



MOUNT SARMIENTO, HIGHEST POINT OF TIERRA DEL FUEGO.

## SMYTH'S CHANNEL AND THE STRAIT OF MAGELLAN.

A COASTING VOYAGE IN SOUTHERN LATITUDES.

BY THEODORE CHILD.

HAVING visited the more accessible parts of Peru, the question of returning to the east coast presented itself, and received an immediate solution when I found that the steamer *Osiris*, of the Deutsche Dampfschiffsfahrt Gesellschaft "Kosmos," was lying in harbor at Callao, about to sail for Hamburg by way of Smyth's Channel and the Strait of Magellan. I had heard so much about the splendid scenery of this extreme southern part of the continent that I was anxious to see it. Here was an excellent opportunity. Furthermore, it was getting late in the season to recross the Cordillera. By the time that I could return to Valparaiso in the ordinary coasting steamer, and reach the starting-point at Los Andes, it would be the end of April; there would be already much snow on the mountains, and consequently the ride on muleback over to the Argentine Republic would be attended both with discomfort and with danger. The ordinary coasting steamer, again, did not tempt me. In going northward from Valparaiso to Callao I had visited the principal ports without much pleasure or much profit.

But still the souvenirs of the trip were not uninteresting. Life on board the big three-decked, top-heavy steamers, whether of the Pacific Steam Navigation Company or of the Compañía Sud-Americana, with their motley and ever-changing crowd of passengers, and their cargo of cattle, vegetables, provisions, and miscellaneous goods, is rich in picturesque incidents, always more or less the same, it is true, but none the less amusing to an idle mind.

The *Osiris* was advertised to touch only at the ports of Antofagasta and Taltal between Callao and Valparaiso, and then at Talcahuano, Coronel, Corral, Punta Arenas, and Montevideo. I took passage to the last-named port, and went on board on the night of Saturday, March 29, 1890.

From Callao to Valparaiso we were only two passengers, a Peruvian boy, who was going to school at Cassel, in Germany, and myself. The first impressions of the German ship were most agreeable. The captain, C. Carlsen, proved to be a simple, warm-hearted, and accomplished gentleman, as well as an expert seaman. The other officers were plea-

sant, blond, blue-eyed Germans, as hearty and unassuming as their commander. The doctor, of a more sluggish temperament, was a typical Saxon from Dresden, and had evidently been a model German student, for his face was seamed and slashed with sword-cuts that bore witness to more valor than fencing skill. The boy, José Antonio, had a gentle disposition and excellent manners, and so we lost no time in becoming a very happy family, the more so as the *Osiris* was favored with the services of two cooks, whose talent was worthy of a more glorious sphere. On the morning of March 30th we were towed out of the Darsena of Callao, which, by-the-way, is the creation and property of a French company. On April 2d we staid for a few hours at Antofagasta, with its smoky smelting and nitrate works, its sand slopes, and its barren brown hills veined with mule paths, where the loose earth appears of a lighter yellow shade. Here we took on board sacks of borax and silver ore, the latter from the Huanchaca mines, and from the old Spanish mines of Potosi. On April 4th we arrived at Taltal, where we were greatly delayed by the holidays of Good-Friday and Easter. We had many hundred tons of nitrate to take on board, but the stevedores refused to work on feast-days, and so we had to stay a full week in the sheltered bay, surrounded by brown jagged rocks and hills. The time passed rapidly and pleasantly. Our captain, being an ardent water-color painter, was always appealing for advice in the choice of points of view, and this was a pretext for excursions in the gig to the north and south headlands of the bay, where he made harmonies in ochre and cobalt, while the engineer and myself collected sea-anemones, shells, and mineralogical specimens. On the south headland we picked up auriferous quartz, and the north headland proved to be a mass of ironstone interspersed with rich lodes of copper. We also made a very interesting excursion up the mountains some fifty miles by rail, to the Santa Luisa and Lautaro nitrate-works, which were created by German enterprise, and are now being managed by Germans working with English capital.

At Santa Luisa, and also at Taltal, we were the recipients of much hearty German hospitality, spent several pleasant evenings enlivened by excellent music,

and parted with regret from many new acquaintances whose social and intellectual qualities we could have wished to enjoy longer. Our cargo was at last on board, and we steamed out of Taltal Bay, and arrived without incident at Valparaiso on April 14th. My impressions of this port received no modification from a second visit. It is a town without character, neither Chilian, nor English, nor German, and neither agreeable nor disagreeable. However, I managed to pass a pleasant day on shore, and paid some farewell calls to persons at whose hands I had received kindness, not forgetting the venerable proprietor of the Hôtel Colon, Señor Kerbernhardt, uncle of the divine Sarah Bernhardt, who lent me the latest bundle of *Figaro*, and gave me news of his niece's triumph in her new rôle of Jeanne d'Arc. I talked also with several business men and politicians, and found that the feeling against President Balmaceda was stronger even than it was at the time of my first visit. The government is bad, is the cry. The unlimited authority of the Executive is disastrous. The unreasoned and wasteful expenditure of the public funds on useless railways, extravagant schools, Krupp cannons, and indirect political bribery is endangering the prosperity of the country, lowering the exchange, and hampering business.

On April 16th we sailed from Valparaiso, but the *Osiris* was no longer the quiet and simple home that I had enjoyed almost alone from Callao southward. Every cabin was full, and twenty first-class passengers, the limit of the ship's accommodation, now sat down to dinner, exclusive of several small children. Before bedtime I was acquainted with all these people. Herr A., his wife and daughter, thirty-four years in Chili, going home for the first time since he came out years ago in a sailing ship; a gentle old couple, silvery-haired and happy. Herr B., wife, and two small children, twenty-three years a merchant in Valparaiso, going home for a season at some baths for his stomach's sake, and also to spend a year in European travel. Herr C., his wife, and his daughter Olga, five years of age, a Russian family, sixteen years in Chili, ship-owner and timber merchant. Herr D. and his wife, a brunette of delicate Oriental type and sweet voice. Herr D. and his companion Herr E. are connected with the Krupp cannon purchases made by the Chilian

government. Herr Capitän-Leutnant F., also anxious to supply lethal instruments to South-American republics. Frau G. and little Max, a very noisy young man of eight years. Frau H., professional pianist. Fräulein von X., gifted with a fine voice and operatic aspirations, and intending to study in the Berlin Academy of Music. All these ladies and gentlemen were refined, amiable, and unpretentious people, who had seen much of the world, and were endowed with homely virtues and human kindness—sensible, polyglot, and well-behaved men and women, whose views on things in general were not of a nature to alarm, or even slightly to perturb.

The next day we were anchored in the bay of Coronel. The *Osiris* was surrounded by lighters laden with coal, which was being rapidly shovelled into the bunks by dark-skinned natives. The white mist that hung over us made the water look like dull silver; in the foreground were ships at anchor and small lighters provided with winches and nets for dredging up the bits of coal that fall into the water while the steamers are loading; in the background were the winding wheels of the coal-pits; the moles surmounted by trains of coal trucks; the sickly sulphurous smoke streams of the inevitable smelting-works; the small town of Coronel clustered along the sandy black beach; and, behind, the green hills diapered with mule paths and patches of red or yellow earth. The meals of the coal-heavers on the foredeck interested us. Great bowls of beans, lumps of salt beef and fat, piles of biscuit, and gallons of coffee were served out to them. Each man took what he needed of the solids, chose his corner on the rail, over the hatches, or simply on the bare deck, and ate with no more comfort than a dog. Then each man produced a large violet mussel shell, which he used in lieu of a spoon to scoop up the beans and drink the coffee. Let it be remarked that these coal-heavers earn high wages, as much as five Chilian dollars, or say ten shillings gold, a day, and their food gratis; and yet they remain little better than good-natured brutes, taking no strong drink while they are at work, but ready for any quantity of dissipation after sunset, improvident in the extreme, and willing to work, and to work well, only when they have no money left to spend. While watching those strong muscular fellows,

I had some conversation with the Russian timber merchant about his experience of men and things in Chili, the subject having been led up to by my remarking the frequent evidences of primitiveness in Chilian methods of working. Speaking of the great strength and hardiness of the Chilian native laborer, Herr C. said that this was still more noticeable in the more southern forest districts. At Puerto Montt, for instance, which is one of the most important timber ports, the work is done entirely by hand. The trees are felled with axes, sawn into planks on the spot by hand, and the planks carried to the port from a distance of ten or twelve miles balanced on the shoulder of a man, who goes along under his burden at a run. None but native Chilians could do such work, and, given the absence of roads, and above all the nature of the workmen, all attempts to modernize the methods of getting out the timber have failed. Experiments have been made in introducing North-American machinery, but without success. The innovators have invariably lost their money, and the natives, accustomed to do everything with their hands, have in the end wilfully broken the machinery, in order to have done with it. I mentioned the fact that the Chilian government, as I had been informed, meditated the essay of Norwegian and Swedish colonists in these southern forest regions. Herr C. was of opinion that this scheme is utterly impracticable, for the simple reason that Scandinavian colonists would refuse to live like pigs, as the Chilians live. The present primitive methods are the cheapest and the most practical. For that matter, Herr C. assured me that the timber cutters were a sad set of rogues and thieves, that the business was necessarily speculative in the present conditions, and that the bad debts mounted up to an enormous figure in the course of a year. In Chili if a man does not want to pay, you cannot force him, he added, and no one who has had any experience of the country will ever think of going to law. In Chili there is no justice for *gringos*, as the foreigners are called. This opinion I had heard expressed by many foreigners in business in Chili, so that my informant's words did not astonish me. His commercial position, however, lent additional weight to the allegation.

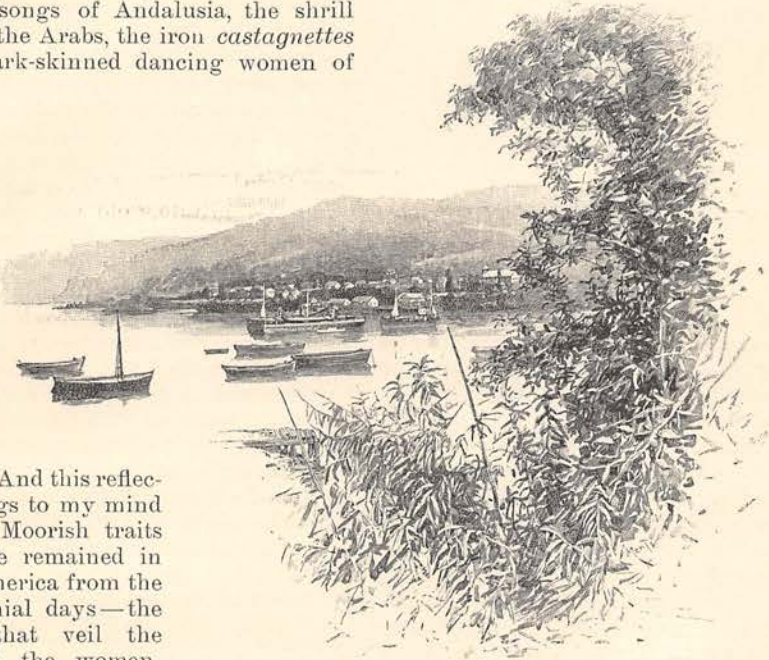
In the evening, after dinner, when the coal-heavers and their noisy shovels have

departed, we have some music. Our accomplished captain begins the improvised concert with some soft music on the zither, and then the ladies play Schubert, and Fräulein von X. sings songs which the audience enthusiastically declares to be *wunderschön*, *prachtvoll*, and *wunderhübsch*; but, being in a perverse mood, I say to myself that I prefer the wailing Moorish songs of Andalusia, the shrill flutes of the Arabs, the iron *castagnettes* of the dark-skinned dancing women of

moment, now streaming down in fine rain, and then giving place to other clouds. Corral, latitude  $39^{\circ} 53'$  south, is the port of Valdivia, and lies at the mouth of the river of the same name. The harbor is formed by a sort of fiord, very much like those of Norway. At the entrance the

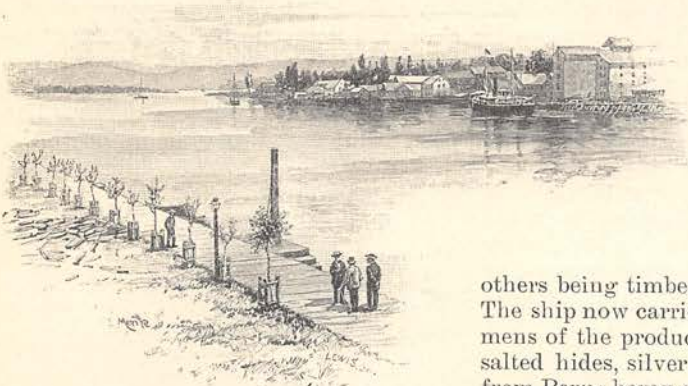
Africa. And this reflection brings to my mind the few Moorish traits that have remained in South America from the old colonial days—the shawls that veil the heads of the women, the mules and the street life that remind one of Stamboul and Spanish Cordova, the *arrieros* who calm their mules with a "Ts! ts! ts!" the very same sound that the Arab camel-drivers have employed from time immemorial.

We left Coronel and its bay, full of starfish and polypuses, on the night of April 20th. The next morning I woke up to find a strong north wind blowing astern, rain falling heavily, the decks dripping, water pattering down on all sides, and the ship rolling over a leaden sea, with a heavy swell piling up the gloomy waters into restless hillocks. The rain and rolling accompanied us to the beautiful sheltered harbor of Corral, where we anchored in the midst of verdant hills, whose mantle of rich green trees reached down to the very water's edge, and over whose summits the gray heavy clouds hung like smoke, now thickening, now lifting for a



HARBOR OF CORRAL.

headlands are crowned by old fortresses. To the right, at the end of a bay, sheltered by wooded hills, is the little town of Corral, straggling along the beach and up the first spurs of the hills, one of which, overhanging the sea, is surmounted by the battlements of a picturesque old Spanish fort, with quaint sentry-boxes at the angles. We naturally go ashore and inspect this relic of the days of the *conquistadores*, decipher the dates on the dismantled cannons that lie on the ground, which is covered with a velvety carpet of small-leaved clover of the most delicate tone of green, visit the abandoned barracks and the stores full of pyramids of cannonballs, and then mount the steep causeway, and pass out into the main street of the town, which crosses several mountain streams by means of rough bridges of



VALDIVIA.

planks. Corral is all up and down; the houses rise one above the other, with solid sloping gambrel-roofs to throw off the rain, which, according to local report, falls thirteen months out of the twelve in these parts; rivulets of water are running in every direction, and now and again the road creeps along under a dripping rock covered with maidenhair and other ferns, while every cottage and every lane is bedecked with a luxuriant growth of fuchsia, foxglove, creeping periwinkle, honeysuckle, and lapigeria. The town of Valdivia, 23,000 inhabitants, situated about ten miles away up the river, nestles in even a richer wealth of verdure and flowers. The journey up the river between the wooded banks and islands is delightful, provided the view is not hopelessly obstructed by low drifting clouds that are blown in from the sea, and deposit their fertilizing showers with too great liberality on the luxuriant vegetation of this moist zone. Valdivia, with its breweries, tanneries, saw-mills, and commodious wooden houses, is an entirely German town; a large proportion of the inhabitants are German; the language, the customs, the civilization are German, which is equivalent to saying that everything in the town looks prosperous and comfortable. My travelling companions had several friends in Valdivia, and returned to the ship laden with flowers and with baskets of beautiful Grafenstein apples. They also brought a new passenger, Herr Z., a frosty old gentleman, with a small aquiline nose and an uncommon musical

talent, which he revealed at the earliest opportunity. Meanwhile the *Osiris* had completed her cargo by taking on board several hundred rolls of sole-leather, one of the chief exports of this region, the

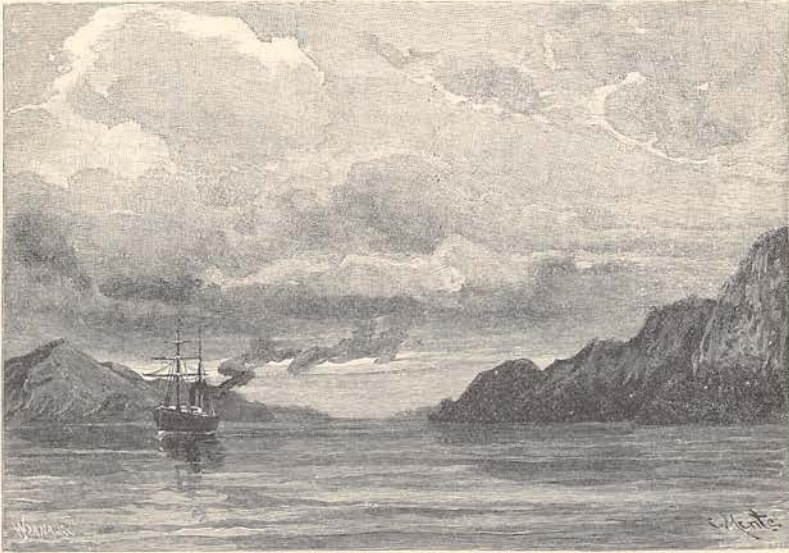
others being timber, live cattle, and beer. The ship now carried the following specimens of the produce of the Pacific coast: salted hides, silver ore, cocoa, and cotton from Peru; borax and silver ore from Antofagasta; nitrate, gold ore, gold ingots, and iodine from Taltal; hides, copper bars, lead, bones, hoofs, and horns from Valparaiso, also some walnuts and barley to be delivered in Montevideo; sole-leather from Talcahuano; and a great quantity of sole-leather from Valdivia. These goods, to be delivered in the ports of Havre and Hamburg, together with the coal, made a total dead weight of 3300 tons, the maximum capacity of the ship, which has a registered capacity of 1875 tons net.\*

In the night of April 22d we steamed through mist and rain out of Corral Har-

\* Having had occasion while studying the question of freights and of the means of transport at the disposal of international commerce between North America and Europe and the Pacific ports, I had noted the extremely cheap rates of the German ships. I took advantage of my voyage on board the *Osiris* to gather some information which will help to explain why the German ships can compete so successfully against the commercial navies of the world. A notable part of the secret consists in the cheapness of life in Germany, the frugality of the nation, and the fact that Germans are willing to do a great deal of work for very little money. German ships are worked very cheaply and with the fewest hands possible. The *Osiris*, for instance, has a crew of 42 men and one boy, whose salaries per month are as follows: captain, £25 sterling; first officer, £9; second officer, £6; third officer, £4 5s.; doctor, £4 10s.; chief engineer, £17; second engineer, £11 4s.; third engineer, £6; fourth engineer, £3 15s.; first carpenter, £4 5s.; second carpenter, £3; first boatswain, £4; second boatswain, £3 10s.; nine A. B. seamen, each £3; seven stokers, each £3 15s.; six trimmers, each £3 5s.; two cooks, one at £5, the other at £3 10s.; first steward, £3 5s.; four under stewards at £1 10s. each. There is no purser or supercargo or other consequential person to play the gentleman; all on board have to work hard, and the officers look after the cargo and do clerks' business, as well as navigate the ship. The A. B.'s, I remarked, were picked men, always quiet, clean, and busy, and at night, after supper, the table of their mess-room was invariably covered with books and illustrated periodicals.

bor, and regained the rolling ocean. The next morning we woke up to find the sun shining, but the swell was still very heavy. In the course of the day we sighted a whale, and about latitude  $41^{\circ}$  south the first albatross appeared, swooping to and fro in the wake of the ship, accompanied by quantities of cape pigeons, which the French call *damiers*, from the geometrical distribution

head to augment the rapidity of his trills. So on Friday, April 25th, we reached the southern end of the Gulf of Peñas, and found ourselves within sight of the entrance of Smyth's Channel, and already sheltered by the westerly islands. The night had been rough but clear, a little snow had fallen, but we had happily been able to navigate without difficulty in these



NEAR NORTH ENTRANCE OF SMYTH'S CHANNEL, LOOKING BACK NORTHWARD.

of black and white feathers on their wings. The rectangular outline, the pointed tip, and the symmetrical markings of these pigeons, seen as they fly with their wings spread perfectly flat, suggested to me the figures of birds in the hieroglyphics of ancient Egypt. The two following days were rough and rainy, and we, who had come down from the tropics, began to feel the cold and put on warm clothing. As the ship rolled along between leaden sky and leaden water there was no consolation to be sought on deck, and so music, fancy-work, and the favorite German card game called "skat" brought all the passengers together in the smoking-room and the ladies' saloon, where we passed many hours of *ennui*. Herr Z. amused us by sitting at the piano, playing a soft accompaniment, and whistling waltzes, operas, sonatas, and I know not what, with curious *virtuosité*, wagging his venerable

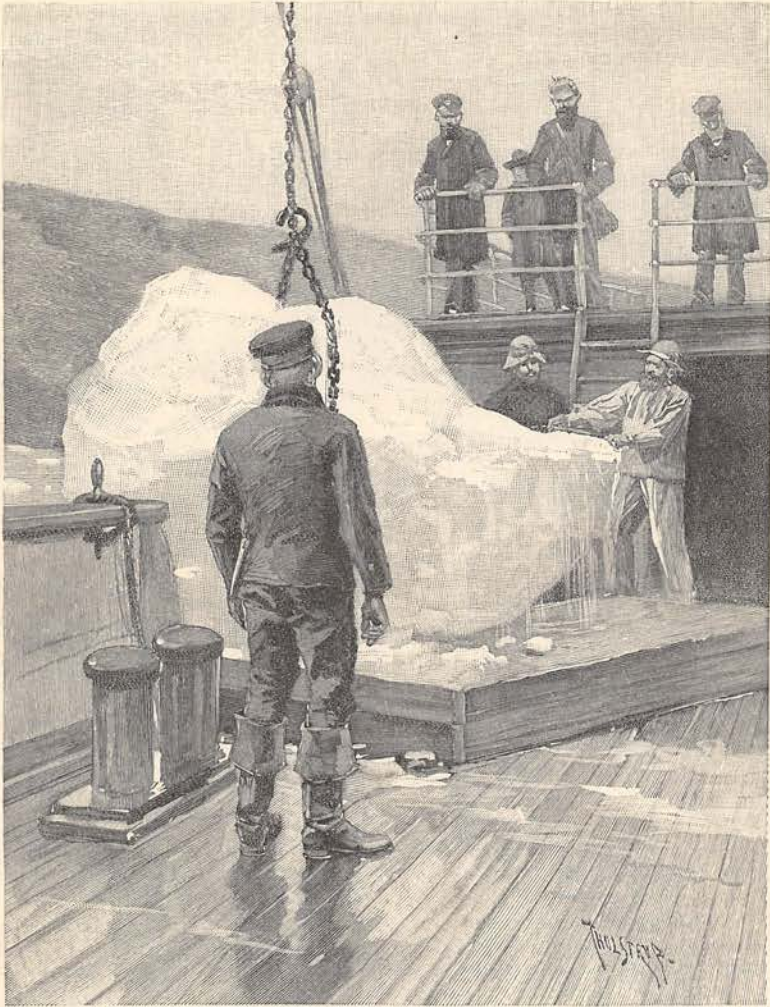
waters, which are not without danger. In the morning, after some rain, the sky began to break, and we saw to the left the island of Ayautau, 570 feet high, and to the right the Guaianeco group, all harmonized in masses of deep velvety blue, with gray clouds rent on their peaks, clinging to their rugged sides, and piled up in Alpine silhouettes above them. The water is of a brownish-yellow color. Off Sombrero Island, 1345 feet high, we celebrate our safe arrival at the entrance of the channel with strong drinks, all the more welcome as the wind is icily cold. The ladies appear on deck in furs, their heads enveloped in bewitching *sorties de bal*, and we prepare to enjoy the scenery of which we have heard so much. Here it must be explained that Smyth's Channel is a passage between the islands and the extreme southern coast of the South-American continent, extending from the Gulf

of Peñas to the Strait of Magellan, and measuring from Ayautan Island, latitude  $47^{\circ} 36'$  south, longitude  $74^{\circ} 45'$  west, to Fairway Island, latitude  $52^{\circ} 44'$  south, longitude  $73^{\circ} 47'$  west, 338 miles in length, with a breadth varying between one-fifth of a mile minimum and five miles maximum, the average width being about two miles. It is, so to speak, a narrow submarine ravine winding between mountains, which, in the great upheaval that produced the American continent, remained partly submerged. This ravine, full of water, with a depth in many parts of more than 500 fathoms, constitutes the channel; the sloping side valleys, where the depth of water is less, form sounds, inlets, and harbors with safe anchorage. The abortive continent above-water presents the aspect of a chaos of peaks, ridges, and glaciers that tower up to heights of 1500 to 3000 feet, with a few lofty summits, like those of Cathedral Mount, Mount Jarvis, and Mount Burney, which attain respectively 3836, 4570, and 5800 feet above the level of the sea. The advantage which Smyth's Channel offers to navigation is calm water like that of a lake, whereas the course in the ocean outside is almost always rough and dangerous. On the other hand, it is impossible to navigate in this sinuous labyrinth of islands except by daylight, and consequently the swift mail steamers never pass that way. The only regular line of passenger steamers that follows this course is that of the "Kosmos" Company. The ships of the other lines all pass through the Strait of Magellan, or, in certain circumstances on the outward voyage, through the southeastern portion of Smyth's Channel, and then out again, through Trinidad Channel, back into the Magellan Strait. All sailing vessels of course have to round the terrible Cape Horn.

So then we enter the channel, and the panorama of cloud-land and mountain begins to unfold itself before our eyes. The clouds are massed over the mountains in grand strata of black, slate gray, and silver. In the middle of the landscape, over the eastern horizon, a brilliant blue rent in the sky reveals the golden lining of sunlit clouds. Gradually the trees on the islands become visible, with their rich green foliage. Toward noon we reach Middle Island, a conical peak 2200 feet high, standing in the middle of the channel. The banks on either side are green,

wooded mountains, with here and there an isolated patch of snow on the higher points, which are upward of 2000 feet high. From the summits the water trickles down in threads of white foam that peep out amidst the yellow or black green verdure that clothes the red-brown rocks. As we advance, the water-falls and patches of snow become more frequent, and small blue glaciers appear on the heights. The weather continues cloudy. The water is of a yellowish-green tone; the hills in the foreground are of a dark green color, almost black, down to the water's edge, while the upper peaks seem to be covered with yellowish moss and lichen. In the distance are the silhouettes of islands and mountains of sombre indigo blue, and overhead is the ever-changing expanse of gray, black, and silvery clouds.

At one o'clock a great event happens to break the monotony of our existence on board. The fat pig that was put on board when the *Osiris* left Hamburg, and which has been living happily in its stall ever since, is slaughtered by the cook, the body plunged in boiling water, the bristles scraped off, and the carcass suspended from the shrouds, ready to be cut up. At the same time the holy-stoning of the fore-deck begins, and three amateur photographers feel tempted to "snap off" negatives. The bewitching Olga, the diminutive baby boy Quito, and various groups also request the honors of the camera, and so the afternoon passes gayly. Meanwhile, as we advance, the scenery becomes more picturesque and grand, the mountains on either side rising to heights of 2000 feet, and snow fields and glaciers becoming more frequent. To our right a buoy marks the spot where the steamer *Cotopaxi* was wrecked in the autumn of 1889, and then we enter the English Narrows, one of the prettiest parts of the channel. Here the passage is scarcely a quarter of a mile wide, and the ship threads its tortuous way through a maze of innumerable small islands, all covered with a most luxuriant growth of trees, plants, flowers, and ferns. We seem to be passing through a series of small lakes, and every moment one wonders how the ship will find its way out of the hills, islands, and trees that seem to form an impenetrable barrier on the horizon. The English Narrows are certainly one of the most beautiful landscapes in the world, and no words can convey an ade-

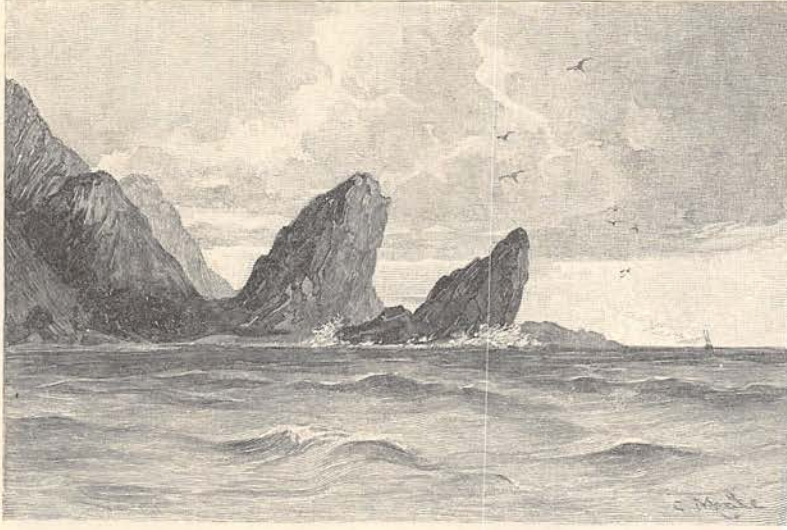


SHIPPING ICE IN GRAPPLER REACH.

quate impression of this charming and lifeless solitude. Finally we wind out of the Narrows, and toward sunset, at five o'clock—the days being very short in these extreme southern latitudes—we approach Eden Harbor, latitude  $49^{\circ} 9'$  south, sweep round the wreck of the Hamburg Pacific ship *Hermia*, which was lost in 1888, and remains with its stern, masts, and funnel above-water, and anchor a few hundred yards ahead of this gloomy monument of maritime disaster. Near Eden Harbor, in the trees, we see some smoke, which indicates the camp of some nomad Indians, who paddle out to the

ship's side after dinner, and exchange some otter-skins for knives, matches, and biscuit. The next morning, in piercingly cold weather, we left Eden Harbor at six o'clock. The night had been very cold; some snow had fallen; all the hill-tops were covered, and the sharp edges of the black rocks alone appeared in relief, forming a net-work of intricate design over the white ground. The contrast of the black rocks and the white snow is now the chief feature in the rugged landscape, the more so as trees are becoming rarer, and no longer cover more than the lower rocks along the water's edge.





CAPE PILLAR.

We then deviated a little from the direct course, and passed through Grappler Reach, in order to lay in a stock of ice. We halted in a cove opposite Averell Point, where there was much drift ice floating in large and small masses; a boat was lowered, and some of the finest pieces were captured, enchained, and hoisted on board amidst the cheers of the passengers, who watched with delight the safe shipping and the breaking up of the huge glittering crystal blocks with crow-bars. Two large whales also paid a visit to us, and blew columns of spray high into the air for their own relief and for our amusement. Then we steamed on again carefully through much drift ice, which slips down the mountain-sides from the numerous glaciers, and remains floating in great abundance in this part of the channel. At Penguin Inlet we beheld a large glacier. At the entrance of Brassey Channel we all admired the marvellous scenery of range after range of mountains, rising 2000 and 3000 feet on each side of the waterway, one behind the other, like stage scenery. Between two and three in the afternoon we passed the entrance of Trinidad Channel; the sun was shining brightly; masses of silvery clouds hung over the horizon; the snow glistened on the distant ridges, and deep shadows hovered over the bold mountains in the middle distance. Our excellent captain, when

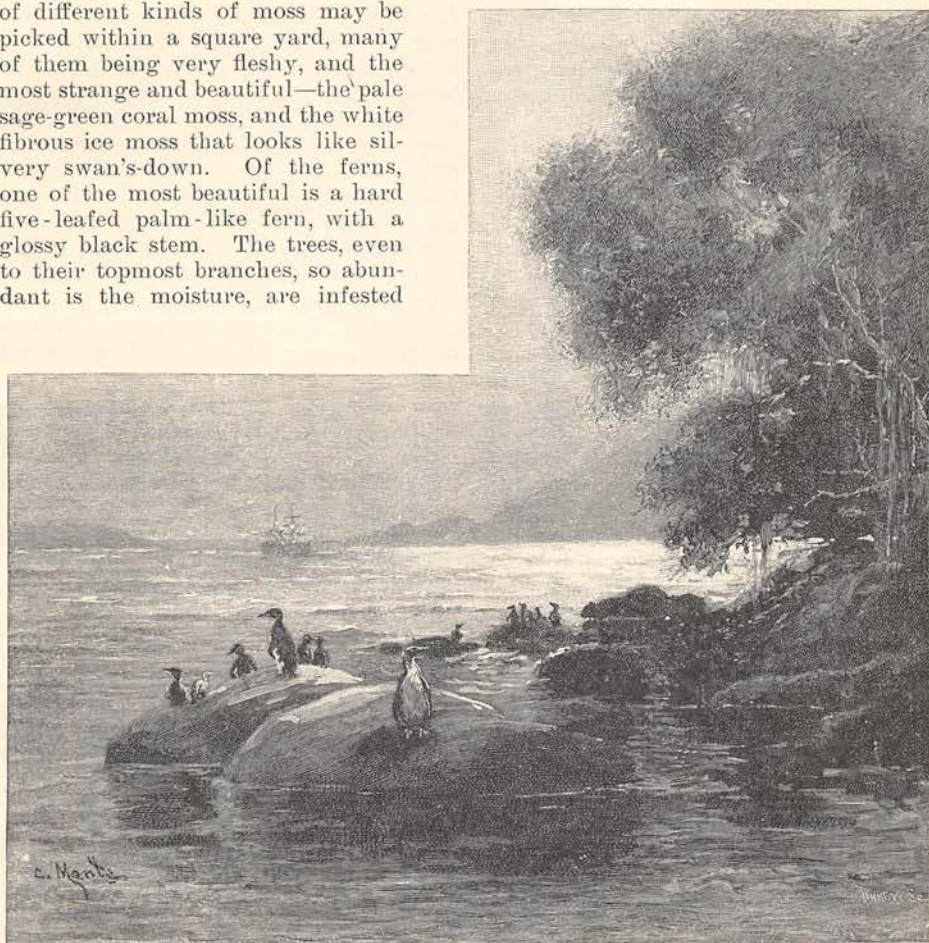
his duties did not call him to the bridge, was busy washing in clever water-color sketches of clouds, mountains, and water, and our amateur photographers were sadly distracted by the innumerable points of view that presented themselves in uninterrupted succession as the *Osiris* steamed along. Soon we reach Molyneux Sound, latitude  $50^{\circ} 16'$  south, the ship swings round, we steer up the inlet, guided by two buoys, and at half past three we anchor, at a distance of some 500 metres from land, in a magnificent harbor, with green hills and islands all around us, and in the distance, toward the main channel, a range of snow-capped hills, on one of whose ridges a conspicuous rock suggests the form of the Egyptian Sphinx head.

Our being obliged to anchor at this early hour gave us an opportunity of going ashore. Boats are lowered, guns and cartridges produced, and we form parties to go fowling, sketching, and botanizing. The captain and myself land at the foot of a pointed hill. The water, of crystalline purity, reveals gigantic sea-weeds floating in its depths, and at the bottom a bed of black and white stones and bowlders unworn by restless flux and reflux. On the surface, too, are large crimped leaves of amber-colored weed. We land without difficulty on some smooth black rocks speckled and striped with white.

Rock of this description is visible all along the water's edge, rising to a height of two or three feet, at which point the vegetation begins, and climbs up the hill to varying heights. Such is the nature of all the islands in Smyth's Channel—masses of rock rising out of the water, covered with vegetation of trees, moss, and lichen, the rock in contact with the water being generally coated with long mussels, which form the only food on which the nomad Indians can count. The variety of plants is considerable, forming, with the trees, an impenetrable mass of vegetation. The ground drips and oozes with moisture, and at every step your feet sink in an alarming manner, not into soil, of which there is little, but into a soft carpet of moss, leaves, rotten wood, and decaying vegetable matter. A score of different kinds of moss may be picked within a square yard, many of them being very fleshy, and the most strange and beautiful—the pale sage-green coral moss, and the white fibrous ice moss that looks like silvery swan's-down. Of the ferns, one of the most beautiful is a hard five-leaved palm-like fern, with a glossy black stem. The trees, even to their topmost branches, so abundant is the moisture, are infested

with a luxuriant parasitic growth of moss and lichens. The undergrowth is composed of low-growing shrubs with hard varnished leaves, varieties of myrtle, a small-leaved berry-bearing plant called *chaura*, a plant with a pale green prickly leaf like holly and a delicate carmine bell flower tipped with white, and a beautiful plant of the azalea family, with an exquisite rose-colored bell flower with golden petals. In this virgin paradise the only living things to be seen are otters, colibris, white geese, black ducks, and gulls. Occasionally a huge albatross swoops overhead, and in some of the creeks are penguins and seals.

The evening in Molyneux Sound left in our minds delightful memories. The



MOLYNEUX SOUND.

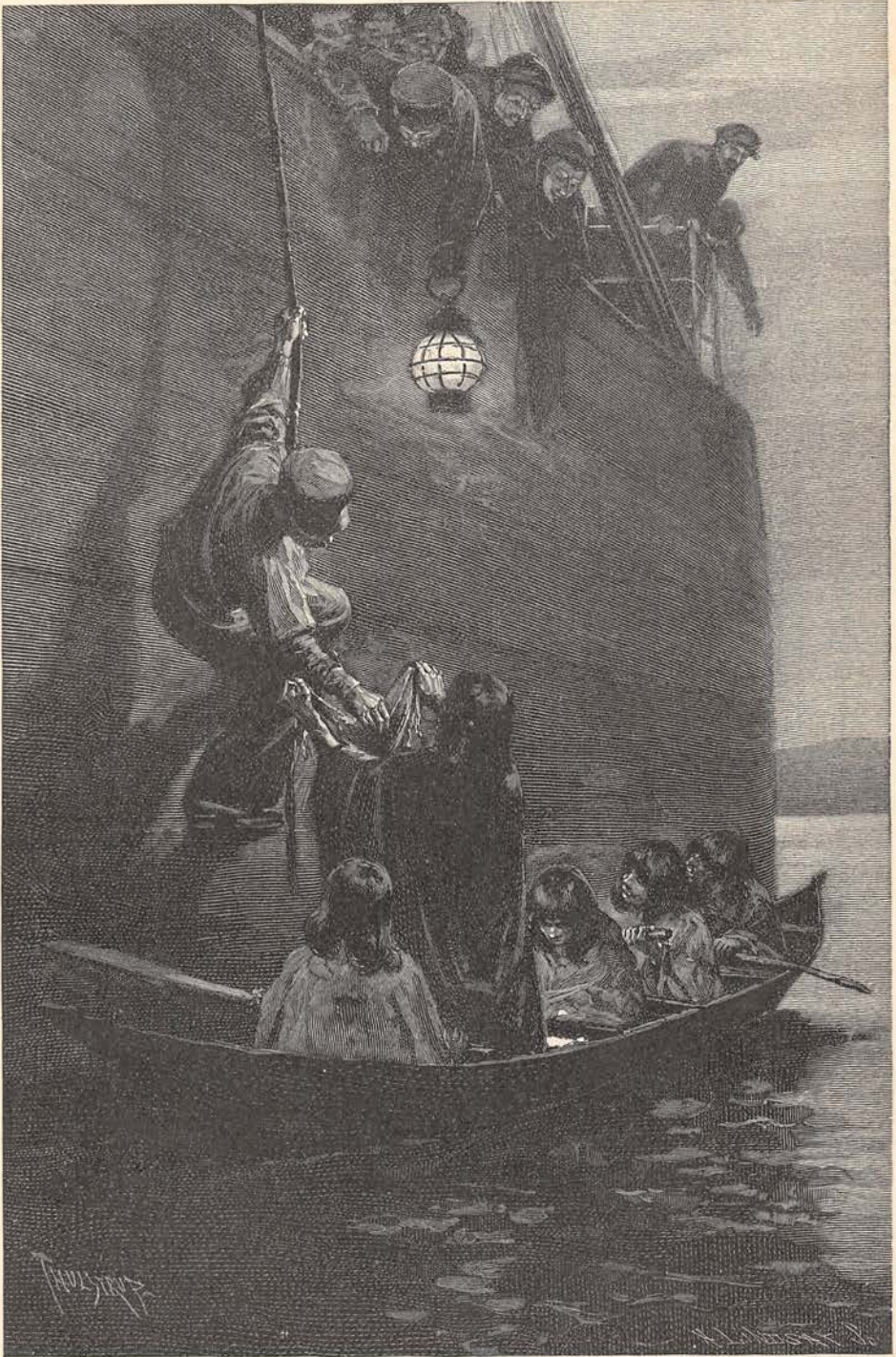
sun set in golden splendor in the wind-swept sky, the stars shone forth, and the moon rose in the heavens, shedding a long train of shimmering light over the water, whose mirror-like surface reflected in deep black shadows the surrounding islands and hills and the light cloud forms that hung above amongst the stars, each of which had its golden counterpart in the still water. Happily the icy south wind that blew so sharply in the afternoon did not reach us in this sheltered anchorage; but still the night was bitterly cold.

The next morning we started at 3 o'clock, and passed through the fine scenery of the Guia Narrows, the grand landscape of the Victory Pass and of the Sarmiento Channel, with its imposing peaks, behind which rises the towering snowy Cordillera of the main continent. The transparency of the atmosphere was extreme, and at a great distance we could see every wrinkle and vein in the snow fields, and every thread-like rivulet that fissured the rocks and precipices. At 6.30 we anchored off Long Island—latitude  $52^{\circ} 20'$  south—in a broad smooth bay, and after dinner we organized a raffle and a concert, in which we were aided by the crew's "drum, gong, and discord band," proudly entitled the "Bremer Stadtmusikanten," and composed of an accordion, a comb, two saucepan lids for cymbals, a tin bath for a drum, and a wooden tub, which, when skilfully scraped with a broom handle by an able-bodied seaman, gave forth sounds resembling those of the bass-viol. After this, two of the sailors, quaintly disguised with blankets, visited us in the rôle of the "Familie Lehmann." This common German name, the equivalent of the English Smith and Jones, has been given by the German sailors to the nomad Indians of Smyth's Channel. Every Indian man is Herr Lehmann, and his wife, Frau Lehmann. Curiously enough, while we were laughing at the strange antics and gibberish of our two sailors, the cry was heard from the stern, "Eine echte Familie Lehmann" (a genuine Lehmann family) is coming. We all hurried to the lower deck, and there alongside on the port side was a long bark canoe with two men, three women, and four small babies on board. The canoe was double-ended, and had a keel, ribs, and cross-ties of wood, over which were stretched sheets of bark, the whole bound together with leather

thongs and grass ropes, and caked with clay. In the middle of the canoe, on a basis of clay, a fire of twigs and branches was burning. At one end were two savage-looking men, with brown skins not unlike those of the more swarthy Chilian *Cholos*, long black straight hair, and no clothes except an old blanket over their shoulders. On the other side of the fire were an aged woman, whose occupation it was to perpetually bale out the boat with an old coffee-pot, and to keep the fire supplied with wood, and two younger women, each with a child slung on her back and another huddled at her feet. These women, like the men, had only a summery blanket thrown over their shoulders, and each worked a paddle. The two younger women were finely formed, and in all the bloom of their firm youthful flesh. Their round and broad faces were regular in feature, their teeth dazzlingly white, and their eyes brilliant and large. Indeed they were quite beauties in their way, and their laughing faces were pleasant to contemplate as they looked up at us through the aureole of long black hair straggling over their foreheads and hanging over their shoulders. A rope was thrown to the canoe, and one of the men held it, while the other and the women kept their craft clear with paddles and poles. Since some of them were kidnapped a few years ago, and carried off to Europe, where they were exhibited at raree-shows, these Indians can with difficulty be induced to come on board the ships. They feel distrustful, and keep their canoes at a safe distance, ready to push off at a moment's notice and at the slightest alarm. The bulwarks of our ship were by this time lined with passengers and crew leaning over and craning their heads to see the Lehmanns, who were crouching below in their unsteady canoe, with their savage or laughing faces upturned, and lighted by the intermittent glare of the fire, and by the dim flame of a ship's lantern. Meanwhile one of the sailors, holding on with one hand to a rope, and clinging with his feet monkey-like to a slight ledge on the ship's side, used his free hand to pass things from the ship to the canoe and *vice versa*. Then began conversation and trading, both of a very primitive nature.

"Good-evening, Frau Lehmann. How do you do?" cried a voice from the ship.

"Frau Lehmann, si," replied the Ind-



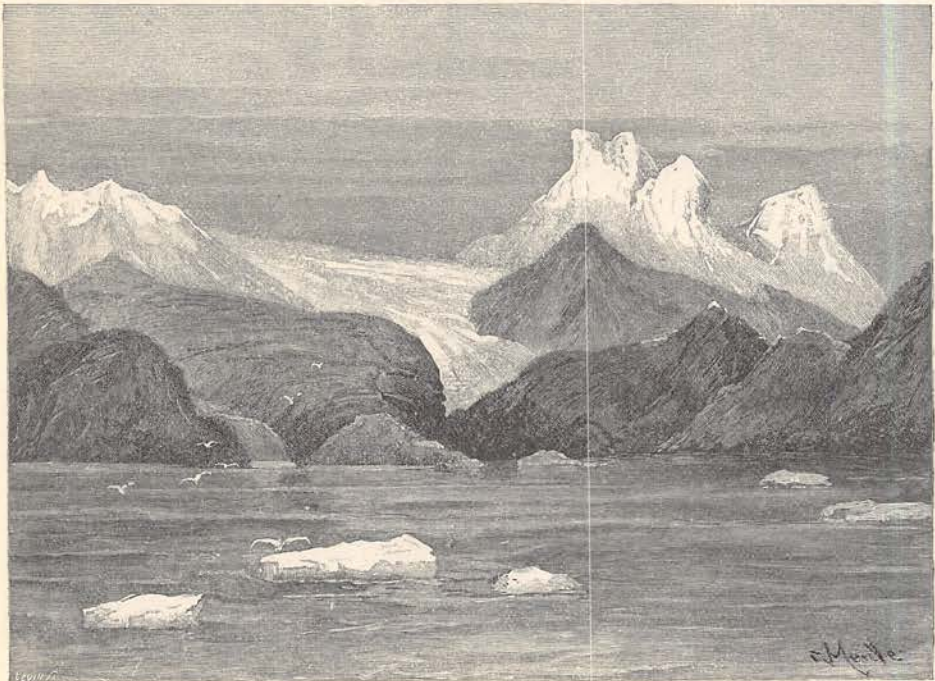
INDIANS VISITING THE SHIP AT NIGHT.

ian ladies, throwing their heads back and laughing like coy children. "Frau Lehmann, si, si, *galletas, galletas*, tobacco, tobacco."

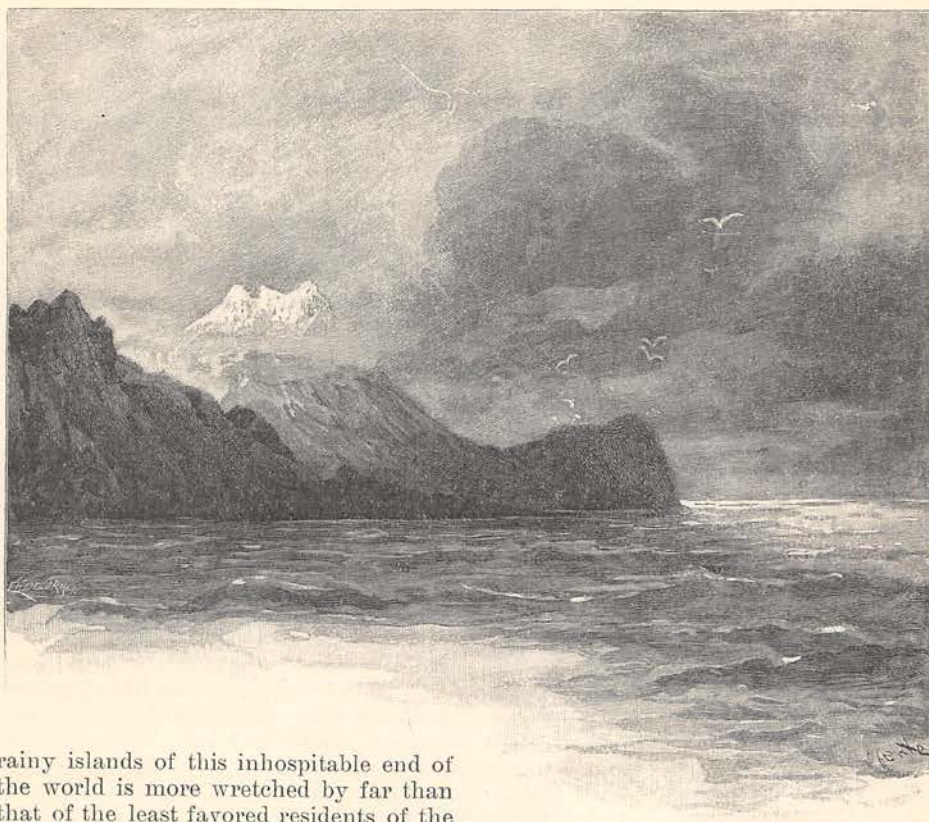
In reply to this demand for biscuit and tobacco, voices from the ship cried, "Skins, skins."

And then from the canoe rose many unintelligible sounds, terminating with the few English and Spanish words which the Indians have learnt from passing ships: "cachimba" (tobacco pipe); "cuchillo" (knife), the English equivalent "knifey," "tobacco, tobacco," and "galletas, galletas." Knives, biscuit, and tobacco are the articles which these Indians desire most ardently, and in exchange they offer bone spear-heads, lassos, bows and arrows, grass baskets, and sometimes otter-skins. We made a few trifling exchanges; gave them a sack of broken biscuit, some cigars, some old clothes, and a few colored handkerchiefs; and then they paddled away in the rain and gloom, after repeating our farewell of "Adios" and "So long," and singing a soft nasal lullaby. This visit of the Indians in the midst of these vast mountain and island solitudes was pictu-

resque and impressive. The moon had gone down, rain was falling, and the drops ruffled with innumerable small eddies the glassy black wavelets that made the frail bark canoe roll and lurch; the fitful glare of the fire now revealed the faces of the Indians, with their white teeth and shining eyes, and now left the boat and its occupants in shadowy mystery; our seaman clinging to the black ship's side formed a fantastic silhouette against the murky background of the night; and the row of heads leaning over the rail, and all looking down, must have presented to the Indians odd effects of foreshortening, which, we may be sure, they failed to appreciate. The Indians seen in Smyth's Channel consist of a few nomad families, who live two or three together, and own a canoe, and a tent composed of a few poles covered with skins. Their only arms are bows and arrows; their chief food, mussels; and their scanty clothing, such old rags and blankets as the charity of passing ships provides. They are, I suppose, the poorest and most miserable specimens of humanity on the face of the earth, and their existence in the cold



GLACIER, LATITUDE  $53^{\circ} 21'$  SOUTH, LONGITUDE  $72^{\circ} 55'$  WEST.



rainy islands of this inhospitable end of the world is more wretched by far than that of the least favored residents of the northern arctic regions.

At five o'clock the following morning, April 28th, we started from Long Island, and after three hours' steaming we reached the end of Smyth's Channel, left the ocean and the bold and curious headland of Cape Pillar to our right, and entered the Strait of Magellan. The character of the landscape now changed entirely. The green islands and tree-clad hills gave place to brown, rugged, and barren rocks, behind which rose high peaks covered with snow. Cape Pillar, latitude  $52^{\circ} 42'$  south, longitude  $74^{\circ} 43'$  west, is 310 feet high; the peaks on our left hand are over 3000 feet; the peaks on our right, on Desolation Island, are equally high; while on Santa Ines Island the loftiest summit, Mount Wharton, rises to a height of 4350 feet. In our passage through the Strait of Magellan, generally obscured by rain and mist, we were favored with exceptionally fine weather. In the afternoon, as we passed Glacier Bay, we had a splendid view of a dazzling bluish-green ice field embedded between craggy and barren hills, with a little vegetation along the

CAPE FROWARD AND MOUNT VICTORIA.

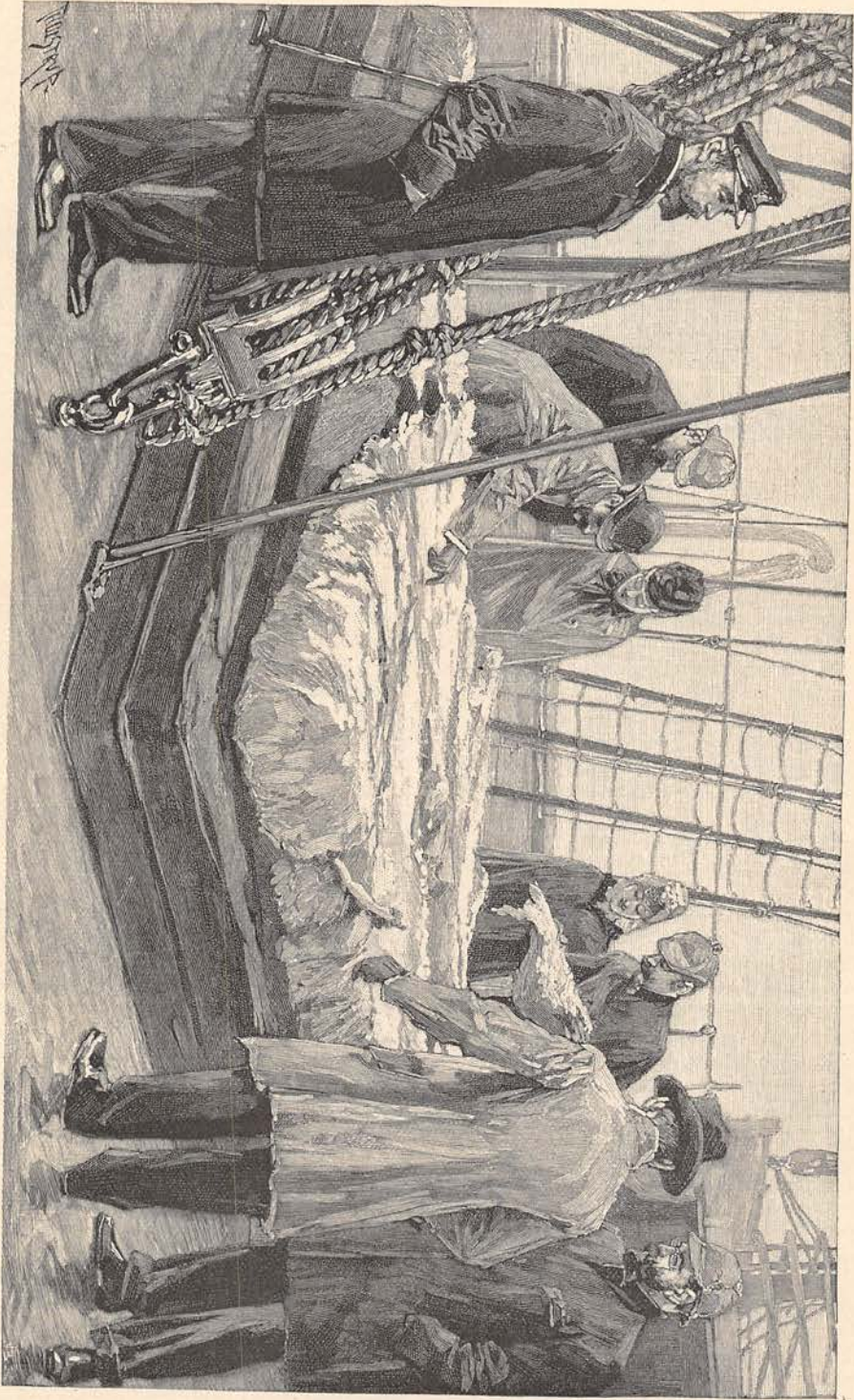
water's edge alone, and surrounded by towering snow-clad mountains from 3000 to 4000 feet high. On the opposite shore we admired a still vaster glacier which had recently begun to slide, and remained a terrific wilderness of jagged and chaotic blocks. In this region of wild mountains, snow fields, and glaciers we witnessed a marvellous sunset. The sky overhead was clear blue; on the eastern horizon a few light clouds; on the western horizon very heavy clouds, with a central brasier of molten gold, in front of which the mountains stand out in successive planes, the nearer ones of deep indigo hue, the more distant ones bathed in an almost transparent haze of bluish rose, passing into the rich tones of *gorge de pigeon*. As the sun sinks, the golden light vanishes, the heavy clouds become velvety black, with an under fringe of bright ruby red, while a ruby glow suffuses the opposite eastern sky, tips with

rose the distant snow peaks, and casts ruddy reflections over the glassy mirror of the calm water. The same evening, by moonlight, we passed the black and barren silhouette of Cape Froward, latitude  $53^{\circ} 55'$  south, longitude  $71^{\circ} 19'$  west, the southernmost point of all the continents of the world, and the extreme end of the great mountain range of the Andes. Cape Froward itself measures only 1200 feet, but the summit of Mount Victoria, immediately behind it, rises to 2900 feet, which figure may be taken as the average of the higher summits seen in the Strait of Magellan in the grand stretch of mountain and water scenery between Cape Pillar and Cape Froward. The Strait of Magellan from Cape Pillar, latitude  $52^{\circ} 43'$  south, longitude  $74^{\circ} 41'$  west, to Cape Virgins, latitude  $52^{\circ} 20'$  south, longitude  $68^{\circ} 20'$  west, measures 317 miles; in the narrowest part the width is two miles, and in the broadest reaches from 10 to 17 miles.

From Cape Froward onward to Punta Arenas the coast rocks and the mountain peaks diminish in grandeur, the highest nowhere exceeding 2000 feet, and most of them being much lower. We reached Punta Arenas in the night, anchored, and slept happily until daybreak, when we blew the steam-whistle to warn the inhabitants of our presence. At length the captain of the port came on board, and we were at liberty to go ashore; but the landing was difficult and dangerous: owing to the roughness of the water and the primitiveness of the moles, we had to be hoisted out of the ship's boat with ropes. The town does not offer much to interest the visitor. In the bay are two coal hulks, an American schooner at anchor, several small coasting schooners used for seal-fishing and local service, and a Chilean survey steamer. To the north of the town is a government depot, with half a dozen buoys lying on the sandy shore, and looking from a distance like gigantic spinning tops. Still further to the north is an old light-house tower, painted red and white, which was used by the German astronomical mission at the time of the last passage of Venus. Beyond the light-house the land becomes flat, and stretches out into the water, forming a long sandy spit, with a conical beacon on the extreme point. Hence the name of the settlement—Sandy Point. The town is of very recent origin, but it has grown rapidly, and now has a population of 922 souls, the whole Terri-

torio de Magallanes having a population of 2085, of whom about 800 are foreigners of various nationalities, the chief capitalists and business people being German or English. The houses are solidly built of wood, the best of them having corrugated iron roofs. Most of the buildings are painted white; some have walls and roofs of the same deep red color; the roofs are, of course, sharply pointed to throw off the rain. The general aspect of things there is new and prosperous. The principal business houses are German. Punta Arenas is a free port, and the great centre for supplying the sheep farms and various settlements on the opposite islands of the Tierra del Fuego group, southern Patagonia, and the Falkland Islands. In these rainy and apparently inhospitable regions the great industry is sheep-farming. There is also much gold-dust in the rivers and torrents, and silver and coal mines in the neighborhood, but hitherto they have not been worked with success. It is curious to note that the shepherds who come to Punta Arenas to buy goods and provisions often pay in gold-dust, which they gather in the streams near which their flocks are feeding. Skins and furs form a second important industry; seal and sea-otters abound in the various channels between the islands of Tierra del Fuego and of the Strait of Magellan, and three times a year the Patagonian Indians ride into Punta Arenas to sell the produce of their hunting excursions, namely, puma, ostrich, guanaco, and silver-fox skins. The exportation of furs is an important business here, and the port, standing as it does in the regular steamer track, is destined to greater and greater prosperity. When we returned on board we found two Danish fur dealers displaying their stock of merchandise, and endeavoring to do business with the passengers. The skins were spread out over the hatches on the aft deck—ostrich, guanaco, seal, otter, puma, fox—looking soft and warm, and interspersed with a few Indian curiosities, such as bows, arrows, spears, lassos, shell-work, spurs, models of bark canoes, and the terrible *bolos*, which the Patagonians and their pupils, the Argentine *gauchos*, use to hunt the ostrich. The *Osiris* landed our mail-bag and a dozen sacks of potatoes, and took on board a quantity of ostrich feathers to be delivered in Havre, and then proceeded on her way.

At breakfast that morning we noted



FUR DEALERS ON BOARD AT PUNTA ARENAS.





PUNTA ARENAS.

with pleasure that pig's feet did not appear in the *menu*; the wretched animal slaughtered at the entrance of Smyth's Channel had been obtruding its memory upon us in various forms twice a day regularly since its decease, and the previous evening it had appeared in the euphonious form of "Schnautzen und Pautzen." Happily this was the end of the beast, whose place was henceforward taken by good beef and Tierra del Fuego mutton, shipped at Punta Arenas. So we went steaming on through cold and scudding rain clouds, in choppy and snarling water, between the low coast hills of Patagonia and Tierra del Fuego. As we pass Elizabeth Island, about twenty miles from Punta Arenas, we catch a glimpse of Sarmiento Mountain, distant ninety-six miles, in the southern part of Tierra del Fuego. On reference to the chart, we find that this mountain, covered with perpetual snow, 7330 feet high, is the highest point of Tierra del Fuego. In the same southern section of the island is Mount Darwin, 7000 feet high, and many other rugged, snow-clad peaks and glaciers, from 3000 to 4000 feet. All this part of the world is terribly inhospitable and dangerous, and the English Admiralty Chart is full of ominous notes and warnings. At Ushuwaia, in the Beagle Channel, latitude  $54^{\circ} 49'$  south, longitude  $68^{\circ} 18'$  west, says the chart, is an English mission station, "which

may be used as a place of refuge for shipwrecked mariners." The same chart gives directions and advice in case of disaster, which makes one feel the horror of these waters, and adds, "A great change has been effected in the character of the natives generally, and the Yaghan natives from Cape San Diego to Cape Horn, and thence round to Brecknock Peninsula, may be trusted." The Yaghan, or Fuegian, Indians are the same as we saw in Eden Harbor and Molyneux Sound. They are by no means numerous, and all more or less savage, more or less miserable, and very few, I am told, as good-looking as the family that visited us in Molyneux Sound. They are all nomad, and wander from island to island in the Tierra del Fuego group, the Strait of Magellan, Smyth's Channel, the western coast of the continent, and the islands of the archipelagoes of Chonos and Guaianeco. Indians of the same race are also found in the Chilian province of Chiloe, but their physical aspect in those parts is much better, and their way of living much less rude than that of their southern brothers.

That evening we anchored off Santa Marta Island, nocturnal navigation in the Strait of Magellan being impossible, owing to the absence of light-houses and the intricacy of the course. The next morning, April 30th, we continued our journey, with a stiff head breeze, through

light green water, the land on either side being low. At Punta Delgada we note Wood's Settlement, an important sheep farm belonging to an Englishman. The runs, I was told, support more than 80,000 sheep. Once a year a steamer from London brings provisions for the colony, and takes the wool back to England. But what a forlorn and desolate place to spend one's life in!

The time now began to hang heavily on board the *Osiris*. The fine scenery was left behind, and in the afternoon we passed Dungeness Beacon, crossed the Sarmiento Bank, and so out into the Atlantic, leaving Cape Virgins to our left, and after five days' navigation over very high and rough sea, with steam and sail and a strong northwest wind to aid us, we reached Montevideo on the morning of May 6th. The *Osiris* is a good stout ship, but not a rapid one. Nevertheless I thoroughly enjoyed the five weeks I spent on board, and it was not without regret that I said good-by to Captain Carlsen and all his warm-hearted and amiable passengers, and went ashore to continue my wanderings in the region of the great plains, the *immensas llanuras* of the basin of La Plata. The voyage was long—the course followed measured more than 4000 sea miles—but it would be difficult to find elsewhere a stretch of coast offering such variety of physical and ethnographical features. I had started from



PATAGONIAN INDIAN WOMAN.

the tropical harbor of Callao, from the latitude of the coffee and cocoa plant, and skirted the strange rainless regions



FUEGIANS.

of northern Chili, with their unparalleled wealth of salts and minerals that make these barren deserts and arid mountain wastes a veritable chemical laboratory. From Caldera southward to Valparaiso I had seen the mixed zone abounding in minerals, but at the same time fertile and adapted for agriculture. Then followed the purely agricultural zone of Chili, with its mild and delightful climate; the coal fields of the littoral of the provinces of Arauco and Concepción; the rainy valleys of Valdivia, Llanquihue, and Chiloe, with their rich soil and luxuriant woods; and finally the zone of woods and fisheries, which begins at latitude  $43^{\circ} 30'$ , and extends to latitude  $57^{\circ}$  south. Here the great central valley, which plays so important a rôle in the topography of Chili, disappears, and the coast cordillera, whose mountain ranges have accompanied us all down the littoral from Peru, becomes transformed into the archipelagoes of Chiloe, Guaytecas, Guaianeco, Magellanes, and Tierra del Fuego—mountainous islands, and for the most part impenetrable solitudes, given up to seals, otters, wild fowl, and Indians. At Cape Froward the main Cordillera de los Andes crosses our route, and becomes transformed into the high lands and valleys of Tierra del Fuego, parts of which are destined to become a great cattle country. Then the region of rugged rocks and snowy peaks ceases, and between Punta Arenas and Virgins Cape we see the southern end of those steppes and pampas which stretch away northward up to the primeval forests of Brazil, and constitute the great natural advantage and agricultural wealth of the Atlantic water-shed of the Andean chain, and of the Argentine Republic, Paraguay, and Uruguay. The rapid panorama of the physical features of the coast was accompanied by a scarcely less interesting glimpse of men and manners. In indolent and tropical Peru the best workers are negroes and Chinese; in the mineral zones the Bolivian and Chilian Cholos are unrivalled in endurance and special skill; in Valparaiso we find Englishmen and Germans controlling the commerce of the country, and organizing exportation and importation; in the lower and more rainy province of Valdivia we might almost imagine ourselves in rural Germany: through the island solitudes, with their forests and glaciers, the most miserable of wild Indians alone eke out a scanty and arduous existence; and then, on the east side of the Andes, we once more find Anglo-Saxon energy settling and transforming the land, and creating wealth and civilization.



PATAGONIAN INDIANS.