolling down its side. At eleven o'clock we reached Zonzonate, besides toiling around the base of the volcano, having ridden upwards of fifty miles; and such had been the interest of the day's work, that, though my first effort, I never suffered from it.

The arrangements for my voyage down the Pacific were soon made. The servant to whom I referred was a native of Costa Rica, then on his way home, after a long absence, with a cargo of merchandise belonging to himself. He was a tall, good-looking fellow, dressed in a Guatimala jacket or coton, a pair of Mexican leather trousers, with buttons down the sides, and a steeple-crowned, broad-brimmed, drab wool hat, altogether far superior to any servant I saw in the country; and I think if it had not been for him I should not have undertaken the journey. The reader will perhaps be shocked to hear that his name was Jesus, pronounced in Spanish 'Hezoos, by which latter appellation, to avoid what might be considered profanity, I shall hereafter call him.

drops of perspiration stood on his forehead. Soon after he threw himself into the hammock, and, as I thought, fell ashep; but in a lew minutes I saw the hammock shake, and, remembering my own shaking there, thought it was at its old tricks of giving people the fever and agus; but very soon I saw that its poor captum was in convulsions.

Wheeler Haw oil trained CHAPTER XVI.

SIGENESS AND MUTINY—ILBNESS OF CAPTAIN JAY—CRITICAL SITUATION—ROUGH NURSING—DOLPHINS — SUCCESSION OF VOLCANOES — GULF OF NICOYA — HARBOUR OF CALDERA—ANOTHER PATIENT—HACIENDA OF SAN FELIPPE—MOUNTAIN OF AGUACATE—"ZILLENTHAL PATENT SELF-ACTING COLD AMALGAMATION MACHINE"—GOLD MINES—VIEW FROM THE MOUNTAIN TOP.

On Monday, the twenty-second of January, two hours before daylight, we started for the port. 'Hezoos led the way, carrying before him all my luggage, rolled up in a baquette, being simply a cowhide, after the fashion of the country. At daylight we heard behind us the clattering of horses' hoofs, and Don Manuel de Aguila, with his two sons, overtook us. Before the freshness of the morning was past, we reached the port, and rode up to the old hut, which I had hoped never to see again. The hammock was swinging in the same place. The miserable rancho seemed destined to be the abode of sickness. In one corner lay Señor D'Yriarte, my captain, exhausted by a night of fever, and unable to sail that day.

Dr. Drivon was again at the port. He had not yet disembarked his machinery: in fact, the work was suspended by a mutiny on board the English brig, the ringleader of which, as the doctor complained to me, was an American. I passed the day on the seashore. In one place, a little above high-water mark, almost washed by the waves, were rude wooden crosses, marking the graves of unhappy sailors who had died far from their homes. Returning, I found at the hut Captain Jay, of the English brig, who also complained to me of the American sailor. The captain was a young man, making his first voyage as master; his wife, whom he had married a week before sailing, accompanied him. He had had a disastrous voyage of eight months from London; in doubling Cape Horn, his crew were all frostbitten, and his spars carried away. With only one man on deck, he had worked up to Guayaquil, where he incurred great loss of time and money in making repairs, and shipped an entirely new crew. At Acajutla, he found that his boats were not sufficient to land the doctor's machinery, and was obliged to wait until a raft could be constructed. In the meantime his crew mutinied, and part of them refused to work. His wife was then at the doctor's hacienda; and I noticed that, while writing her a note with pencil, his sunburned face was pale, and large

drops of perspiration stood on his forehead. Soon after he threw himself into the hammock, and, as I thought, fell asleep; but in a few minutes I saw the hammock shake, and, remembering my own shaking there, thought it was at its old tricks of giving people the fever and ague; but very soon I saw that the poor captain was in convulsions. Excepting Captain D'Yriarte, who was lying against the wall perfectly helpless, I was the only man in the hut; and as there was danger of his throwing himself out of the hammock, I endeavoured to hold him in; but with one convulsive effort he threw me to the other side of the hut, and hung over the side of the hammock, with one hand entangled in the cords, and his head almost touching the ground. The old woman said that the devil had taken possession of him, and ran out of doors, screaming. Fortunately, this brought in a man whom I had not seen before, Mr. Warburton,* an engineer, who had come out to set up the machinery, and who was himself a machine of many horsepower, having a pair of shoulders that seemed constructed expressly for holding men in convulsions. At first he was so shocked that he did not know what to do, I told him that the captain was to be held. whereupon, opening his powerful arms, he closed them around the captain's with the force of a hydraulic press, turning the legs over to me. These legs were a pair of the sturdiest that ever supported a human body; and I verily believe that if the feet had once touched my ribs, they would have sent me through the wall of the hut. Watching my opportunity, I wound the hammock around his legs, and my arms around the hammock. In the meantime he broke lose from Mr. Warburton's hug, who, taking the hint from me, doubled his part in with the folds of the hammock, and gave his clinch from the outside. The captain struggled, and, worming like a gigantic snake, slipped his head out of the top of the hammock, and twisted the cords around his neck, so that we were afraid of his strangling himself. We were in utter despair, when two of his sailors rushed in, who, being athome with ropes, extricated his head, shoved him back into the hammock, wrapped it around him as before, and I withdrew, completely exhausted.

The two recruits were Tom, a regular tar of about forty, and the cook, a black man, and particular friend of Tom, who called him "Darkey." Tom undertook the whole direction of securing the captain; and, although Dr. Drivon and several Indians came in, Tom's voice was the only one heard, and addressed only to "Darkey."—"Stand by his legs, Darkey!"—"Hold fast, Darkey!"—"Steady, Darkey!" but all together could not hold him. Turning on his face,

* Died at Mazatlan about six months afterwards.

and doubling himself inside, he braced his back, and drove both legs through the hammock, striking his feet violently against the ground; his whole body passed through. His struggles were dreadful. Suddenly the mass of bodies on the floor rolled against Captain D'Yriarte's bed, which broke down with a crash, and, with a fever upon him, he was obliged to scramble out of the way. In the interval of one of the most violent struggles, we heard a strange idiotic noise, which seemed like an attempt to crow. The Indians who crowded the hut laughed; and Dr. Drivon was so indignant at their heartlessness, that he seized a club and drove them all out of doors. An old naked African, who had been a slave at Balize, and had lost his own language without acquiring much of any other, returned with a bunch of feathers, which he wished to stick in the captain's nose and set fire to, saying it was the remedy of his country; but the doctor showed him his stick, and he retreated.

The convulsions continued for three hours, during which time the doctor considered the captain's situation very critical. The old woman persisted that the devil was in him, and would not give him up, and that he must die; and I could not but think of his young wife, who was sleeping a few miles off, unconscious of the calamity that threatened her. The fit was brought on, as the doctor said, by anxiety and distress of mind occasioned by his unfortunate voyage, and particularly by the mutiny of his crew. At eleven o'clock he fell asleep, and now we learned the cause of the strange noise which had affected us so unpleasantly. Tom was just preparing to go on board the vessel, when the African ran down to the shore, and told him that the captain was at the hut drunk. Tom, being himself in that state, felt that it was his duty to look after the captain; but he had just bought a parrot, for which he had paid a dollar, and, afraid to trust him in other hands, hauled his baggy shirt a foot more out of his trousers, and thrust the parrot into his bosom, almost smothering it with his neckcloth. The parrot, indignant at this confinement, was driving his beak constantly into Tom's breast, which was scarified and covered with blood; and once, when Tom thought it was going too far, he put his hand inside and pinched it, which produced the extraordinary sounds we had heard.

In a little while Tom and Darkey got the Indians to relieve them, and went out to drink the captain's health. On their return they took their places on the ground, one on each side of their commander. I threw myself into the broken hammock; and Dr. Drivon, charging them, if the captain awoke, not to say anything that could agitate him, went off to another hut.

It was not long before the captain, raising his head, called out, "What the devil are you doing with my legs?" which was answered by Tom's steady cry, "Hold on, Darkey?" Darkey and an Indian were holding the captain's legs, two Indians his arms, and Tom was spread over his body. The captain looked perfectly sensible, and utterly amazed at being pinned to the ground, "Where am I?" said he. Tom and Darkey had agreed not to tell him what had happened; but, after the most extraordinary lying on the part of Tom, while the captain was looking at him and us in utter amazement, the poor fellow became so entangled, that, swearing the doctor might stay and tell his own stories, he began where he and Darkey came in, and found the captain kicking in the hammock; and the captain was given to understand that if it had not been for him and Darkey he would have kicked his own brains out. I relieved Tom's story from some obscurity, and a general and noisy conversation followed, which was cut short by poor Captain D'Yriarte, who had not had a wink of sleep all night, and begged us to give him a chance.

The next evening I embarked on board "La Cosmopolita," a small goelette brig, and my first night on board was not particularly agreeable. I was the only cabin passenger; but, besides the bugs that always infest an old vessel, I had in my berth mosquitoes, spiders, ants, and cockroaches. Yet there is no part of my tour upon which I look back with so much quiet satisfaction as this voyage on the Pacific. I had on board Gil Blas and Don Quixote in the original, and all day I sat under an awning, my attention divided between them and the great range of gigantic volcanoes which stud the coast. Before this became tedious we reached the Gulf of Papajayo, the only outlet by which the winds of the Atlantic pass over to the Pacific. The dolphin, the most beautiful fish that swims, played under our bows and stern, and accompanied us slowly alongside. But the sailors had no respect for his golden back. The mate, a murderous young Frenchman, stood for hours with a harpoon in his hand, drove it into several, and at length brought one on board. The king of the sea seemed conscious of his fallen state; his beautiful colours faded, and he became spotted, and at last heavy and lustreless, like any other dead fish.

We passed in regular succession the volcanoes of San Salvador, San Vicente, San Miguel, Telega, Momotombo, Managua, Nindiri, Masaya, and Nicaragua, each one a noble spectacle, and all together forming a chain with which no other in the world can be compared; indeed, this coast has been described as "bristling with volcanic cones." For two days we lay with sails flapping in sight of Cape Blanco, the upper headland of the Gulf of Nicoya. On the afternoon of the 31st we

entered the gulf. On a line with the point of the cape was an island of rock, with high, bare, and precipitous sides, and the top covered with verdure. It was about sunset; for nearly an hour the sky and sea seemed blazing with the reflection of the departing luminary, and the island of rocks seemed like a fortress with turrets. It was a glorious farewell view. I had pased my last night on the Pacific, and the highlands of the Gulf of Nicoya closed around us.

Early in the morning we had the tide in our favour, and very soon leaving the main body of the gulf, turned off to the right, and entered a beautiful little cove, forming the harbour of Caldera. In front was the range of mountains of Aguacate, on the left the old port of Pont Arenas, and on the right the volcano of San Pablo. On the shore was a long low house set upon piles, with a tile roof, and near it were three or four thatched huts and two canoes. We anchored in front of the houses, and apparently without exciting the attention of a soul on shore.

All the ports of Central America on the Pacific are unhealthy, but this was considered deadly. I had entered without apprehension cities where the plague was raging, but here, as I looked ashore, there was a deathlike stillness that was startling. To spare me the necessity of sleeping at the port, the captain sent the boat ashore with my servant, to procure mules with which I could proceed immediately to a hacienda two leagues beyond.

In the afternoon the captain took me ashore. At the first house we saw two candles lighted to burn at the body of a dead man. All whom we saw were ill, and all complained that the place was fatal to human life. In fact, it was almost deserted; and, notwithstanding its advantages as a port, government, a few days afterward, issued an order for breaking it up, and removing back to the old port of Pont Arenas. The captain was still suffering from fever and ague, and would not on any account remain after dark. I was so rejoiced to find myself on shore, that if I had met a death's head at every step it would hardly have turned me back.

Determined not to lose sight of my friend, the captain of the port, with my luggage at my heels I walked down the beach for the custom-house. It was a frame building, about 40 feet long, and stood at a little distance above high-water mark, on piles about 6 feet above ground. It was the gathering-place of different persons in the employ of the government, civil and military, and of two or three women employed by them. The military force consisted of the captain of the port and the soldier who boarded us, so that I had not much fear of being sent back at the point of the bayonet. My host gave me

a bedstead, with a bull's hide for a bed. It was a warm night, and I placed it opposite an open door, and looked out upon the water of the gulf. The waves were breaking gently upon the shore, and it was beautiful to see the Cosmopolita riding quietly at her anchor, without even 'Hezoos or the luggage in her.

At two o'clock in the morning we rose, and before three we started. The tide was low, and for some distance we rode along the shore by moonlight. At daylight we overtook the courier sent to give advice of my coming; in an hour crossed the river of Jesus Maria; and at seven o'clock stopped to breakfast at the hacienda of the same name.

While breakfasting, the woman of the house told me of a sick daughter, asked me for remedios, and finally requested me to go in and see her. The door opened from the shed, and all the apertures in the room were carefully closed, so as to exclude even a breath of air. The invalid lay in a bed in one corner, with a cotton covering over it like a mosquitonetting, but lower, and pinned close all around; and when the mother raised the covering, I encountered a body of hot and unwholesome air that almost overcame me. The poor girl lay on her back, with a cotton sheet wound tightly around her body; and already she seemed like one laid out for burial. She was not more than eighteen; the fever had just left her, her eye still sparkled, but her face was pale, and covered with spots, seams, and creases of dirt. She was suffering from intermitting fever, that scourge which breaks down the constitution and carries to the grave thousands of the inhabitants of Central America; and, according to the obstinate prejudice of the country, her face had not been washed for more than two months! I had often been disgusted with the long beards and unwashed faces of fever and ague subjects, and the ignorance and prejudice of the people on medical subjects; in illustration of which Dr. Drivon told me of a case of practice by an old quack woman, who directed her patient, a rich cattle proprietor, to be extended on the ground naked every morning, and a bullock to be slaughtered over him, so that the blood could run warm upon his body. The man submitted to the operation more than a hundred times, and was bathed with the blood of more than a hundred bullocks; afterward he underwent a much more disgusting process, and, strange to say, he lived.

But to return: in general my medical practice was confined to men, and with them I considered myself a powerful practitioner. I did not like prescribing for women; and in this case I struck at all the prejudices of the country, and cheapened my medical skill by directing, first, that the poor girl's face should be washed; but I saved myself somewhat by making a strong point that it should be washed

with warm water. Whether they thanked me or not I do not know, but I had my reward, for I saw a lovely face, and long afterward I remembered the touching expression of her eyes, as she turned toward me, and listened to the advice I gave her mother.

At ten we resumed our journey. The road had been much improved lately, but the ascent was steep, wild, and rugged. As we toiled up a ravine, we heard before us a loud noise, that sounded like distant thunder, but regular and continued, and becoming louder as we advanced; and at length we came out on a small clearing, and saw on the side of the mountain a neat frame building of two stories, with a light and graceful balcony in front; and alongside was the thundering machine which had startled us by its noise. Strangers from the other side of the Atlantic were piercing the sides of the mountain, and pounding its stones into dust to search for gold. The whole range, the very ground which our horses spurned with their hoofs, contained that treasure for which man forsakes kindred and country.

I rode up to the house and introduced myself to Don Juan Bardh, the superintendent, a German from Friesburg. It was about two o'clock, and excessively hot. The house was furnished with chairs, sofa, and books, and had in my eyes a delightful appearance; but the view without was more so. The stream which turned the immense pounding-machine had made the spot, from time immemorial, a descansadera, or resting-place for muleteers. All around were mountains, and directly in front one rose to a great height, receding, and covered to the top with trees.

Don Juan Bardh had been superintendent of the Quebrada del Ingenio for about three years. The Company which he represented was called the Anglo Costa Rican Economical Mining Company. It had been in operation these three years without losing anything, which was considered doing so well that it had increased its capital, and was about continuing on a larger scale. The machine, which had just been set up, was a new German patent, called a Machine for extracting Gold by the Zillenthal Patent Self-acting Cold Amalgamation Process (I believe that I have omitted nothing), and its great value was, that it required no preliminary process, but by one continued and simple operation extracted the gold from the stone. It was an immense wheel of cast-iron, by which the stone, as it came from the mountain, was pounded into powder; this passed into troughs filled with water, and from them into a reservoir containing vases, where the gold detached itself from the other particles, and combined with the quicksilver with which the vases were provided.

There were several mines under Don Juan's charge, and after

dinner he accompanied me to that of Corrallio, which was the largest, and, fortunately, lay on my road. After a hot ride of half an hour, ascending through thick woods, we reached the spot.

According to the opinion of the few geologists who have visited that country, immense wealth lies buried in the mountain of Aguacate; and so far from being hidden, the proprietors say, its places are so well marked that all who search may find. The lodes or mineral veins run regularly north and south, in ranges of greenstone porphyry, with strata of basaltic porphyry, and average about 3 feet in width. In some places side-cuts or lateral excavations are made from east to west, and in others shafts are sunk until they strike the vein. The first opening we visited was a side-cut 4 feet wide, and penetrating 240 feet before it struck the lode; but it was so full of water that we did not enter. Above it was another cut, and higher still a shaft was sunk. We descended the shaft by a ladder made of the trunk of a tree, with notches cut in it, until we reached the vein, and followed it with a candle as far as it was worked. It was about a yard wide, and the sides glittered-but it was not with gold; they were of quartz and feldspar, impregnated with sulphuret of iron, and gold in such small particles as to be invisible to the naked eye. The most prominent objects in these repositories of wealth were naked workmen with pickaxes, bending and sweating under heavy sacks of stones.

It was late in the afternoon when I came out of the shaft. Don Juan conducted me by a steep path up the side of the mountain, to a small table-land, on which was a large building occupied by miners. The view was magnificent: below was an immense ravine; above, perched on a point, like an eagle's nest, the house of another superintendent; and on the opposite side the great range of the mountains of Candelaria. I waited till my mules came up, and with many thanks for his kindness, bade Don Juan farewell.

As we continued ascending, every moment the view became more grand and beautiful; and suddenly, from a height of 6,000 feet, I looked down upon the Pacific, the Gulf of Nicoya, and, sitting like a bird upon the water, our brig. La Cosmopolita. And here, on the very highest points, in the wildest and most beautiful spots that ever men chose for their abodes, were the huts of the miners. The sun touched the sea, lighted up the surface of the water, and softened the rugged mountains; it was the most beautiful scene I ever saw, and this loveliest view was the last; for suddenly it became dark, and very soon the darkest night I ever knew came on. As we descended, the woods were so thick that even in the daytime they shut out the light, and in some places the road was cut through steep hills higher than

our heads, and roofed over by the dense foliage. 'Hezoos was before me, with a white hat and jacket, and had a white dog running by his side, but I could not see the outline of his figure. The road was steep but good, and I did not pretend to direct the mule. In one of the darkest passages 'Hezoos stopped, and, with a voice that made the woods ring, cried out, "A lion, a lion!" I was startled, but he dismounted and lighted a cigar. This was cool, I thought; but he relieved me by telling me that the lion was a different animal from the roarer of the African desert, small, frightened by a shout, and only ate children. Long as it seemed, our whole descent did not occupy three hours, and at ten o'clock we reached the house in the Boca de la Montagna. It was shut, and all were asleep; but we knocked hard, and a man opened the door, and, before we could ask any questions, disappeared. Once inside, however, we made noise enough to wake everybody, and got corn for the mules, and a light. There was a large room, open to all comers, with three bedsteads, all occupied, and two men were sleeping on the floor. The occupant of one of the beds, after eyeing me a few moments, vacated it, and I took his place. The reader must not suppose that I am perfectly unscrupulous; he took all his bedelothes, viz. his chamarro, with him. The bed and all its furniture consisted of an untanned bull's hide.

At the entry of Abjurday I stopped to inquire for one hearing a name immortal in the history of the Spanish conquest. It was the name of Alvarado, Whether he was a descendant or not I do not know, nor did he; and strange to say, though I met several hearing that mane, not one attempted to trace his lineage to the conqueror. Don Ramon Alvarado, however, was recommended to me for qualities which allied him in character with his great manuscake. He was the courier of the English Mining Company for Scrapequea and the River St. Juan, one of the wildest roads in all Central America.

Nost to the advantage of the sea voyage, my principal object, in leaving Zonzonate was to acquire some information in regard to the canal route between the Atlantic and Pacific by means of the Lake of Nicaragua and the fiver San Juan, and my business with Alvarado was to secure him as a guide to the port of San Juan. In half an hour all those arrangements were made, the day fixed, and half the

There are four cities in Costa Rica, all of which lie within the space of fifteen leagues; yet each has a different climate and different profluctions. Including the suburbs Alajuela contains a population of about 10,000. The plaza was beautifully situated, and the church, the cobildo, and the houses fronting it were handsome. The latter