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EMERALD LAKE IN ROCKY MOUNTAINS

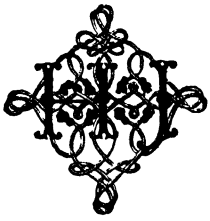
ROUND THE BRITISH EMPIRE

BY

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WITH 24 FULL-PAGE ILLUSTRATIONS



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PREFACE

THE two young people who figure in this narrative were so fortunate as to learn the geography of some portions of the King's dominions by travelling with their parents round the world.

They kept a 'log' which was subsequently written out by their father with the interpolation of a certain amount of information regarding the history, commerce and natural features of the countries which they visited. It is hoped that the record of incidents which came within the experience of the young authors may give to the reader the feeling that he, in some measure, is participating in the joy which their travels brought to them.

In republishing their diary the opportunity has been taken of incorporating experiences gained during a more recent tour and of bringing all facts and figures up to date.

A. H.

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CHAPTER I

WINTER TO SUMMER IN TWENTY-ONE DAYS

'DO you know how all these earls and dukes got their land?' Demagogus asked the company in a third-class smoking carriage. 'Well, I'll tell you. They all came over with William the Conqueror. He stole the land and gave it to them. He had no right to it; no more had they. They were robbers, that's what they were.' 'And who were your ancestors?' Pater asked. 'Englishmen, I hope,' replied the man, who was a full-blooded Dane from one of the 'bys' to the north of Great Yarmouth,—Ormesby, Scratby, Hemesby—very likely rejoicing in the name of Thurtle, or Thurkettle—the kettle obtained by Thor from the sea-god Ægir, for the brewing of beer for the gods—a name common in those parts. The chieftain, Thurketill, was Earl of East Anglia under King Canute; hence the frequency of the name. 'Yes, Englishmen of a kind, no doubt.' 'What! you never heard of the Danes? Well, it makes very little difference. Had your ancestors been Saxons or Normans it would have come to the same thing. They were all pirates of sorts.' Even the Romans could not reach Albion without crossing the sea,

although we have always suspected that they found it more difficult to conquer the Channel than to overcome Britain. Pirates of sorts, whatever their race, but hardy, enterprising sources for the English people! The blood went tingling through the veins of Saxons and of Northmen as the salt spray filled their lungs; among the qualities which distinguish their successors is still a readiness to hazard everything in searching for and settling in new homes; and still our race is marked by an ineradicable love of the sea. An Englishman's heart goes out with every ship which spreads its white wings to the easterly breeze. As he sees it sailing down the Channel, the spirit of Raleigh, and Drake, and Hawkins possesses him, and he, too, longs to try his fortunes in the New World. What a wonderful day it was for the writers of this log when they found themselves on board the beautiful, shapely monster which lay at anchor in the Thames! All the pleasure of exploration was to be theirs, and none of the peril; all the novelty, and none of the discomforts. What interest there was in exploring this marvel of convenience, which could carry several hundred passengers without depriving them of their accustomed exercise, or cutting off a single luxury, except their morning paper and the daily post.

We found some strangers who were on a visit to the ship peeping into our cabins. 'How snug!' we overheard a girl remark to her companion. 'Don't you wish you were going?' There is something inexpressibly snug in the aspect of a cabin. One cannot help thinking that it must be very cosy to be tucked away in so small a space, with all sorts of devices to make the most of every inch. An ordinary bedroom is by comparison as unhomely as a barn or a church. The blanket does not slip out from the back of one's neck as one lies in one's berth at night.

To the Mater's great relief, too, we found our cabin trunks neatly stowed beneath our berths, and heard that our large boxes were safe in the hold. There had been a difficulty. Although they were sent off several days before, we had not been able to ascertain that they had reached the ship. We had explained to Mater that it didn't matter, but she seemed to have the luggage on her mind. We even pointed out the advantage of leaving it behind. We were wearing all the clothing we could carry, for it was a bitter January morning, and since within a fortnight the ship would take us to the tropics, why shouldn't we shed our garments one by one until we crossed the Equator in so much as was left of durable, or endurable wool? It would have been much less trouble than trying to delude our fellow-passengers into the belief that we were provided with an endless variety of morning, afternoon, and evening toilettes; although it might have robbed us of much of the interest of a modern sea-voyage.

The ship did not look so large as Mater had expected. She had had dreams of the 20,000 ton leviathans which she had seen lying in the Mersey. Our boat was only 5,500 tons. But Mater grew satisfied as days wore on, and she gazed along its seventy yards of saloon deck and its long line of bulwarks stretching for 486 feet. Better still when, after staying at a port, we approached it in a rowing boat and looked up at its long hull, its main-deck and hurricane-deck, its rows of boats and ventilators, its four masts, and two great funnels; but best of all when each port-hole was a gleaming eye and the electric lights made a radiant space beneath the awning.

We did not hear the order given, but the ship slipped away from her moorings, just gliding off of her own

volition, without any shouting or confusion. The captain speaks down a speaking-tube or touches an electric signal, the engineer moves a crank, and the engine which hauls up the anchor is filled with steam. What a contrast to the shouting of orders and song round the capstan of Raleigh's days!

Down the muddy Thames, with its low banks, and unsightly powder-magazines and petroleum-stores. Night falls early. A bright ray of winter sunshine makes the red sails of the barges glow against the greyness. The wind is keen, but we cannot bring ourselves to leave the deck; it is such a glorious experience to listen to the splashing of the waves against the bows, to smell and taste the spray, and to feel that, since all hedges, trees, and houses are removed, there is air enough to breathe, an immensity of space about one. The lights of Margate, Ramsgate, Dover, Folkestone gleam from the shore. We wait until we have passed Dungeness, and then we pack ourselves away in our two snug cabins. Hitherto the great ship had not taken the slightest notice of the Channel waves. For all the effect they produced, they might have been beating against a pier. But after we passed the Isle of Wight we met with larger seas, and the motion of the vessel could only be overlooked by diligent sleeping. On board ship one falls into a semi-hypnotic condition. The movement which wakes one up lulls back to sleep again. Every half-hour the bell rings at the bow, one, two, three, to eight bells, marking the half-hours of each watch. A sailor cries, 'All's right; the lamps are burning bright—for'ard!' to be answered by a man at the stern. You may be convinced that you have not once missed the cry of the watch, yet there is something so soothing, so reassuring, in being thus taken care of that it helps you to

sleep. The nights are eventful; there is rather much in each of them, but you rise feeling that time has passed quickly.

Plymouth at 2 p.m.—24 hours, 260 miles from Tilbury. It was pleasant to rest for an hour or two. As we steamed out of the Sound we met a heavy sea. There was a hurried dispersion of the passengers to their several cabins. 'We shall be at Gibraltar in five days. We will meet again there,' was heard on every side. We had a gloomy foreboding that the intervening days might hang heavy on our hands. But the sea was somewhat calmer in the morning. 'Do you know, Pater, I think I *will* have a chop for breakfast,' Puer said, as he sat up in his berth. Imagine our surprise at finding ourselves, on the second day out from Plymouth, dancing on deck and strolling about in evening dress, the temperature that of an English May day, the dreaded Bay of Biscay as smooth as glass.

How busy we were in our idleness! The energetic entertainments committee sat in the morning. Concerts, cricket, sports were arranged. Dancing after dinner seemed to be so natural that it needed no arranging at all. We were fortunate in being surrounded with fellow-passengers full of high spirits and overflowing with good-humour, who intended to enjoy themselves and to do their best to give their neighbours a good time.

The fourth day we passed quite close to Cape St Vincent, and had a splendid view of the lighthouse and the old half-ruined monastery which crowns the cliff. A monk came to a window, but withdrew when we waved him a greeting from the ship. Blue waves breaking in the caves in the red-brown rock were changed into spray-clouds which reached half-way up the cliff. How much of European history has been

made, and made by England, in the bight between Cape St Vincent and Gibraltar! We tried to recall it. How Drake 'singed the King of Spain's beard' in Cadiz Bay in 1587; how at Cape St Vincent, on 'the most glorious Valentine's Day' of 1797, Jervis, Nelson, and Collingwood pounded the Spanish fleet of nearly twice their size; the battle of Trafalgar, and the Siege of Gibraltar. We tried to recall our history, but the cricketers would not let us—they said the match must be finished. After tea, when we had reached the very spot where the poem was written, Pater recited to us:

'Nobly, nobly Cape St Vincent to the north-west died away;
Sunset ran, one glorious blood-red, reeking into Cadiz Bay;
Bluish 'mid the burning water, full in face Trafalgar lay;
In the dimmest north-east distance dawned Gibraltar grand and gray;
Here and here did England help me; how can I help England?—say.'

GIBRALTAR

THE anchor was dropped at daybreak in Gibraltar harbour. Ships are not allowed to enter the bay during the night, and, therefore, since last evening we had been slowly steaming through the straits. There was the usual commotion on reaching port—all the passengers early on deck, and anxious to make the most of their day in the famous town. To our right the Rock towered more than 1,400 feet above the sea, like a great sphinx, crouching with its head towards Spain, its fore feet on the sandy stretch of 'neutral ground' which separates this British fortress from the mainland, its tail three miles off in the sea; on its eastern side the open Mediterranean, on the west the sheltered

'Bay of Gibraltar, as we name it, or 'Bay of Algeciras,' as it is called by other nations. The coast of Africa is fourteen miles away.

The Rock was much as we had been led to expect from photographs and pictures, but we were greatly surprised to find how little influence the English seem to have had upon the town, after nearly two hundred years of occupation. It was captured in 1704, by a combined English and Dutch fleet, under Sir George Rooke, and has been in our hands since the Treaty of Utrecht ended the 'War of the Spanish Succession' in 1713; but its houses and people are as thoroughly Spanish as ever. Our cab-driver was a voluble, smiling, gesticulating, mendacious Spaniard, who informed us that he spoke English, as well as four other languages. We found him fairly intelligible so long as he kept to Spanish. One minute he was swearing at the people who got in his way, shouting and cracking his whip in a frenzy of passion; the next he was greeting his acquaintances with a wreath of smiles, or bowing low and passing extravagant compliments to some olive-complexioned damsel. He might have been a member of Parliament driving through his constituency, so anxious was he not to let any acquaintance pass without salutation. Still, in the brief intervals which his public duties allowed, he managed to jerk out to us a great quantity of economic information. 'There are 26,000 people on the Rock, of whom 6,000 are soldiers'; a close pack when one thinks how small a space on its western slope is suitable for houses. Its summit rises crag above crag, and its eastern side is an almost vertical precipice. Everything used on the Rock, food and fuel, fodder and litter, has to be imported, for the Rock is just as little able to provide for the wants of its inhabitants as a ship at sea. This

makes living very dear. 'House-rent is dear too—4s. a week for a room. Besides, the English make you send your children to school. A great hardship this; though, to be sure, it is not expensive, for the schools are free! Still, it is feeding and clothing one's children and getting no good out of them.' 'But you are an Englishman!' we said to our driver. 'Yes; to live on the Rock one must be naturalized, and even if one wishes to keep a servant (a Spanish or Moorish citizen), one can only obtain a certificate for three months at a time. At night an officer, "San Pedro" we call him, because he keeps the keys, closes the gates of the town. Any one who has not left before the gates are closed has to sleep in the guard-house. On the mainland, truly, living is cheap; the people want nothing but a little wine, oil, and bread: but wages are low—only 6d. a day. The Rock is better—one sees life!' Much more was told us by this communicative coachman. We only repeat statements the accuracy of which we are able to check. We drove to the market, where merchants from two continents dispose their wares: Spanish butchers and fruiterers on one side of the street, Moorish vendors of live fowls, eggs, and vegetables on the other. This was our first glimpse of oriental life. No wonder Puer asked a day or two afterwards, 'Didn't you feel in the Moorish market that you were looking at a play?' The Moors, with their long faces and shaven heads, dressed in blue tunics, yellow stockings, and pointed slippers, did not seem to be real people. It was indeed difficult to believe that people who dress in such a queer assortment of bed-clothes and strut about in the sunshine in such solemn fashion—every fat urchin with the air of a nascent pasha—were really doing every-day work in the manner which they find most convenient.

As we climbed the steep streets of the town and looked down upon its clustered roofs gleaming in the sunshine, it all seemed to belong to a make-believe world. Here were we, only four and a half days' steam from England, still in the month of January, and yet roaming about a land of flowers. A torrent of mauve-crimson blossoms (*Bougainvillea*) hung over a high wall. The golden fruit on the orange trees was just in perfection. Arums and hibiscus were in flower in every garden-patch, while paper-white narcissus, acanthus, asphodels, aloes and yuccas, and hosts of less-known flowers and shrubs, clambered over the wild rock which rises behind the town. Gibraltar is an inoffensive-looking place when seen from the sea. But what a different idea the visitor gets after obtaining the necessary *permit* to view its 'galleries'! Gently sloping roads, wide enough to allow cannon to be drawn up many hundred feet above the sea, have been hewn in the solid rock. From below only the rugged mountain side is seen, with its clothing of shrubs and flowers, but, when within the galleries, one finds that every curtained recess hides the muzzle of a heavy gun. What ship in the straits or fort on the land can possibly stand against their fire? But who can hurt our gunners as they work within the mountain-side?

In 1778 the Spaniards made a supreme effort to recapture Gibraltar, very wisely choosing the moment when England was at war both with her American colonies and with France, in the hope that she would not be able to spare ships to send supplies and reinforcements to the Rock. They were assisted by the French. For three years and seven months General Eliott (afterwards Lord Heathfield) resisted the utmost efforts of the combined force. He was hard pressed at the

beginning, however, for the difficulty lay not so much in resisting direct attack as in obtaining food for his forces. Pater has been reading to us a fascinating book, Colonel Drinkwater's story of the siege. When listening to the description by an eye-witness of what happened to the garrison from day to day, we felt almost as if we had been there ourselves, and realized very forcibly, too, the difference between warfare now and warfare a hundred years ago. It was before the days of canned meats. Some flour, biscuit, and salt pork were stored on the Rock, but the means of keeping them were so unsatisfactory that, when they were most wanted, they were found to be mouldy and putrid. The garrison was entirely dependent upon supplies brought from Morocco and Minorca by small fast-sailing boats which ran the blockade of the Spanish fleet. The eyes of the soldiers were first opened to the gravity of the situation when General Eliott ordered them to mount guard with their hair unpowdered! There was no flour to spare, even though the dignity of His Majesty's troops was at stake. It was six months before the first convoy arrived, and meantime the inhabitants suffered great privations. A pint of milk and water cost 1s 3d., a cabbage 1s. 6d., and other things were proportionately dear.

Forty thousand soldiers were encamped on the mainland. We had less than 6,000; but they gave a good account of themselves. The famous sortie of November, 1781, was carried out without a hitch. The troops started before daybreak. Before they were discovered they had reached the enemy's fortifications. These ramparts had been constructed at an immense expenditure of time and labour. They were built of timber and faced with more than a million fascines (faggots) to stop the shot. Within an hour they were in a blaze

from end to end. What a prodigious bonfire! It burnt for more than a week.

Part of Hardenberg's regiment missed their way in the dark. They did not realize their error until they found themselves in front of St Carlos battery. There was only one way out of the dilemma: to storm the battery at the point of the bayonet! Inside one of the 'splinterproofs' they found the report of the officer in charge, written in readiness to be sent to the Spanish general when guards were relieved. '*Nothing extraordinary has happened.*' The captain was a little premature in writing his report!

In September, 1781, Spain and France determined to take the Rock by storm. They collected forty-seven sail of the line and innumerable smaller craft, and constructed ten 'battery-ships' which were deemed to be invincible. These ships were coated with green timber, wet oakum, and raw hides. They carried 5,000 men and mounted 212 guns. It is said that they cost half-a-million sterling. From the Rock our gunners threw upon them a ceaseless hail of red-hot shot, and within eighteen hours they were all on fire. The explosion of their magazines killed most of their men. Our sailors saved 357 of them at great risk to their own lives. The siege was raised on February 5th, 1782.

The day after we left Gibraltar was a day of romps—great romps! wild romps! Sports at 2, ball at 8.30.

It was an open secret that committee-men had been on shore at Gibraltar to purchase prizes. Whispers of Spanish lace and old silver had been heard on board ship. The competition among the ladies was keen as keen could be. A potato-and-bucket race was the first event. Of course it was necessary that it should be run in heats. Twelve half-potatoes were placed flat

side downwards on the deck, at intervals of three yards in two rows of six each. Each competitor was to pick up the potatoes in her row and place them in the bucket, making a separate journey for each potato. It was a splendid trial of nimbleness. How they skipped, and turned, and bounded! One demure little maiden, who had hardly spoken since she came on board, but had been slowly acclimatizing herself to the motion of the ship, which made her giddy, and the noises, which kept her awake—noises inevitable to shipboard life, where so many people are confined within so small a space,—displayed sudden and unexpected activity. Like a combination of steel springs and india-rubber, she pounced upon the potatoes, sprang back and placed them with the utmost precision in the bucket. She won her heat, she won her tie, she won the final! Many people discovered her existence for the first time. But more attention was paid to her when she again proved herself best woman in the lemon-and-spoon race. A lemon placed on the deck, to be picked up in a tea-spoon and carried round the course. In several of the heats one of the ladies carried her lemon quietly round the course before her antagonist had succeeded in lifting hers from the deck; for it is well understood that the lemon must not be touched with hand or foot. The maiden who had already carried off the first prize in the potato race proved herself equally agile in this. She scooped up the lemon as one would scoop up sugar, and glided round the course with it, without any hurry, but always just a little ahead of her opponent. In the final heat we thought she had met her match. The excitement was intense. 'Go!' The lemons were raised, step for step their bearers raced down the deck. They turned, and down rolled the lemons, for both ladies had turned

inwards round their posts, with the inevitable result that they collided, face to face. Again they started, and this time the demure little maiden held the lead; her opponent became desperate, risked everything, made a rush, and lost her lemon! Filia wishes it to be understood that she did not write this account of the sports.

Chalking the pig's eyes is an amusing shipboard sport. A pig is drawn upon the deck. The competitor's eyes are bandaged, a piece of chalk is placed in her hand. She is turned round three times, and then started in a straight line for the pig; with the result that she probably draws a beautiful eye somewhere about the tip of its tail!

The men's sports were of a rougher character—cock-fighting, for example. Amusing enough, but almost as barbarous as the sport in which our ancestors took delight a hundred years ago. A circle, six feet across, is drawn on deck. Then the two cocks, each trussed with a cricket stump under his knees, his hands placed below it and tied together in front of his shins, are lifted into place by their backers. 'Are you ready?' 'One, two, three,' and they slowly draw together in the centre to push at one another with their feet. In a few moments one of the cocks rolls over, and then the worst of the struggle begins, for a throw does not count until the victor has pushed his opponent from the ring. In this endeavour he usually falls too, and the helpless warriors finish the combat with head, knees, and back.

But the last event of the afternoon was the most exciting—the obstacle race. 1. A lifebelt suspended from the awning to get through. 2. A rope eight feet from the deck to get over. 3. A bar only ten inches from the deck to get under. 4. A long net six feet

above the deck to scramble over. 5. A windstay (a canvas tube, twenty feet long by eighteen inches across) to creep through. Last, a trapeze to circle and a sprint up the other side of the deck. Pater was drawn in the first heat with a Wesleyan minister from Adelaide. He got through the lifebelt and over the rope so quickly that we thought he was going to win; but he did not see the bar near the deck, caught his foot as he was running at full speed, and came down crash. Picking himself up, he was level with his opponent at the windstay, dived in and began to wriggle like a worm through the canvas tube. He was so long in the middle, however, that we thought he had given up the race, and when at last he emerged at the other end he was a sight! All the sailors were grinning, for they knew what to expect. They had filled the windstay with flour! Poor old Pater! it is well that he isn't asthmatical. When he entered the windstay he was panting from his unusual exertions, but he says that in the middle he thought he had drawn his last breath, for the flour, stirred up by hands and knees, made an atmosphere worse than any London fog. The hasty pudding in his chest took away his appetite for pastry at dinner that night, and it was several days before he got the last of the flour out of his hair, and eyes, and throat.

In the other windstay the sailors had put soot, which can't have been much more pleasant than flour; and although the first two victims of these humours of the fo'castle took their punishment in good part, feeling that, although they were sacrificed, it was to 'make a Roman holiday,' none of the other gentlemen cared to wriggle through those windstays.

As we went down to dinner Sardinia was swimming past us in the saffron haze which follows sunset. The

wind was rather fresh, and we knew that we should feel the waves when we left the shelter of the island. Shall we be able to have our ball? The general opinion was not hopeful; but when we came up from table we found the deck changed as if by magic. The starboard side was tented in and hung with flags. A new row of electric lights ran down the centre of the awning. A buffet was fitted up at the for'ard end. Such a jolly dance we had! Romping lancers, racing barn dances; and when we had made ourselves too hot to dance we leant over the taffrail and gazed across the Mediterranean, flooded with the light of a full moon. Run, January 31, 325 miles for the ship, and 523 miles for each of the passengers.

Next day we seemed to have sailed into fairyland. A perfectly smooth blue sea melted into blue sky, while out of the mist which veiled the horizon emerged the islands of Ischia and Procida, rosy-pink, and apparently transparent. Then Capri appeared upon our right, backed by the mountains behind Sorrento; Vesuvius, with its long pennant of smoke, arose in front; and, last of all, the mist congealed into the square white houses of the town of Naples.

At two o'clock we anchored, and at three we could go ashore. The 'Molo' (Quay) is not in fairyland. Cab-drivers fought for us, crowds of touts and guides impeded our progress. With difficulty we forced our way into one of the narrow, picturesque lanes of tall, tinted houses, beneath an avenue of balconies, from which clothes of every colour were hung to dry. Through an undergrowth of macaroni-stalls, melon-stalls, trays of meat, and fish, and cutlery, bambini (babies), beggars, orange-peel and cabbage-stalks—all easier to thrust aside than the indiscriminate, coagulated stench,—we threaded our way. The fish-

vendors offered us squills, and octopods, and other 'frutti di mare' (fruits of the sea), in the hope apparently that we would put them in our pockets; and Pater promised that we should lunch to-morrow on 'angeli di mare' (sea-angels—*i.e.*, octopods), but the smells made the idea of eating anything, even octopods, unattractive at that moment.

We wanted to find the post-office, but Naples has been much altered since Pater was there last. Fine streets are being made in all directions through the picturesque, if foul-smelling, lanes. At last we reached the office, but found that our journey was in vain. Puer is, you must know, an enthusiastic stamp-collector. Before we set out he determined to obtain all the current stamps issued by each country that we called at. Now the general post-office seemed to contain a department for every conceivable thing except stamps. They don't sell stamps! For these we ought to have gone to one of the branch offices. However, we ascertained that stamps were to be bought in a private room by the entrance. Here we found half a dozen tables, laid with writing materials, at each of them a man prepared to act as scribe. Twenty-seven per cent. of the population of Naples cannot read. A much larger percentage cannot write, and the profession of scribe is profitable. One of the scribes could give us the dozen stamps of 25 centesimi (2½d.) each that we needed for our letters, but kept no other kinds. Pater offered him a three-lire (300 centesimi) note in payment, but it appeared that it was torn, and he declined it. A small boy was despatched to see if he could get it changed, but reported his efforts a failure after a long interval. So Pater gave a five-lire note instead, and received all his change in soldi—half-pennies. A somewhat similar difficulty occurred next

day. Pater offered a cabman a lira (10d) as his fare. It looked as fresh as a year-old shilling, but cabby would not have it, and made such a noise we thought he was going to assault us. Pater turned to an Italian gentleman who was passing and asked for an explanation. Taking the coin in his hand, he said most courteously, 'Don't trouble. It is good. I will speak with him.' Then he led the cabman off to the nearest policeman. There was a discussion, and we saw the gentleman slip a note into the man's hand and put the coin in his own pocket. When we came up to him he told us that all silver issued prior to 1873 had been recalled, and the coin was not in currency; but he would not let us have it back. We should like to think that in an English town a foreigner would be sure of receiving service of a similar kind.

The ship lay in Naples harbour for thirty-eight hours, starting at 4 a.m., as soon as the mails for Australia were on board.

All next day the snow-capped Appennines were in sight on the port side. About 1 o'clock Stromboli, with its little cap of smoke, appeared on the starboard bow. It is an almost perfect cone, rising out of the sea without any flank of low-lying shore; and yet a large village, almost a town, lies on its eastern slope. To the south-west of Stromboli the other Lipari Islands make a pretty group of volcanic cones. One of them, Vulcano, has been especially active of late. Its funnel seems to lead down to the same chasms beneath the earth's crust from which the chimney of Vesuvius starts. In this part of the world the crust is thin and cracked. Through the cracks sea-water sinks into the red-hot chambers below. In these chambers it is turned into steam, which either accumulates until it forces its way along some new passage, making the

earth quake as it goes, or else rushes up the chimneys of Vesuvius, Stromboli, Vulcano, and Ætna. Pater says that pumice is the froth whizzed off the surface of the lava, by the rush of escaping gas and steam, as it boils and bubbles in the subterranean cauldron. In the air it cools into a porous stone lighter than water, although if fused again and the air expelled, it sets into a glassy mass which is three parts flint. The comparative thinness of the crust of the earth is clearly shown by the way in which, in these volcanic regions, it bends under the action of the forces which are always at work beneath it, and the pressure of the sea. Just north of Naples, at Pozzuoli, are the ruins of a superb bathing establishment, known, in error, as the temple of Serapis, of which only three front columns remain erect. These columns, each a single block of marble, forty feet high, are pitted with holes made by a marine mollusc (a lithodomus). Now they stand high and dry, and some little distance from the sea, and we cannot doubt that they occupied a similar position when the baths were built. Since then, however, the land has sunk until the colunms were at one time beneath the water, where the waves would soon have made an end of them, had it not happened that, either before the land sank or just afterwards, the volcano Solfatara threw up a shower of 'ashes,' and buried them half-way up their shafts. The pumice held them firm until the land rose up again and brought them to the surface. That this is what occurred is proved by the fact that only a broad ring at the upper part of the columns is marked with holes made by the boring bivalve.

Late in the afternoon we passed on our left the town of Scilla, picturesquely situate on a projecting rock; and steaming between the mainland and the Punta di Faro (the 'Point of the Lighthouse,' which was

built by Englishmen during our short occupation of Sicily, from 1806-1815), entered the Straits of Messina. The tide was running fast, twisting the water into swirls and eddies, but it required a vivid imagination to recognise the whirlpool of Charybdis. No doubt the current made the Straits difficult of passage for boats which, like Ulysses', were propelled with oars, aided by a sail only when the wind was astern; but to influence the course of an Australian liner needs something stronger than Charybdis and more terrifying than the dogs of Scilla which bark when the waves break in the caves along the shore.

A singular contrast was presented by the two sides of the Straits. On the Italian shore the town of Reggio and the hills behind it glowed pink in the clear, crisp light of the setting sun. On the other side Ætna rose to its full height of 11,000 feet, pointing far above the other mountains of Sicily, but so surrounded by lurid clouds in every shade of yellow, bronze, and grey that, save for its peak, against a pale-green background set in an oval frame, we could hardly say which was mountain and which cloud; while at the base a deep blue-black shadow obscured the lower hills and blended with the sea-mist which filled the valleys.

It was growing dark as the seventy Italian emigrants whom we had shipped at Naples took a long farewell of their native land. They were going to work upon the new railways in Western Australia; tidy-looking fellows, short but broad-shouldered, with cheerful faces, evidently willing to take life as they found it. Two German ships which lay in Naples harbour while we were there shipped, the one 350 and the other 600 emigrants for America — a very different class of men from those who face the longer voyage. The Australian contingent comes from the country

villages; the American emigrants are the surplus population of the towns. Two of the latter had out their knives and fell to fighting before they had been ten minutes on board ship; but the second-officer, a stalwart Teuton, caught them by the collar, twisted them round, and held them dangling like two wild cats until the watch could secure them and take them below. Then he had them put in irons, and kept them there until they were out of port—just to give them an idea of what is meant by discipline on board ship.

Between the Straits of Messina and Port Said we experienced the coldest weather of the voyage. The mountains of Crete were covered with snow almost to the water's edge. A fresh breeze dashed the spray over our bows. We found it puzzling to decide on 'luggage day' what clothes to get out and what to put away in our boxes. We were not to have another chance of getting at our luggage until we should reach the lower end of the Red Sea. Since on a long voyage it is impossible to keep in the cabin more than a small part of the things required for various climates and different social functions, all the luggage is brought up from the hold once a week and ranged along the main-deck. The toilet which then takes place *al fresco* is an amusing sight, especially in a lively breeze. Ladies hurry from their cabins with linen-bags in their arms; dive into their boxes for the things they want; fill up the gaps with clothes out of their cabin trunks, and make their way back encumbered with gauzy garments suited to the hot weather we are sure to experience before next luggage day comes round. The playful wind takes great liberties with their bundles, and perhaps a malicious dash of spray spoils a muslin dress which its fair owner had counted on to do service at several dances, or to prove irresistible in its cool

whiteness as she gave tea to the cricketers, heated by a strenuous match beneath a tropical sun.

When the Suez Canal was opened in 1869, it was regarded as a prodigious work, but larger undertakings of the same kind have been carried out since then. It is lined with stone and concrete, to prevent the banks from being washed away, and long breakwaters and much dredging are needed to keep the entrance from becoming blocked with mud brought down by the Nile; but it looks, as one sails along it, an easy task to have cut a channel through 100 miles of almost level sand, a mere ditch compared with the gorge rent through the Isthmus of Panama. On the breakwater is a fine bronze statue of the engineer who planned it, Ferdinand de Lesseps.

It is not, however, the magnitude of the work that impresses one so much as the difficulty of regulating the enormous traffic which passes through the waterway—nearly 5,000 ships a year. The Canal is, in a sense, neutral ground, for it has been arranged between the Powers that it shall never be blockaded, but shall be kept open to all nations in times both of peace and war. At first sight this seems a very important matter for us, since two-thirds of the ships which pass through the Canal belong to Britain, and a large number of them are engaged in carrying troops and stores to India. When the *Ophir*, the boat by which we continued our voyage from Ceylon, entered the Canal she found it blocked by a German vessel which had run aground. For five days the traffic was interrupted, until sixty-three ships were waiting to get through. Fifty-five of these were flying the British flag. Various other nations were represented, but their members hardly felt themselves at home among the host of Englishmen, who

amused themselves playing cricket and polo on the desert, riding camels and trading with the Arabs.

The ease with which it can be blocked detracts from the value of the Canal as a high-road to India. How can we prevent one of the ships of a hostile Power from 'accidentally' running aground? When in 1882, Arabi threatened to overthrow the government of Egypt, we sent a string of gunboats along the Canal with unexpected promptitude. They were followed by transports, one of which, the *Catalonia*, ran aground; and had she lain in the middle of the channel, instead of at the side, she would have spoilt Lord Wolseley's plans for a rapid advance. It was a piece of luck that she lay near enough to the bank to allow the other ships to be warped past. Her pilot, an Egyptian, was not above suspicion.

As soon as we dropped anchor in the harbour of Port Said four large coal-barges, lashed together, were towed up to each side of the ship. With a not unmusical 'Oola! oola! oola!' the swarm of Arabs who covered them brought the planks into position and began their dirty work. What these gentry are like when clean—if they are ever clean—we know not; at work they look like imps of Satan. But they *do* work! To carry us to Colombo we needed about 800 tons of coal (80 tons a day); in three hours they had put 920 tons on board.

When we landed we felt the full force of the sun for the first time. The air was not hot, but the glare reflected from the sand scorched our faces. Port Said is a squalid town. A few decent houses near the quay, and thence to the 'native quarter' buildings, which grow rapidly more ramshackle, until at last no one can say which are cabins and which hencoops; nor do the natives make any distinction. Dark-

skinned men were lounging about in every variety of bed-gown. Women in heavy 'yashmaks' walked quickly by on business. In addition to the yashmak, each woman wears across the forehead a brass band, from which four brass rings, as large as napkin rings, hang down in front of her nose. Children swarmed round us like mosquitoes, begging to the tune of 'Give a penny, missus!' 'Me Ferguson; good guide, good donkey!' The 'New Pilgrim's Progress' is still remembered at Port Said. As every other child in the crowd that pressed about us was pitted with small-pox, their proximity was not desirable. Pater feared lest among the crowd there might be some who were just commencing, or recovering from the disease. He looked for vaccination marks, but could not find them. The authorities are almost helpless in dealing with these people. They bring their families into Port Said, work as coal-porters for two or three months, and then disappear into the desert, to live on their earnings for perhaps a year.

The animals were more attractive than the children, and in the absence of even the smallest blade of grass, their presence was more difficult to explain. The goats seem to live on bits of paper and scraps of orange-peel, but cows, dogs, and cats, which, with the goats, wander restlessly about the streets exploring the heaps of refuse, come off badly. As for the donkeys and camels, they stand in groups or lie down in the sand with their usual resignation.

Port Said is now well supplied with water, but the people have to obtain it at hydrants in the streets, and it is a curious, uncanny sight to see the water-skins fill up as they hold them at the tap. The whole skin of a pig or calf is retained intact, and as the water enters it, it rounds out, wriggles about, and at

last erects its ears and tail in a most lively and realistic fashion.

Tilbury to Port Said, 3,400 miles.

We entered the Canal at 4 p.m., and made a very rapid passage in sixteen hours, only having to tie up once to let another vessel pass. Ships are not allowed to proceed at more than six miles an hour; nor could they go much faster even though they put on a full head of steam, for the bottom of the vessel is so near to the bed of the Canal that when the screw revolves at more than a certain pace, it merely drives the water backwards, instead of forcing the ship more quickly forwards. Dredgers were at work deepening its channel. It was also being widened. Arabs were pushing trucks of soil some little distance into the desert, or shovelling it into panniers on the backs of kneeling camels which rose when the panniers were full. The water stands at the same level in the Red Sea and the Mediterranean, but there is a slight tide in the Red Sea which affects the southern portion of the Canal.

At sunset Lake Menzaleh, stretching to the western horizon, was dotted with a few fishing-boats, and covered with vast flocks of pelicans, flamingoes, and various kinds of duck, which, unlike the fishermen, having caught all the fish they wanted, were settling for the night. There was not much inducement to stay on deck; we soon grew tired of watching the banks glide out of the glare of our great searchlight into the darkness behind.

Sunrise next morning was a most impressive sight. As the great red globe appeared above the horizon and flooded the waste of sand, we realized what is meant by *desert*—a limitless expanse of sand, crossed by ridges of absolutely barren hills. Not a tree nor a patch of grass in sight.

The land was not always like this. Many names, such as 'Ras al Esh,' the 'Cape of Bread,' as well as the remains of cities, show that it was once a fertile plain. Even the 'wilderness,' or 'desert,' in which the Children of Israel sojourned was not the burning, sandy waste that we see now, or their cattle could not have lived. The change is partly due to human action, Pater thinks. The Egyptians were a race of horsemen owning sheep and cattle, and cultivating the soil. Palm trees shaded the surface and attracted dew from the air. But the dominion of the Pharaohs was destroyed 340 B.C., and the country has never known any long period of settled government since that time. At frequent intervals bands of nomadic Arabs, with herds of camels, have wandered over the land. Unlike the horse, the camel eats young trees as well as grass. For a time, perhaps, no change was noticed, but as the old trees died no young trees took their place, the grass withered when exposed to the burning sunshine, the soil became an arid waste. During our tour we had several opportunities of observing the effect upon climate of the destruction of trees. If one remembers how, on a misty morning at home, a little drop of water collects on every twig, one can understand that when in America or Australia vast forests are cut down or burnt to make way for grass or grain, the moisture is diminished, and the fertility of the soil reduced. A great change due to this and other causes has come over the climate of this region, since the children of Israel made their way to 'a good land . . . flowing with milk and honey.' Such a description would not be appropriate to Palestine to-day.

Just before we reached Suez, we came upon a Bedouin camp; the camels lying down with their

fore-legs tied together; the donkeys standing about in groups. A small ferry-boat was carrying the donkeys across the canal. As we came abreast of them one tumbled into the water. It went down head first, and emerged a limp and sorry-looking jade. Nevertheless, it was unwilling to go ashore, but wished to stay by its companions in the boat. Next moment there was consternation on board the ferry, for our wash made it rock until men and donkeys nearly fell over the side. One turbaned figure curled up at the bottom of the boat with a donkey sitting in its lap.

Suez looked pretty in the morning light—square white houses clustered among palm trees, lagoons in front, desert around, bare mountains behind, rose-red in the sunshine.

We were soon at rest in the roads, and the boats with fresh supplies, shells, corals, and other articles for sale, collected round the ship. It was amusing to see the way in which the negroes who manned them reached our maindeck. They *walked* up the halyards of their sailing-boats, grasping the rope between the great toe and the next, while the Arab trader leaned his weight on the edge of the boat nearest to our ship, making it heel over until the negro could step on board. An abundant supply of vegetables, neatly packed in crates, made of cane or split bamboo, was carried up our starboard gangway. They looked out of place in a land which has not a square yard of ground in which a cabbage can be grown; but we were told that they had come by train from the Valley of the Nile.

In half an hour we were racing down the Gulf of Suez, through the bluest water we have ever seen. The roll of water which slanted away from our prow

seemed to be blue in itself, and not to depend for its colour upon reflection from the sky. If the Red Sea were called blue, instead of red, the epithet would be appropriate, and would give rise to less discussion than its present name. 'It owes it to a great red mountain of hæmatite on its eastern shore,' says the *Orient Guide;* but the mountain is far away from the track which ships follow now-a-days. 'It is due to the red sea-weed which floats on the surface,' says the doctor; although unluckily for his theory scarcely any weed grows in the Red Sea.

About twenty miles below Suez we passed Aboo Darraj, reputed to be the place where the Israelites crossed the Red Sea; and a hundred miles farther down the Gulf, Jebel Moosa (Moses' Mountain) appeared with great distinctness on our left. This is the peak of Mount Sinai (7,000 feet in height), on which tradition asserts that Moses received the Law. We gazed with awe upon the spot which has so much to do with our ideas of right and wrong. We had never thought of Mount Sinai as a real mountain, a clear-cut, climbable mass of rock. In our imagination its broad base covered hell, its peak reached heaven. But all its terrors vanished in the glow of an Arabian sunset. The thunderclouds of the pictures could never roll about its tranquil summit. Gradually a tawny haze crept up from the sea—a dry haze, not like the mists of our temperate climes, but opaque, dusty, almost as obscure as the gauze used on the stage. For a while the peak glowed crimson in the sunshine, then faded rapidly from view, and when our eyes sought the lower hills and cliffs, we found that the footlights were turned out, grey had already changed to black. Was it an illusion? Have the symbol and its application exchanged places?

The application true, the symbol false! Perhaps we had not seen the *real* Sinai, after all!

When we awoke next morning, the beautiful mountains had disappeared. We were in the middle of the Red Sea, out of sight of land. Now we understood the reason for its name. Its surface was covered by a reddish brown scum so thick in places as to make the sea look like the water in a basin of the London docks after a ship laden with flour has discharged her cargo. Explanations of this phenomenon were freely offered. 'Sand blown from the desert,' said some of the sailors—as if sand could float! 'Fish-spawn,' said others, although it did not resemble the ropy masses of fish spawn which one sees sometimes on the surface of the sea; nor could all the fish in the Indian Ocean have discharged such a sheet of eggs as this. For hundreds of miles it hid the blue water. 'Putrid coral insects which have risen to the surface,' said the doctor—but again he was unfortunate. It is true that coral grows on the floor of the Red Sea, but its polyps do not become detached from its branches when they die. It is a striking illustration of the abundance of minute organisms, plant and animal, but chiefly plant, which are everywhere to be found in sea water. Now-a-days they are known collectively as 'plankton.' Only when the sea is as smooth as oil can they be seen floating on the surface. The middle third or thereabouts of the Red Sea is always smooth. At its north end the wind blows from the north, at its south end, from the south. These winds tend to make the plankton collect in the middle where there is no wind. In the sea all the animals, which are large enough to be seen with the unaided eye, with few exceptions, live on animals smaller than themselves. Big fish eat

little fish; little fish eat shrimps. But the animal world lives on the vegetable world, and plankton is the basis of its life; an aggregation of vegetable specks upon which the tiniest of animals feed. Even the Antarctic Ocean abounds with such vegetable specks. Shrimps live on these microscopic plants. Large colonies of Emperor Penguins, each as heavy as a man, find a sufficiency of shrimps to nourish their bodies and keep out the cold.

Some mails which the Orient Line usually carries had been given to a new French ship, which was expected to make a faster passage. Our captain was, naturally, inspired with a desire to reach Colombo first. We were, therefore, racing against a ship of which we neither saw nor heard anything until she arrived in port some hours after we had dropped our anchor. Two days out from Suez we crossed the Tropic of Cancer. Every day was taking us five degrees nearer to the Equator, and our energetic cricketers, who had to play on the sunny side of the ship, because the shady side is reserved for loungers, looked, after the first few innings, as if they had been boiled.

The sea was smooth and oily, and at night our prow cut its way through liquid fire. The phosphorescence was of two kinds—a universal glow and scattered stars. The glow is due to minute animals (pyrocystis) which swarm in the plankton on the surface of the water. They emit light only when the water is disturbed. Sometimes a patch of light shows that a shark has compelled a group of flying fish to dash through this superficial layer and to take refuge in the air. We wondered what purpose this luminous property serves. It is difficult to see how it benefits the little animals which possess it, while to the flying

fish it must be most offensive. As they rise to the surface in search of food their path is lit by myriads of microscopic lanterns. They cannot leave their safe depths without becoming visible to the fish which in turn feed upon them. Perhaps this is its purpose? The phosphorescence may enable the little animals to show the fish that prey upon them to their enemies the sharks. On nights on which there was no general phosphorescence the scattered stars were always to be seen. Our track was spangled with them, although sometimes they sparkled only in the water which was poured out of the condensing chamber of the engines; as if the hot steam had stirred the little animals (copepods or other crustaceans) to activity.

In the upper part of the Red Sea the wind was astern; in the middle it dropped completely. As we approached Babu'l Mandib a head-wind began to blow, increasing in force until the spray was dashed over the deck, and we had to hold on to the rail when we tried to stand near the fore part of the vessel. But, just when she was beginning to pitch, timid passengers were comforted with the assurance that as soon as we passed the Straits the south wind would disappear, and we should enjoy a pleasant north-east breeze all the way to Ceylon.

To travellers from our capricious clime this is one of the most striking features of the voyage. The wind in these regions is just as fixed a feature of the country as its mountains. Before we entered the Canal we were told the direction in which it would blow and how hard; for we are now within the zone of fixed winds. At the Equator the air ascends, because it is heated and expanded by the sunshine. To take its place a steady rush of air sets in from the north and south, and since our globe is always

rotating towards the east, and the atmosphere tends, as it were, to drag behind, the wind seems to come from the east. The inrushing winds converge as the north-east and south-east 'trades.' Near the Equator they meet, and, neutralizing one another, produce the uncertain weather of the equatorial 'doldrums'—calms, squalls, and tropical showers. About 30 degrees to the north and the same distance to the south of the Equator the hot winds begin to descend again, but now their direction is changed. Where they rose from the sea, the earth had a circumference of 24,000 miles, and the air was, therefore, travelling at the rate of 1,000 miles an hour. Where they descend the circumference of the earth is very much less, and, therefore, the velocity which the atmosphere had acquired at the Equator is greater than that of the part of the surface of the earth upon which it descends. Now the air is travelling faster than the land. The atmosphere overtakes the earth as a westerly wind, which in the Southern Hemisphere blows very steadily and at times very fiercely too, causing sailors to dread the 'roaring forties.' If the world were completely enveloped in sea, the winds would blow steadily all the year round; but every mass of land disturbs them, by absorbing heat faster than the sea in the daytime, and losing it faster at night. And not only does all land take up the heat of the sun at a different rate to water, but in some places it absorbs more heat than it does in others—a sandy desert, for example, grows hotter than a forest-covered slope. In the Northern Hemisphere the preponderance of land over sea produces great confusion. In England we only know a frequent but capricious south-west wind, which comes to us charged with the moisture which it absorbed when,

as the north-east trade, it was blowing across the surface of the ocean, before it rose to the higher strata and fell back again towards the Pole; but this straight wind attracts much less attention than the circling winds, cyclones—whirlpools in the world's gaseous envelope—which chase one another across the Atlantic Ocean, reaching our shores from the north-west, as a rule. We have no wind which we can compare with the steady west wind of the Southern Hemisphere. In the same way the juxtaposition of land and water disturbs the course of the steady winds which blow across the Indian Ocean. The vast irregular continent of Asia counteracts the forces which produce the 'trades.' Regular winds, called 'monsoons,' sucked up by the heated land from the surface of the sea, prevail at certain periods of the year.

From November to March the pleasant breeze which we were now enjoying sets steadily from the north-east—the north-east monsoon. It is a very different matter to make the voyage between May and September, and especially in June and July. The fierce south-west monsoon produces an almost continuous storm. It is this wind which brings fertility to India, 'bursting' with singular punctuality towards the end of May, flooding the rice fields and filling the tanks with water. From fellow-passengers who had made the voyage at all seasons of the year, we heard gruesome stories of the bursting of the south-west monsoon, when, at a few minutes' notice, the rain comes down in such a mass—the ordinary expressions 'sheet,' 'torrent,' 'deluge,' seem insufficient—that the captain on the bridge cannot see the quarter-deck, and has no alternative but to turn the ship about and let her drift like a cow with her tai

to the storm. We were fortunate in taking our trip to Australia at a time of year when the sea is calm, the sky blue, and the breeze only just sufficient to temper the heat of the tropical sun, which from six in the morning to six at night diapers the ceiling of the saloon with chasing patches of light, reflected from the waves.

When land came in sight on the port bow, we were told that we could see the white roofs of Mocha. Very little coffee comes thence now-a-days, but happy are they who obtain it. The berries are bought to sow in Java and elsewhere, but in a few years the plants raised from Mocha berries assimilate to the native stock.

In the evening we burned coloured lights as we passed the Island of Perim, and were answered by the men in charge of the lighthouse. We did not envy the guardians of this British island their barren, burnt-up league of rock. They must often regret that the governor of Aden saw fit to send Lieutenant Templer, in 1857, to take possession in the Queen's name; though they may admire the promptitude with which the island was secured. Instead of going straight to Perim, the French admiral who had orders to annex the island, put in first at Aden, where, if we may trust the mess-room story which Sir Charles Dilke has made historic, he was asked to dinner by the governor, who discovered, when the wine had circulated what was the errand of the French ships in these waters. The governor thought that there could be no harm in anticipating his guest by planting the British flag upon this uninhabited rock, in the narrow throat of the Red Sea, and then writing home to know whether it was the wish of our Government that it should become the property of

France. Whilst dinner was in progress, he gave orders that the anchor of a British gunboat, the *Mahi*, should be quietly weighed. The French admiral reached Perim at a reasonable hour next day, to find, to his surprise, that here also the British were prepared, with the same genial courtesy, to play the part of hosts.

Suez to Perim, 1,200 miles. The Red Sea is longer than one is apt to suppose. So unimportant are its desert shores that few atlases contain large scale maps. One does not realize its length when looking at a map of Asia.

Aden has long been regarded as a place of great strategic value. Its immense water-tanks, hollowed out of the rock, or made by damming mountain gorges, were constructed as far back as A.D. 600. They are still used for the supply of the town, although the improvement of apparatus for distilling sea-water has overcome the chief difficulty which used to attend the occupation of desert-forts on the sea-shore. Aden was the first territory annexed to the Crown after the accession of Queen Victoria. It was captured in 1839, at a time when we were obliged to demand redress from the Arabs for ill-treatment of a shipwrecked crew. Aden is often called the Gibraltar of the East in consideration of its commanding position as a shelter from which ships can patrol the Red Sea, the Indian Ocean and its various gulfs, but it differs in appearance from its Mediterranean counterpart. It is not a single rock, but a group of rugged peaks which reach an extreme height of 1700 feet. Rock islands guard an inlet which affords sheltered anchorage. Close to its shore the Club, the offices of the consulate and other houses cluster. The Residency is on a projecting spur

Barracks climb the hill. A few bamboos and other plants make a green patch round some of the buildings. For the rest it is bare and burnished beyond belief. A different place from Gib. to live in, the difference between latitude 12° and latitude 36°, proximity to the Atlantic, and the southern extremity of Arabia. It is not a place that one would choose, yet it has a population of 40,000, so important is it as a meeting place of trade-routes and a coaling station. It and Gibraltar are the centres from which telegraph lines radiate, north, south and east. It does not look attractive, but an officer told us that he would rather live in Aden than in many parts of India. The air is dry. There is usually a breeze and the sea tempts to bathing and boating; though the land offers few opportunities of recreation.

At 11 p.m. we narrowly missed a tragic accident. An Arab dhow, filled with people, only cleared our bows by about two yards. As they were carrying no light, neither the look-out men nor the officers on the bridge saw them approach. Their yells of fear first gave intimation of their presence. The engines were instantly stopped, and the dhow slipped along our starboard side. As it disappeared in our wake, we heard their screaming changed into a chant. Indeed, Allah is merciful! His protection is better than rudder or lights! By just one minute they had missed being crumpled up beneath our bows like a match-box under a steam-roller. The sharks would have been before us to the rescue! Truly Allah is good!

Next morning when we went on deck we were opposite the most eastern point of Africa—Cape Gardafui, a bold, bare headland. The sheer precipice of rock rises to a tableland about 900 feet above the

sea. A little to the north of the main cliff there is another mass of rock, with a sandy beach between. At night or when the weather is misty it is a dangerous spot. Taking the direct route from Australia, and steering, therefore, a north-east course, the *Garonne* ran full-steam on to the beach. The captain thought that he had rounded the Cape when he passed the higher cliff. Anchors were at once thrown out, and an attempt made to pull the vessel off with the steam-winches. In this the crew happily succeeded, despite the efforts of the natives (Somalis), who hung upon the ropes in hundreds, hoping to hold back the ship, which they regarded as their legitimate prize. It has been found impossible to establish a lighthouse on the cliff, owing to the resistance of the blacks, who are constantly on the watch for wreckage.

Two small islands, one of them British—given to us as the only Power whose shipping interests would demand the establishment of a lighthouse—and then Sokotra, of which we took formal possession in 1887. Sokotra is about the size of all the Inner Hebrides added together—1,500 square miles. It is inhabited by Bedouins, and of little value in times of peace; but in time of war it might be annoying to us if a hostile power possessed it.

Life on the Indian Ocean wave! At six o'clock, with business-like punctuality, the sun steps above the horizon and shoots his beams into every corner of our cabins. We have two cabins, next to one another, on the port side. With equal promptitude Puer springs out of bed, and tickles Pater's ribs, if the poor old gentleman shows any inclination to hide his face from the sun's rays. A cup of tea in the 'nursery,' and then on deck in flannels. We circle

the horizontal bar, which still remains to remind us of the obstacle race. Run half a mile (5 times round the deck) with bare feet, for the sake of the later risers in the cabins beneath. Then, hot and out of breath, we lean over the bulwarks and watch the flying fish as they scud away in mobs from both sides of the ship; the little ones, about the size of sardines, following the larger fish, as big as herring. The whole body, except part of the back and the upper surface of the pectoral fins, which are dark-brown or black, gleams white in the sunshine. The pectoral fin is about as large as a swallow's wing, but straighter. The hinder fins are not so large. The fish dart over the surface of the water in a straight line for 100 or 200 yards, and then disappear with a flop, like a duck alighting, not with a dive. Usually they remain in the air for fifteen or twenty seconds only, but we once timed one that flew for one minute and fifteen seconds. Only once did we see a fish rise to any considerable height above the water. It towered straight up, like a shot bird, to a height of at least thirty feet. The flight is maintained by a vibration of the fins, so rapid that they appear to remain still. The fish look like heavy-bodied moths, or, as Puer remarked, one might mistake them for dragon-flies hovering over a pool—an admirable comparison. Except for the flying fish, there is very little animal life —no birds and only a few jelly-fish and salpidæ floating on the surface of the water.

At 8.30 the bugle sounds for breakfast. Our exercise and baths have given us an appetite. During the morning the committee meets to plan the evening's entertainment. Competitions have to be played off, peg-quoits, bull-board, shuffle-board, chess, draughts, halma; and in a thousand other ways the

ingenuity of a crowd of idle people designs means of thwarting Pater's virtuous desire to instruct us in the history and geography of the lands we are about to visit. Even the 'Poet's Corner,' our little 'study,' as we call it, behind the mainhatch is usually occupied by a frivolous couple, who are only talking such nonsense as might, one would suppose, be invented by a person of average intelligence, in the densest crowd.

Lunch—a loaf—not *for* lunch, but *afterwards*. For lunch, thanks to the freezing chambers, we have every luxury, and all, from the lobster to the salad, as fresh and crisp as if they had come from the morning's market.

Then cricket for the men, fancy work and fancy talk for the ladies. At four o'clock, tea in the saloon, or on deck with some of the knowing travellers who carry their own tea-things. After tea the passengers who have æstivated all the rest of the day become suddenly active, and promenade the deck in business-like fashion. Dinner, music, a dance; and how can we leave the deck, the soft air, the black heaven spangled with stars which change from night to night? The Southern Cross first took its place among the other constellations when we were half-way down the Red Sea. A deck-chair is tempting at all hours, and not least so late at night.

Presently the ladies begin to retire, with the exception of a few deserted wives, who wait in the vain hope that their husbands will abandon the smoking-room and join them. At last they too gather up their cushions and go below.

Unfortunately, the smoking-room becomes more and more attractive as the evening wears. We hear rumours that a good deal of money has changed

hands; but it is a curious thing that on this particular voyage the only people who gambled were Australians or Americans. It seems to be in their blood. At Naples a Yankee with a 'poker face' came on board. He left at Port Said, three days later, with £200 more in his pocket than when he joined, and we noticed that some of the Australians, who could ill afford to lose the money, were a long time in regaining their spirits. However, gambling was entirely confined to the smoking-room; we never saw it on deck. Nor was there, as on most of the other ships we travelled by, a sweepstake on the run. On other ships Pater used to be much pestered by people who wanted him to 'join the sweep,' but he always declined politely. Except once, when a priest was auctioneer and leading spirit. After the third or fourth application, Pater jumped up and answered, 'Yes, I will join, on one condition only.' 'And what is that?' 'That you guarantee that I shall lose. I will not humiliate myself by accepting money I have not earned—money to which I have no claim, except that I happen to draw one number and not another.' Pater looks upon all gambling as stealing. It only differs from ordinary stealing inasmuch as people arrange beforehand to make it a game. *A* says to *B*, 'I am going to let you take money from me, to which you have no right, but if the cards or dice happen to fall in my favour, you, of course, must let me take your money instead!'

On one or two evenings we had the most splendid games, far too numerous to describe, they would fill a book. We did all the ordinary tricks, 'Right hand or left?' 'Musical proverbs,' 'Where does the stick lie?' and so on; but the one that most thoroughly mystified our audience was 'Guessing the letter of the

Alphabet.' Filia went out of the room, while the company selected a letter; when she came back, every one said any word that first occurred to him, but the *German* equivalent of Pater's word began with the letter selected. We were so hard-hearted as never to tell how it was done.

Some of the passengers amused us with juggling and sleight of hand, but the very drollest illusion of all was 'Three little maids from school.' Our tall doctor, an Australian lady, and Puer, were dressed as girls. Such a funny trio! The fronts of their dresses were fastened down their backs, they had masks on the backs of their heads, and long pugarees hanging down over their faces. Then they crossed their hands behind them, and with many affectations fanned their masks. Every one was taken in when they walked in backwards, puzzled with the new form of curtsey, and convulsed with laughter when they sat down!

Among our friends is a most beautiful young Dutch lady, making her first acquaintance with the world outside Holland, in her brother's company. Mater was somewhat embarrassed by finding herself seated next to this lady, with whom she could not exchange a word; and Filia was so unhappy, because there was nobody on board who could talk to her, that she tried to learn a few words of Dutch. They soon found, however, that she could talk a little German and was quick in learning English. February 14th was her birthday. Lately she has taken to playing cricket, so Filia sent her a valentine—a photograph of the ship, on the back of which she had sketched cricket-stumps, kodak, chocolate-box, and the other appliances which minister to her comfort. The valentine caused great amusement, although its origin was soon guessed.

One day the chief engineer took us down to see the engines. What a box of tricks it is! Every inch of space is utilized, and there are engines for many purposes besides driving the ship; engines to work the cranes, to fill the baths, to make electricity, to distil water, and last, but not least interesting, engines to fill the refrigerating chamber with cold air. It was this wonderful invention of Coleman (in 1879) which transformed ocean travel, so far as the comfort of the passengers is concerned; and although it has been supplanted on many ships by the newer 'ammonia process,' it is to this invention that we first owed the possibility of importing fresh meat, butter, eggs, etc., from Australia and New Zealand—a possibility of vast importance both to our home markets and to the Colonies. The freezing engine is in the hottest part of the ship, and it is a strange sight, when the door of the expanding chamber is opened, to find it half-filled with snow, condensed from the atmosphere. The heat has been, as it were, squeezed out of the air by an engine which compresses it to less than one-third of its bulk. As it shrinks it grows hot. It then passes through tubes surrounded by sea-water, which takes away the extra heat. Then it is suddenly allowed to expand, and since there is no new source whence the air can get heat, the heat still left to it has to be distributed through the larger space, and the temperature falls. The temperature of the expanding chamber can be made to fall to 70 degrees below zero and the refrigerating chamber is kept at from 10° to 20° F. What would happen to all the meat, and cream, and vegetables, if the freezing engine were to break down for twenty-four hours?

When we were starting for our journey, an old

lady in the country said to us, 'What a business it must be to get all the provisions you will want! I suppose you have to take your own?' 'No; the ship provides them.' 'Ah! dear me! how things have changed! When my sister went to Australia, forty years ago, they had to carry all they needed except ship's biscuits. There was such a boiling of hams and puddings! And then, poor dear! the ship sprang a leak. They were four months in getting to Australia; they ran out of water, and when the ship reached Melbourne, they had to take my sister to an asylum. She has been there ever since.' What a change! We shall be at Melbourne within an hour of the time arranged; we shall live upon fresh food all the way, and have fresh water to wash in—as much as we like to use!

In the evening we had a grand ball, to which the captain invited the second-class passengers as well as the first. It was so jolly! No one seemed to know when to go to bed. We don't want to reach port, for we feel that we should like this life to go on for ever. It seems like being lifted out of the world, with all its business. No postman, no newspaper, no shopping, not even anything fresh to look at. Only the ship and the sparkling sea! In the log, which we post up every morning, we find that we wrote, 'As nothing is likely to disturb us between here and Colombo, we may consider this chapter closed.'

Alas, how rudely our peace was shaken! Reclining after lunch in our deck-chairs on the shady side of the ship, we were suddenly startled by that horrible cry, 'Man overboard!' Before we could run across, a lifebelt with a flag had been dropped; the engines were reversed; the captain was on the bridge; the fourth officer with his crew, of whom only one had

stopped to secure a hat, despite the burning sun, had tumbled into the boat which hung over the side on the stern davits; before the last man had stepped into the boat it was being lowered. We saw the poor fellow who had jumped overboard swim to the life-belt and take hold of it. Then he disappeared. When at last the ship came to rest, two great sharks were seen to be loitering in its shadow; and although for an hour the boat's crew rowed about, they did not find a trace of the handsome, refined, and kindly man who, only last night, was master of our revels, taking the leading part in introducing partners, arranging sets of Lancers, leading out those who were too shy to commence dancing without his help.

Too sensitive, too conscious of his own failure to reach his high ideals, he found the world condensed into the narrow limits of a ship. Infinity stretched around him, the Indian Ocean looked warm and playful in the mid-day sunshine. Just a moment's courage, a jump, and he would sink to sleep upon its bosom.

How terrible to think of! All the rich possibilities of life pushed aside. Its cup of happiness dashed down and broken, like a toy smashed by a peevish child; and the horrors that lurk beneath the water braved for want of a little courage—the courage to wait until the age of uncertainty has passed, and the mature man can see life as a whole.

Pater would like to send all doctors for a sea voyage. If they understood what ship-board life is like, they would not send so many unsuitable cases to sea. To put a patient suffering from low spirits on board a ship is to give him a good opportunity of committing suicide. He has time to study his feelings; while by day and by night the sea beckons to

him to put an end to his troubles, and not to puzzle any longer over the issues of life. Yet melancholiacs are often sent to sea; even dipsomaniacs are put on board these floating hotels; men in consumption are sent to distribute germs of phthisis to their cabin companions, and are even recommended to take a voyage in a crowded steerage. We found a consumptive lad shipped as steward, and attempting a life which is trying to a man of strong physique: at work before breakfast scrubbing the deck, and constantly on duty in the hot air between decks until ten o'clock at night. A delicate passenger finds life in a deck-chair trying in the tropics. How the energies of a hard-worked servant must flag!

We passed the lighthouse on Cape Comorin about ten o'clock at night, and were glad to know that another twelve hours would find us in harbour. We regretted parting with our friends on the ship, both passengers and officers. They had done much to make the voyage pleasant. Indeed, until the sad accident which made us wish to get to land, it had been—from Tilbury to India—one long picnic.

For a long time we gazed at the light, thinking of the great wedge of country which stretches from Cape Comorin northward to its barrier of mountains. We longed to see India with its 250,000,000 inhabitants, its extremes of luxury and squalor, of romance and monotony, of orientalism and West-end-of-London ways; but we saw nothing but the light. And since it is our object to describe simply what we saw, we must not stop to moralize, but pass at once to the pearl which hangs from India's neck, Ceylon.

CHAPTER II

CEYLON

IT was midday when we dropped anchor in Colombo harbour. Outrigged canoes and catamarans swarmed about us like flies; while great black-beetle coal barges crawled out from their hiding-places beneath the jetty, and attacked us on either side. Five boys paddled toward us on a log, too primitive to be called a 'dug-out.' One of them had parted with an arm to a shark; but he dived for pennies as fearlessly as if no such fish existed. Natives crowded the deck dressed in 'comboys' and short jackets, their glossy black hair fastened in a knot at the back of the head by a curved tortoise-shell comb, and their feet bare. The comboy is an oblong piece of cotton cloth about four feet long by three feet broad, which is wrapped round the legs and tucked in at the waist. When one sees the rapidity with which it can be taken off and re-adjusted, the wonder is that it ever stays on! But we tried dressing ourselves *à la Cinghalaise*, and were astonished to find how tightly such a garment holds in place. Does it deserve the name of 'garment'? Not a stitch of making, no buttons, tapes, or hooks and eyes. What an economy in time and trouble compared with skirts or trousers! Think of the con-

venience in the early morning. Whisk! and here we are, dressed and ready for breakfast. We'll go down to the lake later on to bathe. Then we will hang the comboy for a few minutes in the sun to dry, for we are careful to wash it, too, every day. As to our long, glossy hair, that requires much more attention. We will reserve it until we take our afternoon rest under the shade of a spreading tree.

In the crowd we soon recognised an imposing Singhalee, whose massive features were well set off by the hair strained back from his forehead by the comb. Across his chest he wore a sash carrying a brass badge with the well-known letters G. O. H. He was the peon of the Grand Oriental Hotel. 'Andrew my name!'—and he took us and our baggage into his charge. At the jetty we were surprised to find that duty is levied on many things which are free in England—even photographic apparatus—but a visit to the deputy-collector and a declaration that we did not intend to stay more than a fortnight, cleared the baggage without examination. So now we were free to inspect the town.

But first we waited a little while for the heat to abate. Not that we felt it unpleasant, but we were thoroughly impressed by the notices in large letters on the jetty, the first things one sees on landing—'Remember —— and —— and ——' (who had died of sunstroke), and 'put up the umbrella.' In the hotel, too, we met the bishop, who gave us good advice. 'I have lived here in good health for twenty-two years, but I find there is only one safe rule. Always wear light clothes, a spine-protector, pith helmet, blue spectacles, carry an umbrella, and *stay indoors*.' Bishop Copleston, who was shortly afterwards translated to Calcutta, could afford to make this joke at his



A PRIMITIVE DUG-OUT

own expense, for it was not his custom to stay indoors. He is an energetic worker, much respected by the various races which make up the 150,000 inhabitants of Colombo. To the Tamils and Singhalese he talked in their own languages, but, in order that he might preach to the survivors of the Portugese colony, established in Ceylon in 1517, and to the Dutch, who dispossessed them a hundred and forty years later, he learned their languages also.

The Roman Church has a hold upon the natives of Colombo which shows in a singular way how persecution defeats its end. The Portuguese converted the natives to the Roman Catholic Faith. When the Dutch took the island, they attempted by forcible means to make them reformed Christians; but their persecutions seem to have established Roman Catholicism more firmly than before.

A first drive through an oriental town is indescribably fascinating. The shops, the people, the animals, the trees—we did not know which way to look. Our 'grand British calm' deserted us; we all four talked at once and called to one another to look at four different things at the same time. However, we need not here describe a drive through Colombo, for we shall understand better what we see when we have been longer in the island, and we shall come back to Colombo before leaving. Besides, the object of our drive was not to see the town, but to visit the museum. Pater always makes for a museum as soon as he reaches a place, because, he says, he 'knows then what to look out for during his rambles.'

In the museum we saw a very fine collection illustrating the natural history of the island. The birds and butterflies are lovely, but the flying foxes, leopards, snakes, sharks, tarantulas, scorpions, and jumping leeches, are distinctly depressing. The hot,

moist climate and impenetrable forest make some parts of the island a perfect paradise for venomous pests. Cobras always make one shiver, even when they are safe behind a sheet of plateglass in the 'Zoo,' but they must be horrid things to find as neighbours when one stops to bivouac in the shade or to rest upon a log. There is something so cruel in the indolence which can lie still for hours without so much as winking, and then 'strike' with incredible rapidity. A friend of ours, when descending a hill, mistook a great cobra for the stem of one of those giant creepers which festoon every forest in the tropics. He stepped upon the snake; but, when he felt his mistake, he took a jump which would have done credit to the 'Varsity sports. However, the creatures which gave us the most distinctly creepy feeling were the jumping leeches (*Hæmadipsa ceylanica*). It must be very unpleasant in the rainy season to see hosts of these little animals running at you along the ground, turning rapid summersaults from head to tail. When the leeches are numerous, people are obliged to carry boxes of salt, to make the blood-suckers let go their hold. If they try to pull them away, they bring pieces of flesh with them, and wounds are apt to fester in hot climates. Coming from our own favoured land, where the viper is almost extinct, and the common snake absolutely harmless, where we have no enemies more offensive than the wasp or the domestic flea, every visitor to India goes about at first with a feeling of insecurity. But it is wonderful to see how indifferent to snakes and other vermin Europeans become in a short time. We have heard of men who kept venomous snakes as pets, letting them out for an airing every morning at breakfast-time, and merely keeping watch, with a

forked stick near at hand. If the snakes forget their company-manners, they are pinned to the ground by the forked stick, neatly placed behind their heads, and returned to prison in their box.

How strange it is that while most animals live a much shorter time than man, some live much longer. There is a tortoise in the museum which lived in captivity for just two hundred years, being probably about seven years old when first acquired; parrots have lived in captivity a hundred years, and elephants, if tradition is to be trusted, have reached a still greater age. Probably this easy-going reptile 'holds the record,' if only authenticated instances of longevity are admitted.

We are not going to talk about Colombo, but that drive home along the Galle road made an impression we can never forget. Cocoa-nut palms bow to meet one another high above the road. Glossy-leaved bread-fruit trees line its sides. Beneath the bread-fruits low-fronted shops, thatched with palm leaves, display a queer medley of pottery, brass-work, and eatables. Hackeries, drawn by tiny trotting bulls, long bullock-wagons, jinrickshaws, pulled at a hard run by perspiring coolies, take up the thoroughfare; while, on the side-walk, one sees maidens carrying water in earthen vases, balanced on the head or resting on the hip, held there by an arm encircling the neck of the vase; men dressed in Nature's modest brown, tied in at the waist with a brightly coloured loin-cloth; naked brown babies, and all the picturesque confusion which one associates with oriental lands. When we reached the sea-shore it was growing dusk, and the palm-trees stood out black against the rosy copper of the afterglow.

Few railway rides can equal in beauty the journey

from Colombo to Kandy. The first half of the way is over an alluvial plain—covered everywhere with cocoa-nuts and plantains, except where meadows are cleared for paddy. We do not know why rice when growing is called paddy. In India the ryot makes paddy; in Ireland it is, sometimes, the other way about. But a paddy-field sounds an appropriate name for these flat fields, which are always arranged so that they can be flooded with water, each with its little encircling bank. Here they were large fields, flooded by the river, or by canals cut from it. In the hilly country the paddy-fields are rounded terraces, which make a beautiful green staircase up the course of a brook, in the angle of a ravine. At this time of year most of the fields were either in stubble or under water, for rice must be planted in water; but a few were already emerald green with the young rice-grass. Shaggy grey buffaloes, with long jowls and narrow backs looking much more like great pigs than near relations of our own domestic cow, were dragging wooden ploughs through the mud. Like the natives of these swamps, they seem to need an epithet more comprehensive than amphibious; for they live in three elements, instead of the two which content a frog—mud by preference, water or dry land when they cannot get the viscous mixture.

Leaving the plain, the railway climbs to the top of the pass by a series of bold curves. The line affords a number of beautiful views, but at midday there is usually too much haze for the full appreciation of the landscape. In places the cuttings are tasselled with exquisite ferns. Several monkeys were sitting in the branches of a tree, but they swung themselves quickly away as the train came up. Through a gap in the trees we caught sight of three elephants bathing in a

pool, evidently revelling in the cool water, which they squirted over one another with their trunks.

Kandy is a perfect gem in its setting of wooded hills. The lake made by the last rajah, to whom every visitor is under a great debt, is bordered on two sides by an ornamental parapet of characteristic oriental pattern. The rajah's bath-house stands on the lake. On its northern side an acre or two of level grass makes the great meeting-place of the town. The Queen's Hotel is at one end of this green, the Temple of the Tooth at the other. The old town comes up to its side. Behind the Temple of the Tooth is the beautiful old palace, used as a court-house, and beyond this the governor's residence; while the bungalows of European residents clamber up the slopes of the hills which surround the head of the lake. These one-storied houses are simply smothered in flowers: eucharis lilies, hydrangeas, scarlet hibiscus, yellow alamandas, French-grey thunbergia, brilliant mauve bougainvillæa, spathiolus-trees, with erect trusses of orange-coloured flowers, flame-trees, cotton-trees covered with pink blossoms; feathery bamboos lean over road and garden; broad-leaved bread-fruit, glossy jack-fruit, giant india-rubbers tower overhead; while palms are tucked into every gap, as one fills in a nosegay with ferns.

Kandy belonged to the native rajahs until 1815, being governed as an independent State. In 1803 the English had tried to dispossess the last of the rajahs, Wikrama Sinha, but had failed. It was, however, at the urgent request of his subjects that they intervened again in 1815. The king's horrible cruelty and oppression had driven his people into a state of revolt which even oriental despotism could not repress. The native chiefs welcomed the British with their promise of equal justice and religious liberty.

Visitors who stay at hotels do not learn much about native life. It can hardly be said that they even taste the food of the country; for the natives, being Buddhists, eat no meat, whereas meat was cooked for us three times a day. We thought that Europeans would be wise to forego the tough beef and mutton, which, like alcohol, are most unsuitable to a hot climate. On the other hand, 'seir' flesh (*Cybium guttatum*), which appears on the table every day, is excellent—a fish like salmon, although white and not so fat. And how shall we do justice to the curries? Curry, the national dish, although modified to suit our carnivorous habits, cannot be tasted out of India or Ceylon. Shall we ever at home eat the chopped meat in turmeric gravy which is palmed off upon us under this royal name? It is a silly imposition; a design for getting rid of cold mutton by hiding it beneath greasy yellow sauce in a fortress of sloppy rice! Now a Singhalese curry is after this fashion. It consists of from seven to ten separate dishes, which vary somewhat according to the season, but appear in an order as fixed as the soup, fish, and entrées of a civic feast. *In primis*, rice — each grain separate, and dry as a floury potato; meat, in a gravy of turmeric; white cocoa-nut, or sambul, if it can be obtained; red cocoa-nut—that is to say, cocoa-nut ground with chillies, peppers, and other spice; chutney of mangoes and limes; a curried vegetable, snake-gourd, pumpkin, green corn, etc.; and, lastly, a wafer and 'Bombay ducks.' The diner takes some of each of these several dishes, and either keeps them separate on his plate or mixes them together, as his taste dictates. But the blending of the ingredients in the red cocoa-nut, or chutney! Of this we know nothing, although we once watched a woman at a

cottage door, who seemed to devote the whole morning to the preparation of this important blend. It is an art which can only be acquired by years of training, and must be practised with the quiet disregard for time which marks the natives of a land of ceaseless sunshine.

It is queer to see the crowds of servants in an hotel—all men, of course—standing on the stairs or squatting patiently at bedroom doors, waiting for some one to clap his hands and call out 'Boy!' An Englishman cannot squat. Neither ankle, hip, nor knee will bend far enough to allow him to sit upon his heels in an attitude of repose. We never saw a native sleeping in this posture, but we have no doubt but that they can so sleep, for there they remain for hours, evidently regarding squatting as the most restful position possible, save lying down. It is still more strange at night to walk along the passage and to find the servants sleeping on their rugs at the doors which they watch by day. An Indian 'bearer' travels with you for from ten to twenty rupees (say, fifteen to thirty shillings) a month, finds his own food, and sleeps at your door. No wonder every house is overfull of servants.

One night we dined at the house of a planter. His second daughter, just returned from school in England, adopts the Anglo-Indian style. 'Boy!' A soft-footed servant pounced from the serving-room. 'Send the other boy.' The other came. 'Claret'; and her attentive servant filled her glass from the decanter, which was all the time within her reach.

In a Colombo paper we read a letter from a lady who had just visited New Zealand, as a change from Ceylon. She found little to praise in the southern island; the people were vulgar and the service ex-

ecrable. We quote *verbatim*: 'The people seem to think that we are all equal; and so I suppose we really are—at any rate, when white. But I saw young ladies, otherwise refined, whose arms and hands were red from domestic work.' Hands and arms remain white in Ceylon. Most of the English women we met were indeed painfully white and transparent; and with their roses they seemed to have lost the ready smile and frank good-humour which distinguishes their sisters in New Zealand. We would put up with red arms and hands if they would save us from that little look of hauteur and shade of discontent which results from the constant management of an inferior race in an enervating climate.

And here we wish to say that we liked the Singhalese very much, although, since we met them chiefly in hotels and shops, our good opinion is based upon an acquaintance with natives who have been much in contact with Europeans. We were greatly struck with their gentleness, attentiveness, and real anxiety to find out what we wanted. When Filia had the fever, the grey-headed 'boy' John showed an extraordinary power of anticipating her wants. At all hours he hovered at the door watching for commands. 'John, hot water, quick!' and he flew down the passage with the eagerness of a dog for whom a stick is thrown. How the Mater would like to have one or two Johns in our house at home!

Liking the natives as we did, we could not understand the way in which some Englishmen thought fit to treat them: muttering contradictory orders under their breath, and then abusing the servants for not understanding them. It may be the way to maintain British prestige, but surely we are strong enough now to adopt a different tone. An Englishman need

not depart so far from his own standard of the conduct which becomes a gentleman for the sake of inspiring awe in the oriental mind. As the train was nearing Kandy, Pater asked a gentleman, who had already given him a good deal of information, what was the proper scale of 'tips' for the railway porters who swarm about one's baggage. 'The only thing these people need is the stick,' was the unsatisfactory answer. 'You should never argue with these people; you should kick them,' an officer explained to us. It is strange. We do not understand it. Men, who when they spoke to us exhibited good-breeding, seemed, on turning to their servants, to forget all obligations of gentility. They growled and grumbled, shouted and swore, in a way which gave the Singhalese no chance of understanding their directions. It is so different from England, where good-breeding is especially shown by a courteous bearing towards people whose station is humbler than one's own.

At Peradeniya, near to Kandy, there is a famous botanic garden. It contains all the plants of economic value which can be grown in Ceylon, as well as a great variety of flowers and splendid specimens of tropical trees. The clumps of bamboo are delightful: just giant tufts of grass, each stalk six inches through and more than forty feet in height. They give a grand idea of the luxuriance of tropical vegetation, for one can hardly thrust a walking-stick between their stems. There are several fine banyans (*Ficus indica*), the tree whose aërial roots, descending from its spreading branches, become fresh stems, so that a single individual, if it has a clear space about it, forms a forest by itself. We scratched the 'slope-sided roots' of another kind of fig (*Ficus elastica*), and collected some of the milky juice, which soon sets into

raw india-rubber. It is strangely interesting to see things which are only found in grocers' shops at home growing in the open air—pepper, spices, nutmegs, tea, coffee, cocoa, sugar.

It was not the season for fruit, but the attendants gave us some wild mangostines. We had already tasted mangoes, custard-apples, and sour-sops. One fruit which was just in perfection was the papaya, which looks like a melon, with glossy green rind and apricot-coloured flesh. For a long time it has had a great reputation as a wholesome fruit, but now it has been shown on chemical analysis to possess a remarkable property. It contains a very powerful digestive ferment. The Englishmen in Ceylon pride themselves upon their hospitality, and think themselves happy in the possession of a fruit which prevents their guests from suffering from the effects of indulgence in the good things set before them. Pine-apples also contain a digestive ferment, although in a very much smaller degree.

In the museum we saw old Mr d'Alwis at work on his drawings, and a small grand-nephew following in his footsteps; already this Singhalese family has served the gardens as artists for three generations. They have made many of the drawings which illustrate Dr Trimen's great work on the Flora of Ceylon. A little later in the year a greater variety of flowers will be found in the gardens. It was amusing to enter an 'orchid-house' of which the walls were semi-transparent matting, and not glass; excluding the sunshine, instead of imprisoning it. The stove-heat makes the atmosphere of an orchid-house at home difficult to breathe; the Peradeniya 'houses' are cooler than the open garden.

To Puer's great delight, a good-natured guardian

or the gardens gave him some of the butterflies which vie with the flowers and birds in gorgeousness of hue. We may as well say in a word that Puer collects *everything*—stamps, butterflies, minerals, 'curios'—but his special passion is for butterflies and stamps. He started on his travels armed with net, poison-pot, and collecting-boxes, and his well-filled cabinets testify to his success in the chase. Most of his butterflies he set as he caught them, and almost all of them reached home in good condition, although the ants destroyed a few before we discovered the virtues of naphthalin. But, for the benefit of collectors who come after us, we jot down two hints: (1) Instead of an ordinary collecting-box, take a tin box full of sawdust and a bottle of powdered naphthalin to mix with it. (2) Do not set any of the butterflies. Fold each one in a square of paper with its wings together, back to back, and pack it in the sawdust. When you reach home put them in a 'relaxer'—*i.e.*, a pudding-basin half-full of sand, wet with water containing carbolic acid. Place clean paper on the sand, lay the butterflies on this, and cover the basin with a sheet of glass. They may lie in the relaxer for months without taking any harm, and can be set whenever you have time to spare.

We used to enjoy a quiet little laugh at Puer's expense, as he started from the hotel on butterflies intent. In his brown-holland knickerbockers, jacket of a single layer of 'nun's veiling,' with nothing underneath, and his pith helmet, he looked like a perambulating mushroom. The mushroom stepped into a 'rickshaw and trotted up the road with its butterfly net of green gauze floating above it in the breeze, like a broad-leaved dock. The poison-pot was carried by a Singhalese 'boy,' who had volunteered to serve 'Master' in any capacity. For a few rupees

he proved himself of use in many ways; but he could not catch butterflies. However, he dashed into the thicket after them, to the detriment of the net, whenever Puer thought that he was wise, in his inexperience, to beware of snakes. Pater had insisted upon his leaving this part of the chase to the boy, and the result was that their take was a little disappointing. But when our taste for 'flies' was discovered by the native catchers, we soon had offers, and acquired a pretty good collection. The Singhalese, being Buddhists, will not kill the insects, but they fold them up in paper for us Christians to treat as we think fit. One day, Puer, seeing a beauty on the green, rushed after it. In a moment half the 'rickshaw men, who were lounging beside their vehicles, joined in the chase, and the poor butterfly found itself pursued by a boy with a net, aided by twenty or thirty native beaters, shouting and clapping their hands. They did not catch it, however, for some of these butterflies are amazingly strong on the wing; they fly like birds. Over and over again we tried to catch a beautiful fellow with upper wings of black velvet, six inches across, and on the under wings patches of transparent gold, through which the sunshine filtered, making a wonderful contrast to the black; but we never succeeded. One day Pater nearly secured one in his cap. It was loth to leave an ixora,—a beautiful tree covered with coral-blossoms, just like those of a bouvardia,—and for half an hour Pater chased it to and fro. Next day, when he was on the top of a tower three hundred feet above the ground, one of these butterflies flew close past him with the quick flight of a bat. It is well named *Ornithoptera darsius*, for it is more like a bird than a butterfly when seen on the wing.

In the evening the air was alive with twinkling stars. Puer and his friends used to catch the fireflies in their hands. The light is produced by two long, flat organs on the under side of the abdomen, and is so brilliant that when the firefly is held above a watch, it is easy to read the time; indeed, one can read the smallest print by the light of one of these little lanterns.

The great sight of Kandy is the Temple of the Tooth. We postponed our visit until the six-o'clock service, for we wanted to see it in the veiled mystery of candle-light. It is a squalid business—the service of the temple—sadly out of keeping with the glory of its wood-carving and stone-work, its doors of bronze and ivory, its shrines of gold, silver, precious stones and crystal.

First of all, we visited Buddha's footprint—a plain impression in a slab of rock, about five feet long; for you must know that Buddha was forty-seven feet high, as proved by the life-size statue at Dambulla. In front of the little crypt which contains the footprint was a triumphal arch fluttering a thousand tiny calico flags, gifts from the pious people of Matalé.

The wall of the temple is adorned with frescoes, showing the punishment fitted for various crimes. They are very like the pictures in old Catholic churches —devils at work with fire and tongs. The man who drank is lying on his back, his mouth held open by two devils with immense iron pincers, while a third fiend pushes down his throat a ball of fire. For ill-using her husband, a woman's flesh is being torn away by eagles; but there is no picture to show what happens to the man who is cruel to his wife!

In the outer court of the temple, half a dozen priests were vigorously beating tom-toms, making a hideous noise to attract worshippers — at the expense, one

would think, of Buddha's carefully guarded repose. Perhaps they think it only right that Buddha should wake up at service time to welcome his devotees. The court was full of stalls for the sale of flowers—lotus, heavily scented 'temple flowers,' and the blossoms of Liberian coffee. Smoky oil-lamps produced a properly subdued illumination. A very respectable and intelligent Singhalee now took us in charge, first calling our attention to the notice on the wall which announces that, by their creed, priests are forbidden to touch money, and asks that all offerings may be put into the locked iron chests. We made our donation, and having purchased a few sweet-smelling flowers, we entered the shrine. Perhaps their creed forbids the priests to clean ceiling, wall, or floor; they are not allowed, we were told, to wipe the dust from the great images of Buddha—but we do not know how much farther the prohibition goes. However moderate the restriction, they are very zealous in its observation; while, as to the unreasonable regulation against taking money, they treat it with the scorn it deserves. We could hardly make our way out of the sanctuary, so firmly did they hold their alms-plates in our way. When one sees the sordid greediness of the priests, the wonder is that they guard, as we suppose they do guard, the jewelled shrines of this temple. Some one remarked that she thought the Government should interfere to prevent them from turning their rubies into rupees. We dare not give the name of the perpetrator of so small a joke. Buddha's tooth we did not see. It is only exhibited by the Governor's order, which we made no effort to obtain, since we had seen an admirable reproduction of the tooth and its shrine in the museum at Colombo. It is needless to say that the tooth is on a superhuman scale. With

all its squalor, the temple makes a deep impression. The gloom, the overpowering odour of the flowers, and (except when the tom-toms are sounding) the silence, are fit surroundings of the sleeping Buddha, or the round-faced god who sits with a vacant stare in passionless Nirvâna. The protection of Buddha's image, standing, sitting, or lying down, is the object of all the temples. Sometimes the figure is reproduced a dozen or a hundred times; but always the same Buddha, copied with undeviating accuracy, from the flame-element on his head, and the face with its inane want of expression, to the toes, all of equal length and decorated on their under surface with the lotus blossom. It is not a good copy of the human figure. Like the ancient Egyptians, early Singhalese artists never succeeded in overcoming the difficulty of hanging the arms on the chest without making the shoulders project, like epaulettes, on either side. It is an anatomical puzzle to every schoolboy. His picture of a man always comes out either too wide in the shoulders or too narrow in the chest. But though the model is bad, the Singhalese show an amazing power of reproducing it and of making it, as biologists say, bilaterally symmetrical. It would require an engineer with calipers and expanding ruler to detect any deviation from equality in the two sides.

We had, like lazy people, allowed the merchant who has a booth in the verandah of the hotel to coax us into buying several badly executed articles in brass. It was less trouble than going to the shops, and besides, we came after a time to understand his scale of prices. But the worse the execution of his wares the better seemed to be the merchant's trade. Tourists like to purchase Indian work which has a rough, archaic look. There is a notion that such work is

genuinely oriental. When we made our purchases we did not know that there exists in Kandy an art-society, which tries to keep up the standard of work both in execution and design. We ought to have applied to it, instead of adding our contribution to the degradation of the Kandyan craftsman.

Buddha's image is the central emblem of all Singhalese art-work, whether in ivory, wood, or brass. A visitor who purchased a number of figures entrusted them to a native agent for packing and despatch. The box was delivered at his home in England, thoughtfully labelled 'Gods with care.'

There is a cacao plantation six or eight miles from Kandy. The road along the river gave us a capital opportunity of studying native life, for it is lined by cottages whose inhabitants transact most of their domestic business in the open air; and the hot, close atmosphere of the valley seems to make it a favourite haunt of birds, as well as of chameleons and other kinds of lizard. We passed, too, a number of huge, conical ant-hills, often as much as six feet high. At Gonawatta—a name we found easy to remember, it sounds so much like 'go on the water'—our carriage crossed the river on the ferry, an ordinary square raft, which is pushed across by poles. A few yards further and we entered the plantation. Although so large that we were an hour in driving round it, it is beautifully kept. Cacao trees, three to eight feet high, cover the bare earth. Their crinkled crimson fruit, rather larger than lemons, are pretty, but too dark in colour to produce any effect from a distance. Shade trees, chiefly Grevillea robusta and Eucalyptus, are grown above them for firewood, to drive the engines. A few Liberian coffee-trees in full blossom loaded the air with fragrance.

By train to Newera Eliya (sixty miles), the mountain sanatorium, devised by Sir Samuel Baker, and developed by him with romantic enthusiasm. The name is pronounced 'Nuralia,' which is a simplified form of the two words as uttered by a native, for the Singhalese elide their vowels. To be more accurate, Singhalese, like Hebrew, is a consonantal language, to which vowel sounds have to be added. Hence the variations in spelling which are met with. The pronunciation of place-names is extremely difficult. Words spelt almost alike may be pronounced quite differently. Dambulla, for example, is pronounced Dambool; while Badulla is Bádula. As a rule the accent falls on the first syllable—thus Mátalé, Kélaneya (Kelany). There is always a doubt as to the value of v and y.

Between Kandy and Nanu Oya (the station for Newera Eliya) the line climbs from 1,700 to 5,200 feet, by a succession of loops and curves, almost without tunnels. In places the scenery is fine, but the perpetual tea-shrub is a tame substitute for the jungle which it has dispossessed. It is grown in straight rows on the rounded hills and up the sides of the mountains. Since the great object of the cultivator is to get as much top-surface as possible, each bush is pruned to a flat spreading head about two feet from the ground. When well grown the tea plantations show a full green surface, which does not injure the landscape, but, unfortunately, patches of freshly cleared jungle are everywhere to be seen, the stems of big trees which would not burn standing erect and bare, or fields of freshly planted shrubs, which make, as yet, no cover for the red-brown earth.

Still we must not complain of the tea, for no other British colony is as prosperous as Ceylon. When the leaf disease (a fungus, *Hæmilia vastatrix*) destroyed

the coffee twenty years ago, Ceylon was on the point of bankruptcy. Now tea-plantations pay from 20 to 35 per cent. Land which after the coffee failure might have been bought for £10 per acre, or less, is now being sold to large tea-companies at from £100 to £110. In this wonderful climate every kind of plant which loves warmth and moisture flourishes exceedingly.

Rough hillsides too rocky for tea or cacao are being cleared for rubber trees, and this most lucrative of crops has already displaced tea and cacao on the less productive plantations.

Everywhere chetties, from Southern India, are at work, picking the leaves into baskets which they carry on their backs. Small people, with narrow foreheads, who come to Ceylon for four or five years at a time. Men, women, and children live and work together. They are in crowds at every station, either arriving or leaving for the coast. Anxious, chattering groups, rushing for the cars with all the worldly goods of a whole family packed in a 'gunny' bag, or in an old soap or candle box. Sometimes they seem to have no belongings at all, save two long sticks and a few yards of Hessian matting. When the men have coats —they need them on the higher stations—they are almost without exception faded scarlet tunics with the number or, more often, with the name of one of our regiments on the shoulder. The cast-off uniforms of British soldiers seem to clothe the whole male population of Southern India—at any rate, when on their travels. The women are squat in figure and thick-lipped. They carry the whole wealth of the family more safely secured about their persons than it would be in any kind of purse. Huge ear-rings of brass or silver drag the lobes of their ears right down

to their shoulders. Even baby girls have at least one large ring in each ear, while the women carry three or four as large as curtain rings in the lobe, as well as several smaller gold rings passed through other parts of the ear. Rings through each nostril, as well as through the septum of the nose; bracelets and finger-rings; bangles on arms and legs; rings round their toes. It is difficult to think where else these perambulating banks could stow their treasure. They are an insignificant, unintelligent-looking race. We found it hard to look upon them as fellow human beings; yet several times a touch of nature brought tears into Mater's eyes. Here a large party was starting back for India; anxious, hurrying, jostling, driven into their carriages by the railway porters; while outside the station a crowd of their friends who had come to see them off were giving way to their feelings much as an English crowd at the side of an emigrant ship might do. What is their relationship? Is that woman seated on the wall and sobbing with her head beneath her shawl a wife who must stay behind until she has earned more rupees and can afford to rejoin her husband in their Indian home? That child they were making such a fuss about because the father thought it could pass on a single ticket, as part of his belongings—is he really going to leave it behind? They are very human in the way in which they give expression to their emotions.

Labour is cheap in Ceylon; but money is plentiful, from the chetty's point of view. On some plantations he is paid by the job—two cents for every pound he picks. Up to fifteen pounds his earnings are booked, and not paid until the end of the month. All above fifteen pounds a day is paid for in cash. The average pick is about twenty pounds; but women do better

than men. If a woman picks twenty pounds, she gets ten cents a day to live upon, and draws R.7:20 at the end of the month—say 9s.; quite a fortune in Ceylon. Some planters consider that piecework injures the trees, as well as producing an inferior tea, owing to careless picking, and so they prefer to pay their coolies by the day, although they have to go to some expense in employing overseers. The cost of growing and picking tea, apart from interest on money invested in clearing or buying land, seldom exceeds 23 cents a pound. The Peradeniya company has brought it down to 21—say 3½d.

As the line climbs, palms and plantains disappear, and the railway track is marked out in the landscape by its fringe of handsome large-leaved aloes. Unlike one of its American cousins, which lives for a hundred years before it flowers, this aloe flowers in five or six. Its spikes of cream-white bells are often fifteen or sixteen feet in height. A chatty American guard, who came to the side of our carriage, pointed out to us all the features of the country. Strangely enough, he could only recognise Adam's Peak when it appeared on the left side of the carriage, although, as the train in climbing up the mountains often loops back above its previous track, the peak is sometimes better seen upon the right. Pater says the guard was imposing upon our simple natures, and that he knew the mountain from every point of view as well as we soon came to do. It is difficult to miss it. Although not quite the highest point in the island, it is the most conspicuous. A bold, sharp wedge, which would certainly be marked out for veneration, even though Adam had not left his footprint on its summit. Here were we, incredulous people that we are, privileged to look upon a mountain which has been an object

of pilgrimages for countless ages. Probably the most sacred spot in the world, as judged by the number of persons who venerate it. The Brahmans regard the footmark as that of Siva. It is the impression left by Buddha's foot, say the Buddhists. Here Adam descended, the Mohammedans allege; and even the Portugese Christians could not see so fine a footprint unannexed. It was made by the eunuch of the Æthiopian queen Candace, according to their account. Doubtless the mountain was sacred in the eyes of worshippers of sun and moon and stars who lived in the island long before Buddha left his father's palace to share the sufferings of the Rajah's poorer subjects.

Our guard told us something of the difficulty of railway work in these regions. On the 27th of December last, eleven and a half inches of rain fell in twenty-four hours. As the train was crawling up towards Banderawela, the engine-driver saw that beyond a certain tunnel the line was washed away; he, therefore, stopped the train. The passengers got out to see what it was best to do, when one of them noticed some stones rolling down the mountain side above them. He advised the engine-driver to push for the tunnel. Just as the train entered it, down came a tremendous mass of rock, which carried away the embankment, as well as the last carriage of the train—a goods' van fortunately. Close behind the tunnel the ends of the rails were hanging free over a precipice, and the same was the case not very far ahead; they were in shelter, but their dangers were not ended yet. A messenger came down from a planter's bungalow above them to say that water was accumulating in the piece of cutting in front, and that if it broke through the *débris*, which at present re-

strained it, it would wash the train out of the tunnel. When they left their shelter, they found themselves up to their chests in the water in the cutting. As a matter of fact, the train was not washed out of the tunnel. A horse that was on board it was fed in its box and rescued after five days.

This story gives one a good idea of the way in which the rain comes down in Ceylon. It helped us, too, to understand a fact that hitherto had puzzled us—the poverty of the soil. Here is an island about five-sixths the size of Ireland (its area is 25,000 square miles), extending from Lat. 5° to Lat. 10° N., with all the advantages of an equatorial island climate. In its hot, moist atmosphere vegetation grows with extreme rapidity, and when it falls upon the ground it decays as fast as it grew; and yet there is no accumulation of humus in the soil. The soil is a clean, gritty loam of varying shades of brown, red, and buff. There is no rich black earth or peat. What becomes of the immense weight of vegetable matter which every year comes into existence and decays? These terrific rains wash it out to sea. They make the soil as clean as a gravel path, and the vast masses of fine detritus which the rain brings down from the mountains form the dome-shaped foot-hills which give a characteristic rounded appearance to the sides of the valleys.

Newera Eliya (6,200 feet) is a thousand feet above Nanu Oya. The road up to it passes through a pretty gorge full of patena-oaks, which at this season of the year were covering themselves with fresh leaves, varying in tint from emerald green to ruby, and giving a very rich hue to the jungle. We saw several new flowers of conspicuous beauty, particularly a mauve broellia—a shrub which closely resembles ar

[illegible]—and a large shrubby hypericum. Here, for the first time, we saw the tree-ferns of Ceylon, known from other tree-ferns by their very woolly surface. They were growing in clumps, surrounded by common English bracken!

The plateau amongst the peaks was full of planters and Anglo-Indians, enjoying its beautiful breezes, which remind one of bright weather in the Trossachs, rather than the tropics. The Governor had come to Queen's Cottage the day before, so we were mistaken in supposing that the stations on the line had been decorated to welcome *us*! The Mohammedans are not far wrong in supposing that Adam made his *début* on the earth here or hereabouts. No wonder a man who has spent two or three years in Colombo or Calcutta likes to come up here for a change. The air is as light and sparkling as in the Engadine, while the sky is unclouded, and at this season of the year the north-east monsoon blows day after day, with almost unvarying constancy. A large school of boys with rosy faces were playing cricket on the race-course. At this early hour in the afternoon the temperature was 80°, but when night fell we were glad to gather round a huge log-fire lighted in the drawing-room.

The first thing to be done on reaching Newera Eliya is to ascend Pidurutalagala—the highest point in the island—8,295 feet. Puer asked every one the question, 'Which is the highest mountain in the British Isles?' And when they named 'Ben Nevis' he replied, 'You are wrong; it is Pidurutalagala.' Subsequently, when his experience was enlarged, and he had seen New Zealand, he found that he was obliged to dethrone Pedro, as he is familiarly called, in favour of Mount Cook (12,349 feet).

Pater was obliged to start without us. At 3 a.m., 'John' brought him tea and eggs, and a few minutes afterwards Pater joined his guide in the passage. Poor guide! there was no appearance of his wearing anything under his cotton comboy, and his teeth chattered so with cold he could hardly say, 'T-t-t-this w-w-way, M-m-master.' Fortunately, our careful Mater had provided a rug to protect Pater from the keen wind on the summit. He wrapped his guide in this, but he could not save his bare feet from contact with the frozen ground. A sharp frost had covered grass and trees and buildings with rime, which glistened in the moonlight. This happened to be a particularly cold night, and when we rose in the morning we saw some of the native servants who had never before left the plains carrying about frozen leaves and bits of ice in great excitement. When travellers ascend the mountain, they usually carry revolvers for protection against the, now mythical, leopards; but nothing of the kind is needed, nor was there any need for a guide. It it had not happened that just at this time the path was blocked by fallen trees, Pater would have hired a pony and taken us. We were very sorry that we missed the view. On the east a long row of peaks, almost as high as Pidurutalagala, formed the rugged boundary of a vast field of cloud; but the cloud-waves were so cold and sharp in outline that any one transported blindfold to the spot, with no knowledge of its situation, would undoubtedly have called them ice—a glacier twenty miles across. Behind the ridge of rock, radiating golden beams announced the approach of the rising sun. On the opposite side of the heavens the full moon was poised about 20 degrees above the horizon; while at almost exactly the same altitude on the north and on the

south appeared the North Star and the Southern Cross. The four cardinal points of the compass were marked out as on a map. Truly this must be, as Brahmans, Buddhists, and Mohammedans believe, the centre of the world!

Punctually at six o'clock the edge of the sun's disc appeared above the rim of the cup which held the lake of cloud, and his rays glittered across its waves of ice, which trembled, melted, deliquesced beneath their warmth.

Pater saw another phenomenon, which people often ascend Adam's Peak in vain to see—'The Shadow of the Peak.' Looking away from the sunrise, he thought in all seriousness that he saw a new mountain to the south. It was harder in outline and more distinct than Adam's Peak, which lay a little to its west. As the sun rose the summit of the new mountain sank. It was the shadow of Pidurutalagala cast upon the haze which covers the lower land towards Colombo.

A few miles to the east of Newera Eliya, at an altitude of about five thousand feet, just where the high ground drops into the great Uva Valley, a few acres of Paradise have been preserved. It may not be the very spot in which Adam first saw Eve, but this nook on the eastern slopes of the group of hills which surround the Peak, with its glorious view across the deep valley to the mountains beyond, would certainly be a likely bower in which to find her. Watered by tinkling cascades, surrounded by moss-draped rocks, and crowned by wooded heights, the Hakgalla Gardens might assuredly have contented the First Gardener, and satisfied not only his soul, but even his wife's. What would Austen Dobson, Dean Hole, or Dr Michael Foster have said to developing a garden in this spot among the Alps of Ceylon, where

the temperature is never too hot, yet touches freezing-point only once in ten years; in a climate which allows the gardener to ground in all his borders with Adiantum farleyense, front them with selaginellas, and fill them with gorgeous calladiums, cannas, coleus, and crotons; where delicate bamboos droop over the little brooks; tree-ferns, and Abyssinian plantains with immense unbroken leaves, constitute a sort of middle height; while, above, casuarinas and pines in great variety cover the large-leaved plants with a feathery canopy, their stems hidden in creepers or tasselled with orchids?

The parts of the garden which are devoted to the things that grow best are extremely lovely; but our courteous guide did not permit us to linger long. He wanted us to see the formal beds, laid out with flowers in the European style; the little greenhouses, containing begonias, cinerarias, a grape vine, and many other things which grow infinitely better at home, and then to walk round the experimental grounds, full of unhappy-looking apples and plums, blighted beans, and runaway lettuces. It was an amusing commentary upon the ways of gardeners as a class. After we had seen the flowers and palms at Paradeniya, Puer said that he would never care again to see the same plants grown at home. Hakgalla showed such a giant bouquet of flowers, foliage plants, ferns, and trees, as would make the tropical house at Kew a dreary failure; but its guardian cared more for the poor deformed strangers from another land. He viewed the latter with the same kind of pride which we take in the stunted tropical plants of our hot-houses.

Pater left us at Newera Eliya. He wanted to visit the 'buried cities,' and thought that in this healthy,

comfortable place we could not need him for a week. He little guessed how much we should need him before he had been away a day, but we must write about this later on, and leave him to tell his story first.

THE BURIED CITIES

PATER'S STORY

As the train slid down the mountains I read in my newspaper, 'The hot weather is upon us at last — Colombo, 90°; Kandy, 89°; Anuradhapura, 93°'; and speculated as to whether such heat might not make the long journey through the jungle a trying experience. As a matter of fact, I enjoyed every hour of it. At this season the air is dry, and, although one is perpetually bathed in perspiration, the warmth is not in the least depressing or enervating. I should not hesitate to bicycle all over Ceylon,—Puer and I have promised ourselves this pleasure some day,—for the roads are excellent, and so are the rest-houses; while the 'coaches' are as bad as they can be, and a bullock-wagon is a mode of progression only suited to Buddhists who have already attained Nirvâna.

The rest-house at Matalé, the end of the branch line from Kandy, was a bungalow with broad verandah hidden away beneath palms, casuarinas, and mangoes. I entered with an eye open for snakes, and prepared for a meal of rice and jungle fowl. The dinner was very different from my anticipations. Clearly a man may bicycle over Ceylon in comfort, if all the rest-houses are like this! The bedding and mosquito-nets were good too. It is not necessary, as in India, for the

traveller to carry his own, if he intends to stop at the dâk bungalows.

Matalé is a long village, which was at the time very full of plantation-coolies come down to trade. Open booths lined the street for more than a mile. Most of the shops displayed fruits, grains, and cakes of various kinds. Some contained earthen jars and other utensils. Others were devoted to dried fish, which made the atmosphere of this part of the village trying to a civilized nose. The Tamil barbers were busy shaving heads, according to the caste of their customers. Some are shaved in front, some all over, while others reserve a little patch above the ear, on one side, by which they hope to be lifted up to heaven.

It was a noisy crowd, and not so good-natured as in most Singhalese villages. In several places violent disputes seemed to threaten blows. As I walked up the street, I happened to follow an old fellow in a turban, who suddenly turned round and kicked a Tamil in the stomach because the latter, in handing a plantain to his little boy, had touched the old Turk. Since the Tamil took the blow without remonstrance, I imagine that difference of caste prevented him from resenting it. When I settled for the night I still heard squabbling. As this died out, the voice of a reader or reciter of some sacred epic became unduly noticeable. From 8 at night until 2 a.m. he kept up his wearisome chaunt, without altering time or accentuation. Then our dog on the verandah (every rest-house has a dog or two) flew up and down all night, barking furiously at imaginary thieves or leopards. In my room it was absolutely dark, and when, at last, I became deeply unconscious of all outside noise, I was suddenly awakened by a most unaccountable blundering of something against walls and furniture,

and eventually against my mosquito curtains. At first I thought it was a monkey, but a flapping sound proved it to be a giant bat. When I asked the boy in the morning, he said, 'Rest-house no monkey; only rat and bat.'

This was my only disturbed night in a Ceylon rest-house. I soon learnt that one may sleep in a rest-house as securely as at home. But it takes a little time to grow used to the notion of new pests. Even the harmless lizards (gecoes), which crawl about the bedroom wall, look uncanny. Two German gentlemen joined me at dinner—a Professor of Sanskrit, travelling to study the dialects of Ceylon, and a merchant friend. I happened to say that all I had heard of pests must be exaggerated; for instance, I had not seen a snake. 'Oh,' said the merchant, 'I saw one ten minutes ago, as I passed through the village street. The natives were hurrying away from something, and when I stepped up to see what it was, I found a ticpolonga crossing the road as if the whole place belonged to him.' The ticpolonga (*Daboia elegans*) is the snake most dreaded in Ceylon. While the cobra runs away whenever it can, this viper runs at any one who disturbs it, advancing with a kind of jump. Then the Professor added that he had only spent one day at the house of a lady friend in Colombo, but the servants killed a ticpolonga in the bath-room in the morning, and caught a cobra in the garden after dinner. Buddha did the world a service in forbidding his followers to kill; but he carried mercy too far when he not only protected snakes, but even made the cobra sacred. The Professor asked his boy what he would do if a snake attacked him, and he answered, 'I no kill.' When servants, in obedience to instructions, have killed a cobra, they expiate the

crime by pouring milk down its throat. During our whole stay in Ceylon we none of us saw any animal more noxious than a mosquito; except Puer, who saw a little black snake, which he was warned was very venomous.

At 5.30 I took my place on the box of the wagonette which runs as coach. My companions were Dr and Mrs Ebel on their way back to his station at Anuradhapura, and, for a few stages, the Government Agent for the Matalé district—Mr Saxton. I could not have been more lucky, for all three were very kind to me, and gave me a great deal of information. The stage is well horsed, although the animals are apt to fight at starting. If only the harness were decent, the journey would be safe, but it does not seem to enter into the native mind that a horse which would do its work well in comfortable harness may give trouble when its back or shoulders are galled. In the first team one of the leaders, a little grey, fell to kicking, and it was only through the influence of the Government Agent that I could get the driver to have its trace, which was rubbing a raw spot on the side, shifted to a different pin. After this it went perfectly. Towards the end of the journey we were as nearly as possible turned into a deep and dirty ditch by a chestnut stallion, which was working beautifully until it could no longer bear the pressure of the ramshackle collar on its raw neck. Two or three times they tried to get off—the runner and conductor holding the pole on each side with a rope—but each time the horse, after trying a start, threw itself violently back into the breeching.

For the first half of the way the road passes through pretty valleys. After that the country is flat, and nothing is seen but the edge of the endless

jungle which borders the road. Horses are changed every seven miles. There is a rest-house at every alternate stage. The first was typical of the others: a neat little bungalow shaded by a huge tamarind. Mr Saxton invited us to tea, which is always ready when the stage is due. I tried some of the ripe tamarinds, but did not recover my customary Pickwickian expression for at least an hour. Sulphuric acid is not more acrid. The villages are few and far between, always placed about a little clearing of paddy-fields. Boys and girls were going to school with their slate and books much as in England, for education is compulsory, the Government supplying the teachers, while each township finds the school-buildings and other educational plant.

The ride (72 miles) was full of interest and not unpleasantly hot, although some green cocoanuts brought to us about 4 o'clock in the afternoon afforded a grateful drink. The stalk end of the green nut is cut off, and the juice drunk from its natural cup. Afterwards the small quantity of jelly which represents the white is scraped up with a knife or spoon.

Doctor Ebel was soaked with fever; he had taken eighteen months' leave to get quite quit of it—to have it all back again within a week after returning to Anuradhapura. He took it and the other troubles incident to Ceylon with great good-humour. Amongst the other troubles, they had just had their house cleared out by native thieves. 'The best of it,' Ebel said, 'was my first remark to my wife on waking up: "I have not been able to sleep a wink all night!" But these fellows will take the sheets off your bed without disturbing you.' This housebreaking is a great trouble to English residents, and the thieves are very seldom caught. At Colombo there is a new

and energetic chief of police; so just to stimulate his zeal the thieves amused themselves by taking the tiles off his roof and fishing up with hooks and string all the clothes and jewellery which lay about in his bedroom. Often (probably usually) they are in collusion with the servants. At Newera Eliya, a short time back, the bank was robbed of Rs.30,000. Pills of the juice of the moon-flower (*Datura suaveolens*) were put in the manager's soup one night when his wife was away. The thieves then considerately undressed him and put him to bed before they took the keys from his pockets and opened the safe. In this case a too liberal distribution of rupees led to their conviction.

Thanks to Dr Ebel, I learnt a great deal about native ways. For example, he explained to me the principles of the perpetual betel-chewing. The mouth of every native, male and female, is stained blood-red with the juice. All through the day they expectorate a red liquid, and then take a fresh bite from a green leaf. Old women squat in front of baskets covered by wooden rods into which iron pins are fastened. The pins form a kind of toast-rack on which the dainty is displayed. Between each pair of them is tucked a folded leaf smeared with quick-lime, with a little heap of paste made from the ground nuts in its centre. The packets look attractive, but poor people cannot afford such an artistic confection. They just carry a bundle of the leaves in the top fold of the comboy, and lime and areca-nut in a box. Unless lime be added, the juice does not turn red, and the full flavour is not developed. Ebel told me that, although it is undoubtedly narcotic when taken persistently, he could not recognise any effects at all from such quantities as he was willing to take.

As a happy result of travelling in such influential company, I had the chance of seeing the rock-temples of Dambulla. It is a high misdemeanour to stop His Majesty's mails. The contractors who are fined if they are late at their destination, show little ceremony in starting without a passenger who lingers by the way. At Dambulla the coach halts an hour for lunch, but, since the temples are only half a mile short of the village, it is possible, by keeping the coach a little beyond its time, to see the temples and yet get lunch. So we got out at the place which leads up to the temples and climbed the steep rockpath. It faces full south, and is warm at mid-day! But the view over the jungle from the summit, as well as the temples themselves, more than repay the trouble.

There are five chambers. The first was made by King Walagam Bahu in B.C. 80. It contains the great sleeping Buddha, forty-seven feet long, cut out of the solid granite. The dates of the others are very uncertain, for the temples were embellished by all the kings who reigned at Anuradhapura and Polonarua, and even by the later rajahs. On the rock-face is an inscription as late as A.D. 1192, which might have been written of a monarch, who, three centuries earlier than this, reigned in England: 'Thrice did he make the circuit of the island, . . . and such was the security he established, as well in the wilderness as in inhabited places, that even a woman might traverse the country with a precious jewel, and not be asked, "What is it?" '

All the temples are roofed by the solid rock, but it is impossible to tell to what extent they are natural, and to what extent excavated. The uniformity of the cleft leads one to suppose that it is largely, although probably not wholly, artificial.

The temples are much in the condition in which they were built, although the decorations have been touched-up from time to time, they have not been re-drawn. Undoubtedly the swords and dresses in the pictures are such as were worn in the early centuries, and have not since been in vogue. It is useless to seek information from the priests. They go through an extremely laborious course of education from boyhood onwards, and know a vast amount of religious lore, but they do not shine in history. Ebel asked in Singhalese, how old the temples were; to which our guide replied, '200 years.' When we seemed incredulous, another priest suggested 2,000; they agreed, after some discussion, that it was either 200 or 2,000, but they did not seem to have any predilection for one figure rather than the other.

The largest cave is 160 feet broad, by 50 feet deep, and 23 feet high at the front, although only 4 feet high at the back. It contains fifty-one statues of Buddha, one of Vishnu, and one of King Walagam Bahu; but its most interesting feature is the mural painting which covers the walls and roof. In addition to the scenes from Buddha's life, there are a number of historical pictures of great value, going back to the landing of Wyeya, the first of the Singhalese, in B.C. 543. The picture of Sanghamitta, Mahindo's sister, bringing from India the branch of the Bo tree under which Gautama was sitting when (B.C. 588) he attained to Buddha-hood, explains a story about which one might otherwise be somewhat sceptical. The 'branch' is a well-rooted scion in a flower-pot which a slave carries on his head. Had it been a simple branch, one might have doubted whether it could have retained its power of striking root after so long a journey. Buddha's tree has disappeared,

although the temple at Buddh Gaya, 300 miles N.W. of Calcutta, marks the spot where it stood; but the scion still flourishes at Anuradhapura, after the lapse of more than twenty centuries.

From Dambulla to Anuradhapura (pronounced Anoorajapoorah) is forty-two miles, without a break in the jungle, except the clearings on which two or three small villages stand. In several places lagoons of shallow water border the road. They were covered with lotus flowers and other lilies, and teemed with water-fowl, many of them of great beauty, while two kinds of kingfisher darted at their surface from overhanging trees. The road was very dull except for occasional droves of goats, on their road south from Southern India. At this time of day the jungle was silent, save for the cry of the jungle-cock, of which several fine specimens crossed the road. It is a strange thing that these birds, which so closely resemble small game-fowl, cannot be domesticated. We were told that no specimens had been brought to England, and that the 'Zoo' was prepared to give a large price for a pair; but this is a mistake, the Ceylon jungle-fowl, as well as several Indian species, have been kept and even bred in the 'Zoo.'

I made my first acquaintance with these birds at Matalé. A bullock-wagon drew up in front of the resthouse where I was sitting. Two handsome young planters emerged feet foremost and unfolded themselves with difficulty. I could not help asking, 'Has your carriage and pair brought you far?' 'About fifty miles; but don't call that confounded thing a carriage. We left at five o'clock yesterday morning' (it was now four p.m.), 'and have been travelling ever since. This pair of bullocks has brought us

twenty-eight miles. We thought we were going to miss the train, and had to hurry them up. They have done the last fourteen miles in nine hours—not bad!' Under the cart was slung a basket with a jungle-cock and two hens—pretty birds, not unlike small game fowls, but with yellow combs, edged with red. When I asked if they were provision for the way, I showed that no plummet could sound the depths of my ignorance. They were a valued present to a planter friend, who was to try keeping them with ordinary poultry.

It was funny to see these fellows ordering and scolding the natives, who had to unpack the luggage and get it to the station in double quick time. Their dignity lost nothing by their standing on the verandah dressed only in a towel, and pointing to their various chattels with shaving-brush or razor. By contrast with their servants and helpers they looked so very white.

On the road we saw numbers of mongoose. These creatures are very numerous in the jungle, but they do not seem to make war upon the snakes. If a snake and a mongoose are shut up in a room together, the mongoose makes short work of his traditional enemy; but all sportsmen agree that as long as the snake keeps out of his way, the mongoose lets it alone. I could not ascertain whether they eat snakes' eggs, which seems to be not unlikely.

At one point a large family of monkeys were sitting in a tree by the road-side. As the coach came up they moved off into the jungle. One young mother had a little baby clinging round her neck. It might have been mistaken for a lady's boa.

As we entered Anuradhapura, we passed along the bund (embankment) of the Nuwara Wewa tank. I

could not estimate its size, but it is not less than 700 or 800 acres—perhaps much more. Yet this is small as compared with the Kala Wewa tank, from which also, although fifty miles away, Anuradhapura receives water. This tank was restored in 1884-7, and although much less than its original size, it is still forty miles in circumference and twenty-five feet deep. Irrigation channels are being rapidly cut and jungle cleared, and we may hope that before long some of its former prosperity will come back to this desolate, fever-stricken district. Until about 700 A.D., it was the granary of Ceylon, supporting an enormous population, thanks to its irrigation works. Any guess at the size of Anuradhapura is the merest speculation. Sir Samuel Baker estimated that the town covered 256 square miles, and contained a population which 'makes our modern London a mere village by comparison.' But all that is left of this gigantic city is deeply buried in jungle; the domestic buildings have disappeared,—only temples, baths, and palaces remain,—and it is impossible to tell whether these were the centres of small towns embedded in fields and gardens, or points in one huge, thickly-populated city. The population cannot have been less than half a million; it may have been twenty millions. Whatever the city was like in its prosperous days, the widely separated villages of feeble people at present scattered throughout the jungle are strangely inadequate to the possible resources of the country; but absolutely nothing can be done without water. Ceylon is a remarkable illustration of what British enterprise and order can do for a native race. We found a degenerate people, speckled over what was once the garden of the world, spending their time in local quarrels; giving their best thought to destroying the

tanks of rival tribes, instead of trying to restore the former greatness of the island. We turned the jungle into thriving coffee-plantations. When the leaf-disease seemed to have swept away this source of income, the cinchona-tree was brought from the Andes. For a time the production of quinine was very remunerative, but in a few years, owing to the quantity thrown upon the market, its price went down from eighteen shillings an ounce to one shilling and eightpence, and this industry ceased to pay. Then, almost by magic, the country was covered with tea and cacao, and the revenue is now sufficient to allow the Government to make railways and to restore the irrigation works. Within a few years we shall probably see the population of the N.W. Province multiplied a hundred-fold. Already the Government has made a well in every village, and has established admirable hospitals at convenient distances. The mortality from cholera has been reduced to one-twentieth of what it used to be. Soon the miserable beings, stunted and deformed by fever and parangi (a mild leprosy), will give place to well-to-do Tamils from Jaffna and Southern India.

At Anuradhapura I was to meet Mr and Mrs Percival, and I anticipated much pleasure in exploring the district in their company, since Mr Percival is an archæologist of great experience. They were waiting for me on the verandah of the rest-house with tea and welcome. Their cart, drawn by two bulls no bigger than Shetland ponies, was in attendance, to take me to see the Bo tree by moonlight. The Government Agent, with the hospitality which is everywhere met with, had asked us all to dinner. The Agent's residence is built for hot weather in separate portions with broad verandahs. A roofed

garden between the drawing-room and dining-room makes a cool place for a midday rest. The house is surrounded by a compound of a dozen acres, its green turf and huge trees recalling an English park.

Next morning we went to Mihintalé, Miss Byrde, the Agent's daughter, most kindly accompanying us as guide. Two little bulls could not pull four people, however much their tails were twisted by their sable driver with the strip of leopard skin around his arm to charm away all evil spirits, so I walked, and thoroughly enjoyed the exercise. Eight miles each way and a long climb at Mihintalé did not prove trying in the least degree, although the thermometer marked 95 degrees at mid-day. In the dry season one can do anything.

Mihintalé is a particularly sacred hill. On it the great Missionary-Prince Mahindo 'alighted,' in 307 B.C. Here he converted King Dewenipiatissa, and here he died, and was buried beneath a dagoba, which seems to have been kept continuously in good repair. A flight of 1,840 steps leads to the dagoba. The steps have been much displaced by the roots of trees, and are very irregular. Some that I measured were twenty-seven feet broad, but the flight grows narrower as it ascends, a device adopted, no doubt, to increase the worshipper's estimate of its height.

On the left of the stairs are some remains which our guide-book, printed in Ceylon, calls the 'reflectory.' I do not wonder, for amongst them is a stone feeding-trough, said to have contained the food of the priests. It is about thirty-six feet long by three feet deep and two feet wide, made of three tiers of huge stone blocks admirably shaped and mortised together. A meal from such a trough would lead to a period of reflection—even for the elephants, for

whom I fancy it was intended, rather than for priests At the entrance to the refectory are two most interesting slabs of polished granite, seven feet high by four feet broad and two feet thick, minutely covered with writing, and surrounded by beautifully chiselled frames. It was the only instance of polishing that we saw. Their surface is still quite smooth.

Mahindo sleeps beneath the Ambustala Dagoba. From this we descended to a curious stone slab known as Mahindo's couch. If the missionary slept here, he showed excellent judgment in the choice of a situation for his bed. One big rock rests over another, its arched under-surface forming a canopy. On the lower rock is a flat surface which forms the couch, about seven feet by four, with what appears to be the remains of a low stone pillow at its upper end. It slopes gently towards the foot. It is high enough from the ground to make the retreat safe against wild beasts, yet it seems to have been protected by some sort of railing, for the couch is surrounded by square holes, into which wooden, or perhaps stone, pillars were fixed. The great rock which roofs it keeps it delightfully cool; it is open to every breeze, and commands a magnificent view. Here we sat for half an hour or more, while the mild-eyed priest and his small acolyte leaned against the rock—picturesque objects in their yellow robes—staring into the face of first one and then another of the party. For ten minutes at a time they would not shift their gaze; we wondered whether they were reading character.

Next we visited the large snake-bath (Naga Pokuna), 130 feet long; partly natural, but chiefly excavated in the solid rock, and always full of water. A large five-headed cobra is cut on the surface of the cliff at the back of the bath, the body of the snake disappear-

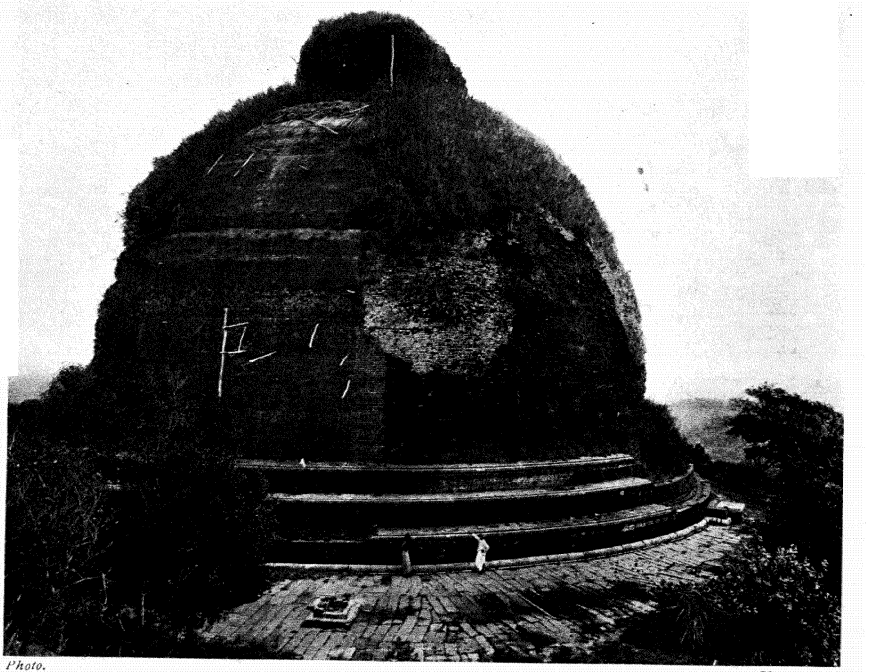


Photo. *Skeen & Co.*

A DAGOBA

ing in the water. It has been supposed to indicate the existence on the hill of snake-worship, antecedent to Buddhism, but its excellent workmanship seemed to us to belong to a later date. The five-headed or seven-headed cobra is a common emblem in these buried cities, since Buddha made the cobra sacred.

The gigantic Mahaseya Dagoba on the top of the hill was built to enshrine a single hair from Buddha's eyebrow.

In the afternoon we visited the hospital — seven neat, detached buildings in a compound of about three acres. Almost all the cases were either parangi or malarial fever, the victims of both diseases being miserable objects. Parangi is an inflammation of the nerves which leads to ulceration of the skin, with subsequent disease of the joints, and, in some cases, necrosis of the bones. The disease resembles leprosy, and is extremely interesting to medical men from the fact that it does not occur out of Ceylon, although a somewhat similar disease is found in the West Indies. The most noticeable feature is the great pain in the nerves of the diseased parts, which lasts long after the patient seems to be cured. The sufferer cannot bear to have the part touched or the inflamed joint straightened. The doctor was a very intelligent 'burgher'—*i.e.*, descendant of Dutch half-castes. He told us that the disease is entirely due to an exclusive diet of kurucan (korocam)—a kind of millet. But, although the poor food may be the predisposing cause, it is generally agreed that the disease is due to germs, and probably contagious. It always gives way to a course of good food and suitable medicines, if taken in time. The other patients were all suffering from the effects of malarial fever. A number of

children were playing in the compound, under the eye of a watchful nurse. Poor mites, their spleens were so enormously enlarged that a tumble would mean its rupture, and their death. Medical science has eliminated malaria from the isthmus of Panama. It is not beyond its scope to eliminate it from Ceylon.

The doctor showed us his great treasure—a snake-stone—which he had acquired in return for service rendered to a hermit. Dr Davy, travelling in Ceylon in 1815, says: 'It seems, when placed upon the wound, to be an infallible cure for snake-bite.' The hospital doctor had not the same good opinion of it, but prefers strychnine. Nevertheless, he admitted that all the cases of snake-bite brought to the hospital had died. It was always too late to do any good. 'Snake-bite is not common in this district, however. As the snakes are so numerous, the natives are constantly on the watch.' The 'snake-stone' appeared to be some kind of resin, and incapable of producing any effect.* Still, several natives told us that a man need not be afraid of snake-bite if he lives near to a native doctor, they are so clever in treating it; but we could not elicit any facts in justification of this statement.

It will be convenient to describe the ruins of Anuradhapura in the order in which we visited them. The Miriswetiya Dagoba is chiefly interesting from the story of its foundation. Some time in the second century B.C. the pious Dutugemunu remembered that, when partaking of a certain curry, he had omitted to send portions of the miris (chillies) and wetiya (sambul) to the priests. To atone for this fault he

* A snake-stone analysed by Sir Humphrey Davy was proved to consist of calcined bone, the interetices of which were filled with dried blood polished by constant handling.

built an immense dagoba and monastery. It is being restored at the cost of a prince of Siam, but as long as he employs the workmen whom I found asleep at the summit, the prince may look upon it as a fixed charge upon his revenues. The restored building is being constructed on most scientific lines. An outer shell of brickwork three feet thick, and an inner shell about two feet thick; between the two is a space six feet wide, which is arched over in a series of elliptical tunnels, crossed at intervals by partitions. We could not ascertain whether or not this was the original plan, but we concluded that it was not, since such dagodas as have been opened have been found to be solid masses of brickwork with small interior chambers. Apparently the relics were placed in the chamber, and then a gigantic mass of brickwork was erected over them, without any kind of door or other opening.

Mrs Percival wished to see a crocodile. At the resthouse we were told that her wish was hardly likely to be gratified at this hour in the day, but our driver took us to the Tisa Wewa tank, and made without any hesitation towards a particular rock which stood some yards from shore—the only break in the surface of this desolate lake. Then he pointed like a dog, and we crept stealthily forward without seeing anything. At last we realized that half the rock was crocodile. As soon as it saw us the great beast slunk lazily into the water.

The Brazen Palace—1,600 upright stones, about twelve feet out of the ground, arranged in forty rows of forty each on a square each side of which measures 230 feet. The stones are rough. They evidently had had a coating of 'chunam'—the white cement with which most stonework was covered, giving a

surface like ivory. This may have been decorated with, or partially cased in, copper. The columns formed the cloisters or ground-floor of a nine-storey wooden building containing dormitories for 1,000 priests.

The great Abhayagiriya (Mountain of Safety) Dagoba is the largest building in Ceylon, erected B.C. 89. Indeed, one has to look to the Great Pyramid for its rival. It rests on a stone platform eight acres in extent, and was originally 405 feet high, but half the spire is broken off. It was fifty feet higher than St Paul's. Writing of the somewhat smaller Jetawanarama Dagoba, Tennent says: 'Even with the facilities which modern invention supplies for economizing labour, . . . it would take five hundred bricklayers from six to seven years, . . . would cost at least £1,000,000. The bricks would construct a town the size of Ipswich or Coventry, or form a wall one foot in thickness and ten feet in height from London to Edinburgh.' Fancy these great buildings being so hidden in jungle that they were taken for natural hills, and only 'discovered' some fifty years ago!

The best piece of stone-work is in a building recently uncovered near to this dagoba. It is surrounded by a 'Buddhist balustrade,' the only specimen known in Ceylon. It is difficult to describe this without an illustration, but plinth, railing, and coping are excellent examples of very difficult stone-work, which would do credit to Trafalgar Square. It stands seven feet six inches; or did, for it lies at present on its side. The railing is three feet ten inches high, and consists of three horizontal rails supported by square posts. The three rails are broad elliptical bars, with only an inch-wide space between them. Each upright



Photo. *Skeen & Co.*

BATH, ANURADHAPURA

post, with its three rails, is hewn from a single block. The rails are on one side of the post only, and their free ends are mortised into the next post.

There are two or three large baths, with dressing-rooms, platforms, and steps, all of shaped stones. They are quite as well executed as the Roman baths at Bath, and differ from Roman work chiefly in the total absence of round columns; all the columns are square, although round and ogee mouldings occur.

On the village green a young tusker, about eight feet high, was being exercised and accustomed to human society. It had been caught six weeks. Two men led it with a strong rope round the neck, but it seemed peaceful enough now, with its little mild eyes and smooth forehead. The poor beast's thoughts were wholly occupied with its hind legs, still very sore from the cuts made by the rope with which it is secured at night. No doubt it had struggled hard when first caught.

We made a last pilgrimage to the Bo tree in the late afternoon. The tree stands in the centre of an enclosure, with the remains of a bath and a large brick figure of Buddha on its western side. The tree was planted in B.C. 245—the oldest historical tree in the world, if it be, as seems not improbable, the original Bo. Unfortunately, two terraces (about twenty feet high) are built up round it. The visitor sees, therefore, an enclosure (about twenty feet by thirty), out of the centre of which arise three straggling stems not more than ten or twelve inches in diameter—one decayed, the other two healthy. A larger trunk appears at each of two corners of the enclosure. The priests look upon the three central stems as the sacred Bo, and regard the corner trees as younger; but it is impossible to tell how much

trunk is enclosed in the terraced ground, or whether the three boughs, or all five, belong to the same tree. In the absence of the trunk there is nothing imposing or even suggestive of age in the appearance of the tree. On the other hand, authentic records (the 'Mahawanso') give a continuous history of the tree from A.D. 430 onwards; and Fa Hian, the Chinese traveller, who visited it in the fifth century, describes it just as it is at present. That stone buildings should receive the devotion of the pious for 2,000 years is not nearly so impressive as this instance of a living thing—a quiet, observant tree—shading the pilgrims from all parts of the East for twenty-one centuries, and shedding its sacred leaves for them to carry to their distant homes and cherish as family treasures.

As the sun began to set crowds of brown monkeys gathered about the sanctuary. They came close to us, and evidently expected attention, but we had nothing to give them. However, it is unlike Ceylon, if there be not a small boy squatting at a little distance and gazing like a spaniel at the 'Masters'; so by means of an easily intelligible pantomime I indicated the monkeys, my mouth, the direction of the market, and a ten-cent piece. The boy flew and returned with a large bunch of bananas, upon seeing which the grizzled patriarch of the tribe came to close quarters and took one out of my hand. For the sake of experiment, I let him have three in succession, and have never seen bananas so skilfully peeled and stowed away. They were not swallowed, for most of the fruit stayed in his pouches; but they disappeared with the rapidity of a conjuring trick. When all the fruit was gone he applied himself to the skins with great deliberation. When the monkeys

saw that they had had the last of the plantains, they all moved away in a business-like fashion and did not pester us for more. Their favourite roosting-place is in three very tall cocoanut-palms, fully sixty feet above the ground. One of these has a much more slender stem than the others, and is in consequence the tree they prefer to climb; but since its 'tope' will not hold them all, they have to spring from it to the second, and then to the third. I could not watch these acrobats swinging themselves from palm-leaf to palm-leaf across the gap high above the ground without the same feeling of oppression in the chest which I used to experience when, as a boy, I watched trapeze-displays at the Agricultural Hall.

The history of Anuradhapura is the history of Ceylon. In B.C. 543 Wyeyo landed with his followers. Since he married the daughter of an Indian rajah, after discarding the native princess who had helped him to conquer the island, it is probable that India was his native land. A picture in the Dambulla temple shows his queen, mounted on a white horse, cutting off the heads of the aborigines with a sword of ancient pattern; but although she may at times have indulged in this unladylike pastime, the bulk of the natives were probably enslaved, for we know that they lived in separate settlements close to the towns. The Veddahs are descendants of natives who escaped into the forests. In their turn, the Singhalese were incessantly harassed by 'Malabars,' or Tamils from the Indian kingdom of Pandya. Having chosen the flat country in the north-west of the island for their settlements, they were peculiarly open to attack. Their kings were frequently defeated in the plains, and compelled to take refuge in the rock-fortress of Sigiri, or the caves of Dambulla, until in A.D. 769 the

seat of government was withdrawn from Anuradhapura to Pollonarua. Here the Singhalese monarch (although once dispossessed by Tamils, and again restored) reigned in great magnificence until the thirteenth century, when the country was overrun by barbarians from the Northern Circars—*i.e.*, the provinces to the north of Madras. Then the Singhalese gradually withdrew from the plains and established the monarchy in Kandy. Here, in 1505, they received the news of the arrival of a Portuguese ship, manned, says the Mahawanso, by 'a race of men surpassingly white and beautiful, wearing boots and hats of iron, eating a white stone [biscuit] and drinking blood [wine], and having guns which could break a castle of marble.' The Dutch dispossessed the Portuguese in 1648.

A very small remnant of the aboriginal population is found on the east of the island towards the coast; but these wild people are diminishing in numbers very rapidly. They are of two types—the rock-Veddahs, who live by the chase; and the Veddahs of the plain, who practise a rude kind of agriculture. When Atherton visited the latter in 1838 he found that a small village-community had only one hoe amongst them, which the families used in turn. He gave the headman twelve hoes to divide between three clans, but the poor old gentleman, after trying for a long while to divide them fairly, and always finding that one parcel of hoes was larger than the others, had to confess himself beaten by this difficult problem in arithmetic. From Badulla I might have reached a settlement of Veddahs in a couple of days, but alas! we had not time to see more than a sample of Ceylon.

The Singhalese are divided into those of the low-

country, who wear curved tortoise-shell combs at the back of the head, and the hill-Singhalese, without combs; the settled Tamils, chiefly in the north-west; the burghers, or Dutch settlers and half-castes, and the Portuguese half-castes, as well as various kinds of 'Moormen,' or Arab traders, Afghans, and other settlers —a difficult population to govern, one would think.

In the afternoon my German friends, as well as the director of the Hakgalla Gardens, arrived. They kept me company on the verandah until midnight, the time for starting of the Matalé coach.

We could not have had a better night for our ride. It was full moon. Very soon it became so cold by contrast with the heat of the day, that I was glad I had borrowed a blanket from the rest-house keeper. Besides a miscellaneous assortment of mail-bags and luggage, the coach carried Mr and Mrs Percival, myself, three natives, a clerk, driver and conductor. I sat on the box on a pile of mail-bags. This perch had the disadvantage that a nap would have meant immediate precipitation under the wheels. We reached Matalé at noon next day. In the terrible persecution known as Dragonnades (1683-6) the soldiers of Louis XIV found that no torture so soon compelled the victim, especially if an elderly man, to embrace 'the king's religion' as making it impossible for him to sleep. In the drowsy warmth of a tropical morning I felt that there were few principles with which I was not prepared to part in exchange for a nap.

About four miles out of Anuradhapura the coach pulled up at a narrow jungle path, and the white robed clerk slipped down from his place beside me with three cocoa-nuts in his hands. These he smashed on a flat stone close to the entrance of the path, while

the conductor skipped about collecting the fragments, that nothing might be lost. Then he took a little tin lamp from a bag, lighted the candle, and set it on the stone. This rite accomplished we dashed along the road again. The German professor had told me that the driver of his carriage had performed the same ceremony as they came into Anuradhapura. In the jungle there is a shrine of unusual sanctity, and since they cannot drive to it, the worshippers make their oblations at the entrance of the path.

Other common superstitions are marked by the piece of leopard-skin around the right arm, the shell almost invariably hung on a bull's forehead, and the broken jar, blackened and then spotted with white paint, which is seen outside most houses; all supposed to be efficacious in averting the 'evil eye.'

Presently a jackal appeared in the road, and trotted to meet the coach. The shouts of the driver, who evidently regarded the beast with great aversion, hardly induced it to withdraw beyond the reach of his whip. Here and there we passed flocks of goats and cattle on their road from India to the south of Ceylon, with drivers asleep on their mats at the four corners of the square in which their beasts were huddled; by each driver a little fire.

In one village we passed a great detachment of chetties on the march for India, *via* Jaffna. They were squatting or lying by the road-side. As soon as our coach came up, the whole company began to chatter like monkeys.

As dawn approached, the jungle became noisy with birds. We saw a very large owl, numerous paroquets, a 'bird of paradise' (*Tchitrea paradisi*), several Ceylon bulbuls with golden body and black head, and many another pretty creature.

It was impossible to reach Newera Eliya until the following afternoon, and although frequent telegrams told me that Filia's fever was subsiding, the delay at Kandy and the long train journey were hard to bear.

Filia felt very unwell the morning Pater left us at Newera Eliya; but not wishing to spoil his excursion, she got up as usual and wished him a brave *bon voyage* in the porch. Soon afterwards she turned so faint and ill that we wished Pater back again, but he was two days' journey away before we could let him know, and then Mater insisted on his going on. Poor Filia had a very sharp attack of malarial fever. Probably she picked it up at Kandy, perhaps on the Gonowatta drive. Pater had been told that Kandy was safe, but this is an error. In the middle of the dry season no part of Ceylon is really safe, while some districts are extremely dangerous. We heard of one plantation which cannot find a manager, since no one cares to face death or 'invalided home' at the end of two years. When Pater and his friend the doctor reached Anuradhapura they found that a man whom the doctor had left quite well three days before had died of fever. His only symptom was a high temperature, which in less than two days rendered him comatose, in which state he died. If Pater had known that there was fever in Kandy, he would have dosed us regularly with the little tabloids of quinine which he carries in his pocket. Such faith has he in quinine that armed with this he would not hesitate, he says, 'to take a dip in any climate', though it is a very different matter for those who have to live for a long time in a fever-haunted place.

Shopping was our real business in Colombo. We only wanted a few 'curios' and models, but shopping in Ceylon is even a more serious business than it is at home. Had our needs been limited to a box of pins, we should have been obliged to give our minds to the transaction. Most people lose their tempers at the end of a few minutes in a Singhalese shop; but then they do not try to understand the essential difference between the oriental plan of trading and our own.

'You asked me six shillings for that comb this morning, and now you ask me twelve! I am ashamed of you; you change your prices!' we heard a lady say. But the truth is, a Colombo merchant has no price. In Europe the price of a thing is the sum the vendor asks. In oriental countries it is the sum which the would-be purchaser is willing to give. At home we look at a shopkeeper's wares and make up our minds as to whether we will or will not give his price. In the East it is for the vendor to decide whether he will or will not accept the purchaser's offer. The eastern method is more tedious than ours, but economically it is as sound. The worst of it is, it throws so much responsibility on the buyer, for we had no notion as to the value in the country in which they are made of an ebony elephant or a cocoa-nut bowl. Therefore the scientific method of proceeding was as follows:—'How much is that elephant?' we asked at the first shop. 'Two rupees.' 'I will give you twenty-five cents' (a quarter of a rupee). If the merchant treats our offer with scorn, we go to another shop. 'How much is that elephant?' 'Two and a half rupees.' 'I will give you fifty cents.' One is sure in a little while to find a man who exclaims as he sees us leaving the shop,

'It is missee's.' Then we know that we have bought the thing at something like its value. Although it is tedious, there is some fun in this shopping too. Puer took great delight in the sport, but he chaffered and chaffed to such an extent that his parents were driven to hide their blushes in the hotel. So difficult is it to throw off English traditions! It may be embarrassing, yet every time you make a purchase you flatter yourself you have secured a bargain. You have compelled the merchant to reduce his exorbitant price by at least 75 per cent. You are pleased to discover in yourself such an aptitude for business, and your complacency continues to increase with each successive victory. It is a rude shock when another member of the party shows you an ebony elephant exactly like your own which he has obtained at half the price!

Despite our absorption in commerce we found time to drive to Mount Lavinia, seven miles, past rows of native shops, along a straight road shaded by cocoa-palms. The hotel stands on a little headland which shelters a bay in which fishermen beach their out-rigged boats. It was pretty to see the canoes skimming in. The fishermen had made a heavy catch, chiefly 'doll-fish,' a large coarse fish dried for native food. It was sold by auction on the beach. Puer hunted for shells with his usual crowd of native children in attendance; while Filia sketched a particularly nonchalant and taking little laddie.

We also visited the Kelaniya temple, driving along a route which, being little frequented, gave us many peeps of native life. It was noon, and the cottagers were far from active. For the most part, they were asleep on benches in the shade of the verandah, which occupies the front of almost every hut; or father and

mother slept while the elder children combed their parents' hair and in other ways attended to their toilet.

Although 2,000 years old, the Kelaniya temple is not attractive. There are two shrines, which stand near a dagoba built over the chair in which Buddha sat when he visited the spot. An extremely intelligent guide told us that the priests at the principal shrine are bad priests, who beg for money, and are willing to sell the images and other offerings of the pious from between the knees of Buddha himself; but the high priest who presides over the second temple is, he said, a very holy man. This we could believe, for his appearance was such as one looks for in a chief priest. His shrine was rich in offerings, and we saw in his private room an ancient copy of the Buddhist scriptures, written on palm-leaves and framed in fine covers of chiselled-silver, richly set with gems. But the glory of the temple is a reproduction in alabaster of the print of Buddha's foot, presented by a former King of Burmah. The chief priest is a member of the Pali-text Society, and a recognised authority on questions of Buddhist lore; as he could not talk English, we could but smile and bow, and part on friendly terms, after making a contribution to the fund for the maintenance of the temple. The greedy priests came off worse with their begging. Their insistence was so offensive that we would not give them anything. As a body they are a great trouble to the Government, for they try to hide every kind of scoundrel from the clutch of the law. They claim to administer spiritual justice; and no matter whether the culprit be thief or murderer, they pretend to clear him of his crime in consideration of a certain payment and a proper



RECUMBENT BUDDHA CARVED IN GRANITE, 46 FEET LONG

course of penance. In this way they both increase their prestige with the people and fill their coffers; while the police can do nothing, for it gives great offence if they venture to search the temples for the rascals whom they believe to be hidden therein. We heartily wished that we could take a more charitable view of the guardians of the sacred mysteries. If the priests were good, the people would be better Buddhists, and if the people followed the precepts of Buddha, their morality would leave little to be desired. Some English-speaking Singhalese whom we met were not only really devout, but understood the inner meaning of their religion—the great lessons of self-renunciation and the search for inward peace which Buddha taught. The way to establish a good understanding with such men we found to be to talk of Sir Edwin Arnold's *Light of Asia*.

One more visit to the market, to lay in a store of limes and other fruits, to cool us during our passage across the Equator, and then we join the *Ophir*. As our rickshaws drew up a Singhalee full of good-humour rushed out, bubbling with doubtful English: 'Laidy, six mats, 'nother day, laidy buy same, all-i-same laidy, six mats, eh?' The 'laidy' had been guilty in the matter. They appear to watch all day, and an old customer is pounced upon in a jiffy, spite of innocent appearance and change of costume. The fly tried to fly, but it was useless when once the spider spied her. They are very seductive, too, and their attempts at English are often pretty. One young scamp selling trumpery outside this market, after many appeals to the hard-hearted Mater, turned up his eloquent eyes for one more telling effort: 'Buy, buy, dear, *dearest* Mamma!' But another and

much more impertinent imp, having received a castigation from her sunshade for troubling us beyond bounds, stood facing us, pointing to Pater: 'Good Parpar'; then to Filia: 'Good *yittle* Marmar'; but making a grimace at Mater: 'Bad, no good Marmar.'

CHAPTER III

THE LONG STRETCH

WE don't like to speak disrespectfully of the Equator, but crossing it in a steamship is not a stirring event. Taking a hedge in the country, on a pony inclined to refuse, is far more exciting. Steamships are so well trained that they never jib, and our smart officers, in their snow-white uniforms, are too familiar with the Equator to treat it with formality. They would not lose their self-possession even though an 'authentic' sea-serpent were to rest his head on the upper deck. They might perhaps tell the watch to bring their swabs, in case the animal should slobber. And so, although we knew the Equator would soon pass beneath our keel, no red-faced Father Neptune appeared at the foc'sle hatch, no smell of tar warned the tyros that they would soon have to perch aloft among the booby birds, dressed like them in black and white feathers. The ceremonies which attend the crossing of the line in Captain Marryat's novels are things of the past. 'The Equator, sir? Yes, sir, I believe we crossed it this morning. Will you take strawberry cream or lemon water-ice?'

Speaking of 'booby birds,' we suppose they deserve their name, although we thought their confiding natures should gain them more considerate treatment than they usually receive. They like to fly on either side of the bow of the ship, perching from time to

time upon the rigging, and they take so little notice of human beings that the sailors sometimes succeed in catching them by the legs.

It was an uneventful ten days from Ceylon to Australia. The moist heat took the spirit out of every one. There was no wind; the sea was smooth and the sky usually clouded. We were in the 'Doldrums,' but the weather had no surprises for us. Sometimes we saw a patch of heavy rain in the distance, but it never fell upon the ship. It was a time for sitting still and doing nothing.

Nevertheless, the ladies began to bestir themselves soon after leaving Colombo. They were to be seen sewing vigorously, each little group endeavouring to evade the notice of the others; had it not been arranged before the ship reached Colombo that a fancy-dress ball should be held a few days after leaving port? The chief fun of such a ball lies in the fact that no one has any materials out of which to make a fancy dress, and great ingenuity is needed to produce a telling effect. Yet many of the costumes were extremely good. As this is our diary, we must content ourselves with recording our own. Puer was splendid as a Roman senator. The ship's barber curled his hair about a silver chain which he wore as a fillet. His chiton was a night-gown of nun's veiling; his toga, Pater's velvet camera-cloth. A pair of cork soles had been turned into sandals. Mater, really, hardly knew him. She had no idea that he could look so nice! As for Filia, every one thought her get-up wonderfully life-like. Her hair was twisted into unkempt tails, and a whole cake of sepia had been used in painting her face, arms, and feet. She wore a comboy and short jacket, and carried a little drum and fife and a bag of snakes—

we had bought a number of cork snakes in Ceylon. As an Indian snake-charmer she was perfect, but she did not charm us. Poor Pater crossed to the other side of the ship whenever he saw her coming. He had no idea that any change could make her look so ugly!

The only other costume for which we were responsible was that of a young New Zealander, whom Mater turned into a Companion of the Bath. Dressed in bath-towels, with C.B. embroidered on his chest, cakes of soap, flannels, and flesh-brushes hung about his person, and a huge sponge on his head, his costume was effective enough and very easily made.

We had a few games too, although they did not arouse much interest. Among the men's sports, 'tent-pegging' was the best fun. The men are drawn in couples; one is horse, the other rider. The rider carries a long lance, with which he has to peg a potato lying on the deck. After each heat horse and rider change places, and since they are competing one against the other, it is always to the interest of the horse to carry his master past the potato with a rush, making it as difficult as possible to peg it.

One evening we amused ourselves with making limericks Each passenger in turn was the butt of the others' wit, although it is hardly necessary to say that a reference to the place he came from was almost the only personality admissible, as well as being the time-honoured opening of a nonsense verse. The following skit deserves to be saved from oblivion:—

'There was a young man at the Cape
Who always wore trousers of crape;
When asked, "Don't they tear?"
He replied, "Here and there,
But they keep such a wonderful shape."'

Another verse also seemed funny to us as we sat on the deck of our Leviathan, which was thrashing its way through the water at the rate of fifteen miles an hour: —

'A squatter whose home was in Wales
Said that steam's not a patch upon sails;
"See me spread out my jacket,
To aid the steam-packet,
Which carries His Majesty's mails." '

CHAPTER IV

AUSTRALIA

WE saw she saw sea-shore. But it was not easy to say so quickly!

Fremantle, at the mouth of the Swan River, is about twelve miles below Perth, the capital of Western Australia. It owes its harbour to the genius of O'Connor, an engineer of whom we shall have more to say when describing the water-works which supply the Gold Fields. The most eminent of harbour makers had pronounced it impracticable to scoop out of the river a basin wide enough and deep enough for ocean-going ships. The mouth of the river was blocked by a ledge of rock. It was choked with sand. O'Connor blasted away the rock and sucked the sand through pipes into barges which carried it out to sea. H.M.S. *Powerful*, a vessel of 14,000 tons, has tied up, as our ship tied up, against the quay.

Pater had to give University Extension Lectures in Western Australia—it was nice to feel the arm of Cambridge stretching round the Globe—and in consequence we came in for an extremely good time. All kinds of hospitality were offered to us by Their Excellencies the Governor and Lady Bedford, the Bishop, the Premier, judges and doctors and citizens of every class. It was overwhelming in its generosity, so full indeed that we shall be obliged to omit particular

reference to it from this story; otherwise Western Australia would take up half our book. We must be content to try to give a general impression of the country without chronicling the details of our doings.

Western Australia is as large as France, Germany, Austria and Italy rolled into one. Its population is less than that of the towns of Bradford or Burnley and only about half that of Birmingham.

From north to south and east to west it is covered with bush—forest as we should call it at home—immensely tall trees, for the most part, such as the red gum, or jarrah, which yields the blocks that pave our streets. There are many different sorts of trees, but most of those which are valuable as timber belong to the genus Eucalyptus.

To class all these different kinds of tree in a single genus is another way of saying that the trees of Australia are unlike, and therefore easily distinguishable from, European trees. Their woody cup-like flowers, filled with stamens and pistils, are closed with a lid, to which the genus owes its name 'well covered.'

Their resinous sap suggested the common name of 'gum trees.' But it is a great mistake to suppose that all gum trees are alike. They vary very greatly in height, in mode of branching, in form of leaf. Had the botanists who first named them eucalypts realized that they were including in a single genus the majority of the trees which fill a continent they would have split the genus into many different genera amongst which they would have distributed its three or four hundred species. All eucalypts agree in differing from the various trees which grow in other parts of the globe, but amongst themselves they show as great a variety of form as is to be found in an English forest. They are the trees of a different world.

What a strange world it is! All its plants and all its animals are as unlike those with which we are familiar as can well be imagined. Even its climate is the reverse of ours. From September to May not a drop of rain falls in the southern half of Western Australia. 'We don't say "we will have a picnic on Christmas day, if it is fine," for we know that it can't be wet. We make up our parties months beforehand, arranging exactly where we will pitch our tent and how we will amuse ourselves.' All the rain falls from June to September, but even in the winter a wet day is very rare. For half an hour it pours, and then the sun shines out again. The storm clouds of the south-west monsoon thrash the fringe of the continent, losing all their water before they reach the hills which form a chain a hundred miles or so behind the coast. At Perth the rainfall is 34 inches, about the same as in Devonshire. Ninety miles inland, at York, it is 18 inches. Beyond the hills at, say, 150 miles from the coast, it is below 9 inches. At Kalgoorlie 5 or 6.

And the flowers! How can we attempt to describe the flowers? They come out with a burst after the winter's rain; for they are bound to get their business over before the long months of drought begin. In their feverish eagerness to attract the attention of the insects and still more of the birds upon which their fertilization depends, they riot in blue and scarlet. Nowhere else on the face of the globe is there such a display. You cannot put your foot down without stepping on flowers, bushes shoulder-high are smothered with them; they tassel the 'bottle-brushes,' wattles and other trees of moderate height. And some of the flowers are almost weird in their unlikeness to the types to which we are accustomed. We found six or seven different kinds of 'kangaroo paw.' One of

the commonest raises its inflorescence two or three feet above a clump of flag-like leaves. The flower-stalk, as thick as one's finger, is vermilion. Its long bell-shaped flowers are gas-green. They hang over like fingers in a cluster, four or five side by side. Their bells are not complete but open towards the stalk, for it is on the stalk that a bird will perch to search for drops of honey at the bottom of the bells. The trigger flowers gave us much amusement. They are shaped like orchids. Two stamens held back beneath the lip of the upper petal are bent and tense. When you touch them they spring forward projecting the pollen-masses 15 or 20 feet.

Perth is built on a clearing in the forest. You cannot tell where the streets end in the bush or the bush ends in the town. Most of the tall trees have been cut down for firewood, except in the glorious Park, an enclosure of about two square miles on the hill above the town. Here we walked almost every day making the acquaintance of trees, flowers, birds and insects too numerous to mention. A great variety of banksias are mingled with the eucalypts. They are easily recognised by their cone-like flowers and fruits. The carpels, very thick and woody, hang on the trees for years. When they fall they dry up and split, setting free their seeds. This is curiously advantageous to the tree when a forest fire occurs. The fire clears away the scrub and dries the cones. Falling on the ground the carpels burst, and the seeds germinate after the first shower of rain. Thanks to the destruction of its competitors by the flames the seedling finds an open space of which it takes possession. Many of the Australian plants seem almost to be adapted to take advantage of bush fires.

Amongst the more unusual forms of tree, casuarinas,

with their long dependent filamentous leaves, look like giant mare's tails. The 'zamia palms' (*Macrozamia*) were very abundant. They are not palms, but conifers, yet their leaves are so like those of palms or of screw pines that anyone might be forgiven for falling into error. Here, too, we first saw Black Boys or grass trees, which afterwards became monotonously familiar. They belong to the lily family. On some of our railway rides we passed for scores of miles through a forest of tall gum-trees with the queer Black Boys thick amongst their stems; each a stump 5 or 6 feet high with a shock of long narrow leaves on top of it looking like an unkempt head of hair, out of which in some cases a straight stalk sticks up, the inflorescence, which in the twilight might easily be mistaken for a spear.

The town slopes down to a broad lake into which the river widens. In New Perth on the farther side are the Zoological Gardens under the care of Mr le Souef who by nature and by family traditions is a born Director. He very courteously came across to meet us and conducted us over the Gardens, where he has a fine collection of Australian animals and some lions, bears and other exotics in addition. The trained parrakeets and parrots had greatly attracted King George and Queen Mary when they visited Australia to inaugurate the Commonwealth in 1901. Mr le Souef offered us a dingo puppy and some young emus. It would have been great fun to carry them off as pets; but alas dingos turn out badly however gently they behave when young, and emus grow too big. The river was almost as good as the Zoo. It was simply crowded with great pelicans, shag, divers and black swans. When the Romans wished to suggest something contrary to nature they could think of no animal

more improbable than a black swan. The dazzling whiteness of all the swans which they had seen made the idea of blackness so unlikely as to be laughable. *Rara avis in terra, nigroque simile cygno.* But rare in Europe is common in Australia, where beasts, birds and plants are adapted to hold their own in the 'struggle for existence' in altogether different surroundings.

In the Museum we saw a cat mounted with a bustard or native turkey, in its mouth. It was labelled 'Felis domestica,' but it was the descendant of cats which long ago escaped into the wild. The bustards are so helpless in the presence of such a doughty hunter as a cat that they have almost become extinct; and the cats have flourished amazingly on so rich a diet. This one is half as big again as the largest Tom in England, measuring 4 feet from its nose to the tip of its tail. Its head is immense. It was shot by a settler when in the act of attacking his children. Not only was it a savage brute, as dangerous as one of the larger members of the cat tribe; but like its larger relatives it had a coat which would render it almost invisible in the dusk amongst the trees, dark grey, almost black, striped in vertical bars. It would appear, therefore, that the cats which have taken to the woods are reverting to a primitive type. We should scarcely have guessed from its appearance that the ancestors of this one were tame domesticated cats.

We expressed a wish to see the caves in the south-west of the State, as famous as any in the world. Our fairy god-mothers gave us everything we asked for whilst we were in Western Australia; and they seemed to enjoy doing it in the most distinguished way. The caves are in the care of the Government. Mr Robinson, Secretary of the Caves Board, and Mr

Hughes, a member, accompanied us. A special carriage was reserved for us on the train to Busselton, nine hours from Perth; where there is a pleasant seaside hotel. A special coach drew up at the door next morning, and away we rolled, not rattled, for the road is sandy to Yallingup. At Yallingup the Board has built and runs a well-appointed hotel near the mouth of a beautiful little gorge. As the most accessible of the caves is here, everything is arranged to make the tourist comfortable. The cave is lighted by electricity which shows in the most charming way the numerous chambers and galleries through which the visitor is conducted, the pools of water on their floors, their glittering walls and the stalactites and 'shawls' which hang from their roofs. The shawls are the most remarkable of their features. Water charged with super-carbonate of lime has made its way through cracks in the roof, depositing its mineral matter, as it loses its excess of carbonic acid, in plates many yards wide and several feet deep. Often the plates are folded just like drapery and they present a pattern almost indistinguishable from the pattern of a Shetland shawl; narrow vertical ridges on their surface look like threads of wool, and they are crossed by parallel bands of white, when the calcite is pure, and various shades of tawny yellow when the water which brought it contained iron. When lighted from behind they glisten like sheets of alabaster. In one of the deeper caves we were astonished by the discovery that a pillar, as thick as a man's arm, which stretched from ceiling to floor, was not a stalactite but the root of a tree. 'How far are we below the surface?' 'Ninety feet, and that jarrah root has been traced thirty feet deeper, still as thick as you see it here.' No wonder the gum trees hold their own in this land of prolonged

droughts, if they can throw roots down in search of water 120 feet through limestone rock! The caves are spaces dissolved by water out of the coral limestone. It seems odd that the formation of stalactites should be going on simultaneously with the hollowing out of the caves; but the caves have been dissolved by streams of fresh water, subterranean brooks, whereas the water which drips through the roof is over-charged with the carbonate of lime that it has taken up from the rock as it percolated through it.

After the caves, Puer started for the shore with string and fishing hooks. He soon found plenty of shell-fish for bait. Our host of the hotel says that he can always catch as much fish as he wants in a very short time. Great waves break on the edge of the reef and fish in large numbers feed in its shallow pools. Mr Hughes, on a recent visit, caught three 'gropers' aggregating 180 pounds in weight, in an hour. Pater found all kinds of strange beasts in the pools, more interesting to him than fish. One was a sea-slug weighing about a pound which when he touched it poured into the pool a flood of transparent violet ink.

Next day, 25 miles to Margaret River, about half the distance over unmade bush tracks. 'Tim' Conolly, the Ranger, cantered in front of our team, returning to warn us of boggy places in the road, or selecting for us the better of alternative tracks. Our quarters for the night were in a house built 50 or 60 years ago by Bussel, an Oxford graduate. A fresco in the sitting room bears in Greek capitals the legend ΣΑΡΠΗΔΩΝ. Sarpedon was the friend and ally of Priam. First in the attack upon the Greek camp, he was slain by Patroclus. The picture shows his body being borne to Lycia, after its rescue by

Apollo, in the kindly arms of the twin brethren, Sleep and Death. How came this Oxford scholar to snut himself up with his wife and children in this homestead, isolated from his nearest neighbour by 50 miles of roadless bush? The river with its limestone gums,' and the meadows which he was able to clear round the house for his cattle and horses go some way towards accounting for his choice. It is a singularly lovely spot.

Pater, when a school-boy, nearly fifty years ago saw a picture in the *Penny Illustrated Paper* and read an account of the rescue of a shipwrecked crew by a girl on horseback. Little did he think that he would, one day, see the spot where the *Georgette* was cast upon the reef, or that at Sir Winthrop Hackett's in Perth he would be asked to take the Grace Darling of Australia in to dinner! Only on the spot could one realize how it was possible for Miss Bussel and her horse—for the horse deserves an equal share of credit —to save the sailors' lives. The reef, as at Yallingup is a flat shelf, a hundred yards or more in width. On its edge the ship was being pounded by the ocean rollers which rushing over the rough limestone floor swept shorewards with a force no man could resist. But the horse was able to keep his feet or to regain them after being lifted by a wave. Time after time, walking and swimming, he carried his plucky rider to the wreck, returning after each journey to the ship with a man clinging to the saddle-girth.

Another long drive through the bush, and the exploration of six of the largest caves. Each has its special characteristics; but any attempt at description would take up too much space. In one of them an enormous stalactite two or three yards thick and weighing scores of tons hangs from the roof and

seems to rest upon the surface of a lake which occupies the floor, showing in a striking manner how caves and stalactites are being simultaneously formed. The water trickling through the roof deposits calcite. The subterranean river which floods the floor is always scooping it out, and enlarging the cave; as the stalactite reaches the water, it is dissolved. The Bride Cave, so named after Lady Hackett who opened it during her wedding tour, is about as large as St James's Hall. It is specially interesting because its entrance is from the bottom of a pit 100 yards across and 120 feet deep, with over-hanging sides. It was unapproachable, save at the end of a rope, until a ladder was constructed. The pit is a cave which has fallen in. For ages it has been a death trap for the animals which roam the bush. There was no getting out when by mischance they had tumbled over its edge. Wounded or starving they crept into the cave to die. The sand of its floor is full of their bones.

On this drive we passed quite close to a large kangaroo which had to accommodate her pace to the baby by her side. The mother's long leaps and pauses were in amusing contrast with the kangarooling's short quick jumps. We saw numbers of tamars, or kangaroo-rats, as big as rabbits, and a great variety of birds, — eagles, hawks, green cockatoos or 'twenty-eights,' black cockatoos, jays, &c.

From the Margaret River direct to Busselton is a drive of thirty-five miles. We halted once only to gather black boronia, growing in a swamp; a flower which we carried to our friends in Perth. It is a very welcome present on account of its delicious perfume, a marked exception from the rule that Australian flowers are mostly scentless. The blossoms are small

and cup-shaped, chocolate-coloured on the outside, and yellow on the inside of the petals; the plant a pretty feathery shrub.

We passed some farms in valleys by the side of streams; but they were very few and far apart. Mile after mile the road runs through bush. Nothing is to be seen but the stems of the trees and the line of sky above the road. It was easy to realize the monotony of journeys lasting many days or even weeks. Such journeys are made periodically by the Bishop of Perth and the Bishop of Bunbury when visiting the scattered settlements of their enormous dioceses. All day they drive between the trees. At night they sleep in the wagon by the roadside. The surface of the land is undulating but the hills are low and for hundreds of miles the traveller may never reach an elevation, or a clearing from which he secures a view. Our wanderings took us about 400 miles to the south of Perth and rather farther to the east. We visited all the towns of any importance in the state, with the exception of Broome which lies far to the north within the tropics, yet we saw, of course, but a small part of its million square miles. At York we met with rich red soil, detritus of the granite hills, which yields a heavy crop of wheat sown just before the rains begin, it covers the land with emerald and forms a sturdy plant by the end of the winter, when all rain stops. This matters little to the wheat which ripens two or three months later, after the river has ceased to run and the country, save for its gum trees, is dried to a dusty brown. There are various other areas suitable for wheat. But fertile spots are like islands on the map isolated by vast tracts of sandy soil, or iron-stone gravel, useless to the farmer although they carry an infinite number of the trees which are so remarkably adapted to an

inhospitable soil and scarcity of water. Under the trees grow various shrubs on which horses, cattle and sheep feed; but there is very little grass and a great many acres of bush are needed to keep even a sheep alive. Anyone may select 160 acres, free, provided he undertakes to fence it and build a homestead. The settler selects a patch where permanent water is available. Usually he is allowed to buy a back block of 1000 acres of the land adjoining for ten shillings an acre, paid by instalments in 20 years, without interest. The cattle 'stations' in the north are enormous. A man whose acquaintance we made at Perth holds just a million acres; but when we asked him how many cattle this great tract of country, larger than any county of Great Britain, with ten exceptions, will carry, the answer was, 'not more than 30,000.'

Yet if the land is for the most part unsuitable for cultivation, the orchards, where there is a reliable supply of water for irrigation, are the finest in the world, and the vineyards produce the very best of grapes, both for the table and for making wine. It was very striking to see in a garden not far from Perth bananas, oranges, peaches, nectarines, apricots, loquats, pears, almonds, apples and plums growing side by side. The bungalow house on the hill was smothered in roses and surrounded with wattles. The nearer hills were of a warm dove colour, which only a certain kind of eucalypt with red stems and grey-green vertical leaves can give. In the far distance the hills were blue. Could our first parents have had a more attractive home?

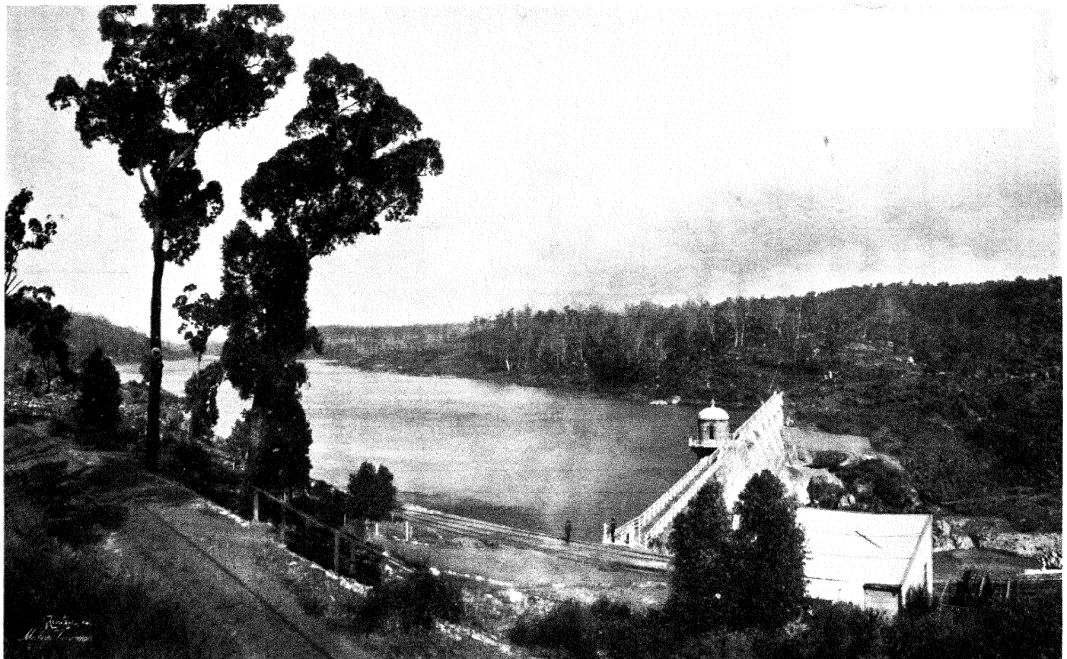
We were escorted to Mundaring to see the weir by the chief engineer and two of his assistants. The launch was got out to take us up the artificial lake which is seven miles long. It is held up by a dam

100 feet high and sunk at one spot where the ground is rotten 90 feet below the surface. The valley lies between granite hills which are enclosed for many miles on either side the lake, making a catchment area within which neither cattle nor human beings are allowed to enter. We were shown the engines which pump the water for the first stage of its passage towards the Gold Fields, and the gauge which registers up to 100,000,000,000 gallons. Dwellers in Birmingham think a great deal of their pipe-track which brings them water from a Welsh Valley. Yet its length is but 80 miles and Birmingham is far below the level of its intake. Kalgoorlie is 352 miles from Mundaring and the highest point on the track is 1600 feet above sea level, and about 1200 feet above the lake. There are eight reservoirs in which the water comes to rest and eight pumping stations which again force it onwards and upwards until it reaches the reservoir at Coolgardie from which it falls to Boulder and Kalgoorlie; yet 84 per cent. of the water which enters the two pipes at Mundaring is accounted for on the Gold Fields. This great engineering feat was accomplished by O'Connor. And he had many difficulties to overcome. The first and most obvious difficulty was to provide the pipes. They could not be made in Western Australia, and iron pipes are too bulky to be carried in ships. O'Connor imported flat rolled plates, which he bent into half cylinders, using one to form the upper, the other to form the lower portion of a tube. Then he mortiсed their edges in a rod of iron with a slot on its upper and another slot on its lower surface. As the segments of piping which were made in this way were not socketted he fixed the adjoining ends of each two segments in an iron hoop. Caulking these joints gave him great trouble at first.

In the dry atmosphere of an Australian summer the materials which are ordinarily used for caulking cracked and broke away. He invented a machine which hammered lead into the grooves. Seeing that 84 per cent. of the water reaches its destination and that a considerable part of it is lost by evaporation in the eight reservoirs, the leakage is practically *nil*.

Yet poor O'Connor blew out his brains a few weeks before the water began to flow through his pipe-track. 'At first it was said that only a lunatic would have conceived the idea of carrying water from Mundaring to the Gold Fields. When it was about to become an accomplished fact the miserable gutter-rags accused him of peculating public money. The sums which passed through his hands were so large that they could hardly imagine any one as missing so good an opportunity. Yet after his death it was found that his whole estate did not amount to £200. I had the satisfaction of carrying a motion that a life pension of £250 be granted to his widow,' said to us the then Attorney General. O'Connor was a martyr whose blood has not been shed in vain. He was a great man wholly devoted to his profession which he glorified by the services which thanks to his efficiency it rendered to the state. Distrust of prominent men has been the failing of all democracies from the days of Athens to these present days, and unfortunately it is often justified. But a man may be wholly free from self-interest; and many people told us that O'Connor's example is both a stimulus to those who aspire to do public work and a warning to meaner men who are too ready to attribute sordid motives to their leaders.

Thanks to Sir John Forrest's large hearted statesmanship and O'Connor's brains 30,000 people are now living in comfort on the Gold Fields. Everyone is able



MUNDARING WEIR

to secure a bath each morning if so disposed. 'During the first month that I spent on the Gold Fields,' said Bishop Riley, 'I did not once wash, and not infrequently I had to make my tea with soda water.' It may be right to speak of 'the thirst for gold'; but gold will not satisfy thirst, and many a man who was shaking out £50 worth of gold a day at Coolgardie would gladly have changed some of it for an equal weight of water. Now, broad streets are bordered by pepper trees; tennis courts, public gardens and race courses are carpeted with grass.

The Mayor of Kalgoorlie paid Pater the great compliment of a 'Civic Welcome.' Fifty of the leading citizens assembled at 11.30 in the morning in the buildings which at the time served as a temporary Town Hall. Speeches were made and refreshments consumed. The welcome was very cordial and had pleasant results, for after we had been thus publicly introduced, everyone treated us as friends. We were greeted by name in the streets by people whose faces we could not remember to have seen.

Of course we were taken down the principal mines of the Golden Mile which are yielding an apparently inexhaustible supply of grey rock heavy with gold. Upwards of seven million pounds worth of gold is raised in Western Australia every year. Wages on the Gold Fields are large, from 10/- to £1 a day, but living is very dear, if one exacts the comforts to which one is accustomed at home. Half a guinea seemed a large fare for the cab that carried us to the house of the friends with whom we were to stay. But there is no fodder for horses within two hundred miles of Kalgoorlie. Like everything else which is used on the Gold Fields it has to be carried there by train. Home life was very entertaining. Domes-

tic servants being almost unobtainable the family does much of the work. We begged to be allowed to do our chores, and greatly enjoyed the half hour after breakfast which was devoted to emptying baths, chopping wood for the kitchen fire and generally putting the house on a working basis for the day. In this dry climate the verandah is more used than any room in the house, and much of the housework is done in the garden. All goes smoothly in the intervals between the dust storms. They reduce the mother of the family to desperation. Even when she is in time to shut all doors and windows the dust manages to enter through the cracks, and if by ill-fortune the windows have been left open on a windless day while she pays a visit to a neighbour, the 'Willy-Willy' if it comes along makes the inside of her drawing room a sandy desert.

We had the good fortune to visit an encampment of aborigines. The natives of the interior are very shy. They move camp every night to prevent the white man from finding them. When we came upon them in the bush they resented our intrusion, and their dogs which were more numerous than all the men, women and children in the camp, joined in an effort to drive us away. The men whose faces were smeared with grease and powdered with wood-ashes threatened us with their spears and jabbered in a language which of course we could not understand, although it was very clear that the things they were saying were not complimentary. But Dr and Mrs Scott were not to be intimidated, and after a time the rolls of nigger-head tobacco with which they were provided brought about more amicable, although still distrustful, relations. They threw their spears and boomerangs for us and afterwards sold them to us for silver coins—

not sixpences be it understood. When a sixpenny piece was offered, a truculent little man who could speak some English threw it scornfully into the scrub, 'Little fellow him no good, give big fellow.' It was a cold morning after a frosty night. The lubras and children were huddled within a moon-shaped screen made by very roughly plaiting the boughs of the scrub together on the windward side of a fire. How these people secure food and water for themselves and their dogs is a mystery. They had no appliances of any kind that we could see, save spears, throwing sticks and boomerangs. They had no stores. A single billee appeared to represent the whole of their camp equipment. These desert natives are amongst the lowest of their kind. They are seldom seen and would not have ventured so near to Kalgoorlie were it not that the Government once a year gives them blankets. We happened to be on the Gold Fields at the season when they come to fetch them.

The entrance to the harbour of Albany, the southern port of Western Australia, is protected by lofty cliffs, said to be fortified. As we rounded them a tremendous breeze struck the ship, upsetting deck-chairs and blowing hats overboard. Pater's hat whizzed straight towards a gentleman who would be noticeable anywhere for his stalwart figure, even though he were not pointed out as the purchaser of 'Baily's Reward,' the first gold-mine discovered at Coolgardie. The hat struck him on the head, and his head saved Pater's hat—a reversal of the ordinary sequence.

It was nearly dark when the *Ophir* dropped anchor, but we got into the steam-launch, and had twenty minutes' toss to the shore. The owner of the launch told us that he would return to the ship in half an

hour; but this gave us time to see the town. A telegraph office and half a dozen good shops on the quay; a broad road running straight up country at right angles to the shore; a town-hall, standing in proud isolation, some two or three hundred yards up the road; on the hills, at wide intervals, wooden houses with galvanized iron roofs. Such is Albany, and many another developing colonial town. The rage for investing money in town-sites and corner-lots gives a dreary wasteness to the place. In the case of Albany confidence was misplaced. At one time the only port in the southern half of Western Australia, it is now much less important than Fremantle. We hurried back to the launch, for one can never tell how long it is wise to stay away from the ship. This time we might have had three hours in the town, had we so desired; but with a thousand miles of sea between Albany and Adelaide we preferred to keep on the safe side. Puer thought that a journey overland on camels would be great fun, but it would require the wealth of Crœsus to cross these waterless plains, besides taking weeks for the trip. Along a coastline of 1,500 miles no river, not even a rivulet, flows into the Great Australian Bight. Its shore is bounded by low, rocky cliffs, pitted here and there by 'pot-holes,' in which rainwater accumulates, with the Great Australian (or Victorian) desert in their rear. The overland journey from Albany to Adelaide is not to be undertaken without great preparations, and yet—the tale reads like a romance—there lives in Melbourne, or did live there until recently, a man who ran away from the Swan River Convict-Settlement, and crossed the waterless waste on foot, no one knows how—the convict himself least of all.

Australia owes her prosperity, indeed, almost owes

her existence as a part of the civilized world, to convict labour. During the seventeenth and eighteenth centuries people thought that the best thing that could be done with criminals was to send them as far away from home as might be: a not unnatural view. The world contained wide tracts of land as yet unoccupied. They seemed to say as plainly as a borough-council's notice-board, 'Society may shoot her rubbish here.' Until the War of Independence, Virginia and the Carolinas were our rubbish-heaps, but when in 1782 the old American colonies set themselves free from the Mother Country, which for a long time behaved to them like the cruel stepmother of a story-book, rather than an affectionate parent, the Americans refused to receive any more of the felons and vagabonds whom we could not manage at home. Captain Cook had visited New South Wales in 1769. This great explorer must always be regarded as the Columbus of Australasia, so little real exploration of the 'Terra Australis,' the great 'South Land,' had been attempted by the few navigators, Portuguese, Dutch and English, who, before Cook, had sighted its coasts. When the Carolinas were closed to them, Cook recommended the British Government to send their convicts to New South Wales, and selected for their reception a place to which he had given the attractive name of Botany Bay. To this land of flowers the first convicts were sent in 1788, although it was found desirable to establish the penal settlement a few miles farther north, at Port Jackson, the beautiful harbour on which Sydney stands, rather than at Botany Bay, as Cook proposed.

One of the most remarkable chapters in social history is the story of the transformation in this new land —this land of wide scope and fruitful opportunities—

of criminals into hard-working, self-denying citizens. This happy change was largely due to the energy and prudence of one of the early governors, Major-General Macquarie, who was governor from 1810-1821. He encouraged the convicts to try to deserve 'emancipation,' and helped them, when free, to become successful settlers. Of the 30,000 settlers in New South Wales in 1821, no fewer than 20,000 were or had been convicts. It is said that on board an American liner an Australian asserted rather loudly that 'those who early settled in Australia were very sensible men.' 'Yes,' remarked a Yankee who sat at table with him. 'I have always understood that they were sent out by the best of judges.'

New South Wales and Tasmania have to thank convict labour for the opening up of the country by excellent roads, which could hardly have been made in any other way. It is difficult to see how, without forced labour, the colonies could have made so good a start; but conditions which suited the commencing colony were not suitable after the tide of immigration had set in, when men, women, and children from all parts of Britain made the southern land their home. Soon the voluntary emigrants vastly outnumbered the convicts, of whom they declined to receive any more. Except in a small town which we visited in Western Australia, there is probably no man or woman on the island-continent of unmixed convict descent, whilst the vast majority of its people are descended from parents who were not *sent* out. Transportation to New South Wales was stopped in 1840, and to Van Dieman's Land in 1853, although the scattered colonists of Western Australia, where there was much to be done and great scarcity of labour, received convicts, at their own request, until 1868.

TOM TIDDLER'S GROUND

It is a remarkable fact that Greater Britain owns the most productive gold-fields in the world. Upwards of two hundred and fifty millions sterling has been taken out of Victoria, while Canada, Western Australia and South Africa bid fair to prove themselves equally prolific of the precious metal. In Australasia there seems to be hardly any limit to the area over which gold-bearing rock occurs. It is found in New Zealand, in Tasmania, in abundance in four of the five Australian colonies,—namely, Queensland, New South Wales, Victoria, and Western Australia,—and to some extent in South Australia too. These colonies, which comprise an area of more than three million square miles, have a population of less than five millions—yet they turn up out of the ground in gold alone, without mentioning copper, silver, tin and coal, nearly eleven millions sterling in a year—as much as two guineas, that is to say, for every man, woman and child! As day after day we steamed across the Great Australian Bight, we used to study the map on which our course was marked, and always these figures kept ringing in our ears:—'Three million square miles—bigger than Europe; a population of five millions—less than London!'

In the days of the Roman Empire, Britain was on the outskirts of the world; where she remained till late into the Middle Ages. There was no external trade; her extensive coast-line and her harbours open all the year brought her no commerce. They were even a disadvantage, since they made her an easy prey for every band of robbers—Romans, Saxons, Danes or Normans—who found themselves discontented with their continental homes. In 1492 America was added

to the trading world, and a shifting of population began to set in, which has since placed England in the very centre of civilised lands. No longer *ultima Thule* our little islands assumed on the Atlantic Ocean the position which Venice had previously held on the Mediterranean. Our ships bring home wool, cotton, and other raw materials from the New Worlds, which, with the help of our coal and iron, we turn into manufactured goods, for our ships to distribute both to New and Old. It has been well said, 'Countries are separated by rivers and straits; but united by oceans.' The rapid improvement of steamships and railways is fast making the whole world one. Great Britain has many competitors. Her position no longer gives her so great a lead in the race as it used to do. Suppose then it were desirable, as we hope it never will be, for Britons, in a body, to abandon their cramped land; in Australia, New Zealand and Canada the whole population of our islands might find a home.

The finding of gold is the most striking event in the economic history of Australia, but gold is not the chief source of her wealth. The Australasian colonies feed more than a hundred million sheep. Their wool alone returns to the colonies nearly twenty million pounds a year. As the Greeks sought to teach in the old Argonaut myth, agricultural products are the real source of the world's wealth; the sheep carries on its back a golden fleece. The metal we take so much trouble to hunt for, the gold for which hundreds of thousands of Englishmen are digging and blasting in all quarters of the globe, is only useful for making counters which facilitate the exchange of agricultural products, or of other commodities for which the agricultural products have been already exchanged. Lands which can carry a hundred million sheep could feed a

large part of the population of the British Isles; though it is hardly necessary to add that the conditions of agriculture would have to be entirely changed. The great drawback to agriculture in Australia is the risk of drought. The rainfall is not really so very different from that of Europe; although the absence of mountains in its centre makes this part of the island-continent a desert. There are no mountain-tops to prick the clouds and make them discharge their burden of rain. Australia differs from other parts of the world, and especially from North and South America, in having no mountain chain of any importance on its western side; its mountains are found on the east. There are no Rocky Mountains or Andes to catch the westerly winds, and hence there are no grand rivers, no St Lawrence, or Mississippi, or Amazon traversing the continent from west to east, depositing vast alluvial deltas, irrigating the land and facilitating commerce. Owing to the absence of mountains on the west and in the centre, the rainfall is uncertain—abundant in some years, causing floods; in other years leaving terrible intervals of drought. The great Dividing Range which runs from north to south on the eastern side of the continent lies, as it were, too near the sea. Its peaks catch the easterly and south-easterly 'trades,' and rob them of their rain, leaving the land at their back without a sufficient supply. And while we are speaking of the winds we must remember that what we said about their general direction does not hold good, entirely, for this part of the globe. Its sandy centre becomes heated like a furnace, until it is probably the hottest region in the whole world. The heated air ascends, and to supply its place air is sucked in from all sides, north, south, east, and west, neutralizing the currents proper to the latitude. Some-

times conditions are reversed, the hot air strikes down on the fertile regions near the coast. Every inhabitant of New South Wales has sad tales to tell of occasional 'hot blasts,' accompanied by clouds of dust, which have sent the thermometer up to 115°, or even higher, and withered all the growing crops.

The average rainfall of Tasmania is about the same as that of Edinburgh—twenty-seven inches a year. South Australia falls far behind with only twenty-one inches; while Perth, the capital of Western Australia, records as much rain as Devonshire—about thirty-four inches. In most parts there is sufficient water, if only it can be stored and distributed as it is wanted; and, in many places, more or less in the interior, abundance can be obtained by sinking artesian wells. Several of these wells discharge more than a million gallons of water a day, and the admirable results obtained by their use are interesting, not only from a practical, but also from a scientific point of view. The surface of Australia is not exactly a basin, but the greater part of the interior is comparatively low and flat. There is high land in the very centre, but real mountains are only found at the edges of the continent. There are no real mountains on the west, merely rounded hills, but on the east the rim of the basin is almost complete. Dr Wallace thinks that the whole surface of Australia was once much higher than it is at present; while its mountain-chains were very lofty. The rainfall was then abundant. The interior consisted of fertile hills and valleys, through which great rivers took their course to the sea. Slowly the land subsided, until the foundations of the coral reef—the Great Barrier Reef—which once fringed its eastern edge, but now lies about fifty miles from shore, were sunk two thousand feet below the sea. During the long

period in which this submergence was taking place the mountains were being worn down by ice and water. They no longer attracted so much rain. The rivers of the interior failed to reach the ocean; their water accumulated in an inland sea. Probably volcanic elevations on the north and south coasts helped to block their mouths. Now, most of the inland sea has dried up, and many of the lakes into which it has divided are only lakes after one of the heavy downpours which occur at irregular intervals. Because the permanent lakes are salt, it used to be supposed that the interior of Australia had risen from beneath the sea. That this is a mistake is shown by the complete absence of sea-shells. The saltness of the existing lakes is due to the enormous evaporation which has taken place. Explorers who have chosen a particular route, because they were told that they would meet with a broad lake, have often found themselves nearly suffocated in salt sand raised by whirlwinds from its dry bed. About one-third of Australia is sandy, or rather, gravelly desert; not bare, like the Sahara, but covered with 'scrub' of eucalyptus or acacia, or by tussocks of spiny 'porcupine grass,' three or four feet high. How far the land has changed for the worse is proved by the immense number of different varieties of animals and plants which the continent still contains. So rich a fauna and flora could only have been developed in a fertile land, and a land which presented many different climates. Moreover, the forms of life are peculiar and strongly marked; in the far-away ages when the land was fertile they must have been united by many intervening links which have since become extinct. Decreasing fertility rendered the struggle for existence excessively severe. Only the types which were markedly adapted to the new con-

ditions survived. Commonplace, average animals and plants went under.

Some of the largest rivers in Australia fail to reach the sea. After flowing inland for a great distance, they either join a lake which has no outlet, or lose their water in the sand. Sinking beneath the sandstone, it accumulates in subterranean lakes. Prick the sandstone and up it comes; often rising to a considerable height above the surface because it had sunk beneath the sandstone where the altitude was greater. It is just as if a flower-pot with a cork in the bottom were made to stand in a basin of water. Bore a hole in the cork and up rises the water, which was confined between the flower-pot and the basin. This is the principle of all artesian wells.

Given sufficient water, the soil is fertile and the climate favourable to the growth of every kind of crop. Already the apples of Tasmania, the vines of South Australia, and the sugar-cane and other tropical plants of Queensland can hold their own against all comers.

There is plenty of room in the world for its present inhabitants. A trip to the colonies enforces the conclusion that these thinly populated countries want more arms to dig, more mouths to receive the produce of the soil, more people to devise and construct the superfluities of life upon which the comfort and amusement of the whole community depend. There is no limit to the possible development of agriculture in Australia. When the demand justifies the effort, Science will overcome the difficulties which Nature has failed to remove.

We saw more gold mines in Victoria for we had, fortunately, an introduction to one of the most experienced mine-owners in Bendigo. During the great rush forty years ago, he had come to the town from

Glasgow, as assistant in a store. Now he is, we were told, a millionaire, interested in more than thirty mines, and chairman of several companies.

Bendigo lies about a hundred miles to the north of Melbourne. Long before the train reached the town we saw, on either side of the railway, the pits made years ago by the first 'placers.' The 'alluvial' is dotted over with these pits, which are in places arranged as regularly as the holes in an india-rubber door-mat. A man and his chum worked together, one digging out the red-brown soil, the other shaking it in a pan in the river, or beneath a stream of water which a conduit led to the place. Gold is one of the heaviest of metals, and even very fine particles remain in the pan while the water washes away small stones and soil. The 'placers' who first handled the soil were in a hurry to find gold in lumps, they could not stop to search for little pieces; but since they turned it over the soil has, in many places, been washed two, three, or even four times by their successors, who have to be content with smaller gains.

Bendigo is a handsome town, spreading for miles over an undulating plain. Chimneys and lifting-gear appear at short intervals; but, since wood is the only fuel, it presents a remarkable contrast to an English mining-centre. The sun was shining, and the atmosphere brilliant, our engine being responsible for the only smoke to be seen in the district. The place looked as peaceful as an English country town on Sunday, and yet 40,000 people were engaged either in the mines or in supplying the wants of the miners, if a wife and family are included among a miner's needs. They are luxuries with which, in Western Australia, the majority of miners have to dispense, but they seemed to be generally looked upon as requisite in Bendigo.

Our friend met us with a smart buggy, which whirled us away to his house. How admirably the vehicle is suited to the country! During the course of the day it took us round many a sharp corner and over many a heap of mining refuse. No matter how deep the rut or high the heap, the buggy only swayed without jolting.

After a kind welcome and a peep into the paradise of flowers by which his house is surrounded, we were taken to the 'Red, White, and Blue.' No doubt this mine was chosen because it would make an impression, but it happened also to be near at hand, to have the best stamping and washing plant in the district, and to possess a personal interest for our host. Some years ago a tenant of our friend said to him, 'I have lost £1,000 in mining, and don't mean to go in for it any more.' 'Give it another chance,' he answered. 'Your mine failed because it was badly managed.' 'Well, tell me of a mine worth taking up!' 'I should work that abandoned claim down there,' answered our friend, pointing from his garden gate towards the place where the chimneys of the Red, White, and Blue now stand. The hint was taken. A company was formed, with 45,000 £1 shares. Our host's friend kept 38,000. They called up sixpence in the pound and started work. Since then they had called up ninepence more, and on this capital of less than £3,000 they had, in six years, paid £120,000 in dividends. The manager showed us his books with a steady output of so many ounces of gold a month, and a corresponding dividend of one shilling, with very slight fluctuations either way. It looks like a sum in 'interest' upside-down; as if a school-boy had multiplied the capital by 100 and divided by the rate per cent.!

The Red, White, and Blue is one of the fortunate

mines. It gives point to our guide's dictum: 'If you go in for gold-mines, you should divide your money among fifteen mines, at least. It is hard lines if none of them pay. If one pays, it pays for all the rest.' The share capital of these mines is usually small, for nothing is gained in economy of working by running several shafts at once. Shafts are sunk, under Government regulations—down-shaft, up-shaft, and ladder shaft—until quartz is reached. When the reef is struck, tunnels are carried north and south, for it is noticeable that all the reefs trend in this direction. The simplicity of the geological formation of Australia is very remarkable. All the rocks, with one exception, 'strike' north and south. Hence the important mountain chains of Australia run north and south. The reefs 'strike' north and south, and 'dip' east and west. From the galleries, irregular passages, called 'winzes,' slope right or left in the plane of the dip. They join other galleries at a lower level, along which tramways run to carry to the main-shaft the quartz taken out of the winzes. The rock is a hard, grey schist, with intervening strata of sandstone. Gold is most abundant in places where quartz and 'rock' are mixed together like a badly made pudding. Where the quartz is pure and white, the gold lies chiefly on the surface of the seam. Every ounce of quartz is brought to the mills, while the rock is used to fill up the galleries and winzes which are no longer required.

When it reaches the mills, the quartz is thrown beneath the stamps, which beat it into a powder almost as fine as flour. Water flowing round the stamps, which rotate as they fall, washes the powder down flat tables or troughs. In the best mills the tables are kept constantly rocking. Their surface is of copper, amalgamated with mercury, which combines with the

particles of gold, while it allows the crushed quartz to pass on. Every day the tables are scraped; the amalgam of gold and quicksilver is set aside; fresh mercury is poured over the copper plates. At intervals the amalgam is heated in crucibles, the mercury is distilled over and condensed for future use, while the gold remains behind.

It is not very exciting to descend a mine. Dressed in a suit of blue linen, the traditional miner's hat, usually very greasy, on your head, and a candle in your hand, you step upon a platform, which immediately sinks into the bowels of the earth. After a minute you can hardly tell whether you are descending or standing still. The pressure of air on the drum of the ear makes you deaf. You try to speak to your companions, but cannot hear your own voice. Swallowing a few times sets this all right however. Presently the platform stops very gently, but whether only a hundred feet or a mile below the surface you haven't the least idea. Then the candles are lighted. You walk along comfortable galleries; scramble down steep winzes; 'pass the time of day' with the men who are attending to the drills, which strike the rock with a chisel which rotates at every blow. The compressed air which works the drills ventilates the shafts; they are as sweet and wholesome as a stone-mason's yard. It is odd to listen to the tapping of distant drills; the mine seems to be full of loudly-ticking clocks. 'Won't that drill soon come through into this gallery?' we asked. as we stood still for a moment to listen. 'I reckon it has a hundred feet of rock to get through first,' the manager replied. So well does rock conduct sound.

All the mines are managed by an 'acting manager' and a 'legal manager,' or secretary. They alone know

how much gold the periodical heating of the crucible yields. Every fortnight accounts are balanced; if there be a surplus, it is divided as profit; if a loss, a 'call' is made. Supposing that a shareholder is unwilling to pay his call, his shares are put up to auction. Then the buyer has to pay the call, and the purchase-money goes to the former owner of the shares. If the price offered is not equal in amount to the call, the shares, or some of them, become the property of the company as a whole.

One disappointing feature in a visit to a mine is that, instead of the glittering walls which might be looked for, it is unlikely that the visitor will see any gold at all; unless by chance it is thought worth while to 'salt' the mine.

A friend who had bought shares in a gold-mine said to Pater, 'It must be a really good thing; I went to see it, and just as I was about to ascend the shaft we came to a pocket where a man was working by himself. "Have you got anything good, Jack?" cried the manager. "Oh, a few small specks in that box," Jack replied.' 'My dear sir,' said our friend, 'every "speck" was a nugget at least as large as a pea!' It is a curious thing, but Pater had been down a gold-mine in quite a different part of the world. He had seen no gold in his wanderings through the mine, which of late had been less distinguished for dividends than for calls. However, the manager assured him that next month he 'expected to turn up some really heavy stuff.' Just as Pater was going to ascend, he also came to a man working by himself. He too had just found some 'specks.' Pater asked for the best of them for Puer, who has it safely in his cabinet. He was amused at the reluctance with which the manager allowed this particular nugget to leave the mine. The gold rings

true, but the tone of the conversation between the manager and his man raised a doubt, as to whether those 'specks' had not done duty before, and might not be needed next time a visitor went down the mine. There is one point in which gold-fields are strangely similar in all parts of the world—the community suffers from a thirst for British capital. Although they are taking so much gold *out* of the ground, they never miss an opportunity of inducing a visitor to put a little *in*.

At Adelaide the ship was obliged to lie at some distance from the shore in the uncertain anchorage of Largs Bay. The city is fourteen miles from the coast, but we could see its towers and spires on the sloping ground which leads up to the hills by which the capital of South Australia is surrounded.

When the post-bag came on board we received letters and telegrams offering hospitality which would have sufficed for a week; but we had only eight hours to spend on shore. How were we to arrange our time? How make the most of our opportunities as travellers, and at the same time show our friends that we appreciated their kindness? Assuredly no South Australian would wish us to give up to visits of politeness time which might be spent in studying the unique arrangement of his city. We must see Adelaide first of all. Here an old friend, the head of Way College, came to our help, placing himself and his carriage at our disposal for the day.

Adelaide is a city in a park. We had seen many a beautiful park within the precincts of a town, but never before a town in the midst of a park.

From east to west runs a boulevard of great width, bordered by trees and gardens, which surround the public buildings, and set them off to the best advan-

tage. Adelaide is justly famous for its scientific collections illustrating the natural history of Australasia. After a run round the principal drives, where the citizens can take their pleasure beneath shady trees almost within a stone's-throw of their doors, we visited the Zoological Gardens. No doubt the inhabitants of Adelaide like to look at strange creatures from other parts of the world, but we were interested in the excellent collection of animals indigenous to Australia. The Botanical Gardens were bright with flowers, although the exceptional drought of the preceding summer had left them, as well as all the country round, without a blade of grass. A great date-palm, with a stem two feet thick, gave us an excellent index to the climate. It was loaded with dates, which would not ripen, even this year, in which the thermometer has reached 105° in the shade. A very little frost would kill a date-palm; Adelaide's hottest summer cannot ripen its fruit. The same would be true of Lisbon. These towns may be said to enjoy a very similar climate.

But the best of the day was a visit to the museum, under the guidance of Professor Sterling, one of Australia's most distinguished men of science. What a field he has to work at!—a new world, with a flora and fauna all its own. But though new to us, it is a strange, old-fashioned world compared with ours—a world which has learnt very little since it ceased to be connected by dry land with India and Africa. Long ages ago a great part of the Indo-Africo-Austral continent sank beneath the ocean; very gradually, no doubt, and not completely, for Sumatra, Borneo, New Guinea, and hosts of smaller islands still stand like stepping stones above the waves. Geologists cannot tell us exactly when this occurred, but they think that it was about the time when, after a long submergence,

Britain came up from beneath the bed of the ocean, covered by a layer of white chalk. Whatever may have been the date, it is certain that for hundreds of thousands of years only animals which could swim or fly have passed from island to island between Australia and the rest of the world. Occasionally fruits of trees and seeds of flowers have been borne across the sea by currents or carried by the wind. But, despite these occasional visitants, there has been, practically, no exchange of ideas between Australia and Africa or Asia since very early times. Australia was for some millions of years cut off from the rest of the world, and its inhabitants did not feel the stress of competition which caused the plants and animals of the Northern Hemisphere to perpetuate the smallest improvements in structure which gave them an advantage in the battle for life. At any rate they did not improve. They remained much in the condition in which plants and animals were in Europe in the Carboniferous Period. In their own way they progressed, of course; but they took life easily until the time of which we have already spoken, when the climate became disastrously dry. It was then too late for improvement in the upward sense. Nature's energies were absorbed in enabling them just to keep alive. During the happy days of increasing abundance and fertility they had had no experience of the intense struggle which pushed forward the rest of the world.

Thus it has come about that no living thing in Australia can hold its own against the highly gifted denizens of the Northern Hemisphere. When our sweetbriar and thistle are imported they cover the ground; the European bee dispossesses the native honey-seeker; the sparrow chases the native birds far back into the bush; while, as for the rabbit, it just occupies the land!

It behaves as if Australia were made for it alone; as if it had no rivals and its enemies were beneath contempt. It is not for nothing that for countless generations Brer Rabbit has had to put up with persecution and hard living; only on arid, barren sandhills has he been allowed to make his home in the Northern world. He has had to pick up a precarious livelihood in places where herbage is sparse and the only water dew. Even there Brer Fox is constantly sneaking about his warren, while owls and hawks hover above the openings of his burrows, watching for his young. Place him amongst the simple-minded animals of this most old-fashioned land, and soon he takes possession of the whole; eats the grass from beneath their noses and sniffs in the face of the native carnivores of which they stand in awe. He is the gipsy of Europe, but in Australia he looks upon the prettiest gardens and the most fertile farms as his natural camping ground. During his life of vagabondage he has devised so many dodges and acquired so many wiles that it is hard for even human ingenuity to keep him out. Put weasels in his burrows; well, in a country where it never freezes it is just as pleasant to sleep in the trees! Surround the 'run' with wire netting, sunk well into the ground, you soon find he hasn't forgotten how to dig. Brer Rabbit comes up smiling on the other side! While the colonists would give any sum of money to the man who could cure them of the rabbit-pest, the creatures native to the country can hardly be said to give any trouble at all, its human beings least of all. The natives of the island-continent are probably the most backward that exist; while, as for the mammals, they wear pouches!—things which for æons have been out of fashion in the rest of the world.

A mammal, we used to be taught, is an animal which

breathes air and suckles its young. But there are three stages in the domestic history of Mammalia, although the assertion that they all suckle their young is perfectly correct. First come Prototheria, which lay eggs like reptiles and birds. Secondly, Metatheria, whose offspring are born in a very immature condition, and placed in a pouch until they are old enough to take care of themselves; to this division the marsupials belong. A new-born kangaroo is smaller than a rat, although its mother may be larger than a donkey. The third division, Eutheria, comprises by far the greatest variety of species, including all the mammals with which we are acquainted in Europe. Their offspring, when born, have already reached a stage of development equal to that of the metatherian when it leaves its mother's pouch. Fossil marsupials are found all over the globe, and America can still show a few living species (the opossums), but almost all the mammals of Australia belong to this class. In Australia alone are the queer Prototheria, neither bird, beast, nor reptile, found alive. In the museum we saw the ornithorhynchus, an animal about as large as a rabbit, with soft fur, webbed feet and a duck's bill. This lowest of all mammals lives in the south and east of Australia and in Tasmania. It is amphibious, feeding on shell-fish and other water animals. It lays its eggs in a burrow and sits upon them like a hen. Echidna, the other prototherian, is not quite so large as Ornithorhynchus. It lives upon ants. Its body is covered with coarse spines, like those of a hedgehog. Like Ornithorhynchus, it is toothless, but has a kind of beak, turned up at the end. It also lays eggs, but carries them in a pouch, in which the young are hatched.

We saw also the most interesting little sand-mole,

Notoryctes, which had recently been discovered in the centre of Australia, and of which the first specimens were secured by Professor Sterling, when crossing the continent in company with Lord Kintore. It has a pouch, which open backwards, not upwards as in a kangaroo, so that it is not blocked as the animal burrows in the sand; but whether the sand-mole lays eggs, which are placed in the pouch to hatch, or whether its young are placed there, like those of a kangaroo, has not been ascertained. It is perfectly blind.

Our log would not hold a description of a tithe of the animals in the museum, even though we reduced it to nautical phraseology. If we did this, a kangaroo would come out somewhat as follows: 'Fine in the bows, broad in the stern; paddle-wheels aft, and a rudder as long as the ship.' And it might be added that 'she is a clipper for rough water, and never moves without appearing to toss on the waves.' Almost all the Australian mammals are pouched. Some eat grass, like kangaroos and phalangers, miscalled opossums; others are carnivorous. The striped Tasmanian 'tiger-wolf' and the Tasmanian 'devil' among flesh-eaters have a very bad reputation for raiding poultry-yards and worrying sheep.

Among the very few mammals of Australia which neither lay eggs nor carry their young in pouches, the dingo, or native dog, and the huge bats, or 'flying foxes,' are best known. It is not strange that many bats which are found in India and the islands have migrated further south. Like birds they were able to fly across Torres Straits. They fly in flocks, and live on fruit. A flock makes sad havoc when it settles in an orchard. The rest of the eutherian mammals are all small, chiefly mice of various kinds. No doubt they crossed Torres Straits on trunks of trees or

clumps of vegetation, which were carried down the rivers of New Guinea in times of flood, and cast ashore by currents.

The museum contains a magnificent collection of birds; the emu and cassowary, both large birds, like ostriches, with still more rudimentary wings; the brush-turkey, which saves itself the trouble of sitting upon its eggs by making a huge hot-bed of leaves and grass, which ferment and keep them warm; and hosts of pigeons, cockatoos, ground-parrots, and parrakeets. A large number of the birds are honey-suckers; for it is characteristic of the Australian flora that while it abounds in flowers yielding honey, fruits tempting to birds are scarce.

In a friend's garden we were introduced to a 'laughing jackass'—a bird of the size of a jackdaw, and not unlike it in colouring, although its head and beak show that it is related to the kingfishers. It is a great hunter of 'mice and other small deer,' easily trained and always a welcome guest. We thought, however, that it laughed on the wrong side of its mouth. It was only when a piece of meat had been snatched from its beak or after it had been stirred up with a broom that it put its head back and gave expression to its joy. And we noticed that it regarded the stable-boy as infinitely more facetious than our kindly, merry friends—the mere sight of him sent the bird into fits of laughter.

But we must not end our short account of the museum without a reference to the fossils, perhaps for scientific men the most promising field of work at present. Australian animals and plants are so widely different from our own that we need to trace them back through the strata to find connecting links; we want to know, too, which of them are descended from

stocks which have always existed in Australia, and which are immigrants. The dingo, for example, so nearly allied to the wild dogs of India, and so unlike the pouched mammals—when did it come to Australia? Or, if its ancestors have always been here, why have other eutheria not multiplied in this land as they have done on our side of the Equator? What are the conditions in Australia favourable to mammals which have long ago died out in the Northern Hemisphere, and unfavourable to the type which with us holds the field; Professor Sterling showed us the huge bones of Diprotodon, an animal almost as large as an elephant, and of Nototherium, another kangaroo-like creature as big as a rhinoceros. How unpleasantly impressive it would be to see one of these beasts hopping towards one on a moonlight night! Also the bones of an immense fossil bird, allied to the emu, but as large, if not larger, than a New Zealand moa.

On the voyage from Adelaide to Melbourne we first began to hear about the social and political unrest of the Colonies. We were destined to hear the same story wherever we went. Our fellow-passengers were professional men, or men of wealth, and we recognised that they looked at matters chiefly from one side; but there must be some reason for the great anxiety with which they all seem to regard the future. The government, they say, tends to fall into the hands of men without education in any of the subjects which a statesman needs to know. Too often they know nothing of history or of economics, and politics means to them not a science, but the trade of catching votes. The professional man thinks that his intelligence and training, instead of aiding him, stand in his way as a politician, owing to the suspicion with which democracy regards all that savours of gentility. Not that the

business of publican or storekeeper unfits a man for governing, but it clearly does not help to make him an expert in the art. At Adelaide Pater came across a curious illustration of the harm that may be done by ignorant and unprincipled meddling for political ends. Not very long before he visited it the management of the hospital had dismissed two nurses for neglect of duty; but since the elections were approaching and women were to vote, certain members of the Government thought that it might be politic to take up the nurses' cause. The Premier spoke in favour of reinstating them. The board of the hospital was 'packed,' and the nurses were returned to their posts; with the only possible result—the resignation of the whole medical and surgical staff. Afterwards we heard that the chairman and several members of the board had resigned. Now, if there is one sphere in which the introduction of politics amounts to a crime, it is in the management of a hospital. A hospital has one object, and one alone—the reduction of suffering,—any mistake in the selection of the staff or the superintendence of the nurses may cripple its efficiency in this respect. The poor of Adelaide lost, for a time, at any rate, the services of the ablest doctors of the colony, which were at their disposal hitherto; and men who had devoted the best of their lives to the service of the institution, for no direct benefit which it brought to themselves, were suddenly deprived of the work to which their hearts were given.

It is the conflict of petty interests that South Australia, as well as other colonies, has to dread—the government of the country in the interests of its rulers of to-day, and the neglect of the vast heritage held in trust for the Anglo-Saxon race. What a gigantic trust it is! Looking at the map of Australia, one sees

that it is divided into thirds by two vertical lines. The western third is Western Australia, the middle third South Australia, and the Northern Territory, which was separated from South Australia in 1911, while the eastern third is again divided into three by almost horizontal lines. Of these three the southern division, Victoria, is almost the same size as Great Britain; the middle division, New South Wales, is nearly four times as large; the northern division, Queensland, is the largest of the three.

In South Australia grow wheat, oranges, olives, grapes—everything, in fact, which can be grown in Italy. The Northern Territory and the north of Queensland, which are in the tropics, will grow sugar-cane, cacao, bananas, and other tropical fruits. In the centre there are still many grass tracts which are not yet covered with sheep. Much of the land is desert, but in many regions abundance of water can be obtained from artesian wells, and the land when irrigated proves to be very fertile. Gold is found, and other minerals, especially copper, which has already yielded more than £20,000,000.

Melbourne, the capital of Victoria, is the largest town in the Southern Hemisphere, with a population of more than half a million. Among the many population-puzzles which Australia presents, none is more difficult to answer than this: Why in a country whose inhabitants number very little more than three to every two square miles do so many people live in towns? Exactly one-third of all the population is to be found in the five capitals alone, and there are many other towns of considerable size. The wealth of Australia is 'natural wealth,'—minerals and the produce of the forests, vineyards, orchards, and fields,—and yet a comparatively small proportion of her people are en-

gaged in collecting it. How rich the colonies would soon become if the inhabitants of the towns could be sent out into the country to develop their resources!

Pater has been foisting philosophy into our log of late. We must not let him do it any more. Now for Melbourne as we saw it. The *Ophir* came up to a great pier as easily as a penny steamboat on the Thames. We stayed on board for a long time watching the welcomes given to Australians who had returned from England, and amusing ourselves with the excitement of the emigrants, who had reached their destination after six weeks on board ship and a voyage of 12,000 miles. It is always pleasant to take things quietly at the end of a journey, just because every one else is so anxious to save five minutes, after having patiently lost as many hours, or, as in this case, weeks.

By train into the city, and then a ride on the cable-tram to our hotel. We were so much taken up with the tramway that we had no eyes for the town. It was like a ride on a switch-back, uphill and downhill in an open car at a pace which made us clutch our seats. Melbournians tell us that they have the finest system of trams in the world, and we can quite believe them. They traverse all the principal streets. The cars run in pairs, one open, the other closed. The speed in the centre of the city is eight miles an hour, in the outer parts of the city ten miles, in the suburbs twelve. Three minutes is the usual interval between the trams.

When we were able to turn our attention to the town, we found it difficult to form a judgment It is not the finest city of its size in the world, as its admirers often boast, although it is a marvellous city, considering its age. Looking down its broad rectangular streets bordered by impressive public buildings, one is unable to grasp the idea that fifty years

ago only a few wooden shanties straggled up the slopes. Some of the citizens of this great capital can remember the time when sheep were feeding where its busiest thoroughfare now runs. The public buildings are very handsome and in excellent taste. Their flat roofs and cool open corridors look appropriate in a land of sunshine. The classical 'palladian' style gives dignity to a city which could not disguise the fact that it is new, however carefully the Gothic buildings of a mediæval town were copied.

Probably the public buildings are not to be matched in any other town of its size, and many of the mercantile houses are imposing in themselves; but Melbourne as a whole is not a handsome town. The great city houses look inappropriate amidst their humble surroundings. Huge stone giants of eight or ten storeys tower up from amongst little brick buildings such as are found in a small provincial town at home. They seem to be always reminding one that Melbourne has suffered from more than one attack of what the Americans call 'swollen head.' The palatial offices of an insurance company, which cost a quarter of a million, occupy the corner of Swanston Street and Bourke Street. They are built on land for which a larger price was paid than has ever been given even for the diamond-dust in the centre of London. We should not have thought that any one would be disposed to insure his life with a society which flaunts its extravagance in this way; but that is not the point. The interesting thing is that before the building was finished the land had fallen to less than half its former value.

With what a terrible crash the great collapse in the value of securities, must have come! Every one talked to us about it, and told us tales of well-to-do ladies who in a day became penniless, and were thank-

ful to get situations as domestic servants; of rich men who were reduced to begging for a clerk's stool in a shop; of crowds of employées of every kind, who, owing to the sudden bankruptcy of so many firms at once, did not know where to turn for work.

But it is an elastic country. Its financiers are perennially engaged in preparing fresh 'booms.' Several 'opportunities of making a rapid fortune' were pressed upon Pater, despite his assurance that he had no money to invest. If he had no money, he surely had some credit! How else could he travel with his wife and children round the world? Such gamblers are the Australians! On board ship they were always gambling. As soon as they landed they began to go in for little 'flutters.' Gambling seems to be ingrained in the colonial character. Every town has its racecourse. The Melbourne Jockey Club claims that theirs is the finest in the world. They have spent £750,000 upon it and its surroundings.

The great prices paid for land and the extravagant expenditure upon buildings was only a form of gambling—playing for high stakes. Among other speculations, a great craze seems to have set in some years ago for building coffee-palaces, in out-of-the-way places. £22,000 was spent upon one which does not look as if it ought to have cost one-third the money. Now they are being pulled down again and the materials sold. In the goods-station at Bendigo we saw a great consignment of second-hand palaces which had been bought for a song. They were about to be used in building miners' cottages.

At Melbourne we first made acquaintance with a colonial hotel. It was a fine building, with a dining-room which would seat two or three hundred people at separate tables of three or four guests each. The

menu was excellent, and one selected just exactly what one pleased; for all colonial hotels make a fixed charge. It is rarely more than ten shillings a day; in second-class hotels the charge is naturally less. Meals are at 8 or 10, 1, and 6 o'clock, and guests cannot order food at other times. At first we did not like the rigidity of the colonial system. We also found difficulty in securing personal service. There were no bells in our rooms—only a bell in each passage common to all the rooms. When we wanted baths we had to fill them for ourselves; but, on the other hand, the baths were 'free and frequent,' a great luxury in hot weather. Altogether we came to the conclusion that when the traveller has learnt how to make himself at home, there is much more solid comfort to be found in a colonial hotel than in an hotel managed on the European plan. Best feature of all, the system of 'tips' seems to be unknown. What a contrast to the last hotel we had stopped at, in Colombo, where we had to force our way through a *chevaux-de-frise* of outstretched palms. At Melbourne the porter closed the carriage door and walked abruptly away when he noticed Pater's hand making for his pocket.

The University is an attractive place of study. It stands in a park, in which we saw students, both men and women, sitting with their books. We were very hospitably treated, and were shown over the laboratories and museums. Puer spent a happy time inspecting the collection of Australian butterflies—sober-coloured wooers, most of them, compared with the gaudy vanities he had chased in Ceylon. The staff of the university were busy preparing for the Opening Day. And now we are not quite sure that we ought to have called the students 'men'; but in every country there are times when all students assert a claim to be re-

garded as boys. It appears that, in Melbourne, Opening Day is faced with some apprehension by the dons. They have, however, effected a compromise which we have not met with anywhere else. The first half of the performance is given over to the boys. When they had made their speeches, sung their songs, and solemnly conferred upon the Porter the degree of £ *s. d.*, they listened to His Excellency the Governor with becoming respect.

The Art Gallery contains a very fine collection of pictures, some of which we recognised at once, because we had seen engravings of them. Such, for example, are Turner's *Dunstanborough Castle* (given by the Duke of Westminster), Tadema's *Vintage Festival*, Marcus Stone's *Peacemaker*, Edwin Long's *A Question of Propriety*, Collier's *Priestess of Delphi*, and several others.

In the Museum Pater showed us the collection of weapons and other things used by the natives. It is always sad to think of a native race dispossessed by Europeans, but it is less to be regretted in Australia than anywhere else. Even when Englishmen first settled there, the aborigines were few in number compared with the immense extent of territory over which they were spread. They have been dying out rapidly ever since. They seem to be the most primitive of human beings, quite incapable of civilization, and addicted to the most degrading rites. Puer did not relish the idea of having his two front-teeth chipped out with a sharp flint as soon as he becomes a man. He thought it would make him want to remain a boy. But the natives have many customs far more barbarous than this. The pictures of the poor women scarred all over by spear-thrusts, which their husbands inflict whenever they fail to bring in a sufficient supply of

food, made Filia shudder. We ought hardly to call them wives; they are merely useful animals, to be bought, or stolen, hacked about and beaten as long as they can work, killed and, in the old days, eaten when their strength begins to fail. The natives wound themselves and one another with knives and red-hot stones for the sake of making scars. In this respect it is hardly fair to call them primitive, for no animal will give itself or its mate unnecessary pain. Yet it seems probable that Man has lived in Australia ever since pliocene times,—ever since the time when the island was cut off from the great Indo-African continent. The Australian native is the ornithorhynchus of the human race—only one stage above the animal which first deserved the name of 'Man.' The original race of men seems to have spread all over the world. In the 'early dew and dawn of time' our own islands were peopled by men with very small brains, prominent brows, and heavy, projecting jaws. They lived entirely by the chase, and knew no tool or weapon other than a broken stone. The stones, usually flint, because of the sharp edges which they present when broken, were left rough, and were grasped in the hand, not fixed in a handle. Wherever we find these stones we say that they indicate the existence of 'palæolithic,' or 'old stone,' Man. These were the only weapons known to certain tribes of the aborigines of Australia. A slight improvement in their weapons has always given to a race a great advantage in the battle for life, and so the people who polished their stone implements and fixed them in handles—'neolithic,' or 'new stone,' men—drove palæolithic men away from the more coveted spots; to be themselves chased in turn by others who made weapons of metal, who again went down before the all-powerful gun. In

many parts of the world the people who still preserve the physical characters of palæolithic Man have adopted the weapons of the superior races; so that we can no longer say that a man whose brain does not weigh more than forty-one or forty-two ounces, and whose skull has projecting ridges and prominent jaws, is palæolithic, although we can say that anatomically he is primitive in type. But in Australia we find men of a primitive type, still using the humblest kinds of weapon. The lowest of the aborigines have already disappeared. There are no Tasmanians left. Poor people; they had no morals, and could not be made to understand what morals mean; therefore we cannot blame them for not recognising that they ought to let the settlers' chickens and pigs alone. They had a sensation inside which they could understand, and no consciences in which to feel either distress or ease. Their habits were disgusting, but they could not be made to see how they might be improved, and unfortunately, the escaped or liberated convicts who formed the early settlements in Tasmania were not the people either to set the natives a good example or to respect their helplessness when they considered themselves wronged. Many stories are told of kindness shown by natives to convicts who had run away into the bush, but the natives were badly treated in return. In 1837 Flinders Island was given to those who still remained, to occupy by themselves. There the last of them died in 1876.

The aborigines of Tasmania could not be called a very ugly race. The head, although small and narrow, was, at the same time, high, the forehead rounded, eyes deep set, bridge of the nose low and narrow, nostrils broad, lips thick and projecting. They were deeply interesting, because they were the least

improved survivors of the original palæolithic men. They could only count up to four!

In Australia the natives do not belong to so pure a type as the Tasmanians. In New Guinea and the western islands of the Pacific Ocean are people of relatively low intelligence called Papuans, or Melanesians. From time to time the continent has been invaded by these black people and by other races, who have intermarried with the inhabitants, and consequently the breed is mixed, especially in the north. Other representatives of very early man are found in Africa—the Bushmen, Hottentots and negroes. All belong to what is termed the negroid type. The Australian differs, however, from the negro in one remarkable respect—his hair is a wavy mop,—not woolly or crisply curled,—and he has a bushy beard. Now woolly hair does not look like a primitive character, for it certainly does not make the negro resemble his nearest connections in the animal world. It seems to be a refinement on the original plan; and therefore we may conclude that the original Australian native was lower than the negro and probably at the very bottom of the human scale. The hair of the Tasmanians was somewhat woolly, but their bushy beards and straight faces separated them widely from the negroes. It is probable that they were the survivors of the original inhabitants of Australia, driven out by the negroid invaders, who intermarried with the tribes which remained on the continent, giving rise to a mixed progeny which constitutes the Australian type. But the Tasmanians resemble certain very primitive human beings found in Japan, India, and other parts of the northern hemisphere; like them, they are remnants of the primitive rock from which the various families of the human race were hewn.

While we are writing of the Australian aborigines

it must be understood that no single description will apply to all the tribes of natives who wander over this vast continent. It is not to be expected that all the people who inhabit so large an area would be exactly alike. Some of the inhabitants of Queensland are as primitive as the Tasmanians, while there are other tribes in Australia who have made quite a little advance in the social scale—tribes which make huts to live in; tribes which catch fish in nets, as well as with hooks; tribes which drive ducks into nets suspended between two trees above the water, make weirs on rivers, and spear fish from canoes by firelight. Their weapons are better. They fix stone hatchets in handles and attach quartz points to their spears. They make string from the sinews of the kangaroo, and use bone needles to sew with, and even spin opossum hair into waist-belts, to support the digging-sticks with which they search for water. The more primitive the races the more difficult is it to classify them. They all resemble one another in their small heads, prominent jaws, and other animal characteristics; in their simple language, in which the sounds more or less imitate the noises made by the things they wish to name, and in the absence of mental, moral, or social development. It is, as it were, their want of character which unites them, and at the same time makes it difficult to divide them into groups. The question of the affinities and classification of the Australians is one about which men of science differ. We have to be content with the reflection that they are very primitive. The lesson we learnt from our visit to Australia was this: it is an inconceivably long time since man appeared upon the earth. If our own palæolithic ancestors resembled the natives of Australia, our section of the human race has made great progress.

Before we left Victoria we spent a few days at the Blacks' Spur—so called because it used to be a place of rendez-vous for the natives—in the heart of the best of the Victorian bush. It was rather a tedious railway ride to Healsville. Healsham, or Healston, or Healsby, would have a prettier sound than Healsville. Whoever it was who added this French termination to an Englishman's name must have been singularly obtuse to the fitness of words. We had made so early a start that we were glad of the most juvenile joke to keep us from yawning. How loyal the Victorians are to put G.R. and a crown on all their railway furniture! Filia's patriotism was aroused. She whistled *God save the King* with frantic energy, until her mother was fain to stop her ears. At last she sank back with a sigh. 'Well, I did think I should make Mater stand up, and Pater leave his paper and take off his hat. I thought my parents had some sense of propriety!'

At Healsville the coach was surveyed with interest. It was a grand old pile, hung on huge leather straps. A number of discarded soles were nailed together to shoe its brake, and the boot was so capacious that, amongst many heterogeneous articles, it carried a live calf—a veritable Wellington this! We moved on to the post-office, where we came to rest. 'What are you waiting for?' asked a bystander. 'More'n I can tell you,' replied our dry, blunt driver; 'it's these poor hosses has to suffer.' We saw that there was a fund of humour to be broached, if only we could find a tap. 'Do you think there's time to get down?' asked Pater. 'No, there ain't any time; we're off this minute.' 'Oh, it doesn't matter. I forgot to fill my cigar-case, but I don't need to smoke.' 'Oh, there's time for *that*; and if you go up the street a bit you'll find a store where the cigars aren't bad.' We should never have seen

him at his best if he had not had a cigar to manage as well as the whip and reins. Puer sat on the box-seat and held the cigar-case. It was a long time before the driver said that he had had enough! As we loitered through the town he stopped the coach. 'How's your mother, Mary? Mrs Dodd told me to inquire.' He had a basket of newspapers between his knees, which he distributed at the farms along the road; a woman or a child was usually watching for the coach. Presently he told us to look out for the messenger at the next farm. When we came to the gate a fox-terrier was waiting in the road. He caught the newspaper in his mouth, and trotted off to the back-door of the house, too proud to wag his tail.

The 'poor hosses' did not suffer from eagerness to push on so much as our driver had led us to expect. Old age seemed to have tamed their wild spirit. The driver's 'Giddy! giddy!' with which he incessantly addressed one of the leaders, might have suited her in her youth, but was inappropriate now; for she had been on the road for six and twenty years! 'Giddy!' seems to be a variant of 'Get up!' The road climbs a thousand or fifteen hundred feet to reach the Spur, but it dips into several valleys on the way. In one of these descents, after a bumping, jumping motion had proceeded for some time, the driver turned to Mater: 'Is that mail-bag behind you safe?' And when she assured him that it was, 'Ah!' he said significantly, '*he's* strapped on.' 'Yes,' said Mater; 'but you don't take as much care of your passengers.' 'Oh! that's it, is it?' and he very nearly gave us a smile.

The Hermitage, Blacks' Spur, has been built by a famous photographer and traveller, Mr Lindt. Here he lives in the fashion which pleases him best, surrounded by curiosities collected in New Guinea and

other islands which he has explored. We were much interested in his collection, as well as happy in the home life and the charming music with which he and Mrs Lindt provided us. The views around the house are grand, the foliage of the eucalypts, with which the mountains are densely clothed, giving distant effects which are not produced by other kinds of tree. Their leaves are a dull olive-green, but in the distance the sea of forest varies from slate-colour in the shadow to blue on the sunny slopes; and as the leaves shake in the wind they produce a haze, a soft, smoky effect, very beautiful, although quite unlike the shimmer which passes over an English wood. All these effects are easily explained by the way in which the leaves are hung on their stalks. They are placed vertically, their surfaces being right and left, not upper and under as on European trees; they turn their edges to the sunshine, in order that they may give off less moisture, and so suffer less in the summer drought than our trees would do. Both sides of the leaf are of the same tint; hence there is none of the sparkle which brightens an English wood when the wind twists its leaves on their petioles, and shows now more, now less, of the lighter under-side. Nor are the woods varied with patches of different tint, due to the presence of several kinds of tree. In the distant landscape, eucalypts alone are visible. Near at hand one sees bright green wattles (acacias) and small-leaved evergreen 'beeches'; but the great eucalypts tower far above their heads, hiding all other growths. Their vertical leaves give no shade, nor do they hide the stems, and so the grey of their stems and the red-brown of their tattered bark mingles with the colour of the leaves and produces a monotonous slaty tint. These great 'gum-trees' are very untidy. If bush fires have not scorched and

scarred them, many of their upper branches are usually dead from natural causes, while their deciduous bark hangs round them in long tatters, like a scarecrow's rags. But, nevertheless, they are trees to inspire one with respect—giants, straight, strong, and noble, however they are clothed. To get any idea of their height, we were obliged to think of the tallest trees we knew at home, and we remembered that when, some years ago, the 'Two Sisters,' supposed to be two of the tallest elms in England, were blown down in the gardens of St John's College, Cambridge, they were found to measure 130 feet from their roots to their topmost twigs. But round the Hermitage the eucalypts reach nearly 300 feet in height, and the tallest tree ever seen in the world was one of these 'white gums' (*Eucalyptus amygdalina*), which measured 480 feet as it lay upon its side. They eclipse in size the sequoias, or 'red woods' of California. 'In my country, stranger, the trees are so big it takes two men to see up some of them.' 'Yes,' was the answer, 'but in Victoria, if you wish to go from one end to the other of a fallen tree, you have to fetch out a horse; and, mind you, the stem is so straight and smooth, you can take the buggy, too, if you like.'

The various gum-trees, white, red, blue, and 'string bark,' as well as other kinds with less easily remembered names, constitute the forests of Australia, although mingled with many varieties of acacia, casuarinas, &c.; while the 'scrub,' which renders thousands of miles of country almost impenetrable, is formed either of dwarf acacia, with long thorns, or of Eucalyptus drumosa, a dwarf gum-tree which grows more densely packed than willows in an osier-bed.

Eucalypts are the characteristic trees of Australia, and have been ever since those early days when the

great island parted company with the continents to its north and west. Before this time eucalypts and other trees now found only in Australia were distributed over the whole globe. They are found in the early 'tertiary' deposits of Europe, which were laid down just about the time when the separation is believed to have occurred; and at the same period various European trees (willows. elders, birches, oaks, and beeches) flourished in the Southern Hemisphere. But the hospitality offered to what may now be considered as Southern and Northern types respectively has not been reciprocal on the two sides of the Equator. In Europe all plants characteristic of Australia of the present day have long become extinct, while on the mountains of Australia thirty-seven species of British plants are found. Since they are plants of the temperate zone, which could not cross the tropics, it is inferred that they have lingered on since the epoch when the flora of the Northern and Southern Hemispheres was nearly uniform. The identity of the plants of the two temperate zones during the tertiary period is difficult to understand. Rather should we expect to find them different from the beginning. If the common stock from which they have developed had appeared first in the warm regions near the Equator, its descendants would have adapted themselves to colder temperatures as they spread north and south; giving rise to temperate floras in Europe and Australia, which would now resemble one another, although differing in detail. The fact that the same plants are found in the temperate zones on both sides shows that there must have been a time when it was possible for them to travel from one hemisphere to the other. Of course, the throwing back of the time of their dispersion does not in the least help us to understand how the plants of

our temperate clime found their way to Australia, or how the plants now characteristic of Australia spread over the globe until they reached the land we now call Britain. The tropics divided the north from the south then, just as they do now. The willows and alders, the eucalypts and banksias, could not have travelled all over the world in those early days unless the conditions near the Equator were very different from those which now prevail. Either the temperature at the Equator was lower than it is at the present time, or the great Indo-Austral Continent presented a back-bone of high mountains, towards the summits of which there was always a cool zone suitable for the growth of temperate plants. The second of these suppositions is probably correct.

If for most of the year the woods of Australia are sombre in tone, there are seasons when they allow themselves the fullest licence in attire. We in England can imagine nothing like the Stenocarpus of Queensland, the flame-tree of New South Wales, or the fire-tree of Western Australia, which make the forest look as if in flames with their red or orange flowers. Indeed, Australia is very rich in different kinds of plants, richer than the comparative uniformity of its climate would lead us to expect; and Dr Wallace thinks that there must have been a time when the continent was larger than it is at present, and its mountains higher. The variations in soil and climate must have been much greater than they are now to have produced the 10,000 species of flowering plants and ferns which the continent contains. The study of its plants leads to the same conclusion as the study of its animal life. It is an old, old land, cut off for æons from the rest of the world. Its plants are peculiar. They stand by themselves—strange forms, not linked



NYORA GULLY

with one another by intervening grades. When we find plants which, although different, resemble one another closely, we cannot assert that they may not have existed for ages in the same form in which we find them, but it is probable that in relatively recent times they had a common ancestor which in its characteristics stood midway between them. But when we find plants which are not so linked together, we know that the flora must be very old. The intervening forms have had their day, have flourished for a time, and then, finding that the conditions of life were changed against them, they have died out, leaving only those which had completely adapted themselves to their altered circumstances, and learnt how to hold their own, although climate and soil were changed and a new race of bird- or insect-patrons had appeared.

There is no church at Blacks' Spur, nor any within reach; but we found a chapel to our liking in the glen behind the house. Tall stems of tree-ferns formed its apse; their richly chiselled shafts draped in transparent, half-pellucid hymenophyllum, or 'filmy fern'; the radiating mid-ribs of each crown of fronds arching to join the others in the groining of the roof. Over its interlacing, fan-light tracery was spread a curtain of green crape, softening almost to gloominess the light which filtered into the space beneath its vault. The morning slipped away before we knew it; so solemn, so restful was our little chapel by contrast with the glare of sunshine beyond the ends of its diverging aisles.

Nor was the chapel without its choristers. Song-birds of many kinds chanted the psalms, flocks of parrots gabbled responses from the trees; but, alas! we must confess that on the higher pipes of the organ the mosquitoes kept up a monotonous droning, with which we

could well have dispensed. There was no other remedy: Pater was obliged to smoke in church!

Sydney and its surroundings are beyond our powers of description. Passing between the 'Heads,' the narrow entrance of Port Jackson, the largest ship which at present serves the Australian public (we were told that the channel may prove too shallow for the ships of the future, raising engineering problems of great difficulty) steams some eight miles over the most placid of inland waters to the wharves and quays of the town. Cliffs rising to about 200 feet enclose innumerable bays fringed with trees of which the branches dip into the sea. Villas surrounded with large parks or gardens stand out on every headland; smaller houses embowered in orange trees and bananas hide in every nook. Nature has given the town a perfect site; and very wisely, man, imitating nature, has reserved large public gardens which set off to the best advantage the Governor's House, University, Museum, Town-hall and other noble buildings, including the churches and chapels with which Sydney is exceptionally well supplied. A photograph of such a view as may be seen from almost any point on the shores of the harbour is singularly disappointing. Hills are dwarfed, houses jumbled up into an indistinguishable mass, sea confused with land. Any word-picture which we could paint would convey as little information as the photograph. Our Sydney friends must forgive us for giving up the attempt in despair, accepting the faint compliment to the indescribable charms of their home which our failure implies.

Tasmania is peculiarly attractive. It is English in climate, English in products, and ultra-English in its ways. A high tableland of 'igneous' rocks has been chiselled out by ice, disintegrated by frost, and washed away by rain, until, in marked contrast with its gigantic neigh-



SYDNEY HARBOUR

bour, it is all mountain and valley; steep slopes, rugged glens; lakes, rivers, and land-locked bays. The soil is extremely fertile. The forests are as valuable as any in Australasia. Coal is abundant. Gold, silver, tin, iron, and other metals are found in profitable quantities. Altogether it is a land to attract English emigrants. Yet its population is only 160,000: it has lagged behind its sister colonies. For this reason we were determined to pay a visit to Tasmania. We thought we should like to have a peep at Cinderella before her good fortune sets in; for we are sure that the Prince must already have found her slipper. If we exclude that superb beauty, the South Island of New Zealand, Tasmania is certainly the prettiest of the colonial sisters. When we saw her, her lap was full of fruit, her hair braided with flowers and ferns. Her smile was as bright as that of either of her sisters, while she had not the wearied look which the others wore after their long, gay summer, profuse with efforts to produce whatever bounties pleased their suitors. She is more sensitive, her moods more transient, smiles and tears come more quickly, and she seldom wears that fierce expression to which more than one of her sisters is prone, when her burning breath sets her cheeks ablaze. About a fifth smaller than Ireland, and, therefore, almost exactly the same size as Ceylon, Tasmania is not unlike the former; with higher mountains, denser woods, more abundant vegetation, greater summer heat, and, probably, a healthier climate. But where are the three million people who find a living in Ceylon, or the four and a half million who inhabit Ireland? There must be room for as many in Tasmania when once the world becomes so crowded that every yard of soil is dug and hoed and handled as painfully as in the Green Isle.

Owing to a small accident we reached Melbourne just too late to catch the fine vessel in which we had hoped to make our voyage to New Zealand. We had to take whatever ship was sailing, and, after the floating palace we had left, it seemed a sorry craft! A thousand miles of sea to cross—the Tasman Sea with one of the worst reputations in the world—and we had only this old-fashioned steamer of 1,900 tons gross register—*i.e.* about 1,200 tons by standard measurement—in which to cross it. She could not steam more than twelve knots an hour, and, what was worse, she was dirty, ill-found, uncomfortable, and crowded. The whole passenger accommodation was limited to less than sixty feet at the stern, and into this between sixty and seventy passengers were packed. We cannot resist the temptation to describe our 'state-room,' for we are never likely to spend ten days in so small a space again. It was six feet long and seven feet high, seven feet wide at the ceiling and about four feet on the floor. We had to 'turn in' and 'turn out' one at a time, and to divide ourselves into watches, for fear lest, if anything were wanted in the night, two of us might try to occupy the floor at the same time. 'Pater, I'm awfully sorry to wake you,' Filia said one night, 'but there is such a huge rat walking along the rail just above my head.' Out tumbled Pater and struck a match,—no electric light aboard the *Terror*,—and tried to persuade that rat that it had made a mistake. It was our neighbours, not we, who were 'at home' that night. But the rat was an old rope-dancer. It was marvellous to see the steadiness with which he walked along the rails, although the ship was jumping and rolling like a kitten at play; while poor Pater got himself so mixed up with the luggage, with Mater's gowns, our hair-brushes, boots, and other odds and

ends, that we were never quite sure whether the rat retired or made himself a nest among the *débris*. We should have been suffocated if we had shut the door, so we could not hope to prevent him from re-entering, if Pater did succeed in driving him out. It was ventilation we longed for most, but one night we paid too dearly for it. As the *Terror* was lying in port we thought we might venture to open a port-hole. Unluckily, the side of the vessel rounded on to the deck. The sailors swabbing the deck at half-past four in the morning rested the end of the hose-pipe over the side. Its nozzle curled gently round and pointed into our port-hole, quickly converting Pater's bunk into a bath. He shut the port-hole, tumbled out and stumbled into the dark saloon. But there was no room to lie down there; every available space was occupied by a sleeping figure. So he returned to the cabin, and was just settling himself upon the floor when poor Puer discovered that he too was being floated out of his berth, as the water sank through from Pater's bunk above.

Although we should not have chosen them, we got great fun out of our narrow quarters. The truth is, that when we came on board we had no idea we were to be fitted in so tight. Pater had taken six berths, the only ones which were still unlet—this little four-berth cabin and two berths in a cabin already occupied by two ladies. But the other cabin was over the screw, and the two ladies were so dreadfully ill that our family found it pleasanter to have a cabin, however tiny, to themselves.

It is a long and complicated passage from Melbourne to the entrance to Port Phillip. We started at five o'clock. The little deck was crowded with passengers, who, owing to the confined space, were more than

usually anxious about the bestowal of their luggage. We too shared their excitement, for boxes which we deemed indispensable for the voyage had been stowed away in the hold. There was a general feeling of discomfort, which was not diminished by our first observations of the way in which the boat was handled. 'Cast off there!' said the officer on the bridge; but the sailor who held the hawser did nothing of the kind. On the contrary, he held on to the rope, remarking, loud enough for us to hear, 'He's mad, he is; it ain't time.' We did not know until afterwards that the *Terror*, in entering Hobart harbour three days before, had steamed straight into H.M.S. *Dart*, as she lay at anchor in the fair-way. This had shaken the confidence of the crew. It shook our confidence too when we saw the broken masts of the little war-ship—which, oddly enough, had suffered more than the *Terror*,—and heard all about the collision from a friend who was on board.

Bass Straight is 150 miles across. Then the boat skirts the eastern coast of Tasmania, the whole distance from Melbourne to Hobart being 450 miles. The wind was with us, our sails were set, and we made a quick run. Cape Pillar was rounded early the second morning, and we entered Storm Bay. Not long afterwards we passed the Organ Cliff, a precipice of sandstone, capped with hexagonal columns of basalt, as regular as those of Staffa or the Giant's Causeway, but vastly larger and more distinct. We could see daylight between the great pipes of the organ which crowns the cliff: an organ whose pedals are played by the waves, sounding an eternal bass to the treble of the sea-birds which build among its pipes.

The approach to Hobart is superbly beautiful. It is difficult to find another town with which to compare

it. The long arm of the sea, which forms the mouth of the river Derwent, here two miles wide, gives off numberless branches, ending in land-locked bays, nestling like lakes among the wooded hills; while Mount Wellington rises immediately behind the town to a height of more than four thousand feet; its sides covered with trees and ferns and its summit capped with pillared rocks. In the afternoon we drove out to New Town to see an old friend, the chancellor of the growing university. He looks forward to a time when the Tasmanian University will be filled with students from all the other colonies, who will go there 'for the sake of a good working climate, never too hot or too cold; never enervating; always brisk, inspiring, industrious.' On our return to Hobart we tried to lay in a store of fruit, but were strangely disappointed. No greengrocer in the town offered anything we cared to buy. Yet all the large vessels of the Orient, the P. & O. and other lines were calling at Hobart at this season of the year and carrying off immense stores of apples. One ship had just started with 22,000 cases, and this was why we found the shops so empty. The orchards had lately suffered much from the codlin-moth, whose grub disfigures or destroys the apples. But they take sharp measures in Tasmania to exterminate the pest. A grower is liable, we were told—although we hardly know how to believe in the figure—to a fine of 7*s*. 6*d*. for every grub found in his orchard; and a greengrocer who exposes for sale a damaged apple is also subject to the same fine. So heavy a penalty leads to an immense destruction of imperfect fruit, and the merchants find it difficult to meet the demands of the London market. This is the only way to fight the moth. If it is not wiped out, it will soon ruin the industry. We know many an orchard in

Devonshire where 'windfalls' are left to rot on the ground, every one of them riddled by a grub. Not that this is so serious a matter in England, where a certain balance is established between moths and birds. If, in Tasmania the moths once gained the upper hand they would carry all before them; unless, as would not be likely to happen, these immigrant moths proved exceptionally palatable to the native birds.

It is 930 miles from Hobart to The Bluff, the most southerly port of New Zealand. We left the harbour with our sails set to a brisk west wind. Every one was happy in the expectation of a rapid passage. On deck a very third-rate 'variety troupe' on tour made the night lively with their banjos and songs—songs which, no doubt, had had their day in the London music-halls years before. We rather thought that we should tire of music before we reached our destination. But what a different scene surrounded us next day! A 'southerly burster' was upon us, lashing the sea into foam without giving it time to rise into waves, for the swell was still running from the west. The little boat leaped about in the most unexpected and extravagant fashion. Three dimensions in space would not satisfy her. When she had tried them all in rapid succession she suddenly discovered a fourth. The *Terror* at her best is slow, but as the wind shifted to the east the wheel to which the log is attached remained quite stationary for five or six minutes at a time. The log is provided with a spiral flange or fin which makes it rotate as it is dragged through the water. Its cord is attached to a wheel about six inches in diameter. The axle of this wheel enters a little box of clockwork, whose hands record the run, in miles. The log cannot turn backwards, and, therefore, the most that it could tell

us was that we were making no progress. We might have guessed this from the whirring of the screw, which seemed to be always out of water. It kept up an intolerable buzz, but all other music was banished from the boat!

CHAPTER V

NEW ZEALAND

IN six days—the time required to steam from Liverpool to New York—we found ourselves under the shelter of the Southern Alps of New Zealand. We could see their snowy summits through gaps in the clouds. Our captain had promised to put into one of the 'sounds,' in order that we might get a glimpse of their glory—narrow, ramified arms of the sea which cleave the mountains for from ten to thirty miles. Like the fiords of Norway, their precipitous walls rise sheer out of the water to tremendous heights; they are tasselled with waterfalls and crowned with battlements and spires of every shape. But in some respects they are more beautiful than the Norwegian fiords. The Norwegian fiords are clefts in a great tableland, whereas the sounds are backed by mountain-peaks as lofty and as varied in outline as the Swiss Alps; glaciers are poised on their shoulders; ferns and trees with feathery foliage root in every cranny of the rocks. The captain had promised to put into Milford Sound, but owing to the delay caused by the storm he was obliged to make straight for The Bluff, dropping anchor for the night in Foveaux Straits, between the South Island and Stewart Island.

Next morning Pater and Filia started by train for Dunedin, but Mater elected to stay on board, and Puer spent the day fishing with 'Dick.' At Hobart

this little lad had been committed to the care of the stewards for conveyance to a school on the other side of Wellington. But their care was not of much benefit to Dick, who had been left to sleep as best he could on the chairs in the little smoking-room on deck His unkempt appearance had made us rather shy of his company, until Puer, having made his acquaintance, discovered that he had had little chance of washing and none of changing his clothes. Having ascertained these facts, Puer told Mater of Dick's troubles, and she, being ready at all times to fight a whole army of stewards, in a just cause, even though they were supported by the captain, the mate, and the ship's cook, secured Dick a berth, and obtained his deepest gratitude, which the boy expressed in very courteous fashion. To finish Dick's story, we may as well relate, that we found him ashore at Wellington, on Easter Monday, in the care of another passenger whose acquaintance he had made on board. Then we ascertained that he had been landed with 3*s*. in his pocket and a letter to a bank which would not open until Wednesday morning. Thus are young colonials taught to take care of themselves!

The first impression of New Zealand obtained by a passenger from Melbourne is far from prepossessing. From The Bluff to Invercargill the country is a swampy waste, varied with patches of manuca scrub; and from Invercargill to Dunedin, a ride of nine hours by train, the scenery is very tame. Rounded hills of boulder clay, borne down by glaciers from the mountains to the west, fields enclosed with gorse hedges, rapid streams bordered with tufts of broad-leaved, flag-like New Zealand flax, make it difficult for the traveller to believe that he is not traversing some high moorland watershed; although the train never attains any con-

siderable elevation above sea-level. Here and there were villages and farmsteads surrounded by plantations of pines and nestling in their orchards, but the only tree on the plains was the strange 'cabbage-tree,' which always chooses swampy ground. A round stem branching about twelve feet from the ground, each branch dividing again two or three times, and then, while still quite thick, ending in a tuft of elongated leaves like those of our common flag. We never quite became accustomed to its bizarre shape. Nor, although we often asked, did we obtain a perfectly satisfactory explanation of its name. Some people thought that its stem resembles the stalk of a cabbage which has run to seed; others told us that the early settlers boiled and ate its leaves; but no one could assert from personal experience that it could take the place of the vegetable after which it is named. Rabbits, the great pest, were very numerous, despite the hawks (Gould's harrier). We saw so many of these birds that we should have thought they would do something to keep down the rabbits. There were flocks of wild duck on one little lake, and some sportsmen, who joined the train at a station near it, brought several with them, as well as wild geese, quails and hares.

Our train was very full. It carried 300 passengers; for at Easter every one is on the move. When, about an hour behind our time, we pushed our way through the people at Dunedin station, it was difficult to believe that we were in a thinly populated country. The crowd would have done justice to Birmingham or Manchester; so zealously do New Zealanders keep their Easter holidays. No fewer than 400 passengers were joining the train, prepared to travel through the night to Christchurch.

How we looked forward to our beds in a comfortable

hotel! After the ceaseless prancing of the *Terror;* the fatigue of holding on to the side of one's bunk; the whopping of the waves and the burring of the screw; what luxury to find oneself in a clean, soft, quiet bed! But it was a mistake. The quiet was oppressive. Why didn't the engines go on? Once in the night Pater thought he heard Filia call. He jumped out of bed, intending to light a candle and go to her room; but he took a header on to the carpet, badly bruising his forehead, and was obliged to sit for some time on the edge of the bed, holding tightly to the rail, before he could trust himself to walk across the heaving floor. This was not imagination. If we were brought up upon the sea and accustomed to balance ourselves upon the waves, we should reel about when first we tried to stand upon dry land. Anyway, a quiet bed was not the place for sleep, so, as soon as the hotel door was unlocked, we sallied forth in search of violent exercise. It does not take long in Dunedin to satisfy one's legs. The town is built upon a hundred hills, so steep that when the ground is slippery it is necessary to use the hand-rail, thoughtfully placed along the edge of the side-walks. Before the introduction of cable-trams locomotion in Dunedin must have been difficult indeed. How well it suits the Scotchmen, who form four-fifths of its population! Auld Reekie is flat by comparison and far less picturesque; for the deep gorges which radiate from Otago harbour are extremely pretty. His old home must have been called to the mind of many a Scot on this Good Friday morning. Low clouds were resting on the hills, breaking every now and again into a cold drizzle which hid the town; then dividing to show a patch of sunlight on the water. There were few people astir, except certain choice spirits who, having

commenced their holidays with too much fervour, were now singing 'Auld Lang Syne' on their way to bed—volunteers, we were told, assembled from the country for an Easter Monday review. About seven o'clock a good many people began to move towards an imposing church built of grey and white stone in flamboyant style. On being told that it was the cathedral, we went thither also, hoping to attend an early service, but were surprised to find it draped in black and otherwise prepared for the offices of the Roman Catholic Church. It is strange that Roman Catholicism should have so strong a hold in a Scotch town. As we left the church we heard the whistle of the *Terror*, and hurried down to the quay to join the other half of our quartet.

At the university we found some Cambridge friends, and had a Cambridge talk. New Zealand has done wisely in endowing its colleges with land. The University of Dunedin—it should be termed a college, since it does not confer degrees—is endowed with 200,000 acres. As land rises in value—much of it has yet to 'come into value'—the college will be able to keep pace with the increasing needs of the country without having to fight for additional grants. Christchurch College owns a still larger area—350,000 acres. At the university Professor Parker took charge of us and showed us over the admirably kept museum, which is his special hobby. 'What would you like to see first?' 'The moas, by all means!' 'Our collection is not so good as the one at Christchurch, but here they are.' And we saluted the ancient lords of the isles. Gigantic wingless birds, of which there were about twelve different species, varying from three feet to more than twelve feet high. The bones of their legs are as thick as a man's arm. How proudly they must have

strutted over the land when they were its sole masters! That their reign in New Zealand was a long one is shown by the depth beneath the surface at which their remains are found. Why have they became extinct? At one time they were immensely numerous, and the last of them cannot have died so very long ago. We saw eggs—nearly a foot long—feathers, and, most interesting of all, a shank bone, with the tendons and skin attached. This fragment, which was found in a cleft in a rock, cannot be very old. It is impossible to think that it dates back to a time before the advent of the Maori. We saw, too, many charred bones, the flesh of which may have been used for food, or, if the bones were lying about in the forest, they may have been scorched by a bush fire, or even have been used to prop a Maori kettle. The curious thing is that there is no direct evidence that the Maori ever lived upon the moas. Their legends, which are rich in allusions to other animals, contain no references to these birds. Probably a race of people whom the Maori invaders conquered were chiefly responsible for its destruction.

All hope of finding a living moa is now abandoned. We had to be content with their nearest relatives, the kiwis. Every one remembers the trick played upon Plato, when he defined a man as a two-legged animal without feathers. A wag introduced into his class-room in the Groves of Academe a fowl from which the feathers had been plucked. How would Plato have classified the apteryx, or kiwi—wingless, tailless, and covered with hair instead of feathers, or, at any rate, with feathers in the form of hair?

We saw, too, the owl-parrot—a large green bird which has wings, but never flies. It lives in a hole, digs for fern roots and climbs trees for berries. Evidently flying has gone out of fashion in New Zealand.

Walking was much less trouble, and quite as safe. It *was* quite as safe before we colonised the islands, for they contained no snakes, the nesting-birds' great enemy, and no mammals except bats, a small rat and the native dog. What sad havoc civilization has made! The rabbit shoulders all other animals out of the way. We introduce stoats and weasels to fight the rabbit, and they find that the poor wingless kiwis and the owl-parrots are much less trouble to kill and quite as good to eat. Even cats and dogs run wild and live upon the native birds. The Norway-rat has driven out the comparatively inoffensive native rodent. The native dog is extinct. Even the native fly has gone down before our house-fly; and in this last case alone is the exchange an improvement. New Zealand is the land of birds. Australia was cut off at an epoch in the world's history before our specialized groups of mammals were developed; its animal life diverged from the common stock in 'marsupial times.' A thousand miles further east and surrounded by deep water, New Zealand is older still. It has been an isolated group of islands almost 'from all time.' It was cut off from the rest of the world at about the period when mammals made their first appearance as descendants of animals of reptilian or amphibian type. If apteryx be a primitive form, the islands were cut off soon after the precursor of the birds appeared. If as appears more probable, apteryx is a degraded type, descended from birds with wings, the islands have been isolated since the age of fishes and reptiles, and its bird population has immigrated from other lands. That the islands contain no indigenous mammals seems very clear. The natives have a tradition that they brought the rat and the dog with them in their canoes. There is a stuffed specimen of the Maori dog in the museum, but we thought that

the taxidermist in setting it up had been unduly influenced by his knowledge that the natives bred the dogs for food: he has made it resemble a fat little pig with a dog's nose.

At Wellington we saw the real aristocrat of New Zealand—a slow moving reptile, neither crocodile nor lizard, with a general resemblance in form and appearance to a large chameleon—*Hatteria punctata*, with a pure pedigree going back to carboniferous times. This amazingly conservative animal, in addition to the pair on the sides of his head, still wears an eye in the middle of his forehead. He certainly cannot see distinctly with it, for it is covered by skin, although it still serves to distinguish between light and darkness. We could not get him or his mate to move, much less to talk, but the old couple were evidently thinking. Thinking of the good old days when back-boned animals used their 'pineal' eyes; and of that later period when, perhaps because the new-fashioned lateral eyes were coming into fashion, one of the pineal eyes was allowed to disappear, and 'we looked through a single median eye, my dear, like the Cyclops of whom Greek stories tell. In those days we moved slowly; animals respected one another's rights; and we did not set much store by our two new eyes; though they came in useful as times changed and greedy things tried to eat *us*, instead of taking the trouble to gnaw vegetable food.'

If New Zealand can show us Hatteria, the most conservative animal that exists, she can also boast of having produced the most advanced of all 'progressives.' A dull-coloured parrot, the kea (*Nestor notabilis*), is the only illustration to which evolutionists can point as an instance in which a wild animal has in a short period changed its habits for the sake of adapting itself to new surroundings. Before sheep were intro-

duced the kea lived upon berries, insects, grubs and honey—a varied animal and vegetable diet; but about 1870 it began to haunt the sheep-runs, to peck the fat from the inside of skins of recently killed sheep, and to pick up offal. On this abundant diet the birds increased enormously in number. But, finding that sheep-skins meant fat, they soon ceased to distinguish between the skins hung up to dry and the skins which still enveloped the living sheep. They settled on the backs of the sheep, in the position from which the poor animals could least easily remove them, over the loins. Having torn away the wool with their claws, they drove their strong beaks through the skin into the tender fat which surrounds the kidneys. This was a better diet than offal! The parrots gave up hunting grubs and almost confined their attention to the sheep. In a short time, no doubt, the shape of the beak, and perhaps even the character of their plumage, would have changed; indeed, it is asserted that they have changed already, although this is difficult to prove. But the New Zealand Government cannot allow this experiment in evolution to go on long enough to produce a definite result. The loss of sheep—killed, poor things, in a most painful way—has been tremendous. A reward of three shillings per skin was offered for the parrots, and as many as 15,000 were destroyed in a single year.

Otago Bay is one of many sheltered roadsteads on the New Zealand coast. Nature seems to have done almost all that was needed, but where she failed Art stepped in, converting it into a magnificent harbour. A channel has been dredged to the mouth of the bay, a distance of ten miles, so that the largest ships can lie alongside the wharfs in the centre of the town. At the mouth of the bay, at Port Chalmers, is another ex-

cellent harbour. We did not wonder that the citizens of Dunedin wanted to develop the natural resources of their port, but we were not surprised to learn that the harbour board find it a little difficult to pay the interest on the capital they have borrowed; for Dunedin is not so important a distributing centre as Christchurch, and now Oamaru and Timaru, which lie between these towns, have got their harbours also. Each of these little towns has a population of 5,500, and each has spent £300,000 upon its harbour! Few countries can boast of four such harbours within a distance of 200 miles. New Zealand has been a costly country to develop, and the British investor has shown marvellous confidence in its future—a confidence which will certainly be justified in the long run. But sometimes he has hardly reckoned for the absurd jealousy of rival towns. As soon as Lyttelton (Christchurch) and Dunedin have harbour-works, and, undoubtedly, Nature has done her part towards making them two of the safest harbours in the world, little Oamaru and Timaru feel that they are being left behind in the race, and the Government has no peace until it has listened to their clamour. Nothing can be done for one place which is not done for all. It was found impossible, we were told, to keep up a garden of acclimatization at Wellington, because Dunedin, Christchurch, Auckland, insisted upon having gardens also. 'We have none of us any regard for the Government,' a New Zealander remarked. 'We all try to get as much out of them as we can.'

We had reached New Zealand too late in the season. One after the other, our projected excursions, to Lake Wakatipu, to Mount Cook, to the West Coast through the Otira Gorge, had to be abandoned on account of the weather, which had completely broken up. We

had looked forward to spending Easter Sunday at Christchurch and to attending the service in the cathedral. Great was our disappointment on learning at Port Lyttelton that our captain had received a telegram ordering him to push on to Wellington as fast as possible, in order that he might be in time to make an Easter Monday excursion. No other boat for Wellington was following for more than a week. So we did not have the chance of traversing the tunnel, nearly 3,000 yards long, which pierces the hills between Christchurch and its port, or of seeing Christchurch, a town which is interesting from so many points of view. The history of Christchurch reminds us of how nearly our Southern Britain became a dependency of France.

A few whalers and other adventurers made New Zealand their home between the year 1770, when Captain Cook hoisted the British flag on a hill overlooking Queen Charlotte's Sound, and the establishment of an Anglican Mission in 1814; but the missionaries were the first to attempt to found a settlement in the country, to till the ground, and make it provide for their wants. They laboured among the natives with great zeal, and deservedly gained their confidence. Unfortunately, 'devil's missionaries,' as the Maori called them, followed in great numbers. These outcasts of civilization brought spirits and fire-arms, and endeavoured to corrupt the natives. One master of a ship supplied a chief with corrosive sublimate with which to poison his enemies; another, a man named Stewart, carried the celebrated Te Rauparaha to Akaroa, on Banks' Peninsula, which closes Port Lyttelton on its southern side. There he hid him and his followers in the hold of his ship until he had induced some Akaroa natives to come on board. Then he allowed Te Rauparaha to rush out of the hold, and a

terrible slaughter commenced which did not end until all the natives of the peninsula had been exterminated. The victory was celebrated with a great cannibal feast. The best amongst the native chiefs were disturbed by the irregularities of these irresponsible English traders, as well as annoyed at the ridiculous claims of a certain Baron de Thierry, a Frenchman, who chose to style himself King of New Zealand. De Thierry had been educated at Cambridge, where he met the Maori chief Hongi during his celebrated visit to England in 1820. From him he had heard of the attractiveness of the country, and had conceived the idea of setting up a kingdom of his own. Resenting de Thierry's impudence, and worried by the lawlessness of the traders, the chiefs petitioned King William IV. for the establishment of a British Protectorate. The petition was granted, and Mr Busby was sent out as British Resident in 1833. He made his headquarters at the north of the North Island, on the shore of the Bay of Islands.

Several attempts were made to found an English company for purposes of colonization, and eventually the 'New Zealand Company' was formed to buy land from the natives and to encourage immigration. But at this time the French were casting sheep's eyes on the islands. A French whaler had bought from the natives 400 acres of land on Banks' Peninsula, which he sold to a French company, and they and Baron de Thierry induced the French Government to attempt to take possession, notwithstanding that New Zealand had been made known to the world by Captain Cook, who had nominally annexed it to the British Crown, and despite the fact that a British Protectorate was already established. The first batch of emigrants sent out by the English company reached the Bay of

Islands in January, 1840. They were accompanied by Captain Hobson as British Consul. Nevertheless, the French man-of-war the *Aube* was ordered to take possession not of the South Island only, but also of the North. Now it so happened that the natives, who, since the introduction of fire-arms, seemed to be in a fair way to exterminate one another in their ceaseless tribal wars, unless something were done to establish a firm government, had in a very great conclave accepted the suggestion of the missionaries, and agreed to the Treaty of Waitangi, by which the chiefs 'cede to Her Majesty the Queen of England absolutely and without reserve all the rights and powers of sovereignty which the said confederation of independent chiefs respectively exercise or possess, *or may be supposed to exercise or possess.*'

The *Aube* arrived a little too late! The British flag was already flying over the Bay of Islands and a consular court was sitting. Then the *Aube* and the emigrant ship by which she was accompanied set sail for the South Island, but Captain Hobson suspected their designs. He despatched H.M.S. *Britomart*, under Captain Owen Stanley, to Akaroa, on Banks' Peninsula, where the French whaler had bought land. The *Britomart* crowded on all sail, while the *Aube* dallied on the way. She arrived on the 10th of August, the *Aube* on the 15th. Again too late! The British flag was flying, and Captain Stanley had already held a court of petty sessions. Most of the French settlers went home again; the rest only remained until they could sell their claims.

The colony at Dunedin was founded in 1848, by members of the Free Church of Scotland; Christchurch in 1850, by members of the Anglican Church. In

neither case did the colonizing association seek profit; both alike endeavoured to find an outlet for the crowded population of Great Britain, and, by making enlightened regulations and liberal provision for the religious and educational needs of the colonists, to found an ideal community at the far side of the world. The city of Christchurch is admirably laid out amidst parks and plantations of English trees. Everything testifies to its connection with the Church of England; the cathedral, with its lofty spire, which rises from the centre of the town; the streets named after English sees, as Hereford, Tuam, Lichfield; and Oxford and Cambride Terraces, which border the two sides of the Avon, encouraging the rowers on this sluggish river to perennial rivalry.

There were comparatively few Maori in the South Island, and, therefore, the settlers did not feel the stress of the Maori wars. But we are not going to write about the Maori wars. It is a chapter we prefer to avoid. They began in misunderstandings as to the meaning of 'a sale of land.' The truth is that no individual chief could sell his land. It belonged, not to him, but to the tribe, the laws which settled the right of each member of the tribe to the use of the land being extremely complicated and depending upon birth, occupation, inter-marriage, adoption, and other circumstances. 'A settler could no more extinguish native title by buying from a single native than an Englishman could purchase a high-road by giving a bribe to a county surveyor,' says Dr Pennefather. But the Englishman's gold was an irresistible temptation to the native. The chief represented that he had the right to speak for the tribe; or the whole tribe appeared to consent to a bargain, of which they repented as soon as the gold was spent. Immense sums of money

have been paid to the Maori for their land, and many of them are now extremely wealthy men, living upon the interest of their capital, or upon the rents of estates which they let to settlers. It was inevitable that troubles should arise with this idle and warlike, although good-natured, people. In the conflicts which occured between 1843 and 1870 courage and chivalry were sometimes displayed by both sides, but the instances of treachery are perhaps more conspicuous, and it is our impression that on the whole the 'honours' of war remained with our Maori foes.

The native inhabitants of New Zealand are very different from the Australians—fairly tall, strong, active, courageous, and, at any rate when their designs are warlike, extraordinarily tenacious. It is impossible to find in the history of any other 'savage' race two such illustrations of enterprise and craft as Hongi and Te Pehi Kupe. In their methods they were not savage, although they were savage enough in their designs, and when they succeeded they celebrated their victories with the usual cannibal feasts. Not that the Maori ever looked upon human flesh as food. They did not, like the worst of cannibals, hunt men for the sake of eating them, or keep their prisoners to kill as they were needed; but they ate the bodies of their victims as a solemn ceremony, believing that they acquired thereby the strength and courage of the slain.

Hongi was born in 1770. In 1814 he went to Sydney in the ship which had come to make arrangements for the mission, returning with Mr Marsden, the missionary, in whose house he had stayed. He was present at the service conducted on Christmas Day by Mr Marsden. There seemed to be every prospect of his becoming a convert to Christianity and a firm supporter of law and order. But some of the other chiefs

had secured rifles, and were beginning to distinguish themselves in war. Hongi determined to acquire both the white man's arms and the white man's skill. He came to England in a whaler; was taken to Cambridge, where he assisted Professor Lee in compiling a Maori grammar. It was here that Baron de Thierry, 'the King of New Zealand,' made his acquaintance. He was presented to King George IV, who gave him a helmet and a suit of armour. Hongi accepted these and many other gifts, although he knew that he did not intend to fight in armour, like a mediæval knight. He meant to use a weapon which would kill at a distance and pierce through armour. So valuable were the presents with which he was loaded that when he sold them all in Sydney he was able to purchase 300 stands of arms. With these he armed his warriors and set out in search of conquest. His war-canoes were dragged great distances across the land, and were paddled up and down the rivers and around almost the whole coast of the North Island, carrying devastation wherever they went. He meant to be the Napoleon of New Zealand; fighting, not so much for greed of plunder as for the love of fighting, which he called glory. And all this time his children attended the mission-schools, and when he was dying Hongi directed his family and tribe to 'be kind to the missionaries, for they do much good and no harm.'

The story of Te Pehi Kupe is very similar to that of Hongi. Sailing out into Cook's Straits, he climbed on board a home-bound whaler. There he clung to a ring-bolt, from which it is said that all the force of the crew could not displace him. He was carried to England, made much of by good-natured people, and loaded with presents, which he also sold for stands of arms. He and his kinsman Te Rauparaha then rav-

aged the coasts of the South Island, almost exterminating their inhabitants. We have already told of the massacre at Akaroa. Fighting was the traditional occupation of the Maori men, but so long as their only weapons were stone axes and 'merés' (beautifully finished hatchets or sharp-edged clubs, made of greenstone or from one of the ribs of a whale) these tribal wars did no great harm, especially as the Maori were very skilful in constructing works of defence; but when they acquired fire-arms their wars threatened the extermination of the race. Probably this would have been the end of their fighting if they had not found in the settlers a common foe. In 1843 commenced the disastrous Maori wars, which cost the lives of a very large number of settlers and of soldiers sent out to aid them.

We reached Wellington early on Monday morning, and were obliged to leave the steamer by 7 a.m., to make room for the excursionists; none of whom went to Picton, after all! The day was so cold and stormy that even New Zealand holiday-keepers were afraid to venture across the Straits. But our Mater wished to visit some cousins who live at Blenheim, on the other side. We made repeated inquiries as to boats, but could gain no information. The offices were closed. Every one was keeping holiday. Suddenly Pater, who was haunting the wharf, discovered that the *Mawhera* was just about to cross to Picton to fetch back the excursionists who had started the previous Thursday. Puer flew in search of Mater, whom he discovered in the telegraph office, where she had just despatched a lengthy telegram to her cousins—a telegram which she picked up next day at Blenheim and carried to their house herself. Mater hurried down to the wharf, stepped on board as the last whistle blew, and out of the harbour

steamed the *Mawhera* in half a gale of wind. Bereft of our precious Mater, we returned to the hotel, and prepared to amuse ourselves as best we might until the boats were prepared to resume their ordinary course and bring her back to us again.

Wellington is not as attractive as some other New Zealand towns. Very few flowers or trees relieve the monotony of its wooden buildings and galvanized iron roofs. Only in sheltered corners is it favourable to gardening, for, lying as it does on the northern side of Cook's Straits it well deserves its soubriquet 'Windy Wellington.' 'You may know a Wellington man anywhere,' people say. 'He never goes out without a mackintosh, and at every street corner he mechanically claps his hand to his hat.' As the capital of New Zealand, it boasts the largest wooden buildings in the world—the Parliament House and Government offices. Some fine stone buildings are also springing up on the quay; for the last serious earthquake occurred in 1855, and Wellingtonians are forgetting the prudence which formerly induced them to build in wood. True, the last earthquake made great alterations in the surface of the ground—the cricket field now occupies a part of the harbour which was to have been reserved as a basin for ships; but 1855 is a long time ago—in the history of one of our colonies! 'Besides,' as Sir James Hector remarked, 'Wellington has no longer a monopoly in earthquakes; since the electric telegraph was introduced they have been uniformly distributed over the North Island!'

In its harbour, at any rate, Wellington is favoured. It is a remarkable sight to see two or three ships of 8,000 or 10,000 tons lying alongside the same wharf. One vast iron hull was being laden with frozen mutton. Van after van, constructed like a refrigerator, with

double sides, brought its cargo of frozen sheep to the wharf. Clean and wholesome they looked in their canvas covers as they were taken from the cart, each carcase falling like a block of wood upon the sheet spread out beside the ship. 'Twenty-five, sir.' 'Haul away!' The corners of the sheet are folded together and it is lifted into the gigantic freezing chamber which occupies the hold of this great mutton tank. The *Rakaia* can carry 90,000 carcases. What a boon it is to the colony to have this means of putting its meat upon the market as fresh as if it had been killed in London! And what a boon to us to receive in unlimited quantity the best of mutton which the world produces! In the shops mutton was marked at 2d. and 2½d. per pound, but we were told that the butchers will always *give* away the inferior parts to any one who is not able to pay for the meat.

Easter Monday was wet and dismal, but we had a long day before us, which we were not inclined to spend indoors after our close confinement on board ship. So Pater and Puer decided to fish for 'spotties' from the wharf. But first they had to obtain some tackle, and all the shops were shut. However, Puer is not easily turned from his intentions, especially when his aim is fishing; so he shook the door-handle of one of the tackle shops. The owner appeared at once. 'I'm afraid you are closed.' 'Oh, yes; you know, we are not allowed to open on Easter Monday. But can I sell you anything?' This is rather characteristic of New Zealand. The paternal Government regulates all its children's actions by statutes, which the children take especial pleasure in neglecting. For example, public-houses are *shut* in Wellington at 10 p.m.; but those who happen to be inside remain there until it is convenient to go home! We might give some other illustrations, but these will suffice!

In the evening our old friend Dr Anson came to see us. Having noticed our names in the list of 'arrivals' in the evening paper, he at once began to search the hotels. In his house we spent many pleasant hours, although we felt that we, idle people, had no right to take up the time of a very busy man. The distinctions in the professions are not so sharp in the colonies as they are in England—barristers act as solicitors, and physicians as surgeons. Dr Anson is a surgeon by preference, and as such he is in great repute; but he is physician to the Wellington Hospital, although free to operate upon the patients under his charge. He showed Pater a patient upon whom he had recently performed, with great success, an operation which only a specialist would have undertaken in a hospital in Britain.

Sir James Hector took us over the museum, showing us his fossils and birds, and the great plaster map illustrating the geology of New Zealand, upon which he was then at work. But the most interesting thing in the museum is the Maori house, or 'wharé.' It is about fifty feet long, eighteen wide, and twelve feet to the roof-tree, from which the roof slopes down on either side to within three feet of the ground. All its posts and beams are carved as human figures, as ugly as the artist could make them, the head about one-third of the whole height, with tongue protruding, and staring eyes of mother-of-pearl. The spirit with which the work is done, and especially the remarkable symmetry of the two sides, show that the artist was not without considerable technical skill, and it might be supposed that this triumph of the grotesque had a definite aim—to frighten enemies or scare away evil spirits. This was not, however, Sir James Hector's explanation. 'Do you notice that the faces are all

different? That is because they represent the ancestors of the owners of the house. In the absence of writing, these portraits of ancestors were the title-deeds of the tribe.' 'But why do they make them so ugly, Sir James? Our family portraits are usually pretty grim, but they are not quite so hideous as these.' 'No! But, you see, the head of a Maori family wanted to have his ancestors entirely to himself. Suppose a stranger who had been entertained in the wharé were to admire one of the portraits on the wall—as it is only proper for us to do when we visit a country house. "Ah!" he might exclaim, "there is something wrong here. That is the very image of my mother's father. I strongly suspect that this property really belongs to me?" "Oh, ho," the owner would laugh; "your grandfather was rather an ugly man! He had a great big head and stomach and only sticks of arms and legs; and are you quite sure that he had only three fingers on each of his hands?" Look at the figure of this slave,' added Sir James. 'It is a very good representation of the human face; and, notice, he has five fingers and five toes. No one could inherit property through a slave. There was no reason, therefore, why the artist should not make a likeness of the man; and in this case he probably made the portrait, not because he cared about the features of his slave, but because he thought that the beautiful pattern with which he had tattooed him was too good to be lost.'

Our attention was also drawn to the difference between the old work done with sharp stones and shells and the work done after the introduction of iron tools. The contrast between rounded contours, which show no marks of the tool, and mouldings which have clearly been carved with a knive is very marked. Probably the workman was so proud of his new tool

that he liked to show how it had removed the flakes or wood, entirely forgetting his old ideal of a smooth surface.

One day we hired a two-wheeled buggy to drive up among the hills. We had a handsome young horse that worked like a Trojan, but the hills are so steep that Pater, not liking to let the horse pull him up them, got out and walked behind. Why should the horse have chosen to shy when passing a timber cart, on the outer edge of the road, with a hundred-foot drop into the gorge below? Filia, who was driving, only just saved us from rolling over. It gave Pater a fright; for the night before, when he was at Dr Anson's house, the doctor was summoned to attend four people whose cart had rolled over the precipice at a much less objectionable place than this.

Lunching at an oyster-house in New Zealand is a novel experience. One can have oysters on the shell, oysters stewed, curried, fried, or cooked in other ways. And better oysters than the small Stewart Islanders are not to be found in the world. They are a little larger than 'natives,' plump and sweet. Why did they never offer them to us at the hotels? It is always the way! People only value their costly mercies. Had they cost three shillings, instead of threepence, a dozen, we should often have had them no doubt. In Stewart Island they have no price at all. You fill your basket on the rocks. At Invercargill they are threepence a dozen, opened; at Wellington, sixpence; but unopened they may be bought anywhere for about a shilling a hundred.

Notwithstanding all the distractions which Wellington offered us, from its museum to its oyster-houses, we were very glad to learn on Thursday night that our Mater had started back from Blenheim, accompanied

by the cousins, who were coming across to see us. At last we were told that the *Waiki* was in sight. So we went to the quay to meet our friends, who had been sadly knocked about during their five hours' crossing. The *Waiki* is a vessel of sixty tons. Fancy this cockle-shell plying regularly across Cook's Straits; where, thanks to high mountains, north and south, and open ocean, east and west, the seas are worse than any which the English Channel can get up! Excursionists would hesitate to take the *Waiki* from London to Southend.

Nothing that happened on our trip gave us more pleasure than this visit of the cousins. It revealed to us with almost pathetic force the sentiment which attached the early settlers to the Mother Country. They went out in great discomfort. The voyage lasted at least three months. The ships were small, and their quarters terribly confined. Salt meat and biscuits were the only food. The water was apt to go bad in the tropics, and was always doled out by the cupful. Scurvy and other diseases attacked them, and many died on the voyage. Mark Tapley's good-humour held out on board the *Screw* from Liverpool to New York. It would have been sadly taxed between London and New Zealand. When they reached their allotments the settlers had still great hardships to endure. The forest had to be cleared, huts to be built, and garden ground to be dug, before the land would provide the necessaries of life. More than once their stores ran short, and they had to dig up the seed-potatoes for use as food, sacrificing the prospect of a crop. They did not find a new *country*. They accepted banishment; banishment tempered with the hope of returning home some day. There was only one country for them—the country they had left. Our cousin

is the mother of a large and happy family. Her children naturally regard New Zealand as their home. But, for herself, her fatherland is the land in which she left her relatives five and fifty years before. It is there she feels that she is bound by family ties during all these fifty-five years she had not seen one of her own people. Just fancy the feast of gossip she enjoyed when the Mater was there, to tell her of their doings, their ups and downs, their characters and tastes, even to the last degrees of kinship.

How completely things have changed! For a man to transfer himself by means of a comfortable steamship from the village in which he has lived hitherto to another at the other side of the world, equally convenient in all respects, is not to *emigrate*. It is merely to migrate from one part of the King's dominions to another. No need now-a-days to dig up seed-potatoes! The profusion of food is most extraordinary. At one 'station'—the farms are called stations in New Zealand—we remarked upon the great flock of turkeys which perched upon the rails. 'How do you manage to rear your turkeys?' we asked. '*Rear* them?' the lady answered; 'I don't understand what you mean.' 'We always find turkeys so difficult to bring up,' we said; 'after all one's trouble in feeding them, they are apt to die, for no obvious reason, when, about, ten weeks old, they "shoot the red."' 'Oh,' she laughed, 'you think we feed them! The only thing we ever do to them is to drive them away. They are such a nuisance about the farm. Besides they are not much good. Sometimes when John has shot some he offers them to one of the shepherds' wives; but they usually decline. They say they are such a trouble to prepare.' Wild pigs, too—that is to say, the domestic pig which has run wild—are so abundant as to be in many places

almost as great a pest as rabbits. They grub up the pasture. A friend told us that after a young Englishman had been staying at his station, to the north of Auckland, for about six months—entertained in the usual colonial fashion, neither asked nor expected to say when he thought it was time to terminate his visit—he exclaimed one day, 'Look here, this isn't fair! You have been keeping me all this time, and I have done nothing for my living. The only thing I can do is to shoot; but can't I make that useful?' 'Well,' said our friend, 'I will credit you with sixpence for every pig you kill.' In a few weeks he had killed 380 pigs, bringing home the tails in proof. The carcases were left to rot where they fell, unless it happened to be near to the house. And yet we found wild pork delicious. We mistook it for veal; for the flesh is white, and the pig, living an active life, has lost the unnatural burden of fat with which we load him by keeping him in a stye.

The sea teems with fish, and we were astonished at the ease with which they are caught. Their tastes are strangely unsophisticated and their gullibility great. Some string, a hook, and a piece of meat are the fisherman's equipment. No need to dig for lob-worms or search for mussels; any kind of meat will do.

From Wellington to Wanganui the railway runs through a rich bush-country, which is being rapidly cleared; for the Government is doing all it can to encourage small holdings, giving settlers land on easy terms, and an advance in cash to start with. The clearings did not look promising, but the people were well and happy. How the few sheep they can graze on their forty acres of cleared bush will keep them, after the Government advance is used up, is a problem with which they do not seem to be concerned. Each

little wooden hut, with its chimney of galvanized iron, stands in the midst of its clearing, surrounded by the gaunt skeletons of burnt trees. To clear the ground of stumps is, unfortunately, an impracticable undertaking. It would cost more than the land is worth. Little gardening or arable work can be carried out, owing to the presence in the ground of so many stumps and roots. The settler can do nothing but scatter grass seeds, which in a few weeks produce an abundant sheep-feed among the charred trunks. It will all come right in the long run—the stumps will decay, and the rich land when tilled will yield every kind of crop; but in the meantime it is difficult to find, on a small holding, sufficient occupation for the settler.

Wanganui is a town of great respectability. Four large churches stand in a row in the main street. The shops are attractive. The livery stables are large and well equipped. As we arrived on a Saturday, the streets were crowded with settlers in dog-carts and pony-carriages, or on horseback, doing their business or stopping to exchange greetings with all the leisurely sociability of an English country town in the 'good old times.'

There is a large public school in Wanganui— one of the best in Australasia. Mr Empson, the headmaster, very kindly invited us to dinner, and to attend the evening service. About 200 boys were assembled in a very pretty chapel, and they rendered the service with great energy, giving it a splendid swing. It quite carried one away, so genuine and hearty was it. They behaved too, in the most exemplary manner, not even fidgetting when our preacher, in the course of an earnest extempore sermon, told us that we should believe in the historic facts upon which our faith is based with the same unqualified confidence with which we

assert that America was discovered by Captain Cook. Filia maintains that the boys did not notice the preacher's slip! A New Zealander can hardly believe that any explorer other than Captain Cook, discovered any unknown land.

The steam up the Wanganui River is one of the most beautiful trips in New Zealand. In its lower reaches the river bank is fringed by two long rows of weeping willows. It is difficult to realise that this tree, which grows with a luxuriance never seen at home, is a foreigner, imported by the missionaries. Behind the willows the bush is varied by the broad, bright, shining leaves of the 'Maori fig,' a tree which, according to their legends, the Maori brought with them in their canoes when they first landed in these islands. There are no eucalypts or acacias in New Zealand, and, although the bush is a little sombre in colouring, it is not so dull as the Australian forests, and presents a vastly greater variety in its forms of foliage. Indeed, its foliage is far more varied than that of any forest of Europe. Different kinds of pine are abundant; and we saw for the first time the 'nikau palm' (*Rhopalostylis sapida*), which grows farther from the Equator than any other kind of palm. It owes its adjective 'sapida' to the fact that the top of its stem, beneath the crown of leaves, makes an excellent vegetable. One day when we were driving through the bush, doubtful if we should reach our destination, we asked our driver what he would do if we had to camp. 'Oh,' he replied, 'I would soon make you comfortable. I would snare some "bush fowls" and boil some nikau heads, and soon prepare for you a dainty supper.' He probably exaggerated his prowess as a bushman, but his statement was reassuring. The gorges of the upper reaches of the Wanganui, where

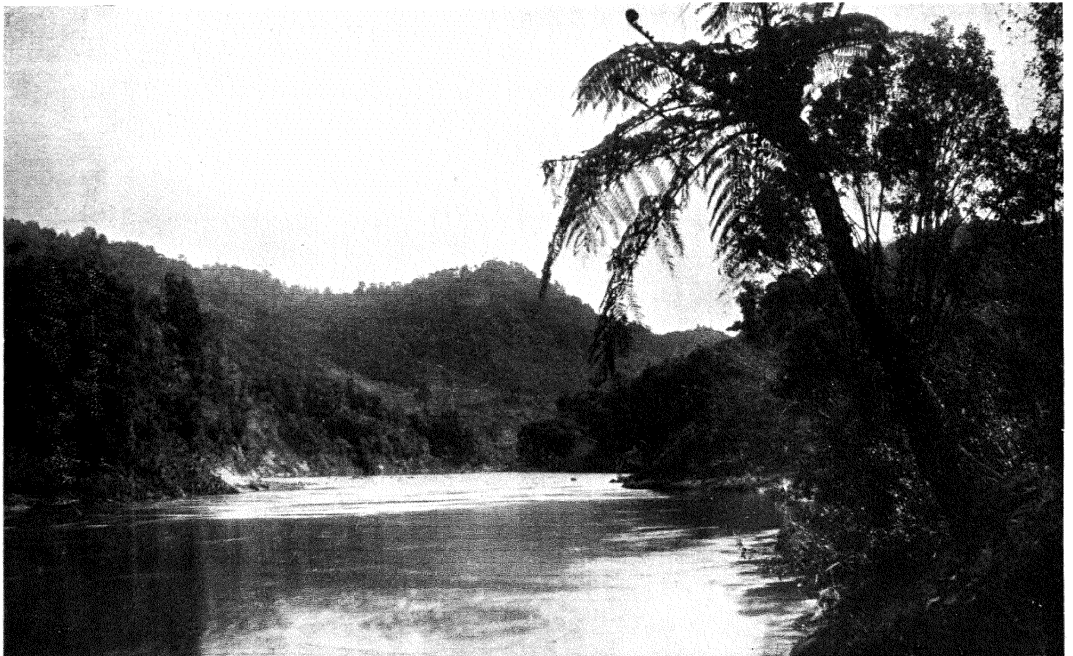


Photo. *Valentine*

ON THE WANGANUI RIVER

rocky walls tower to a great height, are very beautiful, owing to the profusion of ferns with which they are clothed.

At Atené (Athens) the river has shifted its bed. Its new bed was ploughed by the mountain Taranaki, so the Maori say, when he left his home in the centre of the island. For he and Tongariro were rivals for the hand of the graceful, snow-capped Ruapehu, and Tongariro was tne maiden's choice. Not daring to stay to watch their wedded joy, Taranaki roughly tore his roots out of the ground, leaving a great pit, into which water flowed, forming Lake Taupo. Twice he halted on his road, but finding himself still tall enough to see the happy lovers, he at once plucked up his roots again, leaving a new lake to mark his resting-place. At last he espied a mountain maiden, Poawha, standing alone on the extreme western border of the land. By her side he settled. She accepted him as her husband, and the couple were soon surrounded by a numerous progeny of little hills. Poawha is dead, and Taranaki, Mount Egmont, stands in solitary grandeur, raising his shapely volcanic cone to a height of more than 8,000 feet. And nowhere but in the Wanganui River, in Lake Taupo, and in the two other tarns which Taranaki left behind, are found the koaro fish; clear proof of the truth of this story of unrequited love. Maori mythology is full of legends of the mountains and their doings. It is probable that during the five hundred years, or thereabouts, that the Maori have inhabited the volcanic North Island the mountains have done a good deal, acting often from what, to the superstitious native, seemed very human motives.

Next we passed the little island of Moutao, in which Hau-hauism was put on its trial in 1864. Many of

the natives who had listened to Christian teaching found the Old Testament stories satisfied their savage instincts better than the Gospel of Peace. Christianity is based upon the Bible, all parts of which are equally true, the missionaries said. What had happened once might happen again. The Maori chose their precedents from the early history of the Jews. So Te Ua dreamed a dream. And behold there came up out of the river seven white kine. And behold seven black kine came up after them; and the seven black kine did eat up the seven white kine. The interpretation of the dream was simple—the prophet endeavoured to raise the country against its white invaders. He tried to establish a new religion, a strange medley of Jewish and heathen rites. Its devotees danced round a pole, making loud ejaculations, which caused them to be termed 'Hau-haus.' Now the natives about Wanganui knew that the English arms were strong, but they argued that if the gods themselves were fighting for the Hau-haus, their arms must be invincible. So, just to put this to the test, they met the Hau-hau chief Matené on the island of Moutoa. It seemed to them a good idea to test his strength before they joined his banner, committing themselves to a life and death struggle with the white man. They would have a trial of strength just to ascertain whether his pretensions were justified by the result. This would show them whether it were a safe policy to join the God-protected Hau-haus, and go up against the philistines. Matené was killed, with forty of his followers. Then the Wanganui natives saw that there was something wrong about the dream.

Higher up the river we came to Hiruharama, where a Roman Catholic Mission has been carried on for five and thirty years by Sister Marie Joseph. She was on

board the boat with two of her protégées—a calm, sweet-faced woman. She talked to us, although with a good deal of reserve, about the river and the natives. From the first establishment of the mission she has studied the botany of the district and has collected native reports as to the medicinal virtues of the plants. Her skill in herbalism is now in such repute that she realizes, we were told, a very large sum every year by the sale of her medicines, which she devotes to the upkeep of the mission.

Hiruharama is the Maori attempt at pronouncing the name Jerusalem. Having only eight consonantal sounds—H, K, M, N, P, R, T, ng (ñ)—the Maori make sad havoc of many English words. There are many sounds which they cannot pronounce, since the muscles of the tongue needed to produce them are not developed. In all races the habit of pronouncing certain sounds leads to the development of certain muscles; and muscles which are needed for the production of sounds which the people are not in the habit of uttering can only be developed by practice when they are young. One of the letters which a Maori cannot pronounce is L; he replaces it by R. This is very natural, for if one studies the way in which these two letters are produced, one notices that different parts of the tongue are used, and it is upon the muscular development of the tongue that the characteristics of a language chiefly depend. Both L and R are letters which can be reduplicated, although in England only hostlers reduplicate the letter L, and few but Scotchmen or Cornishmen sound a vibrating R. L and R are easily interchanged. We saw on a house-wall at Pompeii, which we visited when the ship waited for mails at Naples, 'alma vilumque cano'; and we could give many another illustration of the inter-

change of L and R in European languages. In Maori there are no Ls; in Hawaiian, a nearly allied Polynesian language, there are no Rs. One other peculiarity of the Maori language may be mentioned, and we shall then have a very good idea of its sound—it has no closed syllables: each syllable ends with a vowel. The names given by Englishmen to the settlements on the Wanganui River are rather ambitious—Athens, Galatea, London; the natives have changed them into Atené, Karaitea, Ranana. It takes some little analysis to see how they arrived at the last!

Pipiriki is situate in a grand amphitheatre formed by a bend of the river. The Maori village lies chiefly on the right bank, the 'accommodation house' is on the left—on our right, that is to say, since we were ascending the river. When we arrived a party of natives, about fifteen in number, were returning from a wake, or 'tangi.' They were all on horseback, two of the women dressed more or less in European fashion and riding sideways, the others wrapped in blankets and sitting astride their horses. All had their heads clothed with outstanding turbans of fresh stag's horn moss (*Lycopodium*). It is the custom to dress the hair in green as a sign of mourning. These head-dresses were very picturesque.

It took us some time to ascend the hill, and then, knowing that the tourist season was almost at an end, we strolled in a leisurely way to the inn. Imagine our surprise on being told that they had no room! A pleasant prospect this with only a Maori wharé as alternative! But it was soon set right. The little inn had an 'annexe' across the road. In this there were five small bedrooms, each containing two beds; but the innkeeper, not expecting an influx of visitors, had allotted them all to single people. A rearrangement

was effected. For Pater and Puer an attic was found in the inn, while the ladies had a room in the annexe. Now it happened that in the annexe two single gentlemen were put into one room; and this is not a wise arrangement when they have different hours for going to bed. About midnight our ladies imagined that the tin annexe was being besieged. They thought of the dusky figures who were lounging round it when they went to bed, and of stories of the Maori war which they had heard upon the boat. But it was only Jones, who wanted to get to bed, and found that Brown was already fast asleep, with the key on the inside of the door. At last Jones succeeded in waking Brown, who started for the door, but brought up instead against the window with a smash of glass. It was amazingly dark. 'Here's the door! Don't you hear me rap?' Then followed a tremendous crash, as Brown took a header over his own or Jones's luggage. Picking up the pieces, he tried to find the way on his hands and knees, but only after a long and weary voyage, with many directions from the shore, did he manage to bring up alongside the key. Nor did Puer and Pater have altogether a quiet night, for the attic next to theirs was occupied by four men who had come together for a quiet talk from their solitary stations in the bush. They succeeded in transferring their ideas in tones which would not carry more than half a mile. Their ideas, if such they may be called, consisted in expressions of antipathy towards certain 'bosses' whom they condemned to torment in torrents of profanity. After some time supplies ran out and conversation flagged, but they decided to wake the accommodation-house keeper, and to obtain fresh inspiration. We were delighted to hear the answer, 'I tell you there is none in the place!' We were now in the 'King Coun-

try,' in which the Government very properly prohibits the sale of intoxicating liquor. The Maori have not the moral fibre to resist it, and we earnestly hope that this law may always remain in force. Malicious people say that the restrictive laws are more honoured in the breach than in the observance, and that it is possible that even at Pipiriki the answer might have been different if Pater had not been staying in the house. He's a suspicious-looking character who might easily be mistaken for a member of parliament or a magistrate, or some other kind of fussy person. But this is not an argument against the law. It only shows that it is not properly enforced.

Eleven people with their baggage were packed into a wagonette, and we started at 7 a.m. *Not* straight for Rihite, however! A little Maori horse in the lead had other ends in view. His home lay in the village 300 feet below. He was used to mountain roads, and not afraid of a short cut. So the moment his head was loosed he wheeled his companion sharp over the edge of the cliff, where they hung on the end of the pole, while the sweat came out on our driver's brow. They were put right, and away we went, the poor little rogue pulling with all his might up the soft clay track, but always edging his companion and the coach to the outer side of the road, within an inch of disaster once or twice. Before we had gone three miles, however, our progress came to an end. There was no mischief left in Rangi Potaki (son of heaven). It was clear that no amount of whip could keep the horses at a trot on a road into which the heavy wagonette sank nearly to its axles. Our driver thought that 'the ladies would like to walk up the hill and look over the "dress circle."' It is a grand terrace cut in the face of the rock, which descends vertically to the stream, of which only a

glimpse is to be obtained here and there, owing to the dense growth of ferns and bushes with which the ravine is filled. Of the rest of this journey the less we say the better. For weeks it was a nightmare to us. Not because of its weary, hungry length,—nearly eight hours for eighteen miles,—but because of the incessant thrashing which the poor horses received. Only the leaders were changed on the road, and nothing but remorseless beating could compel the horses to struggle with a load for which four teams would have been insufficient on such a road. Pater waited near the coach for some time, but at last he could stand the sight no longer, so walked on ahead, reaching Rihite an hour before us. At last we saw the half-dozen wooden houses which constituted this budding town. The road was firm and level. Our driver roused himself for a last frenzied application of the lash, but he could not persuade his poor tired team to break out of a dejected walk. This, we must say in all fairness, was a very exceptional experience. The rain had spoilt the road. The coach had gone down full the day before, but the season was over, and the driver had expected to come back empty. Although we never again saw horses so badly treated as in this case, our pleasure was often spoilt owing to our compassion for our team. How can anyone sit behind a horse with a raw shoulder without feeling the collar cut his own shoulder all the time? or watch a tired horse at work without wanting at least to ease it of his own weight?

It was unfortunate that we had to think so much of the horses. We gave very little attention to the beauties of the road, although we were passing through one of the most superb pieces of virgin bush in the North Island. This road through the 'King

Country' had only been opened for eighteen months, and the bush near Pipiriki was quite untouched. As Rihite is approached, a very different sight meets the eye. Gaunt skeletons of trees stand naked amidst the charred ruins of the forest. The Government had bought an immense tract from the Maori, and settlement was being pushed forward with great rapidity. Settlement begins with the burning of the bush. All is sacrificed, whether common scrub, or timber which cannot be surpassed either for building or for cabinet work; totara, for example, which resists rotting longer than any other kind of wood. We heard of posts taken out of native palisading which were sound after being in the ground for at least forty years. Remu, or red pine, rata, or iron wood, and a host of other trees of which we did not know the names, but which are remarkable, some for their durability, others for the ease with which they are worked; others, again, for the richness of their colour or the beauty of their mottling—all were being indiscriminately destroyed to provide pasture for sheep It seems like pulling down a house for the sake of sowing mustard and cress on the kitchen floor. Although the timber cannot be brought into the market at present, it would prove when the country is opened up of far greater value than the sheep-runs for which it is displaced. Whether our political economy be sound or no, we have no doubt as to the justice of our artistic instincts. The bush is as ugly after it has been burnt as it was beautiful before. Not even the snowy summits of Ruapehu and her husband could make a picture with a foreground of bare and blackened stems.

We were not allowed to rest long at Rihite, for we had another seventeen miles to drive. Just time enough to collect some specimens of the exquisite

crape-fern, or Prince of Wales' feathers (*Todea superba*), the pride of New Zealand, which bordered the road. But now we had a light buggy and fresh horses, and although we were sometimes bumping along a 'corduroy' road, at others up to the axles in mud, or heaving over roots of trees, as we took a short cut through the bush, we left the forest behind us before it was dark. Our most companionable driver, Mr Peters, did his best to make the way seem short. Seeing that we were tired he set himself to amuse us. 'Which was the largest island before Australia was discovered,' he asked abruptly, and from riddles he turned to tales of New Zealand in its early days, of bush-life, of the Maori wars, of the eruption of Tarawera. He fully succeeded in holding our interest to the end of the drive, but we were not sorry when, crossing a river, he drew up at the accommodation-house of Karioi at 7 p.m.

We had heard a bad account of this accommodation-house. All summer the newly opened route had been thronged with tourists for whom its narrow quarters were altogether insufficient. But we, with a lady who was for the time travelling with us, had all the 'hotel' to ourselves, and we were charmed with the urbanity of its manager, waiter, chef, chambermaid, and boots—a single genial Irishman. No one but Mr Peters was expected, yet an excellent dinner was soon on the table. For breakfast we had an omelette, eggs and bacon, curry and rice, hot tea-cakes, toast, and tea and coffee! Pat's multifarious accomplishments would have filled a larger sphere.

All the next day we skirted round the base of the great mountains, on their eastern side, a drive of fifty-five miles, over a country which would have proved uninteresting, but for its novelty. On our left rose

Ruapehu (8,877 feet), Ngaruhoe (7,481 feet), and only active volcano at the present time. The crater of Ruapehu is plugged with a frozen lake, which has not been disturbed since 1886, when, shortly before the Tarawera eruption, the ice melted and the water began to boil. Tongariro is no longer the tall, straight giant who melted the cold heart of Ruapehu. Whether since the wedding Ngaruhoe has shot up between them the Maori cannot tell us, but it is clear that a serious misunderstanding has interrupted the even course of family life. Tongariro no longer smokes placidly by Ruapehu's side. His heart has grown hot within him. His anger was more than mouth could utter. In a burst of wrath it has blown his head clean off his body! No graceful cone of scoria now adorns his shoulders; he is merely a common mass of lava, like any other mountain.

The tempers of this family seem to have been always a little difficult. Life cannot have flowed smoothly at any period. For fifty miles to the east and west, and a hundred miles to the north, the plains are covered with evidences of frequent quarrels. All day long we drove over a pumice country, and we saw that where it was hollowed out by the river—the infant Waikato, which we shall follow until at Mercer it becomes a noble stream—the banks are formed of layers of pumice stones ejected from volcanoes; some small, like those of Pompeii, others as large as cricket balls. Between the layers of pumice we saw trunks of trees, charred and black, but not turning into coal. Evidently Ruapehu and her husband kept quiet at one time long enough to allow a forest to cover their skirts, then something occurred to annoy them, and they spat out red-hot balls of pumice, which first burnt

and then buried the trees; and it cannot have been long since the last of their little domestic squabbles. To the south of the mountains the country is covered with luxuriant bush, but in driving from Pipiriki to Rihite we crossed several remarkable clefts or gorges One was two hundred feet deep, and less than four feet wide at the top. They seem to be fissures produced by earth-movements, and not channels worn by water. Soon after leaving Karioi we passed a little desert totally devoid of vegetation, owing to the impregnation of the soil with poisonous salts. We hardly noticed it, however, for it is only a trifle browner than the tussock-grass and manuca which cover the rest of the plain.

The ground does not look profitable, but it carries a few sheep,—not that we like to speak of them as 'a few,' after seeing them in a flock. We met a flock of between ten and twelve thousand, which was being moved across the country by two men on horseback. In the distance they looked like a vast swarm of ants. No wonder mutton is cheap in New Zealand. When one remembers that at home two or three hundred sheep are considered a large flock, when one thinks of the care with which an English farmer looks after them—how they have a shepherd always in attendance, who folds them on the turnips, drives them every morning for a walk on the grass, cleans their feet, removes grubs from their wool, hardly leaves them during the whole year, and at lambing time sits up with them at night—one realizes how much more they cost to rear at home than they cost in the Colonies. In the Colonies the sheep are only 'rounded up' twice in the year: once for the shearing, and once to sort them out for killing. For the rest of their lives they very nearly take care of themselves.

We had several rivers to ford. The rushing white water produced a curious illusion. It was difficult to believe that the coach was not being whirled round so as to make the horses' heads point up stream. Twice we changed horses, but there was no house on the road. We were told that we should be joined at Waora by twelve Hawke's Bay chiefs, who were on their road to the great Tokaano meeting. Additional horses and a heavy coach were waiting. A sheep had been killed and cooked, a bushel of potatoes were boiling over the fire. But the chiefs had not come. A child had died at a settlement through which they were passing, so they had stayed to hold a 'tangi.' They take life with a nonchalance which exasperated the coach-proprietor. He muttered something about their 'finding they will have to walk on an empty stomach if they don't turn up to-morrow'; but we found something very touching in the seriousness with which they regard their duty to the dead.

It was about six o'clock when we entered Tokaano. The last mile or two of the road was very bad. But all weariness was forgotten in the grandeur of a stormy sunset, which changed the hills into tongues of ruddy flame; in the troops of gaily dressed Maori who came out to meet the coach in the expectation of its bringing the Hawke's Bay chiefs; and then in the idea of driving into that boiling cauldron which lay in the shadow of the hills. Did ever man settle himself so near the nether regions? Columns of steam were everywhere ascending from amongst the wooden houses. They enveloped them and hid them from view. But our horses knew that their suppers were in the village. They were not afraid to trot straight into the warm cloud, although they could not see the road. Out of the dints made by their hoofs and the

ruts cut by the wheels hissed fresh jets of steam; so easy is it to pierce the thin skin of soil which covers the boiling ground!

The inn is very oddly built, in a number of pieces, scattered about a compound of green turf. Drawing-room, dining-room, kitchen, bar, and detached, or semi-detached, bedrooms are isolated one from another, lest too great a weight should be placed on a small area of ground. It is not an unpleasant arrangement, but it makes navigation difficult after dark. Nor is one disposed to wander far at night without a guide. Only this Christmas a native went, according to his custom, to fetch some water in the dark. We were shown the pool in which he was found in the morning, 'boiled to a rag.' Calves and horses are always getting themselves cooked at unseasonable times.

It was with some misgivings that we accepted the pilotage of a gentleman who was staying at the hotel. He offered to take us to a native dance. The night was intensely dark. There was no moon, and the vapour which hung over the village hid the stars. With the aid of a lantern, however, he showed us where *not* to tread, and we threaded our way among the steam-jets to a large reed house about a quarter of a mile from the hotel. Adjoining the house was a little office, where we obtained tickets for the ball, contributing the sum of sixpence each towards the expenses of the entertainment, to the envy of a group of Maori men, who were trying to persuade the box-office keeper that they, like the native women, ought to be admitted free. It was a long, low building, lighted with candles, which were stuck on nails on wooden frames hung from the roof. From forms at the upper end of the room we watched the dancing—waltzes, polkas, schottisches, lancers,—performed with

great precision and grace to the music of two concertinas played by ear, but in excellent harmony and time. The men wore European clothes; the girls loose white skirts, their only ornament a couple of bright-coloured ribbons hanging from each ear.

Our guide spoke Maori. At our request he made the company a little speech. We had come, he said, from England, where they danced the dances we had watched, not as well as they were danced here (which was true!), but still with some success. But the ladies of England knew nothing of the 'haka.' We should not feel that we had seen the Maori dance unless they would gratify our longing and dance a haka. After a good deal of persuasion, the girls ranged themselves across the room and commenced the movements of the haka, which is hardly what we should call a dance, very shamefacedly at first, for they are already so far civilised as to look down upon their native customs; but as the dance went forward they began to fall under its spell. Intoning a monotonous chant, the words of which we, of course, could not understand, they stamped on the ground, turned quickly to right and left, stretching out their arms at every turn. It was a curious contrast to their European dances. Instead of attempting to move their limbs with suavity and grace, they tried to make them angular and rigid. The arms were thrust out straight; the hands and fingers bent backwards, crookedly, in a singular position of over-extension. Then they stamped on the ground, in the attitude of a man ringing a church bell; turned half round, and placing their hands on the shoulders of their neighbours in the line, bowed low to the right, reversed the order, and bowed to the left. Finally, with a yell, they leaped into the air several times in succession, the right hand stretched

above the head; the front row leaping first, the back row last. There was nothing spontaneous in the dance. Every step was evidently fixed by custom, and there is no doubt but that the dance is of great antiquity. Many of the words, our friend told us, are unintelligible to the present race of natives, and they cannot tell you what the gestures signify. Undoubtedly they have become highly conventionalized; but we could not help thinking that some of them were horribly suggestive of a cannibal feast, especially a curious harsh grunt, uttered with the closed fist pressed against the mouth,—such a grunt as might express anger or disgust. One or two of the younger girls thrust out their tongues and clawed the air with savage gusto; but the elder girls found the performance a little embarrassing in the presence of the 'pakeha.' An amusing incident occurred before the ball was over. We had remarked to one another upon the increasing smell of sulphur, when suddenly the box-office keeper entered the room. He had something to tell which caused much merriment. We asked for a translation. 'Oh, it's only a steam-jet which has burst forth in the office.' One of the posts having sunk too far into the ground, a fumarolle had appeared, and the man was suddenly smoked out.

There was a great meeting at Tokaano—a native parliament which had been talked about for years. Already 1,500 Maori had been assembled for a week, and had done wonders in consuming the stores, which had been collected at great expense, owing to the cost of haulage from Napier or Rotorua—about £5 per ton. As a picnic the meeting was voted a great success; but as yet, although it was already a week after the day agreed upon, parliament had not held a session. They were waiting for the Hawke's Bay and other

important chiefs. Whether they ever agreed, as was expected, to send delegates to the Privy Council, to pray that the land laws might be amended, we never heard. We bought newspapers and searched for reports of their proceedings, but the great meeting was hardly mentioned. Yet it had cost much labour to organize, and extensive arrangements were made for its reception. In a large compound a long reed building was erected around three sides of the square. This had served as dining-room only, until now, but it was intended for the debates. A chapel had been built on the fourth side. In addition to the wharés of the settlement, numbers of temporary huts and tents had been put up.

When Pater and Puer sallied forth at 6 o'clock next morning they saw something of native life in undress. Dogs were lying in the sunshine, horses feeding on the grass, and the Maori completing their toilet in front of their huts and tents. But most of the people were making their way to or from the baths, the men in blankets, the women wearing towels over a loose tunic. Thither our men went also, threading their way very cautiously over the calcareous crust which covers the ground. There are several large blue pools among the manuca bushes behind the village, but apparently only two of them are at a temperature suitable for bathing. One of them was occupied by men, who sat up to their necks in water, with their backs to the bank, contentedly smoking and chatting with one another and with the married women who shared the bath. Many of the women held a child in either arm. The adjoining bath was occupied by the younger women and girls. The belle of last night's ball greeted the visitors with a bright smile, but they did not feel sufficiently at home in the etiquette of Maori high-life

to do more than exchange a distant 'Tena koe' and pass on. Our education in Maori idiom had not advanced far at this time. We were unable to make the subtle distinction between a greeting addressed to one, 'Tena koe' ('Here you are'), a greeting addressed to two, 'Tena korua,' and a greeting to many, 'Tena koto.'

No wonder the natives love their settlements in the neighbourhood of these hot springs. Life runs so smoothly. The steam-jets boil the water in their billees. Sweet potatoes when placed in a hole in the ground and covered with a plank are steamed to perfection. Even bread is baked to a light-brown in the hot earth; while the cooking of a pig is simplicity itself. First drive your pig to a hot pool. Then stick him. Fasten his legs to a pole. Dip him in the boiling water. Lift him out and scrape him. Then plunge him in again, and you may lie on the ground and smoke until it is time to summon friends and neighbours to the feast.

The Maori are as fond of bathing as were the Romans. When a man comes home tired from the chase, he gets into a hot bath. Then he lies on a mat while the women submit his limbs to a skilful massage. This finished, he spends the evening in the bath. The bath is the place for social intercourse. There the barber plies his trade; there the natives exchange greetings in the morning; there they often sit from dusk till midnight, smoking and talking; while if in the night a man feels cold, he just rolls his blanket round him and moves off to the nearest pool. Nor is it possible in the case of the Maori to trace any of the evil effects which are commonly supposed to follow excessive indulgence in hot baths. They take their baths at an extremely high temperature, from 100° to

105° F., and even hotter than this; but they are not more subject to rheumatism or diseases of the chest than other people. They are an indolent, loose-jointed race, but extremely agile when they exert themselves, although they cannot bear sustained exertion as well as a white man. Everything conduces to a lazy life. They like their old ways; they like to live surrounded by vast forests which yield an abundant supply of pigeons and wild pig; to let their horses graze on the natural grass; to limit their agriculture to growing sweet potatoes, and never to exert themselves except in war or the chase. Consequently the large territory set apart for their use remains undeveloped. Even the rich land about Rotorua is covered with manuca scrub. The colonists cannot agree to this waste for ever, nor can they leave to the Maori the right of prohibiting access to the natural wonders of the volcanic district or of charging exorbitant tolls. It is a good thing for the colonists, as well as for the Maori, that the latter proved themselves a brave race which could not be trifled with. Their relations are more honourable and cordial than they would have been had the Whites dominated from the beginning. But the end of native independence is coming very fast. Instead of the 'King' walking by the Governor's side at State receptions, even the native representatives in parliament are seldom, if ever, invited to Government House. The Maori has had time enough in which to wean himself from his separate life. Now he must take his place as one of the community, expecting neither special privileges nor special disabilities. His land is rapidly passing into the hands of the Government. The tribes sell it, but they wish that they could keep it at the same time. There is consequently great discontent with the land laws, as witnessed by the meeting at Tokaano; but the

whole question will be settled before long. No wonder they prefer hot pools and forests to towns and farms. We sympathised with an old fellow who was bringing his wife down the road on a sledge near Pipiriki. Our driver told him to 'get that thing out of the way.' He lifted it on to the side willingly enough, but muttering something to himself. 'What's the matter with you?' 'Too much pakeha!' the old man answered. 'Maori': autochthones, natives, original proprietors of the land. 'Pakeha': foreigners, immigrants. It is energy that rules the world. The white kine will eat up the black kine before long.

We thought ourselves in luck's way when we learned that the little steamboat which plies on Lake Taupo had come to Tokaano to bring supplies for the meeting, although some weeks earlier the skipper had announced his intention of tying up for the winter. He was a dear old fellow, the skipper 'Dan'; determined to show us everything and to make our trip as pleasant as it could be. The water was like glass and the sun shining when we started across the lake to see the waterfall of Waiki, close to the scene of a landslip which buried Te Heu Heu and fifty of his tribe in 1846. When we left the waterfall our skipper meant to take us to West Bay, where he was busy prospecting for gold. Dan is an old prospector. He entertained us with many yarns of the hardships and risks which he and others had run when prospecting on the west coast of the South Island;—how they made their flour last out as long as possible; boiled water in the billee and pretended it was tea, and at last made their meals of snow while they struck desperately across the mountains in search of a settlement. There was gold in the sand on the sea-shore. The alluvial deposits from which it had been washed must be in the near

neighbourhood, if only they could find them! He had had his share of fortune too. At one time he and his chum were taking out between four and five pounds' worth of gold a day, but at the end of the week they were 'jumped' by a crowd of 'boys,' who seemed to come up out of the earth. The reckless gamble of a miner's life came out with great realism in the old skipper's stories. Had they been taken down in shorthand, they would have furnished a novelist with excellent copy. Just at this moment he had on board some pannikins of 'earth of the right colour.' As we rubbed the grey clay through our fingers we agreed that we 'had never seen better indications.' We could not, without rudeness, fail to sympathise with the ruling passion; and, besides, the expression 'indications' was comfortably vague. Had we been asked to say that we saw specks of gold, it would have been quite a different thing! We were prepared to land at West Bay, and looked forward to taking a turn at prospecting, with unknown possibilities of lighting on a 'pocket'; but the weather had changed, and landing was out of the question. Heavy clouds had gathered. A squall churned up the surface of the lake, and the little boat danced about like a cork in a mill-race, while its passengers crouched beneath their rugs and complained of the unwholesomeness of the Tokaano sandwiches. Then Dan regaled us with tales of former squalls. Told us how one night he had been blown away from his anchorage when asleep in the boat; and also related his experiences at the time of the Tarawera eruption. It was evening, and he was on board the launch, when it began to bump, 'just as if it had been repeatedly lifted up and bumped on the ground.' Then there was a great noise of falling cliffs, which as they tumbled into the water sent great waves across the

lake. We had been very much puzzled by the bare white surface of the cliffs before we heard this explanation. They have not yet regained their verdure, and are strangely raw, instead of having the usual weather-worn appearance.

It was fine again when the little steamer pulled up against the beach in twenty feet of clear green water, at the mouth of the Waikato River. Mr Joshua was on the bank ready to conduct us to his Spa Hotel. The Spa is a charming place in which to spend a few quiet days. About a dozen wooden buildings in a pretty garden, in a hollow near the river. A hot stream flows through the middle of the garden, and the roses and clematis which festoon the bridges and trellis-work seem to revel in its warm vapours and not to mind the smell of sulphur. Possibly the green fly dislikes the sulphur, while the roses don't! A pretty smoking-room, with a bright wood fire, was ready to welcome us when we were damp and chilled from the frequent showers. But the dining-room is the great attraction of the place. It is a large wharé puné, like the one at Wellington, excellently carved by native artists. Our ancestors—we adopted them at sight—seemed to regard our repasts as rather trivial. Their mother-of-pearl eyes, as large as half-crown pieces, rolled with a fine frenzy. 'If only I could get my back away from the wall I would eat you first, my dears, and finish off with those kickshaws afterwards, by way of dessert.' But how the old fellows must have wriggled on their posts when they saw us going to the baths. The mornings were cold and misty. Wrapped in our dressing-gowns we ran across the garden and tumbled into the swimming-baths, in which, despite the frost of the night, the water was still 102° F. One day we made an excursion to the Arateatea Rapids.

There is no road, but the track leads for six or seven miles across the strange pumice-covered plain, the surface of which has been worn by the rain into miniature hills and gullies. The soil carries nothing but manuca and the thinnest possible covering of moss and grass. As we left the rapids, the clouds, which had already shed several showers upon us, closed in black masses, which burst in a deluge of rain. We galloped back, anxious to reach the Spa before the darkness prevented us from seeing the track. How delightful it was to strip off our wet clothes and to float about in the hot water, in the dark, until there was barely time to dress for dinner!

The views up the Waikato River and across Taupo Lake to the snowy mountains were very beautiful as we made our way to Wairakei in brilliant sunshine. We called a long halt at the Huka Falls, for one is never tired of watching falling water. No canoe could shoot the falls in safety, but there is always a tale of natives who made the attempt and failed—told for the gratification of the local pride of the tribes to whom the falls belong. 'A tribe living upon the lower river were so proud of their whakas that they boasted that they could shoot any fall. So they dragged a whaka above the Huka and started down. One man who was frightened jumped on to a rock as the canoe came through the rapids, and he alone went back to tell his tribe of the great falls upon the upper river.' There is no doubt that the Maori did wonders in their huge dug-out canoes. What immense labour the making of one of these canoes must have cost! A great totara tree was felled. 100 to 120 feet of the straightest portion of the stem was then shaped into the form of a canoe. Its interior was partly burned out, partly scooped with stone adzes. Finally a lofty prow and



TAUPO-SPA

stern-post of iron-wood were added, and the whole elaborately carved. The only addition to the hull, as formed from the dug-out, was a cut-water board on either side. This is the explanation of the form of the canoes found everywhere over the Indian and Pacific oceans. The natives have no idea of making a boat of planks. The size of the boat is, therefore, limited to the size of the tree which can be found suitable for scooping out into the hull. In Ceylon the trees are comparatively small. Broad cut-water boards are therefore added to the dug-out at each side, and the hull is very narrow, hardly giving a man room to squeeze his legs into it. But in Ceylon, as in other countries where the canoes are used for the ocean, extraordinary ingenuity is shown in making the canoe balance by means of an out-rigger—a log of wood hung on two poles at a distance from the side of the boat. In the skilful hands of the natives these out-rigged boats are less easily capsized by the waves than a wide plank-built boat would be, even though manned by North Sea fishermen.

Wairakei is an amusing settlement. The original house is Maori-built of tussock-grass and lined with reeds, very picturesque. We begged that we might be allowed bedrooms in this ancient haystack, rather than in one of the neat modern buildings, with their roofs of galvanized iron. It was warm and snug; the only drawback was the mice. They also found it comfortable to live in; but as we made no attempt to molest them, they need not have spoilt the photo-plates which Pater had put up to drain. It was provoking of them, for if there be a place to stimulate a photographer it is Wairakei! It was at the time of our visit the only place in New Zealand where geysers were still to be seen. Since then others have regained their

activity. What a subject for a photographer—a geyser! Perhaps it only plays once in an hour. For one second a column of boiling water may be seen, then steam hides everything; in five seconds the fountain has fallen back into its hole. Although the geysers had ceased elsewhere, at Wairakei they made up in variety and interest for those that the island has lost. Every form of geyser is represented, and probably this is the only place in geyserdom where this weird display of plutonic force is to be seen in a beautiful valley, the crusts and scars made by the boiling water being set off by a rich background of foliage. Ferns and mosses creep to the very edge of the boiling water. Now and again, when a gust of wind drives the hot spray towards them, their foliage is scalded, but ever they thrust their fronds still lower and nearer, irresistibly attracted towards the warmth and moisture.

Our landlady's niece acted as our guide to the enchanted valley. First she took us to the 'Steam Hammer,' a pool from beneath which issues a regular thud, thud, like a heavy steam-hammer, which shakes the ground. Then, through two minor gorges to the gem of the place, a sloping bank of calcareous deposit, holding pools of water, overhung with foliage, and bright with ferns and moss. A cloud of steam fills the glen, forming a canopy, a tent which often excludes the sunlight. Near the foot of the bank is a white chalice, which overhangs the stream. In this basin 'The Twins' play at regular intervals of three minutes and a half. It would make a delightful bath for two romping boys; but 'The Twins' have no corporeal existence. For less than half a minute they appear upon the scene. Then they fall back into their basin, leaving an untroubled surface on its blue-green water. Again the water bubbles, rises, is suddenly shot twenty

feet into the air, and falling sends a wave over the edge of the chalice into the stream below. We could have stayed for hours watching the diamonds which sparkled in the sunshine. But presently the great geyser at the top of the bank, 'The Prince of Wales' Feathers,' shot up its triple plumes of spray. Just after this has played it is time to ascend the bank. By no means an inviting climb, amongst the jets of steam and pools of boiling water; but imagine our dismay when just as we skirted behind the Prince of Wales' Feathers we saw the geyser preparing to throw up again close to our feet! It only plays once in half an hour, but it is apt to go off a second time after it seems to have finished. We should have liked to run away, but whither? There was boiling water on every side. So we were obliged to follow our guide's advice, and to stand still on the rock. Miss Wilson asserted that we were safe, and, sure enough, the columns of water shot out with an inclination forward, which left our standing-place quite dry, although the water almost touched our feet. Nor does it follow that if the spray had fallen over us we should have been much hurt. These geysers are formed by water trickling down the bank into a hidden pool fed by a jet of steam. When the pool is full the jet suddenly ejects the water, in some cases boiling, in others only lukewarm.

After this we came to great pools of boiling mud, to smaller geysers, to the Eagle's Nest, so named from the petrified sticks which form a cone for the geyser; to the Heron's Nest, incrusted with red deposit; to the Dragon's Mouth, &c.; as well as to the Lightning Pool, from the bottom of which great bubbles of air—each as large as a child's balloon—rush upwards with immense rapidity, looking wonderfully like an electric discharge as they flash through the blue water. Then

we crossed the stream to the great Wairakei, a most impressive geyser at the bottom of a lofty cliff, the face of which is stained a great variety of fulvous and funereal tints, making the chasm at its foot, from which steam is always rising, look indeed like the entrance to the bottomless pit. We looked into the pit, but could see no water. Every seven minutes it comes into view, rises rapidly till near the surface, when it is suddenly hurled into the air to a height of thirty or forty feet.

But the greatest sight of all, the Champagne Cauldron, was reserved for the last. It is a pool of green water about fifty feet across. When at its quietest, bubbles are always rising to its surface, like gas escaping from champagne. It is never at rest, and every two or three minutes it begins to boil. The water rises higher and higher towards the bank on which we stand, about eight feet above its ordinary surface. More and more furiously it boils. The noise prevents us from communicating with our guide. A gust of wind carries the steam towards us, shutting out guide and everything else from view. All we know is that the boiling water is coming nearer and nearer to our feet; then the steam clears off, and we see that the water is gradually subsiding. Only rarely is it thrown out over the bank, but the knowledge that this does sometimes happen makes the neck of land, which keeps the pool from falling into the valley, anything but a comfortable place on which to stand when the cook has pulled the damper right out of the boiler-flue. On a moderate computation this cauldron would cook all the potatoes used in the Emerald Isle. 'What a soite it wad be, be jabers! to see Dame Nature doing the howl domestic work of the great Oirish family, and me nothin' to do but lie by and enjoy me dudheen!'

A couple of miles away the immense subterranean forces which break out in the Geyser Valley have a free vent. This hole, Karapiti, is probably a safety-valve for a much larger area than the immediate surroundings of Wairakei. It is the largest fumarole in New Zealand; perhaps the largest in the world. Gypsy, the good-natured pony who had carried our camera up the Geyser Valley, accompanied us to Karapiti; but when, as we threaded our way through the manuca, we found that she was putting her feet through the thin crust, we tied her to a bush, and went on without her. We were without a guide, and we approached the great steam-jet with caution, for it was difficult to believe that this roaring column of steam, issuing from the bank at great pressure, and in volume sufficient to drive half-a-dozen men-of-war, would behave itself with as much decorum as the best-trained tea-kettle. Had a bright fender been spread out before it, and the muffin-dish reposing beneath its spout, it could not have been more careful not to spit. Gradually we grew bolder, and went down into the hollow from the side of which it issues. We thrust sticks into it, to test the pressure. We let them go, to see how far it hurled them; and we came to the conclusion that the common estimate, that the steam issues at a pressure of 500 lbs. to the square inch, is far beyond the mark; although, of course, no one can guess what the pressure may be a few feet beneath the mouth. We also made a fire in the hollow, to study the effect of smoke on steam. Had any one been watching from fifty miles away they would have seen our signal. The column of visible vapour was increased in size four-fold. When water-vapour is thrown into pure, dry air, and the air about Wairakei is remarkably clear and dry, it mingles with the atmosphere without pre-

cipitation; whereas, if the air contain minute particles of carbon, the steam condenses about them in the form of mist. We found that many an invisible jet of water-vapour could be turned into an opaque column of steam by mingling with it the smoke of a single match.

From Wairakei to Whakarewarewa is another long ride—forty-nine miles, nine to ten hours. It would be a dull road if it were not that every feature of the pumice country is interesting to one who sees it for the first time. Horses are only changed once—at Ateamuri, the half-way house. It is on a bend of the Waikato, where the river, being pent in by rocks, forms beautiful rapids, and is easy to bridge. Near it, on the plain, is a remarkable hill, Pohaturoa, eight hundred feet high. Its top is a flat tableland, with vertical sides, like the mountains in Saxon Switzerland. It is said to be almost unscalable, and was used by the Maori as a stronghold. With the exception of a few Maori settlements, there is no population anywhere on the road. Here and there a patch of forest, but most of the barren pumice is only covered by tussock-grass, manuca, and a broom-like shrub. The appearance of this shrub puzzled us very much. The ends of its branches hung limp and white. We were speculating as to the cause, when our driver explained that they had been chewed by wild horses for the sake of the salt which their sap contains. Then we realized that the numerous horses which were feeding about the plains were wild. It seemed astonishing that no one finds it worth while to organize parties to catch them; but our driver said that it is not an easy thing to do. They know the country better than their pursuers. Besides, they are difficult to break in when they have been caught, and often turn out unsatisfactory.

'You see, they are more trouble than they are worth,' the driver said. 'It's better to give £10 for a team like this,' extending his whip over his pair of big, well-bred steeds. A good hack, well broken, costs from £8 to £10 in New Zealand, while 'something to ride' may be bought for almost nothing—£1 or 30s. A few minutes afterwards we had proof that 'horses are not of much account.' As we passed a bridge a carpenter who was mending it called to our driver to take his horse back to Rotorua for him. It was a handsome grey, but very tired from its journey out in the morning, and we were sorry to find that its rider had not taken the trouble to water it or to remove its bit, so that it might feed on the grass. It had been borrowed from the stables to which our team belonged, so Puer rode it most of the way home. Later it came on to rain. Puer got into the buggy for shelter; the grey was fastened beside our pair, and we drove into the gardens of the Geyser Hotel three steeds abreast. Behind the hotel lies the Maori settlement of Whaka-rewarewa, clustered around the hot springs and the *should-be* geysers—geysers which should be the largest in New Zealand, but, alas! when we visited them they had not played for more than a year! Since then they have returned to business. The universally accepted explanation is that they had been over-soaped! 'Sequah' is credited with having told tourists how to administer the flattery which overcomes a geyser's modesty and makes her perform whether in voice or no. The Maori had a theory that there was nothing like whisky, provided its administration was left in their own skilful hands. But Sequah said, 'Try a bar of soap cut into slices.' The effect was marvellous. The geysers spouted as they had never spouted before. The soap made them play owing to its increasing the

cohesion of the water. But soon they played themselves out! The Government has now prohibited soaping, believing it to be the cause of their exhaustion; and in this they agree with the Americans, who will not allow it in the Yellowstone Park. But why does this forced excitement exhaust the geysers? Does it lead to the breaking away of certain barriers to the escape of steam? Or does the more frequent action lead to the pool becoming emptied of all its water? We could not obtain an explanation, and it seems to be clear that since the Tarawera eruption there has been a general subsidence of volcanic activity in this district. Owing to the quiescence of the geysers, there is little to be seen in the settlement except perhaps the 'brain-pot,' a mammoth calcareous saucepan, in which the Maori had the unpleasant habit of stewing the brains of conquered chiefs before serving them round to the assembled braves—another evidence of the ceremonial character of their cannibalism. As to the Maori themselves, we thought that the less we saw of them the better. They exist on their 'tolls' and the charity of tourists, and are not good specimens of the race. We were glad that we had seen uncontaminated Maori on the Wanganui route. Of course, they are always bathing and always smoking. Their passion for tobacco is remarkable. As an experiment, a man in the hotel yard handed a cigar which he had just lighted to a little girl of seven or eight who was begging for tobacco. She puffed away vigorously, and marched back to the settlement greatly envied by her small companions. The geyser-land had just been bought by the Government at the price of 3s. per acre—not an exorbitant sum to pay, even for dumb geysers; especially when there was a chance of their speaking again as soon as they had recovered from their overdose of soap!

While the settlement is uninteresting, the grounds of the pleasant hotel are as weird as may be. Hot lakes the pools are only separated one from another by thin strips of earth, encrusted with silica and covered sparsely with manuca scrub. Sunrise is the best time to see this strange garden. The steam then hangs over it in clouds. The hot springs are made to provide every kind of bath, but, unfortunately, they are not as much under control as Captain Nelson, the landlord, could wish. After a heavy fall of rain the water rose in the great swimming-bath until its weight forced a new hole in the bottom. More steam entered, and ever since it has been too hot for use. Of the small baths the 'oil' baths were our favourites. Every morning we wallowed in the hot water with as much enjoyment as a shoal of porpoises returning to the sea after being stranded on a sand-dune. The water is so highly charged with silica that it covers all the woodwork with a white enamel, and runs off the surface of the skin without making it wet. It is very buoyant, too, owing to the large amount of mineral matter which it contains.

We joined a party for a trip on Lake Rotorua. At the far end of the lake the launch dropped anchor, and two Maori who had paddled out to meet us carried us in their canoes to the mouth of the Haumurana River. They paddled us up the rapid stream, clear as crystal, which flows over an uneven bottom, in some places many feet deep, in others but a few inches, and everywhere covered with brilliant water-weeds; but about a mile from the lake we reached its source, for it comes up, full grown, out of the ground. We rowed into the round pool and looked down into the hole out of which the water wells. It is extremely cold, and rises with such force that when pennies are

thrown into it they are floated up and easily recovered. Once there was a tourist who risked a shilling; but he was an American. His recklessness was properly punished, for the shilling rested on a ledge of rock. It is still to be seen, about twenty feet below the surface. Several visitors, tempted rather by bravado than cupidity, we may well suppose, have attempted to secure that shilling. But none can dive so far. The water throws them up again, as it does the paddles, the pennies, and other light coin. When we returned to the mouth of the river the billee was boiling, and the Maori and their dogs helped us to consume the abundant eatables which our host of the Geyser Hotel had packed in the luncheon-basket; with the pleasant addition of English watercress, which we had pulled on our way down stream.

Pater went up the bank, beyond a bend in the river, to take some photographs. He was a little disconcerted to gather, from the noise of splashing, interrupted by shouts of laughter, that we were following in a Maori canoe but without our native boatmen. Two young New Zealanders who had joined our party had good-naturedly offered to paddle the canoe; but they knew very little more about the cranky craft than we did, and couldn't make it keep its head to the swift stream. It took us a long time to reach Pater, but we skimmed back in a few minutes.

Tikiteré is a weird spot eleven miles from Whakarewarewa—mud-geysers, boiling pools, steam and sulphur fumes. But we were becoming accustomed to these phenomena, and were not frightened even when we passed through the 'Gate of Hades'—a bridge of land between two boiling lakes. Several carts were employed in removing sulphur, and the place does not smell nice; but we were very much attracted by the

wharé of our guide, a Scotchman. He receives patients who wish to make use of the mud-baths. These baths do not look inviting, but Nature seems to have intended them for use, for she has made a waterfall on the warm stream close by. Beneath this the bather sits when he comes out of the mud. Despite the sulphur, we were tempted to stay in the reed-built house for the sake of sleeping on its beds of fern, covered with matting, and of seeing our cooking done in holes in the ground. Beautiful bush too reaches almost to the house, and hidden in it, about a mile away, is the most exquisite green lake. However frequently we describe the ferns and creepers, we leave the half untold. Walking to the lake, we passed beneath arcades of the silver tree-fern; parsley ferns covered the ground with their feathery foliage; while bold fronds of hart's-tongue draped the mossy trunks of the forest trees.

Near to Tikiteré we saw a striking group—a much-tattooed native on horseback, carrying a bunch of shark's teeth on his breast, was talking to a woman who wore long green-stone pendants in her ears. Throughout almost the whole of Polynesia a bunch of shark's teeth is the royal gift with which every important mission is announced; while green-stone was the coveted spoil which lured the Maori to their wars of extermination in the early part of the century. Even in recent times it has often happened that a chief on receiving fifty or a hundred pounds for his land has immediately exchanged it for a green-stone meré (a short sharp-edged club). The tattooing interested us as much as the ornaments. In old days every spot on the face, even the eyelids, was tattooed. The general effect may not have been pleasing from our point of view, but the pattern was artistic and carried out with extraordinary skill. The young men have entirely

abandoned the custom, but all native women when they marry are still tattooed round the lips.

We could not leave the district without attempting to visit the scene of the Tarawera eruption. Wherever we went we heard tales of that awful night. Gaunt trees which had lost their side branches under the weight of mud, and land covered with 'cinder,' even near Rotorua, still bear witness to its violence. 'It reached its height,' an inhabitant of Rotorua told us, 'about two o'clock on the morning of 10th June 1886. The night was clear, with a sharp frost. Word ran round Rotorua that the peninsula on which the town is built was sinking. We all took to our heels, leaving our houses and stores open, and our valuables just where they were. Had there been any one who was not too frightened, he might have made himself rich. My companion lost a shoe, and was for stopping to find it. "You had better save your life," I said. When we reached the high ground we could see that, whatever might be happening, it was at some distance from Rotorua. By this time too a fierce wind had sprung up, which carried the ashes and mud towards the east, and away from us. So we went back to our homes and waited until daylight, when we organized a relief party for Wairoa.'

The days were short and the weather stormy, but we determined to reach Wairoa, even though we could go no farther. It was quite an exciting expedition. Mater didn't come, but we and Pater had three great coach-horses, excellent goers. The kit with the lunch was strapped to Filia's saddle, and each horse had a lariat twisted round its neck. We felt like bushmen as we cantered down the road; especially when we found that the three dogs, 'Bully,' 'Foxy,' and 'Wolf,' who had accompanied the horses to the hotel, declined to leave

them. The first part of the track was not very bad, although carried away in places by the recent rains. The hills are everywhere covered by the soft earth thrown up from Tarawera. This has gradually settled down into the valleys, where it forms a deposit from ten to thirty feet thick. The brooks cut into this soft earth, making miniature ravines, and wherever the path goes near their edge it is liable to landslips after heavy rain. We had to be very careful, and several times we were obliged to make a considerable *détour* to avoid a new side-gorge which had recently appeared. It was a curious illustration of water-action on a small scale—a sort of ten-year-old Colorado cañon. Presently we entered the bush, where we were obliged to shelter for a long time, on account of the rain. The so-called robins—small grey birds, with white bars on their wings—were much interested in us and our lunch, almost alighting on our horses' backs. The tui, or parson-bird, which owes its name to the two white feathers which hang like bands beneath its throat, called to us from the wood. As soon as the weather cleared we pushed on as fast as we could. The path skirts the Tikitapu lake, before the eruption blue as sapphire, but now opaque like milk. It is still cloudy, but the pumice is settling, and it is regaining its blue tint. Presently the path became very bad. We had to cross gullies blocked with great boulders a foot or two across, which had been exposed by the mountain torrents. No one would have asked an English horse to pick his way among these stones, but we supposed that New Zealand horses could go wherever we could. However, Filia's horse, when it had climbed to the middle of one of these boulder-heaps, declined to risk its limbs by going farther. We had to leave it tethered. Presently, at a still worse place, we were

obliged to tether the other horses. So we started for the last two or three miles on foot. But our troubles were not over yet. When we reached the stream which drains the Tikitapu lake it was in flood. There was no time to lose, so Pater waded in, and, finding that he could cross it, carried Filia over first and then returned for Puer. At the next stream the bridge was standing, although covered with three or four feet of pumice and earth. Next we passed the old water-mill half-buried and looking very picturesque. Then we noticed that we were in the middle of the village, almost walking over the roofs of the wharés which just emerged above the ground. All the wharés collapsed on the night of the eruption, except the one belonging to Sophia, the guide, which was stronger than the rest. Sophia stood at the door calling to the people to take shelter in her house. When once the walls were embedded in earth the roof was able to resist the weight which rested on it, and about forty people were saved. The hotel is surprisingly little altered. It looks as if, any day, one might ring the bell and take up one's quarters there. The iron roof is almost intact and most of the glass in the windows unbroken. It was here that the only tourist lost his life. He had been calling to the people about him to listen to the reading of the Bible and prayer. The balcony was chosen as being the safest place, but, unfortunately, it was the one part of the house to be crushed.

It was an awfully lonely spot this wet autumn afternoon. We knew that no human being was nearer to us than Rotorua, some fourteen miles away; for there is nothing to bring the colonists into the district, and since the eruption it has been 'tapu' to the natives. Tapu, taboo, that strangely comprehensive term which rules all the islands of the Pacific Ocean, meaning

everything, from appropriated (set apart for the chief's use) to sacred, on the one hand, and accursed, on the other. On the altar-cloth in the little Anglican church at Rotorua is embroidered 'Tapu, Tapu Rawa': 'Holy, holy in the highest degree.' Wairoa is tapu—devoted to the spirits. Pater had pushed on to get a view of Tarawera. Despite our British pluck, we felt the uncanny influences of the place. The hotel, silent, paralysed, but life-like. The mill, motionless, smothered in earth, as if the spirits had stifled its merry song beneath a heavy pillow. The weeping willows, which had already taken possession of the soil, were hanging their dripping tresses over the buried wharés. A spell was on the place. We wanted to break the silence, to make some sort of noise, to shout or clap our hands, but we did not like to. Suddenly there was noise enough: a rushing of hoofs, a yelping of dogs in pursuit. The chase was coming straight for the place where we stood. In a moment three wild horses burst from the bushes with our three dogs at their heels. They passed close to us as they swept up the valley, amongst rocks, over holes, across brooks, through the bushes and out of sight. When we saw them again two other horses had joined their comrades. Our pack now held five in pursuit. Startled by the noise, Pater had returned to us. We whistled and called, and called and whistled, but all in vain. If the dogs heard they paid no attention. What were we to do? We did not like to leave them behind; perhaps to find their way home, but more likely to reinforce the army of wild dogs which is already a great nuisance to sheep-farmers in the semi-desert portions of New Zealand. However, it was already four o'clock and we could wait no longer. Horses and dogs were out of sight. We started for home;

when, whether by pure chance or because the dogs had a plan of campaign we could not guess, the horses were 'rounded up' within a few yards of us. By this time the dogs were so much out of breath that they could run no more; besides, they had done their duty: it was for us, if we wanted the horses, to do the rest. So they fell to heel when ordered, looking hugely pleased with themselves, even to little Foxy, who was covered with blood from a kick on the jaw. When we regained our mounts, Puer took the lead, with directions to push on as fast as was safe, and to give us warning of bad places in the path. Filia, who had the slowest horse, came next; while Pater's fiery steed had to be content with bringing up the rear. In this order we made such excellent progress that we cantered into the hotel-yard before it was dark, to Mater's great relief.

We were not near enough to see it, but we were told that a great cleft extends along the sky-line of Tara wera from the farthest peak right down into what was once Rotomahana, the 'Warm Lake,'—a cleft eight miles long by about 1,400 feet deep. Stones, pumice, and dust were thrown out of the mountain. The cloud of ashes rose to a height of about eight miles, and was carried by the wind towards the east coast, hiding the sun from view until after mid-day. When the fissure which began in the mountain extended into the Warm Lake, the mud which covers Wairoa and the country towards Rotorua was ejected. All the marvels of this district, which attracted many a traveller to New Zealand, have completely disappeared. Since we came home several friends have asked us, 'But are not the terraces being re-formed?' Such a restoration is out of the question. The White Terrace is buried beneath forty feet of earth. The site of the Pink

Terrace is engulfed within the fissure. Similar formations which are growing up in other parts of New Zealand may be ready for the travelling public of a thousand years hence; but experience teaches that it is far more likely that long before that time the water which deposits the silica will change its course. By the destruction of the famous Pink and White Terraces lovers of the beautiful in nature have suffered an irreparable loss.

We might have taken the train from Rotorua, but we preferred to drive for the sake of the forest which lies between Rotorua and Okoroire. We were very much impressed with its beauty. All the trees are evergreen. Their leaves are smaller than those of deciduous trees. Often their foliage is feathery. The autumnal bush presented a great variety of tints, and when seen from a height or across a gully, the play of light and shade, the softness, the delicacy, were indescribable.

The most noticeable feature of a forest in New Zealand is the prevalence of parasitic plants. It resembles a tropical forest in this respect. Sometimes the epiphytes are more numerous than their hosts. Every fork and cleft is occupied by great tufts of flag-like leaves, orchids, ferns and the New Zealand mistletoe, which bears crimson blossoms. The tough, cord-like stems of creepers hang from the branches and trail on the ground; while the great iron-wood tree itself, the rata, commences life as an epiphyte. A seed is dropped in a cleft near the top of a tree; it germinates, and the seedling lives for a time on the vegetable mould left in the cleft by ferns and orchids. As this supply becomes exhausted, the rata feels for the ground with an aerial root. Side branches are given off from this root, which bend round the trunk

of the host-tree, embracing it with a perfect ring. Other roots descend and fresh rings are formed, until the host-tree is often completely hidden from view. At last it decays, and its place is taken by an iron-wood tree, which may be a hundred feet in height and ten feet or more in diameter. It is very curious to see the skeletons of the ratas after a forest fire; the partially decayed host-trees are often burnt out, leaving the limbs and ribs of the rata intact. They look singularly foolish, grasping the empty air.

As we neared Okoroire we met a Maori, who seemed to be trying to induce his horse to sit down in a furze-bush. Holding a rein in each hand, he was leaning upon them with all his weight. His imbecile smile showed him to be drunk, and we wished we could do something for the horse—a beautiful bay. As we passed them the rider rolled on to the ground, while the faithful steed stood over its unworthy master, ready to puzzle its poor mind in trying to interpret his contradictory orders so soon as he should rise. Pater wanted to get down, to take the saddle and bridle off the horse, so that it might be free to stand away from its master when he tried to mount; but our driver said it would be unwise—some more Maori were coming over the hill.

There are hot springs at Okoroire, and a pretty waterfall. The hotel is much resorted to for fishing, as the river is well stocked with Californian trout. The only fresh-water fish of any importance native to New Zealand is a kind of eel, which often attains an enormous size. It was until quite recently a zoological puzzle, for the same species is found in the West Indies, in China, and in Europe. Was it a fresh-water fish which made sea voyages, or a salt-water fish which easily adapted itself to a fresh-water life? The mystery

has been cleared up within the last few years by the discovery that all eels when fully adult—which probably means when ten or eleven years old—make their way far out into the ocean, where they breed. The old eels never return, but an infinite number of tiny elvers, after passing through a larval stage, make their way to inland waters. By the chances of ocean currents these little voyagers discover every part of the world.

Although the native fish were few in kind and number, all imported fish except the salmon have thriven amazingly. Trout feed largely on young cray-fish, and the Maori of Rotorua complain that their favourite food is growing scarce. But we were told that if they do not net so many cray-fish they catch great quantities of trout.

We went through to Auckland by train. As soon as we were installed at an hotel Pater walked over to Epsom, to call upon Captain Colbeck, and we received a fresh proof of the width and depth of colonial hospitality. Having heard from his son, whom we knew in Cambridge, that we should probably visit Auckland, Captain Colbeck had postponed his visit to his 'station' for six weeks after the usual time. Nothing would satisfy him but that we and all our belongings should at once migrate to his house, and from the moment we crossed its hospitable threshold we were planned for and amused to the utmost of the country's resources.

Of course, the first thing to be done was to ascend Mount Eden, 'the most perfect crater in existence.' Its regular grass-covered cone might have been made as a model of a volcano. Its cup is as round as if turned on a wheel, and the rim is perfect except for a chip on its north-west side. Most remarkable of all, the old funnel still affords drainage, so that no water accumulates within the cup.

From the summit of Mount Eden we had a very beautiful view over the eastern and western gulfs, which so nearly bite the island in two. They leave an isthmus only eight miles wide. The Hauraki gulf is studded with islands, many of which are perfect cones. We could not help thinking that if the moon were green and fertile its landscape would resemble that around Auckland; for more than sixty extinct volcanoes were in sight. The city lay on the isthmus at our feet—a city of 100,000 inhabitants; not a large population for the largest town in New Zealand, but far too large! Although it is not so noticeable in New Zealand as it is in Australia, it is still remarkable that in a new country teeming with natural wealth so great a proportion of the population is congregated in the towns. They are busy making knives, boots, clothes, and other things which can be made better and more cheaply elsewhere; while they own wealth untold locked up in the rocks, the forests, and the pastures. It is very much as if a market-gardener were to leave some of his ground untilled because he was determined to set aside a portion of his time each day for making tools and working at his loom. 'I can sell you a better spade and better cloth than you can make,' you say to him. 'Yes; but I like to be independent.' 'So you would be,' you answer; 'if you were to utilize the untilled piece of your garden, you could, in the same amount of time that you now give to making tools, grow vegetables which you would sell for more than the tools would cost. You would, therefore, really get them more cheaply than you do at present.' 'I don't like to see money go out of the business,' is all he will say. It seemed very simple as Pater put it, but he tells us that the political economists of New Zealand have a great difficulty to contend with. The

New Zealand Government has borrowed or guaranteed loans to the amount of about £80,000,000 sterling. This amounts to £80 for every man, woman, and child in the islands, for the population is only one million. The interest on this loan amounts to more than two millions. A large part of the capital has been used in making railways, and other productive undertakings, but a huge sum remains to be raised in taxes. New Zealanders are justly confident in the resources of their country. The capital laid out upon its development is sure to come back in natural wealth—wool, mutton, gold, timber—unless too much money is wasted in developing local industries, in manufacturing goods at the cost of the searchers for natural wealth. It is those who wear the clothes and use the tools—the gold-miner and the sheep-farmer—who have to pay the difference between the cost as it would be, if they were imported duty-free, and their cost when made in the colony. It is they, in other words, who have to support to artizan population of the towns.

The interest on the public debt is raised most easily by heavy duties; but the Government of New Zealand has many economic puzzles beside the need to raise the interest without annoying its constituents. The latter problem occupies the attention of all rulers. No one likes to pay down a sum of money for taxes; although we never find out that the Government has charged the brokers fivepence on every pound of tea we drink, or threepence half-penny on each ounce of tobacco we smoke. The Government of New Zealand is very democratic and unusually anxious to please the people, and it finds in consequence that sometimes unfair advantage is taken of its good intentions. We lunched at a little seaside place called Howick, where we saw a pier and heard a tale. The pier is Howick's

pride. Not that the residents use it; they regard it as an ornament to the place. Besides, they 'scored off the Government,' which seems to give them pleasure. They feel that now they are no longer less favoured than other places. Neighbouring towns had their roads and bridges, but nothing had been done for Howick. So, in season and out of season, Howick's member represented that what Howick wanted was a pier. With a pier Howick would soon become a thriving seaport. When we saw it, the pier, although very clean and pretty, was absolutely deserted. £1,500 has gone into the pockets of the local carpenters, but the farmers still prefer to send their produce by cart to Auckland. Yet the pier is not without its destiny, for the friends of the single local fisherman, who were often apprehensive when they saw him embark with a billowy gait, now comfort themselves with the reflection that he only goes out in a boat when he is sober. Usually he fishes from the pier. A considerate Government has even placed a rail along its side.

When our kind host asked us on our arrival, 'What is it you most want to do at Auckland?' we answered without a moment's hesitation, 'To see a kauri forest.' 'You shall see one if it is possible,' said the gallant captain, and we wondered at the 'if.' It is so easy to plan excursions on paper! Pater intended to secure a carriage and to traverse the peninsula to the north of Auckland as far as the Bay of Islands. We found that this was practically impossible now that the rains had spoilt the roads. But to the Waitakerei bush Captain Colbeck said that we should go, if horses could be found to pull us there. Early in the morning a light wagonette, drawn by four handsome, high-spirited browns, appeared at the door. Mr John Colbeck was to be our guide, and Miss Colbeck also accompanied

us. With so light a load it looked as if the horses could have trotted up Ben Nevis, and 'not a sob the toil express'; but we found when we got on to, or *into*, the heavy clay of the bush road that all their strength was needed. The kauri grows only on heavy, unfertile clay. It was only by a piece of extraordinary luck that our excursion was not brought to an end several miles before we reached the kauris. A traction-engine was trying to haul itself along the road by the tedious process of attaching a steel rope to the trunks of the trees and winding it on to its wheel. The road was too soft, and its fire-box was deeply sunk in the mud. By a most fortunate chance, it had come to a standstill at the one spot where it was possible for us to make a *détour*. A stalwart young fellow was in charge of the machine. To our surprise our friends greeted him familiarly as 'Charlie,' and explained to us afterwards that he is well known in Auckland society. What a blessing it would be at home if all the young men whose arms and legs are more useful than their heads could find occupation in the open air. We can fancy the pleasure that some of our friends would take in a six weeks' contract to haul timber in the New Zealand bush. Wouldn't they sell their bicycles, buy an engine, and use the office stool as fuel! Our camping-place was in a bend of a little river. All set to work to collect dry wood. A fire was soon blazing, the billee boiling, and lunch spread on the grass. After lunch we walked to the mill, where the foreman conducted us along the timbered 'slide' to a giant kauri whose grand proportions have spared him from the fate which has overtaken the other conscript fathers of the forest. He is a noble fellow, thirty-seven feet in girth and sixty feet to the first branch, as smooth in surface and uniform in diameter as a Doric

column. It is the regularity of the kauri trees which impresses one most. They look as if made for the express purpose of affording timber. The foreman estimated that this tree would yield 40,000 feet of timber; and it is by no means the biggest in the forest. $\frac{C^2}{4\mu} \times L$: it does not seem to work out, but we must wait to check it until we get back to the home of mathematics. And it is wood without a flaw. How it puts the knotty Norway deals in the shade. The trunks of these kauris look like colossal Wiltshire cheeses, and as the circular saw spins through their hard, durable, yellowish wood, it leaves as clean and uniform a surface as if it were cutting cheese.

The kauri trees are made for timber, but, unfortunately, Nature takes a long time in their production. It is estimated that the really useful trees are, at least, a thousand years old. We cannot hope to see fresh plantations growing up after the present forests are destroyed, and their destruction will soon be accomplished; for the kauri is not only useful as timber, the gum which exudes from it and collects in the ground is also a most valuable commercial product which is easily obtained and put more quickly on the market. Much of this gum is dug out of ground where no kauri trees grow at present, but it is also found beneath existing forests; and, either by accident or design, fires spread from the diggers' camps, destroying every year great quantities of most valuable timber. The value of the gum exported every year exceeds £400,000. It is used for making varnish. Several thousand diggers gain their living by searching for it. They seldon make less than thirty shillings a week, and the more fortunate diggers make a good deal more.

We could have lingered for a long time in the kauri

bush. The heads of the trees are strangely small for the stems, and nearly flat. Their small glossy opaque leaves form a level canopy. Every kind of moss and fern grows in the sombre space amongst the columns; exquisite hymenophyllums, kidney ferns, and the curious climbing lygodium, the wire-like stem of which coils round the trunks and reaches to the tops of the tallest trees. It is tough enough to be used as cordage, and so resilient that bunches of its stem make a fair spring mattress.

We should have liked to camp in the bush, but our guides said that we must hurry away. As we approached the spot where the engine was stuck when we passed it on the outward journey we speculated as to the chance of its having moved to a place where our carriage could not pass it; but it was safe enough. The men were still digging out the clay in front of it, improvising a corduroy-road, hauling away at the wire rope; but the engine had not budged. Our driver thought it would stay there till the following spring. It was dark before we reached the hard, made track, and began to rattle over the last ten miles to Auckland to the soothing music of the horses' hoofs. Sixteen hoofs rattling on the road, in front of a light trap which hardly made a sound. Is any rhythmic noise more musical? Yes, the dinner bell at Captain Colbeck's, which rang soon after our return at 10 p.m.!

CHAPTER VI

ENCHANTED ISLES

NOW for a glimpse of enchanted isles!—a trip to the coral islands of the South Pacific Ocean! Even to the very spot, the very cave, which figures in Byron's *Island*, and is the basis of Ballantyne's book. What glowing anticipations the prospect conjured up! But first we had to get there, and it was not a pleasant voyage. Pater would not take our berths until he had seen the ship; so when the *Ovalau* arrived in port we made our way to the quay. 'She will do beautifully,' Pater said; 'a long, clean, yacht-like deck, open from stem to stern. We can place our chairs wherever we like, and make ourselves comfortable whatever the weather.' What a different scene the ship presented when we embarked in the rain at eight o'clock at night! She was loaded to the rail with timber. A sailing boat blocked the fore part of the deck. The crane was still busy hoisting in a miscellaneous cargo of cattle, pigs, sheep, and poultry. It was hardly possible to make one's way from the saloon steps to the smoking-room door. It looked as if the little ship could hold no more. But we were mistaken. Next day, in the Bay of Islands, she was filled to the hatches with coal, even to the baggage-hatch! The passage which leads from the kitchen to the saloon was blocked with coal, and the stewards had to carry the dishes along the deck. A

fellow-passenger was very angry. 'Deck-loading is illegal, and we are sunk a foot below the water-line.' 'Isn't there a Board of Trade Inspector at Auckland?' Pater asked. 'Oh, yes there is; but we daren't interfere with the Union Company. He would lose his billet if he did.'

Next morning we breakfasted merrily from the mullet which Puer had caught while we lay in the Bay of Islands. An excellent fish, which might be mistaken for salmon except for the colour of its flesh, which is white, instead of pink. But after breakfast the aspect of things began to change. It was blowing hard on our starboard bow. Her weight kept her steady in the water, but we thought of what had been said about the overloading of the little ship. The gale increased until it was almost a hurricane, which made a regular circuit of the ship until at the end of three days it began to lull on the port bow. When the *Alameda* picked us up at Samoa we learnt that the wind-gauges at Auckland had recorded a higher pressure than at any time during the last ten years. Several ships had turned round, and run before the gale, but our captain kept the *Ovalau* up to her work. 'I had four feet of water in the engine-room,' said a captain whom we met at Samoa. 'I had four feet most of the time on deck,' replied Captain Crawshaw; 'but not a drop in my engine-room.' How tired we grew of holding on, whether in our berths or out of them! Even then we did not escape without bruises. Before the anchor was dropped in the lee of Tongatabu we almost sympathised with a fellow-passenger who said, 'When the storm began I feared the ship would go to the bottom, but long before it was over I feared she wouldn't!'

At daybreak we made our way along the very difficult channel through the reef, and brought up against

the little pier in front of Nukualofa. Off went Puer in pursuit of butterflies, accompanied by several natives, who took the greatest delight in the sport. The magical 'poison-pot' was a source of interest, and Puer found it difficult in the absence of a common language, to prevent them from sniffing the air which the pot contained, and trying otherwise to ascertain how it was that the butterflies went to sleep without a struggle. After an hour of butterfly-hunting, Pater borrowed a buggy from a trader—every one was very friendly—and we started for a drive along the shore. Tongatabu is twenty-two miles long, the largest of the islands. It is flat, and only just above the level of the ocean, whose waves would soon sweep it away were it not for the barriers of coral which surround it, and to which it owes its existence. As we made our way along the shore, the view was as coral-islandy as anyone could desire. The track wound beneath an avenue of cocoanut palms, which bordered a white beach, beyond which the blue water on the reef presented a surface as smooth as a mirror. Half a dozen little palm-covered islands, looking like baskets filled with ferns, lay upon its surface. Arms of land stretched out towards the islands, creeks and lagoons ran into the land. The creeks were fringed with low-growing banyans, their glistening leaves making them resemble a bank of laurels, the exposed and twisted roots on which they rested looking like a long row of eel-traps or lobster-pots. Little seedling banyans stood up from every block of coral, and all—islands, palms and banyans—were reflected in the still blue water, so that one could not tell where the sea ended and where the land began.

We crossed two or three creeks, and might perhaps have reached the islands had our driver been bold

enough to trust our fortunes to the two or three miles of shallow water which intervened. But he was cautious, being an amateur; afraid of jerking off a wheel against a clump of coral, or of wandering into the sea along a shoal which he might not be able to find when he wanted to return. So we made our way back to the town, and turned down its quiet glades. The smooth turf which separates the houses was not cut up into roads. The houses were oval, their walls formed of palm leaves plaited in a characteristic overlapping pattern. They were covered with heavy beehive roofs of thatch. Most of them were shut close, but in some a group of people were to be seen taking a meal. Tapa-beating, the only kind of work which was being done, was carried on in open sheds. The soft, damp bark of the paper-mulberry (*Broussonetia*) is laid over a log of dark polished wood about six feet long and supported on wooden feet. The mallet is a short square club, with ridges or goffers on the under side. Each beat marks the bark with ridges, and a succession of blows spreads it out, giving it a fibrous, cloth-like texture. Many strips of bark are beaten together, their union being effected by a kind of gum, until the tapa is of the required length. When the cloth is dry it is ornamented with ingenious geometrical patterns in yellow, brown, or black. It is very tough, and resists both rain and sunshine in a wonderful way.

The log upon which the tapa is beaten is peculiarly resonant, and the musical clang of the mallets gave to the village a cheerful sound of life. The women make the tapa, but it is light work. They are well treated throughout Polynesia, being in every sense the companions of the men, enjoying in this respect a position very different from that of the poor slaves of the more

westerly (Melanesian) islands, the women of many Malay tribes and of the Australian natives. Both men and women are remarkably fine specimens of the human race—taller, stronger, and handsomer on the average than any European population. They would be very handsome were it not for a mistaken ideal of beauty which induces the parents to flatten the children's noses, instead of pinching the bridge, as an old-fashioned English nurse would do. Their skin is a bright brown, and singularly free from blemish, spot, or wrinkle, except such wrinkles as become their laughter-loving natures. We sympathised with the indolence of the inhabitants of this Garden of Eden, who live at ease, without needing to make the least effort to supply even the necessaries of life. It was the same in all the islands we touched at. No self-respecting native works for more than ten minutes in a day. Nature supplies his wants without human urging. A few minutes' occupation in the early morning suffices to collect the bread-fruits, plantains, yams, and pine-apples needed for the day's supply. If he hungers for animal food, he spears fish on the reef, which is rather a pastime than a labour. If he does not care for this exercise, he has only to catch the little black pigs which run about squeaking, 'Come eat me, if you please.' As we picked oranges from the buggy we felt that we were only defrauding these overfed little rogues, into whose mouths the fruit was about to fall.

The traders want the natives to make copra, the one product of the islands. The smell of rancid cocoa-nut informed us when we were near a drying ground. Ripe cocoa-nuts are split and left on a platform to dry in the sun. When the kernel has shrunk it is turned out of the shell; then it is broken into small pieces,

which become almost transparent from the oil they contain. When perfectly dry the copra is ready to be stowed in the holds of the brigs which come from England and America. Its further fate is complex. The oil is used to fill the grease-boxes of railway carriages. The fibrous substance is either given to cattle as 'cake' or to little English children as 'coker-nut rock.'

The traders find it very difficult to induce the native to make copra. Why should he? He doesn't want the money. We looked into the traders' windows and took stock of the baits with which an attempt is made to induce the native to swallow the hook—to give up the Garden of Eden and to take upon himself Adam's curse. There were Manchester cottons,—tapa is equally serviceable; bright-coloured silks,—they are not to be compared for beauty with the gorgeous blossoms of the scarlet hibiscus, which every woman and most of the men wear with the stalk tucked behind the ear, or the leaves and fruit of the pandanus, with which they make their 'titis,' or girdles. There were Lubin's scents; but why use essences when frangipanni and orange-blossom are growing wild; even supposing that the Polynesian had not an inherited preference for smearing his body with rancid cocoa-nut oil? There were stores of planks and sheets of galvanized iron, and, unfortunately, an ugly little wooden house has seemed to some of the natives to be preferable to their picturesque, cool, and otherwise suitable huts. There were cooking utensils; but the native prepares the bread-fruit for breakfast by placing it while still in its thick green rind on the top of a little fire made of cocoa-nut husks; and he still barbecues his pigs in a hole in the ground. Very oddly, all Polynesians are ignorant of the art of making pottery, which is known to races far inferior to themselves in other respects.

They all have traditions of having travelled, ages ago, from their primitive home, and it seems likely that the art of making pottery was lost during their travels. The coral islands on which they landed do not afford suitable earth; the universal cocoa-nut prevented them from feeling the loss of the potters' art when they needed cups or bowls. Lastly, the traders' shop-windows contained an assortment of odds and ends—hats, umbrellas, spectacles, and everything else that in the traders' estimation the native ought to want. The native is almost criminally simple in his tastes; but we sympathised with him. His exquisite cleanliness is better than a parade of clothes. His constant discussion and the recital of passages of Holy Scripture is a good substitute for reading; therefore, he does not need spectacles to decipher print. A banana leaf is as useful a sunshade as a cotton umbrella, and causes no heart-burnings when it is lost!

There is, however, one article of trade which is always in demand. 'I never make a trip without a new pulpit amongst my cargo,' our captain said. 'I cannot think how it is they wear them out so fast.' The Tongans are all Christians and earnestly religious. Their conversion was due to a Wesleyan Mission, but now there is a Tongan State Church, from which a rival free Church has already split. King George I. separated from the Wesleyans and established an independent Church as a stroke of policy. He saved in this way the heavy subsidy which he was paying to the Wesleyan Conference. There is at the present time only one white pastor in the islands.

In Nukualofa there are several handsome churches. One stands in the grounds of the king's palace. The palace would be suitable as a villa on the banks of the Thames; it is out of place on the edge of a lagoon.

Still more unsuitable are the heavy furniture and the thick carpets which have taken the place of the exquisite grass mats, which used to be the most valued possessions of a great chief. Several other churches and chapels are scattered about the town, but the only one which merits attention belongs to the Roman Catholics. Whoever designed it was a man of taste and culture. It is built of blocks of dark grey coral in the Norman style—a dignified building, cool and solemn. Near the church is the graveyard. A cross or pillar of wood or coral stands at the head of each grave. The graves are covered with flat dark stones. Twice every moon the natives re-arrange, clean, and oil the stones; a touching way of keeping alive the memory of the dead.

We heard a good deal about the 'Missionary Question' on our trip. It was always approached by the traders in the same offensive tone. 'When a fellow says, "Me Missionary man!" I know he will steal my things,' a trader said. The traders are full of contempt for the Christian natives because they lie and steal, or, so they say. They hate the missionaries because they teach the native how to protect himself against the lying and cheating of the traders; and they attribute all the native's shortcomings to the futility of Christian teaching. It is the same story wherever there are missions. They are opposed and maligned by the traders. Tales, of which some, no doubt, are true, although perhaps highly coloured, are told to travellers and find a place in their books, but it seems to us easy to detect the prejudice with which they are told. Missions spoil trade, because an eye is kept upon malpractices; but what annoys the trader more than this, they spoil *life*: they introduce notions of morality into these far-away retreats. The white men of the Pacific

like to live 'where there ain't no Ten Commandments And so, instead of the missions receiving credit for the conversion of cruel cannibal nations into some of the most gentle and law-abiding people in the world, they are blamed, because the natives are not so much better than the inhabitants of our own, or any other European land, as they would be were they truly Christian.

On one of the smaller islands of this group there lives a priest who for fifty years has been the devoted minister of his people, without receiving any allowance from France, his native country. This shows the extraordinary advantage with which the Roman Church faces mission work. A pastor with a wife and family may do good by setting an example of domestic life, but usually he is between the horns of a dilemma. Either he must, to a certain extent, spoil his work by keeping his children apart from native life, must import luxuries for them from Europe, and must save money to send them home when the climate tells upon their health; or he must sacrifice his family to his work, allowing his children to live in conditions which may not be good either for health or manners.

There is one respect in which the natives show great good sense in copying the missionaries rather than the traders—they do not drink. It was very hot in Tongatabu—unusually hot for the season, setting the residents agasp. In our enthusiasm we did not notice the heat until about three o'clock in the afternoon, when we sought shelter in the 'International Hotel.' Wherever there is one white man a second arrives to open a bar. In the saloon were three traders—two English and one German—all equally drunk. We were glad to retreat from their maudlin friendliness to a cool and pretty room upstairs. On our boat a lady

was returning with her little daughter from a visit to a hospital in New Zealand. They were on deck at daybreak radiant and expectant, but as we neared the pier we saw a cloud pass over the lady's face. Her two boys met her with their little dog, but not her husband. He was at home—if the dear name can be given to the house as he had made it during the six weeks for which it had been left without a woman's care—deep in delirium tremens, only kept from injuring himself, we were told, by his two little boys and the friendly natives.

It is an unpleasant subject, but we saw so much drinking on our short trip that it made a great impression. Pater heard stories too which showed that Stevenson might easily have obtained materials for several other sketches like the *Beach of Falesâ;* but these he says he has forgotten. If it had not been for the extraordinary watchfulness of Captain Crawshaw, who added to his other duties an almost paternal care in guarding us from anything which might annoy or shock us, the trip would have been unpleasant, instead of yielding us vivid delight. Captain Crawshaw tried to avoid lying in port at night; but the Fates, admirably supported by native indolence, were against him, and several nights we lay at anchor. This gave the traders their one chance in a month of an iced drink, and they filled up our little saloon when they could find their way there. One tall man on reaching the stairs murmured, 'Place so full of mirrors, can't see where I'm going.' There were no mirrors at all. So an officer promptly told him that the saloon was at the other end of the ship, and helped him back into his boat before he discovered his mistake. The company in the saloon observed the barbarous colonial custom, now happily almost extinct in the colonies, of 'shout-

ing for drinks.' Pater went down to get us some lemonade. During the few minutes that the steward kept him waiting he was twice asked by total strangers to 'say what he would take.' When a man 'shouts for a drink' it means that he gives the barkeeper orders to supply the company. Then he naturally stays on until he thinks that he has got his money back through other men's shouts.

The worst story of all was told us by a man who for a time was schoolmaster at Vavau. Soon after his arrival he was invited by two traders to help them despatch a dozen bottles of beer which had just arrived. About midnight the beer raised a craving for stronger drink. Two bottles of whisky were produced. These finished, the schoolmaster tried to go home. He reminded his friends, who were also his employers, that he had to teach their boys and girls in the morning, for he was engaged to teach the white and half-caste children. 'Oh, nonsense! your work doesn't begin till nine; we have to be at the office by six!' So he could not escape until he had seen them subside on the floor under the influence of a bottle of rum! We could believe the story, extravagant as it seemed. A commercial traveller on board the boat was very anxious to do business with two traders at Lefuka. Last time he came they were lying drunk in the middle of the road. Again he failed. They were at their stores, but not in a condition to attend to business.

There would soon be an end to the native race if they followed the example of the Whites. We wonder that King George II. does not exclude alcohol from his dominions. Those who live in the Tongan Islands must live under his laws. If he banished alcohol the character of the white residents would be changed as

if by magic. What a paradise it would be to retire to when age demands warmth and peace!

After butterflies, stamps! Precious stamps: perhaps the most valuable product of the islands. The venerable George I., whether son or grandson of the great Finow we did not ascertain, had his effigy printed in New Zealand, ordered a modest supply of copies, and imported a white postmaster. Why order many copies for so small and unlettered a state? The king had only the good of his people at heart when he made arrangements which enabled his own subjects to write to their relatives in Samoa and Fiji, and gave to the 'papalangi' facilities for sending their orders to Manchester mills. The simple-minded monarch little knew that stamps are often more useful when they cannot be used than when they can be. He had never heard of the bibliophile who, finding that he possessed a book of which only one other copy was in existence, bought the other copy and burnt it. The first issue disappeared and had to be replaced by a new issue of different pattern.

In his fascinating account of the capture of the *Port-au-Prince* by the Tongans in 1806, a story which is as thrilling as *Robinson Crusoe*, and scrupulously true, Mariner, who escaped the general massacre and became a favourite with the king, tells us that Finow laughed at him when he tried to explain the nature of money. 'Do you mean to say that the papalangi turn things into money? It is very selfish of them,' the untutored cannibal remarked. 'If a great chief has yams or bananas which he cannot eat, he should give them to smaller chiefs or to poor people who have not as many as they want; not turn them into money and put them away in a box.' Could King George of Tonga foresee that his stamps would be pounced upon

by collectors and packed away in albums? It was not for that he had had them printed! The present King George II., educated at Sydney and Auckland, has had his likeness reproduced, but the portrait is not so handsome as the original, and so this issue also is to die out. Only the 2½d., 5d., and 7½d. stamps are on sale at the post-office; nevertheless, we succeeded in purchasing a set complete from the beginning, which the postmaster kindly postmarked 'Nukualofa.' Best of all, we obtained a second series, marked G. F. B.: 'Gane Faka Buleango'; for the king, having learnt the ways of other civilised states, supplies his officials with stamps inscribed 'On His Majesty's service.'

To these stamps there hangs a curious story which was told us in Samoa. We give it for what it is worth, it being well understood that we were travelling for pleasure and not as detectives. We had no opportunity of ascertaining whether the story is true or false.

King George I. had as prime minister a man named Baker, and some think that Baker endeavoured to serve the old king well. It is certain that he greatly increased the royal revenues, while incidentally he made for the prime minister an income worthy of the office. He carried out various reforms, and, amongst other things, he introduced something like regularity into the customs and postal departments. This gave offence to the traders, who liked to 'square the customs,' and to sit and smoke on the post-office table. So they abused Baker, and refused to drink with him. Their animosity even extended to his subordinates. The head of the post-office was a man named Campbell. He tried to carry out his instructions, and, therefore, fell beneath the odium which attached to the prime minister. The traders

called him a fool, a weak-minded person, a tool, a creature of Baker's!

The reformers might have stood against the traders, but, unfortunately, the king provoked the antagonism of a much more powerful party when, for the reason already stated, he decided to sever the connection between the Tongan Church and the Australasian Conference. All manner of accusations against Baker were now poured into the ear of Sir John Thurston, Governor of Fiji. It was even alleged that Baker drugged the old king, who was said to be growing imbecile. This was probably untrue, although the prime minister was an arbitrary man, who needed for the country's good to control the generous impulses of his master—for all allow that King George was a most kind-hearted man. There are queer stories of the ways in which the monarch was managed by his minister. The Governor was convinced that these innuendoes and allegations rested on a substratum of truth, and by his advice a man-of-war was sent to the islands and Baker was deported. By this act Great Britain established a very practical protectorate over the islands. She protected them against one of her own subjects. When the prime minister had fallen, an effort was made to drive out his subordinate, Campbell; and now we come to the history of our stamps. If the story which was told to us be true, they were stolen from Campbell's office in order that the auditor might find a deficit in his accounts. We fear we purchased stolen goods; but to whom do they rightly belong—to the king or to Campbell? Although we had no suspicions as to the honesty of the transaction until long after we had left the islands, we should like to make reparation, if we could make out to whom it is due; but our ardent stamp collector maintains that,

whoever may be the lawful owner of the stamps at their face-value, the unearned increment belongs neither to the king nor yet to Campbell, and it was for this we exchanged certain pieces of gold. He is inclined to argue: X stole stamps. If X had not stolen stamps they would have been used, a few would have found their way into albums, but most would have been lost. When X had stolen the stamps he had to hide them. By lapse of time they have attained to much more than their value as stamps for franking letters. It was by stealing them that X created their value, therefore the increment belonged to the thief; and since he, Puer, paid hard money for the increment, it is now vested in him, his heirs and assigns for ever. But Puer's arguments are always too many for his family!

We were told that there has been a good deal of peculation since Baker was deported, and our small experience seemed confirmatory. At Vavau we posted a letter to ourselves, addressed to Samoa, and paid the registration fee, but we did not receive it, nor could we gain any information, although we showed the receipt and made enquiries both at Samoa and San Francisco. It was put in the box long before the mail, which our boat was to carry, was made up. Our only loss was the stamps and the registered envelope. We had filled it with brown paper to make it heavy; so we had not thought it necessary to insure the contents.

When we returned to the ship we came in for a scene of which the kinema ought to have made a record. Genius of Donnybrook, but wasn't it hivinly! Two hundred Tongans, men, women, children, and babies, tumbling over one another in a grand heap of plantains, yams, kava-roots, green sugar-canes, and pigs. The hurricane of which we had experienced the

outskirts had swept over Haapai, destroying the plantations and causing scarcity of food. The inhabitants of Tongatabu were setting out for Haapai laden with supplies. Also a great Church conference was about to be held at Vavau, and many of the people were going thither with the intention of staying as long as the eatables they took with them would hold out. All the afternoon they had squatted contentedly on the pier, each little party surrounded by a pile of provisions, which always included a pig, lying on its side, with its four legs tied to a pole. Just as we came up, however, a strange idea had entered their heads. They had suddenly conceived the notion that unless they instantly deposited themselves and all their belongings on board the steamer they would not find places. Then followed a scramble! Amid shouts of laughter, they rolled over one another in their efforts to reach the deck. Baskets were thrown on board with no regard for the heads of those on whom they descended, and the pigs were handled as if they had no more feeling than the baskets. Their squeaks mingled with the chorus of laughter. Captain Crawshaw was squeezed up on his own bridge, from which he could not get down until the jolly ballyrag was over; and all this time he had fancied that he was unloading timber! We were very sorry for him, poor captain! For the natives there is no such thing as authority or order. All day they had been playing at getting out timber, laughing, chattering, pushing one another with the boards, and doing just as much or as little as seemed to make the game go merrily.

At six o'clock the captain sent the first-mate in a boat with seven lamps, which he was to moor over the principal reefs, so that the ship might find her way out of the dangerous roadstead; but the captain's

efforts to expedite the unloading produced no effect. If the natives worked at all, it was only in play. Some of them would not even condescend to appear to work. One tall fellow, when requested by an officer to move a box, drew himself up to his full height and replied, with simple dignity, 'Me no work!' However, as evening came on the villagers realized that their friends on board the ship wanted to start on their voyage, and that they could not leave port until all the cargo for Tongatabu was on the quay. Suddenly they became as wild as they had until then been lethargic. Out tumbled the wood, over it they rolled, mouldings splintered off, bales broke asunder, biscuit tins discharged their contents on the pier. Their energy was worse than their lethargy had been. Poor Captain Crawshaw! he is one of the best tempered of men, well informed too, and most companionable. It is hard that, with no authority over these children of the sun, he should yet be held responsible for delay in sailing and for damage to the cargo. Every voyage gives him an anxious time.

It was growing late, and there was no prospect of getting away, so rockets were sent up to recall the mate. By a curious chance he did not see them, but lay in his boat till daybreak.

The saloon was crowded until midnight with the white population of the town. It was useless to turn into our berths. On deck an overpowering reek of cocoa-nut oil mingled with the scent of flowers. The natives were so heavily oiled that the deck soon became greasy. It was a strange, picturesque crowd when we saw it last thing at night. Some were squatting, others were lying down with their wooden pillows beneath their necks. Every one had brought his pillow—a flat bar of wood on two wooden feet.

The neck rests upon the pillow, leaving the head quite free. This curious way of reposing was necessary in the old days, because of the superb coiffures which were then in vogue. To have put the head on the pillow would have crushed the hair, and thus have undone an arrangement which had been the work of weeks. Now both men and women cut the hair short; but they still use the ancient pillow. With regard to squatting, we made a curious anthropological observation, which has no doubt been made by many others. An Indian sits upon his heels. The knees are bent outwards, and the weight of the body rests on the balls of the two great toes. When a Maori squats, he does not sit on his heels. His knees are almost straight before him, the soles of his feet are flat on the ground, and the knee- and hip-joints are bent like a double hinge. His tibia seems to be too short to allow him to sit upon his heels. The Tongan men like to sit on the ground with the knees drawn up and the back against a support. Seated at the tapa board, the women seemed to have the knees directed almost straight outwards, and the legs twisted into a single knot.

A little before dawn we left Nukualofa, steaming over the bluest of blue water straight into the eye of day. About noon we passed between the low island of Namuka and the lofty volcanic islands of Tofoa and Kao. It was under the lee of Namuka that the *Bounty* lay on the eve of the mutiny in 1787. Here arrangements were made for the proceedings of the following day. When the *Bounty* had crossed about half-way to Tofoa—the distance may be twenty or thirty miles—the crew seized Captain Bligh and eighteen companions, and set them adrift in an open boat, 16,000 miles from home. Then the crew tried

to land at Tofoa, but the natives stoned the ship's carpenter to death. Afterwards they went to Tahiti, where they were joined by six native men and twelve women, with whom they sailed to Pitcairn, the tiny island which they made their home. Every one knows the further history of the mutineers; how, as the result of their quarrels, there was, at the end of ten years, only one man left alive; and how this ignorant sailor, Adams, made laws for the little community of women and children, and started it on such good lines that, despite its inauspicious origin, it is now one of the most virtuous, affectionate, and devout communities in the world. Pitcairn Island is probably the only spot in the world where infectious diseases are unknown, with the exception of the colds which are left behind by every ship which calls there. Ships call so rarely and the population is so small that the germs which cause 'colds' die out for want of victims. Long may it be before any other sort of microbe is introduced! The officers made their way to Timor, a distance of more than 4,000 miles, discovering the group known as Banks' Islands on the way. It was a truly wonderful performance in an open boat and among islands inhabited by warlike people.

About thirty leagues to the west of Namuka lies Falcon Island, which came into existence at the time of the volcanic disturbances which resulted in the explosion of Tarawera, a thousand miles away.

Tofoa, which we passed on our port side, is a particularly sacred island. Natives from all parts of the group bring thence the flat grey stones with which they cover their graves. They find them on the shores of an inland lake. Near the lake grows an old iron-wood tree, which announces by sympathetic changes when any person of consequence is dying in any island

of the Tongan group. If he has been good and generous, it scatters a tribute of green leaves; but if in his lifetime the chief was mean or cruel, the poor tree's bark peels off in rags. At a spot on the coast the verdant slope of the mountain is scored by a bare track. It was too far away for us to see it, but our captain assured us that it was there. Years ago a murdered man was dragged down this path, the natives say, and never since has grass grown either on the path or at the places where the assassins paused to rest.

Late in the afternoon we entered the gap in the barrier reef which lies on the leeward side of Lefuka, principal island of the Haapai group, and dropped anchor about a quarter of a mile from the town. It was too late to go on shore, so Puer got out his lines and tried to catch some of the fish which were always to be seen about the boat. But he could not tempt them. They declined every kind of bait—inappreciative fish! At last even Puer's enthusiasm for sport gave in, especially when our officers told him that they had never known a passenger catch fish in these waters. They nose the bait, but will not gulp it. Is it because the water is so clear? Its transparency is absolute, vision being merely lost in blueness when the bottom is not visible. The fish could see the line, though it was but catgut, but the little steel hooks were out of sight. The transparency of the water was not, however, a sufficient explanation of Puer's failure, for the natives capture larger kinds of fish with wonderful hooks of mother-of-pearl, which are fastened to a plaited cord and used without bait. Several fishermen were out in their canoes at the time when Puer was trying in vain to capture fish from the deck of the steamer. Each of them carried a fire-stick, tucked

behind his ear as a clerk tucks a pen. Their glowing points swayed about like fire-flies as the canoes rose on the swell. At first we thought that the fire-sticks had something to do with the fishing, but we found that they were merely held in readiness to light the fishermen's innumerable cigarettes.

Generally they obtain their fish by spearing them in the shallow water on the reef, using a long spear with five or six barbed heads. Occasionally, when not too lazy, they make an immense chain of plantain-leaves, mats, and anything else that will float, which they draw across the bay, thus frightening the fish inshore. Then they spear them in great numbers. But sharks are their favourite game, and in taking these ruffians they display extraordinary skill. A rancid cocoa-nut is fastened to the end of a pole, which a little lower down carries a noose of cord. The cocoa-nut is only a charm! It is rage which makes the shark snap at it, not hunger—rage provoked by a long, loud song. In this song they sometimes cajole the fish, sometimes they taunt it. 'Eater of my father, eater of my grandfather, come and eat me!' The shark accepts the challenge, but he cannot reach them in their boat; so he makes a rush for the cocoa-nut, which they flourish in his face. Deftly the noose is slipped round his head and he is lifted into the canoe. The natives become so excited with the sport that rather than desist when they have caught as many sharks as the canoe can carry, they will sometimes fill it to sinking point, and then swim with it to shore, running the greatest risk of reversing the order of the chase. This is when they are filled with the spirit of battle. In their calm moments they are exceedingly afraid of sharks.

Early next morning we started for the shore, determined to give the day to collecting butterflies and

shells. The island is so narrow that a quarter of an hour's walking takes one across to its windward side, where the great 'Pacific combers' are always roaring on the reef, the edge of which is about a hundred yards from the beach. In our eagerness for amassing treasures, we did not even stop to visit the church with the four cannon taken from the *Port-au-Prince*, set up as gateposts; or to pay a just tribute to the grave of Captain Croker, who was killed in 1845, when endeavouring to prevent fighting. We were bent upon collecting as many shells and butterflies as was possible in the time, and we meant to drink deeply of the delight of existence in one of these sunny isles.

The sea was bluer, the plantain-leaves greener, the butterflies and flowers more brilliant in hue than any one whose experience is limited to the temperate zone can picture to himself. It was like a summer day at home with all the atmosphere left out. The great wave which rolled its length along the reef was not water, but sparkling amethyst; as it fell it splintered into myriads of glittering diamonds. The foliage behind us was translucent as an emerald. The shallow water covering the white coral *débris* on the reef was iridescent, as if the emerald lay in a shell lined with mother-of-pearl.

The heat making us thirsty, we invoked the kindly offices of some native lads, who, swarming up the palm-trees, brought down green cocoa-nuts, cut off their ends, and provided us with what, under these circumstances, seemed the perfection of a cool drink, bland and almost tasteless. The milk of an old cocoa-nut, even when freshly picked, is apt to be poisonous from decomposition. The natives never drink it. But the milk of a green cocoa-nut is always wholesome, no matter how much the

water from which the palm draws its sap may be infected.

Then Pater and Puer thought that they would like to bathe, but just at that moment a princess of the royal house crossed the beach bent on the same errand, and the white-skins had to retire to a modest distance. Owing to the rapid evaporation of the shallow water within the reef, it is extraordinarily buoyant. The coral was sharp and cut one's feet, but it was delicious to float like a cork on the surface of the water.

On our way back along the path which wound beneath the trees, between plantations of pine-apples and plantains, we had a beautiful display of the sensitiveness of the sensitive plant. Various kinds of mimosa go under this name at home, for most of them tend to fold their leaves when pinched, but the real sensitive plant (*Mimosa pudica*) is far more irritable than this. It is a low-growing, creeping plant, with pink ball-blossoms. As we looked along the glade, it was clothed with its soft green leaves everywhere, except upon the few yards of ground around us. Near us the ground was covered with wiry brown stalks. As we advanced the wave of brownness spread before us, every footfall causing the leaves to fold up for more than a yard ahead. If a horse looks with longing eyes at the lush verdure, he is disappointed to find, as soon as his nose approaches the ground, that he is in the middle of a patch of messed and shrivelled spiny wires. The brown stalks and under sides of the leaves have a singularly disconsolate appearance. One could be almost certain that the patch of ground on which one stands had been fouled and trampled. When the poor horse grows too hungry to follow the mocking herbage further,

he probably contents himself with the blades of grass which show amongst its shrivelled stems, but are invisible so long as its leaves are spread. And so the clever mimosa attains a double end: while it escapes itself, it reveals to the hungry animal the presence of its rivals; it secures the destruction of the plants which compete with it for the soil.

When it was necessary to return to the ship for lunch, Pater found himself in a somewhat embarrassing position. The news had spread that a doctor was on board. It was four months since the doctor of the islands had touched at Lefuka, and several people had ailments which they were saving up against his next visit. Hearing, however, that Pater was a doctor, they sent urgent requests that he would come to see them. Not direct requests, be it noted, for nothing was said about their illnesses, but they had collections of shells or butterflies, which they were certain Pater would like to see. As soon, however, as they found that he declined to accept any fees, although they were honourably pressed upon him by his first patients, no secret was made of their needs; nevertheless some of the white men whom he treated medically resented the want of reciprocity which made him decline to 'be treated to a drink.' It came near to being an insult. Still, Pater had tried to do them a good turn. They must not carry their resentment too far! One of his patients was the native wife of a whaling captain who makes the islands his head-quarters. Whales are numerous in these shallow waters, and easily captured. In deep water they dive to great depths, when struck, and break the rope of the harpoon. The poor woman had scalded her foot, and the native remedies which had been used had so irritated the wound that the foot was in a precarious state. Some carbolic acid

and cocoa-nut oil were found, and directions were given for dressings. She was a very good-looking woman, attaining like most of the native women to an *embonpoint* far beyond the European standard. Her skin was soft and clear, and very little darker in tint than 'legal piecrust.' She was lying on the floor on the only piece of furniture the hut contained—a clean grass mat. On the walls hung a billee and some faded girdles of flowers—'titi,' 'cissie,' or 'lava-lava'; the names seemed to be used indifferently, so far as we could judge; but very possibly the words refer to slightly different things.

The impression as to the exorbitant fees demanded by a European doctor being removed, and confidence increasing, Pater might have had a flourishing practice. Several surgical cases were offered for minor operations. But when he encountered a cancer which called for removal, Pater, much as he disliked the idea of leaving the poor woman to await the arrival of the itinerant surgeon, was obliged to take refuge in the excuse that he had no suitable instruments in his kit. It is to be hoped that his would-be patient, acting upon his advice, made her way to a hospital in New Zealand.

The natives are not bad surgeons, although their methods are peculiar. They are clever in setting broken bones, but have no idea of the way to deal with a dislocation. Whatever happens, they submit the part to a series of manipulations, a kind of massage, in which they have great faith. We saw a broken nose and damaged face very cleverly restored to shape. One of our Tonga-tabuans was too hasty in pressing his attentions on a Haapaian lady. He did not stop to inquire if the lady had a lover. Not only had she a lover, but the lover had a club, with which

he put the face of the Tongatabuan out of court for courting for some time to come. When they came back to the ship, a cocoa-nut was opened, and the operator, dipping his fingers in the milk, pinched and kneaded the nose into form, and with hard pressure squeezed the effused blood out of the tissues of the orbit, so that from being a very ugly spectacle the patient was restored in half an hour to something like his natural appearance. He, his rival, and his rival's lady were now travelling amicably together to the great Church Conference at Vavau. The natives seldom bear malice, we were told. Although hasty with their clubs, their good-humour is quickly restored.

Their surgical manipulations are effective, but medical treatment in the islands is extremely crude. To cure sore-throat two sticks are drawn backwards and forwards across the patient's neck. For most other ailments they trust in drugs. Not that they have one drug for each ailment, but one drug for each doctor; and the secret of its composition is hereditary. When a person is ill—diseases of the liver seem to be not uncommon—his friends send for a doctor, who administers his own peculiar medicine. It must cure at once, as soon as swallowed; otherwise it is no medicine. Recovery next day would be set down to other causes. If it fails, another doctor is called in. Perhaps half a dozen follow one another in succession. Amongst them may often appear a little boy of six or eight. He carries the precious drug which his father has bequeathed wrapped in a plantain-leaf; of it he administers as much as his directions tell him to, and then, unless the patient immediately begins to mend, he too makes his bow. When a successful doctor is found, he remains in charge until his patient convalesces. The Tongan method of finding the right

drug is almost as simple as that of the whaling skipper who carried a medicine chest and a table of directions. '*For sore-throat with fever give a tablespoonful of number fifteen.*' 'Well, it so happened,' explained the captain, 'that fifteen was all used up; so I gave the man a dessert-spoonful of number five, and another of number ten; and I don't think the chap that drew up that table could have been good at figures; or else, what's just as likely, the medicines were all shams, just coloured sugar put up by some cheap German firm. Either way it was hard on poor Bill! He died in half an hour, with a dreadful pain in his inside.'

The postmaster's boat brought us back from the shore in fine style. We wondered by what means he induced the natives to exert themselves in this way. They were four smart-looking fellows, who put their backs into it when in the boat, and stood on the beach like British tars while waiting for their master. The postmaster gave us the explanation. They were convicts. The worst punishment which can be inflicted on a Tongan is to make him work, and this is the penalty for all ordinary crimes. There is no outcry in Tonga against prison-made goods. No one grumbles that prisoners take away their work, for work is a thing that no one wants. So, when a man is convicted of crime, the State clothes and feeds him well, but exacts a little work,—not arduous labour, that would be an affront to public opinion which might lead to a revolution, but just enough to keep his hands out of mischief. He has to clear a patch of forest, make a road, or weed a plantain-field, while his friends and relations sit about, brew kava for him, and roll his cigarettes. The mate of the king's yacht is a man who was convicted of a nearly successful attempt at murder. For this he was condemned to *ten years' work*!

There is no incentive to work in the Tongan Islands. Nature is lavish in her supplies; man is limited in his wants. The population is small compared with the area of soil and the generosity of the climate. When Europeans began to visit the islands their diseases made terrible havoc among the natives, whose constitutions were not trained to combat the microbes of measles or of smallpox. Our own constitutions are not very successful, for the microbe ever gains in virulence to match the increasing efficiency of our microscopic policemen, the white blood-corpuscles. It is a constant battle between the microbes and our systems; the germs of disease are always trying to force an entrance; our white blood-corpuscles are always on the watch to keep them out, or to destroy them the moment they gain admittance. The struggle for existence improves the minute organisms which we call microbes, just in the same way as it leads to the evolution of more capable kinds of hawks, and rats, and rabbits. As the rats and rabbits of Europe have over-run New Zealand, so have the microbes of measles and small-pox romped through the blood of the native populations of the Pacific Islands. They found, as it were, a virgin field with no barriers to stop them; for there were no doctors, and the natives had no conception of the need for isolation. But worse than European diseases were the hateful labour-raids, in which Peruvians, Spaniards, and Englishmen carried off the natives to work in unhealthy mines or sugar plantations, from which they never returned to their beautiful homes. We cannot recommend the reading of *Black-Birding in the Pacific*, by Churchward, or even of *A Modern Buccaneer;* the stories are too sad. The natural result of depopulation is that the supply of food is greatly in excess of the

demand. Captain Cook, in 1780, estimated that the Society Islands could turn out 1,700 war canoes, manned by 68,000 men. Now the population—men, women, and children—does not exceed 15,000, all told. The population of the Tongan, or Friendly group, numbers about 30,000; but if any serious attempt were made at cultivating the soil the islands would carry many times that number.

That no pinch of want is ever felt is shown by the readiness with which food is shared. At the present time it is just as it was in 1806, when the *Port-au-Prince* was captured. Mariner was badly treated at first—stripped and bruised, for the natives found great amusement in ascertaining that red blood would flow from beneath a white skin. King Finow took a fancy to the lad, however, and would not allow his braves to investigate his flavour. He considered that they had sufficiently tested the taste of white flesh by eating all his mates. So Mariner wandered about as a kind of outcast. Sometimes the king invited him to eat, but more often the monarch forgot. At last, when Mariner had learnt a few words of the language, he explained to Finow that he suffered dreadfully from hunger. 'You suffer from hunger! What do you do in your country when you are hungry?' asked the king. 'If no one invites us to eat, we buy food.' At this the savage laughed aloud. 'Invite you to eat! Why, in my country a man invites himself. When you are hungry, look about for a house where food is being eaten. Then go in and sit down, and they will give you your share.'

They are just as hospitable to strangers as they are to one another. Many an escaped sailor and bankrupt trader has lived for years amongst them; not only fed without being asked for any return, but clothed

too; for, though they are comparatively indifferent to clothing for themselves, they cannot bear to see a white man who is not dressed in European garments.

Their communism is a little embarrassing to white men who employ native servants, for it is impossible to make them understand that any food there may be in the larder is not the property of their friends and relatives equally with themselves. The king's chaplain got over the difficulty by making a definite arrangement with his housekeeper. 'Understand,' he said, 'that half of every pig is for me and my friends, and the other half is yours.' Further, he turned this arrangement to very good account. Mr Watkin is fond of his garden. It is fenced, but the pigs, which roam wherever they will, are apt to gain admission. 'Now,' said he to his housekeeper, 'this is really too bad! You know you like the front half of the pig, because it contains the tongue and heart. Well, I arranged that the front half of every pig should be yours; and just look at the harm your halves are doing! My halves do no harm. All the mischief is done by yours. If you can't keep the pigs out of the garden I shall change, and keep the front halves for myself.'

What a country for a gardener! A temperature of 75° to 85°. Warmth without drought. Pater says that he shall retire to the Tongan Islands when he is old and wants a quiet life. He certainly will not follow Stevenson to Samoa. In Samoa the temperature is just about ten degrees higher. We asked some Tongans, whom we saw tattooed in Samoan fashion, why they had not stayed at Samoa. They explained that they did not like a hot climate. As the thermometer was well over 80° at the time, their answer amused us not a little; but Pater thinks that had

Stevenson chosen one of these islands, 6° or 8° farther south than Samoa, he would have found a climate equally good for his lungs, and possibly he might have escaped the apoplexy which was the cause of his death.

When we left Haapai we had on board a still greater crowd of natives. Every spot, with the exception of the yard or two of poop reserved for us, was occupied by squatting or recumbent figures. The men sat in a row along the gunwhale and occupied the shrouds. On deck, the women and children slept as contentedly as if they were in their own huts. Two little girls lay by the saloon steps, alternately watching us with big black eyes and dozing off, to wake up when some one stumbled over them; an accident which could hardly be avoided in the crush. Some of the men had their hair thickly plastered with lime. It stood out crisp and white like that of the Lord Mayor's coachman. This liming serves two purposes. In the first place, it turns the hair a tawny brown, which the natives rightly consider more becoming than black as a setting for their brown faces. In the second place —and probably this was the origin of the custom—it kills any insects which may find their way into the hair when the men are lying on the ground; although, now that they have abandoned the elaborate coiffures which they wore of yore, they are probably, with their frequent bathing, very little subject to vermin. True, we saw several cases of ringworm among our fellow-passengers; but, nevertheless, the liming is now only a matter of fashion. We wonder whether the powder on the hair of the dames and the wigs of the men of Queen Anne's court was the survival of a custom originally due to hygienic considerations, not to fashion?

It was great good fortune to see so large a display

of native life. With a little persuasion, the people were induced to sing to us the same songs which they have chanted for generations during their canoe-voyages from Haapai to Vavau. And when the whole crowd had sung their boat-songs, some men very good-naturedly gave us a display of laka-laka. Having carefully oiled themselves from head to foot, and having so disposed the loin-cloth as to display the exquisite tattooing of waist and thighs—they had been to Samoa, and the tattooing was in the fashion of that country—they seated themselves on the deck. Then they commenced a long, monotonous chant, accompanied by a dance of the head and body. We say *dance* because the movements were repeated with such regularity that they seemed to be related to the rhythm of the song, and not to be gestures appropriate to its subject. They swung the body from side to side, bowed forwards, turned their heads, slapped their elbows, twisted their hands. In this 'act' their pantomime did not help us to guess the meaning of the words. In the second act their movements accompanied a doleful tune. They repeatedly placed the fists one over the other on the left thigh, while they lowered the body until the part of the chest where the heart resides rested upon the fists. In this position they sighed over and over again, as if to indicate extreme exhaustion. A third song was delivered standing. The time was marked by short, quick steps and jumps, and the words were sung with fierce vigour. It was all strangely weird in the dim light of a ship's lantern. There was no mistaking its cannibal suggestions, although the natives themselves were evidently unaware of the origin and meaning of the conventional movements of which they made use. A small space was left for the performers. We had to sit so

close to them that in the last song we were afraid of being struck. Behind them, and clinging to the rigging above, was a wall of dusky figures.

There is very little music in the songs of the natives. The compass of their voices is small, and they are fond of semi-tones, but the people are not unmusical. The children sang 'Home, Sweet Home' in Tongan with excellent effect, and their evening prayers, led by the two native pastors, and taken up by the whole crowd without change of position, were chanted in perfect harmony. It was strange company in which to travel. We shall not forget the view along the deck at night. At first the reek of cocoa-nut oil was rather repulsive, but we soon got over this, and began to feel that the people, with their quick smile and trustful eyes, were friends and brothers.

The town of Vavau stands on a marvellous land-locked harbour, which a ship, or, for the matter of that, a navy, may enter at any tide to find itself absolutely sheltered from every wind. This island is very different from those we had already visited. It is volcanic. Everywhere the land rises abruptly from the sea to a height of 600 or 800 feet; but it is very remarkable to notice from the evidence of two, or, perhaps, three terraces that the elevation did not occur all at once, but at successive epochs; after the island had remained for a time at a certain level, it was suddenly lifted higher, so that the old beach came to form a band round the hill-sides.

We reached the summit of the hill behind the town in time to see the sun rise, and a marvellous view its rays exposed. The land is cut into by a thousand inlets of the sea. It is fringed with tiny islands. Patches of land were girt by still blue water. Pools of still blue water were ringed about with feathery



LAKA-LAKA

foliage of luscious green. The hill on which we stood was covered with orange-trees crowded with golden fruit. In a cup between us and the harbour lay the town, clusters of oval, palm-thatched huts scattered about on smooth green turf. No roads, no strips of barren ground. A collection of nests sheltered by the grand, glossy leaves of bread-fruit trees, embowered by limes and gardenias in full flower, overarched by bowing cocoa-palms. There may be more beautiful places—we cannot picture them.

We returned to the ship just in time to see the royal flag of Tonga run up the mast upon the quay. Red-coated soldiers assembled in their multitudes—to the number of three. An officer stepped upon the parade-ground. At the word of command, soldier number one sounded a bugle; number two discharged a blank cartridge; three hauled up the flag—a white Geneva cross on a red ground.

After breakfast, when strolling about the village, we had just stopped to admire the top-boots and uniforms of the king's guards, who were encamped within the royal compound, when we saw that we had come in for an unusual sight. A procession was approaching the palace—the king has a residence in each of the principal islands—bearing a profusion of things good to eat. First two pigs, slung between bamboo poles, roasted whole and daintily dressed with leaves; then green baskets, made as occasion required by splitting and plaiting fresh cocoa-palm leaves. The baskets were filled with yams, tara, and picturesque clumps of sugar-cane freshly lifted from the ground. Next, borne by eight men between two long poles, the *pièce de resistance* of the feast approached—an enormous boar, stuffed and roasted whole, the liver skewered to the body, the snout and feet wrapped in plantain

leaves. Baskets of minor delicacies brought up the rear of the men's procession. By a different route the women of the village filed towards the palace, trailing behind them tapa-cloths, cottons, and mats. The king and his councillors, or 'mataboolés,' sat beneath the verandah—the king and the captain of his yacht on chairs, the matabooles squatting in native fashion on the ground. The presents of food were placed in the middle of the grass-plot, the cloths were piled at the king's feet, making a picturesque heap, on to which many women, as a symbol of devotion, cast their titis, or girdles of pandanus fruits and leaves. It was the young king's first tour of his dominions, and the chiefs had assembled to welcome him to Vavau. He is a tall, fat young man, with a somewhat awkward, ungracious manner. Report says that he is more interested in making the royal revenue minister to his pleasures than in following in the steps of the good old king, who really tried to be a father to his people. He was dressed in top-boots, black riding breeches, a white shirt and collar and black scarf; whereas all his chiefs had been careful to appear in the royal presence in the state costume of the country.

When all were assembled the salutations began. First, a woman stepped forward and delivered an address, for in those far-away isles not only are women treated as equals by the men, but they take precedence, since a man derives his rank from his mother, and not from his father. This lady spoke with fluency, pausing every now and again, as if addressing a question to the company, who responded with a musical 'o-oolai'—if we rightly caught the word. Two other women followed, the third making what was evidently a very facetious speech. She wagged her

head and waved her palms to words which evoked bursts of laughter from the company, both councillors and chiefs. Three men followed, but their speeches could not be compared for vigour or flow of words with those of the women; they spoke formally and often paused for a word. The speeches over, the solemn function of kava-brewing commenced. A bowl was placed in front of the crowd of lesser chiefs. One stood up, ready to pour fresh water into the bowl from time to time. He held in his hand the ceremonial vessel, a galvanized iron pail, which, like his majesty's bath-towel drying on the fence, the maiden in the garden hanging out the royal clothes, certain kerosene tins and other litter which occupied the palace square, was singularly incongruous with the general spirit of the scene. The chief who sat behind the bowl took the kava-root in his hands. It had been pounded with stones in a wooden trough until the fibres were separate one from another, like a hank of coarse tow. With great ceremony the kava was dipped in the water, and then wrung out over the bowl with a peculiar twist of the hand which is only used when the king is present. Cocoa-nut cups were dipped in the bowl and the grey liquid was handed first to two of the lesser chiefs. These having drained their cups without any sudden evil effects, a cup was presented with a deep obeisance to the king, and after the king to each of the mataboolés, in order of rank. It would be a serious matter if a mistake were made in the order of precedence. Such mistakes have led to bloodshed in the past. In this case there seemed to be no risk, for a beaming old gentleman who sat at the king's feet had carefully conned his part. As he recited the name of each guest the individual named clapped his hands, as much as to say, 'That's me.' A

cupbearer handed him the cup, which he drained, and then returned to the man by the bowl with a dexterous twist. Only two of the women were privileged to drink. The king and the greatest of the chiefs we noticed only touched the cup with their lips, and then emptied the kava on to the ground. The drinking occupied an hour, perhaps, during which time the pigs were growing cold. But it must be understood that the viands are seldom eaten at these feasts, even by the common people, while the king and the great chiefs always eat alone. So when the drinking was finished the pigs were carved into joints, strict etiquette still ruling the distribution of the parts. These joints the chiefs sent to their respective homes, where they were, no doubt, consumed by their several households. Often ten times as many pigs are cooked as the company could eat, if they feasted on the spot.

The ceremony over, the king bolted indoors, when Pater asked of those in attendance if he might be presented to his majesty. But the king is very shy, and the answer he returned is a formula which we were told he constantly adopts: 'He had just come in from riding, and was not dressed to receive company; but if Pater would come back at five o'clock,' he graciously added, 'he would be pleased to receive him.' This we could not do, as our captain had planned for us an excursion to the 'Cave of the Little Bats'; so, with many expressions of appreciation of the honour which his majesty conferred upon us by his gracious invitation, we fell to chatting with the captain of his yacht.

This official kindly presented us to a greater than the king—Lavania Keonga, the representative of the house of To-oitonga, the most noble in the land. In Mariner's time, when Finow asked a favour of his gods, he always claimed that he had 'done good to

the house of the To-oitongas.' The curious megalithic monuments at Mua, which confer the name 'tabu,' sacred, on the island of Tongatabu, are known by the natives as the 'Graves of the To-oitongas.' We wished very much that we could have visited them, as well as the great stone arch — two gigantic pillars, each weighing about thirty tons, and deeply mortised to receive a lintel which is probably some ten or twelve tons in weight. It is very remarkable to find in the South Pacific monuments which rival our own Stonehenge; among a people who, within historic times, have had no idea of using, as building materials, anything heavier than canes and leaves. The representative of the To-oitongas—she would have been king had she been a man—is a rather hard-featured old lady, with a very aristocratic, though gracious, bearing. She received us with the greatest kindness in the midst of her little Court. That they were drinking kava hardly needs to be said! It would be more difficult to find any assembly of Tongans which was not so occupied. A few years ago there was an execution in Vavau. A native had killed a trader—openly and under provocation, it must be allowed. Nevertheless, great pressure was brought to bear upon the king by the Whites, who represented that if the murderer escaped it might easily be supposed that such deeds were not forbidden. Reluctantly George I ordered that the man should be hanged, and on the appointed day the procession started for the gallows. When they were half-way there, it was remembered that without kava-drinking no social function, not even a hanging, would be complete. A bowl and the root were sent for. The party sat down, with the criminal in their midst, and with due solemnity the poor wretch received its solace for the last time on

this side the grave. We can hardly believe that any Tongan seriously looks forward to a heaven where kava is drunk no more.

We entered the circle and squatted on the ground, as if about to take part in a game of 'hunt the slipper.' The cup of kava was handed to each of us after our name and rank had been duly announced, and we swallowed its contents with a wry attempt at a smile. It is not nice—astringent, with a slight warmth, rather like a weak infusion of ginger and oak-galls. In the dose in which we took it, it produced no perceptible effect; but it is claimed for it by every one that even in small quantities it has a remarkable power of checking thirst. It seems to have the same kind of mildly intoxicant action as tobacco-smoking or betel-nut chewing. After many hours of industrious sipping a native finds himself unable to rise; although his head remains clear, his legs decline to move. Fortunately for us, it is only the most conservative chiefs who insist that their kava shall be brewed in the orthodox fashion. Had the root been chewed by the cooks—the lowest in caste among the Tongans—or even by the daughters of the household, after the ancient custom of Samoa, we should have found it a little difficult to behave with creditable courtliness at Lavania Keonga's levée.

The princess had not a word of English, and so our intercourse was limited to smiles and bows; but in these our hostess, at any rate, was very proficient. Indeed, she quite succeeded in explaining to us the difficulty of her situation with regard to the king. We had heard that his majesty is anxious to be married, and that he has, after much consideration, narrowed the field of candidates suitable for the royal hand to three; of these he favours most the daughter of the



KAVA BREWING

chief of a small outlying island. Not only would this union secure to him the allegiance of the island, but it would give him a queen who has no relatives on the larger islands. In this quasi-communistic society relatives make a sad drain even on a royal purse. If all goes well, the marriage is to take place in two or three months, when the king proposes to fetch his bride-elect in a beautiful new schooner-yacht which he has recently bought. But here a difficulty presents itself: the new ship is 'taboo.' No female, whether infant or centenarian, may set her foot upon its deck; and there is only one person in the islands who can raise the taboo—Lavania Keonga of the house of To-oitonga. With many a sigh and smile, the princess explained to us in pantomime that this is a ceremony which she does not propose to perform until the king has been made to feel her power. Like many another great dame, she likes power, and knows how to maintain it. The ordeal of removing a taboo is severe for a woman of her years! She is not quite herself! A little rheumatism; she tapped her shoulder, which was indeed covered with a shawl. She waved her hand towards the palace and shook her head. The king must wait! She pointed to the harbour. The pretty yacht must lie there a little longer! Far away to the north the bride-elect must sigh in vain for her royal lover! But no one knows better than Lavania Keonga that it will not answer to push her authority too far. Taboo is an intricate system of ceremonial regulations, defining chiefly the circumstances under which things may *not* be done. For example, the words which form parts of a chief's name are taboo: they may not be used in their ordinary sense, and often drop, in consequence, out of the language; strange periphrases or foreign words taking their place. It

is decorous to conform to ancient usage, but since the introduction of Christianity taboo is no longer a religion. It is proper to use a table-spoon when helping oneself to food, but if one is very hungry and no other utensil is at hand one's own spoon is apt to find its way into the pie. If Lavania Keonga pushes her reluctance too far, King George will discover that taboo is an old-fashioned code which modern innovations have displaced.

The captain of the yacht is a character ready made to the hand of a future novelist of the South Seas. 'My name is not really Schmidt,' he told us. 'I am an Austrian, a Hun. When Baratieri, the captain of the Italian man-of-war, was here, he fairly laughed on hearing me called Schmidt. "Schmidt! we know all about that," he said; "I have the portraits of your parents hanging in my cabin." ' 'So you are the king's confidential adviser?' Pater asked. 'No, I don't say that. I have influence with his majesty, it is true; but no—my father got into trouble with politics. I will have nothing to do with them. I lived fifteen years with the Chenoux Indians and ten years in Fiji before I came here. I came here as harbour-master only last year. The king was pleased with me, my promotion has been very quick. Next month I marry the king's cousin. They will make me a chief. But no, it is nothing. I was born to the *cordon bleu*. A chief—it is nothing! I prefer to remain plain Schmidt.'

Schmidt's dealings were not as plain as his name. He showed a sagacity which easily accounts for his rapid advance in favour with the king. Far be it from us to pronounce any judgement on his seamanship. The entry of the yacht into Vavau harbour was most impressive, we were told. Dressed like

a corsair, with his shirt open at the throat, and a bright red sash round his waist, Schmidt reclined on the poop, swearing loudly in various languages at his crew—a capital study from boyhood's 'twopence coloured!' But just now he is a good deal exercised in mind. He has to take the schooner to Auckland to be recoppered, and well knows, one of our officers hinted, that he will be lucky if he does not miss New Zealand altogether and bring up at the South Pole. But if he fails to find New Zealand it will not be for want of asking where the islands are and how to reach them. He told us that in the afternoon he would have to take the yacht to a distant bay to obtain a supply of water; but, as a matter of fact, he went on board our ship and commenced a casual conversation with our captain. 'Now I just want your opinion, captain—though, of course, I know what I should do—but an old fool of a mate on board the Norwegian barque said that if he were sailing to New Zealand at this time of year, and with these winds and currents . . .' Our good-natured captain got out his charts and showed him his course, giving him at the same time a little elementary but useful information about compasses, chronometers, and other seaman's toys. He begrudged his time and trouble a little when he heard from his first mate that Schmidt had come straight on to him and opened fire as follows: 'Now, of course, I know what I mean to do, but your captain says that if he were sailing to New Zealand at this time of year . . . I just want your opinion.'

It is a beautiful sail of five or six miles to the 'Cave of the Little Bats.' No wonder this bay was a favourite head-quarters for pirates. Half a dozen channels lead out to sea in different directions, and any

one who knows the reefs could easily baffle the most vigorous pursuit. It is the scene of many plots, both imaginary and real. Near its entrance is the cave which figures in Byron's *Island*, and provides the basis of the story of Ballantyne's *Coral Island*. We should have liked to see it, but no one had the courage to propose that we should dive in faith and swim into its entrance deep beneath the water. The captain of a man-of-war attempted it, we were told, but scratched his back so badly on the coral that he died. We could not, however, learn the captain's name, or any particulars which would convince us that the story was true. But the tale of the cave which was told to Mariner, and believed by him, is prettier than any legend to which its remarkable situation has given rise. A young chief discovered it when diving for turtle, but thought it wise to keep the knowledge to himself, for in those arbitrary times no one could tell when a hiding-place might prove to be useful. Circumstances soon confirmed the wisdom of the young chief's reticence. The choice of this cliff as a place from which to dive for turtle was dictated by his love for a fair damsel whose father owned the adjoining land. Scarcely was his passion acknowledged when events threatened to bring it to a tragic end. The father of the maiden came beneath the displeasure of the king, and, according to the custom then in vogue, the father being ordered to death, all his near relations must die at the same time. It was a simple and statesmanlike plan of avoiding recriminations, which every one approved save the love-blinded chief; but he, being in the king's counsels, hurried to the home of his beloved before the news was made public, while the war-canoes were still filling with warriors prepared to execute their sovereign's

command. 'Trust me or you will die,' he whispered to the maiden, and together they dived from the cliff. Within Ballantyne's cave they set up their first home, and no one remarked that the young chief was more assiduous than ever in diving for turtle, or noticed that he always started on this errand with a superabundance of supplies. At last, when the disappearance of the maiden was well-nigh forgotten, he announced his intention of taking his followers to seek their fortunes in Fiji. Tongan warriors were always welcome in Fiji. It was the scene of constant tribal wars, and either one party or another was always prepared to pay for their service well. As they passed the mouth of the cave the chief ordered his men to wait. Then he dived out of their sight. So long did he remain beneath the water that they looked at one another in dismay. There was no red streak upon its surface, no bubbles had risen as if from the breath of a drowning man; but surely their leader had fallen victim to a shark! They were on the point of returning in sorrow to Vavau, when he reappeared, his hand linked in that of a beautiful bride, whom he had brought up like a pearl from the bottom of the sea!

The entrance to the Cave of the Little Bats is on a headland which juts out into the sea. We fetched a long tack, and sailed swiftly in; the cave being so large that there was plenty of space for the cutter to lose her way,—not to lose herself, but to come to a standstill before she ran into its wall of rock. The roof, scallopped out by the great waves which burst into the cave when the wind is in the south, hung down in inverted pinnacles. Near the water the walls were red; elsewhere they showed every shade of green and blue. The sun being at this hour opposite to the mouth of the cave, we could, when we were within

its dark shadow, see down into the water to a tremendous depth—twenty or thirty fathoms, our guides said, but we had, unfortunately, no string with which to take a sounding. The illuminated water was amethyst, not blue; in the hollows a rich purple, with a strange electric blue shimmering in the ripples and reflected to the roof. It was beautiful beyond description, far surpassing the famous blue grotto of Capri in size, colouring, and moulding.

By midnight the *Ovalau* was under way, and we rolled into our bunks, almost too sleepy to undress. We had had a hard life on the islands—hot, eager, and thrilling. How delightful to look forward to two nights on the water, with a quiet Sunday between! There were no longer any natives on deck; no traders were drinking in the saloon. It is just thirty-six hours' steam from Vavau to Samoa, and we started from the former island on Saturday night. To arrive at midday on Monday? Not so; to reach Apia on Sunday morning! The captain presented us with an extra day; and, on this occasion at any rate, we found it delightful to have two Sundays in one week. Samoa lies in latitude 170° W., Tonga in latitude 173°; nevertheless, while Samoa observes, very properly, Western time, Tonga takes its calendar from Fiji, Australia, and the East. This arrangement makes the log of the *Ovalau* perplexing reading. On the voyage between Vavau and Samoa the seventeenth of May occurred twice over; while between Samoa and Fiji the nineteenth of May did not appear at all!

Samoa

Samoa adopted Western time only a few years ago; when by some carelessness the notice of the

change in calendar was not properly promulgated. It even happened that the proposed change did not come to the knowledge of the principal pastor in Apia, although it reached the ears of his assistant. Imagine, therefore, the pastor's surprise at hearing the church bells ring for service while he was still chatting with his housekeeper about Saturday's shopping! Naturally the change was to begin with the first day of the week. No sermon ready! The white ducks and jacket which distinguish the native clergy—white seems to us in many respects a more suitable colour than black—those beautiful white clothes were not home from the wash! Besides, his dignity was offended; the notice ought, in decency, to have been served upon himself. Whatever his congregation choose to do to-day, they must come to church to-morrow. He declined to give way to the new *régime*, and so for some time Apia had two Sundays in each week. But such is the spirit of the natives that they would have welcomed an arrangement which gave them three or four.

The Sabbath is observed with great strictness. A year or two back it was useless for a ship to anchor in the harbour on Sunday. Passengers could not get ashore except in the ship's boats. This was very awkward when the port became a place of call for the American and Australian packets. They could not always so arrange as to miss stopping there on Sunday. At last our consul thought that he must fight the matter out. So one day, when a British man-of-war dropped anchor in the harbour, and the Queen's business demanded that he should go on board at once, he called his crew together and said to them, 'As long as I am in Samoa I wish to employ a Samoan crew; but if you will not work on Sunday when I

need you, I shall import a crew of "labour boys," and use them instead of Samoans.' The matter was discussed in Synod, and it was at length agreed that an exception to the prohibition of Sunday work should be made in favour of boatmen.

The religious struggles of the Samoans are very touching. Of their deep earnestness there can be no doubt; but they run great risk of missing the true spirit of Christianity, and serving tables. Their knowledge of the Bible would put most Englishmen to shame. Indeed, many a missionary who has catechised their Sunday schools has found himself in the pillory when the process was applied by the scholars to himself. They like to know 'how many notes a sackbut hath, and whether shawms have strings.' There is great danger of their making the Bible a fetish, much as our own ancestors used to do; and the risk is much greater now than formerly, for the native pastors outnumber the white missionaries a hundred to one. All questions have to be settled by votes in Synod. The white men have lost their influence, and they are often obliged to acquiesce in decisions which they know to be erroneous, or else to withdraw, and so lose any chance which they may have of doing good at an opportune moment. Worse than this, the Church, in the absence of any government, aimed at political power; she tried to set up a hierarchy. This would perhaps have been an end to be desired if the Samoans had taken the advice of those who understood the situation, and chosen their pastors from the families of the chiefs, so that the hereditary influence and the spiritual influence might have been in harmony. But they chose their priests from the lowest of the people, and so the Church became one more factor in producing the lamentable chaos which until

recently reigned in the islands. Poor Samoa! Three great powers—the United States, Germany, and England—squabbling over her from without. Within, three rivals—Malietoa, Mataafa, and Tamosese—quarrelling for the throne. The Church and the chiefs thwarting one another in their efforts to maintain order in the scattered villages. How will it end? Soon after we visited Samoa, the island was annexed by Germany.

The politics of but few countries are as interesting as those of Samoa. Stevenson has written about them in *A Foot Note to History;* ponderous blue-books on the subject may be bought from the King's printer. We were fortunate in travelling in the company of one of the makers of these blue-books—Mr T. H. Hervey, C.B., formerly chief clerk of the Foreign Office, who had special charge of Samoa. He told us much about its recent history, but it is far too complicated for reproduction in our log. One thing that comes out quite clearly is that the Samoans more than once formally petitioned Queen Victoria to take possession of their islands; but the request was not granted owing to the offence which it would have given to both Germany and the United States. And now, as has just been stated, they have fallen to Germany, much against the wishes of their inhabitants.

Before 1881 Samoa was no man's land, but the German's had the preponderating influence, for they had invested large sums of money in plantations, which they worked with slave labour. The 'labour-boys' are now no longer slaves in name, but there is not, perhaps, much difference in point of fact. Germany proposed to make the islands a 'protectorate,' but the United States objecting to this, a conference was called at Washington. The United States proposed

that they, Germany, and England should have equal trade rights. We 'went one better,' and it was decided that the markets of Samoa should be kept open for all the world.

This was all very satisfactory, but it did not settle the government of Samoa, and if there was to be any trade at all, it was necessary that some strong power should keep the natives from fighting one another. Had they been allowed to fight it out some ten or fifteen years ago, they would probably have settled the question of the monarchy for themselves; the successful chief would have secured the loyalty of the islands. But the plan adopted by the three powers, of deporting first one king and then another, tended to equalize the factions. An exiled king was not unusually more popular than a reigning monarch. The Germans at one time favoured Mataafa, but he had a habit of selling his land and then repudiating the bargain. So the men from a German man-of-war landed at Apia, with the intention of seizing him, in order that he might be held hostage for his own engagements; but he gave them a very severe beating at Vailili, killing no fewer than sixty.

Another conference was called at Berlin, at which it was decided that the land round Apia should be set aside as a neutral zone, and that no natives should be allowed to indulge in fighting within the bounds of the 'municipality of Apia.' A costly governing machinery was elaborated for the municipality, including a chief justice, who was also a court of appeal for the islanders in all cases, whether native or white; and a land commission, to decide the titles to the land—two or three times the area of the islands—which the chiefs are alleged to have sold. Laupepa Malietoa was declared king, but Mataafa, the victor of Vailili,

was still the favourite of the people. Malietoa was brought back from the coast of Africa, whither he had just been deported by the Germans, and their candidate, Tamosese, was deposed. Mataafa, of whom we read in the *Vailima Letters*, was Stevenson's hero, and probably the great novelist's sympathy had some influence in inducing him to break out in open rebellion. He in turn was deported to the Marshall Group in 1893. At this time Stevenson himself narrowly escaped deportation as a disturber of the peace.

We bought a very beautiful Marshall Island mat, which had been presented to Mataafa, and sent by him to Apia, to be exchanged for Samoan products for his Marshall Island friends. The Samoans make good grass mats of coarse pattern, but they are incapable of doing anything so fine as this.

With Mataafa out of the way, the great powers flattered themselves that things would settle down; but they were quite as bad as ever. Every village was a law unto itself, what little authority there was being weakened by the rivalry of the hereditary chiefs and the clergy. If we had withdrawn our ships, a general conflagration would immediately have resulted. So long as they remained in Apia harbour the municipality, at any rate, was peaceful enough. Here we maintained a puppet king, whose writ ran just as far as the guns of our men-of-war would carry. We had a chief justice, with no power of enforcing his authority, and a land-court, which decided titles to estates, but could not instate their possessors. When the court had decided that *A* or *B* was owner of the land, it sent him, with a few policemen, to take possession. The local chief met the owner, listened to his story courteously enough, then

levelling his Winchester, replied: 'All right; you owner. You take land, me shoot.' This was the state of affairs in Stevenson's day.

Cusack Smith, who was British Consul at the date of our visit was a man of great capacity and tact, who took a deep interest in the people; he had a difficult and thankless task. One of his most important functions was to look after the 'labour-boys,' who are recruited in British-protected islands. First he inspected the schooners, and licensed them to carry a certain number, according to their accommodation. When they returned, he inspected each of their recruits—they are Melanesians, small men with negroid features, very different from the tall, handsome Samoans—and recorded every mark or bruise upon their persons. Each man received a tally with a number. Presently No. 1,507 would come to the consulate, and complain, 'Overseer beat me; see mark.' Then the consul would visit the plantation, to find perhaps that the boys had been fighting among themselves; or he might discover that the overseer had flogged the man, in which case we must negotiate with the German Consul for redress.

The Germans treat their boys badly, we heard, flogging them, putting them in irons, and giving them bad food. Theoretically the labour-boys enlist of their own free will, but in practice they are little better than slaves. The captain of a schooner calls upon a chief. 'Me got two rifles, very fine rifles, in the ship. You persuade twelve men—big, fine men—to enlist for Samoa, and me give you rifles.' The chief's powers of persuasion seldom fail in such wild islands as those of the Solomon Group, where cannibalism still prevails.

Once a number of labour-boys came to the con-

sulate, and explained, 'Overseer very bad man. All boys say, "Kill overseer." We say, "See consul first, *then* kill overseer."' Cusack Smith advised them not to kill him just at once, and so gave him a chance of getting out of the way. These fellows come for a term of years, and since they are paid wages, they return to their native land with some treasure, for the sake of which they run great risk of being murdered by their fellow-countrymen. If a labour-boy takes back a Samoan wife, she is, in certain islands, almost sure to be despatched as an intruder.

The Tivoli is an imposing hotel for Samoa, and really much too large for its custom. All the steamers come in during the same week, and then for a month the hotel is deserted. Its management is curiously composite. The responsible tenant is married to a native wife, but his department is limited to the bar. A young Australian runs the bedrooms, with the tenant's two little half-caste boys as chambermaids. A Chinaman rents the kitchen, while a native Tongan, Aitofele, does all the outside business—boating, horses, washing, etc. Negotiations have to be made with each member of the company in turn. We tried in vain to persuade the Chinaman to serve us native dishes. It was the usual story. Canned salmon. canned mutton, canned butter in profusion; while bread-fruit, yams, taro, were not to be had. With the thermometer at 95° we had no appetite for his melting mayonnaise and rich ragout.

It was distinctly hot, especially when chasing butterflies among the close groves of broad-leaved plantains. If you merely moved in your chair, the perspiration started from every pore; and when Puer began to run, he looked like a pæony which had just been played on

with a garden hose. But we did not mind the heat, and the butterflies were very beautiful. There seemed to be but few species, although the number of individuals of each kind was very great. They were quite different from those of Tonga, where the number of varieties was equally limited.

The feeling of heat was greatly increased by the moisture of the air. During the first two days that we spent in Apia rain fell in torrents every half-hour. The sky became suddenly black. The opposite side of the road was blotted out of sight. We felt inclined to shut eyes and hold breath, under the impression that some one had just pulled the string; but the tepid shower-bath was distinctly agreeable. In ten minutes it was over; the sun was shining, the sky was cloudless, the leaves were dry again, and Nature's face wore a broad smile. 'Rain in Samoa?' she seemed to say. 'Oh, you're quite mistaken; it never rains in Samoa. It is always sunshine, just like this. You find the air moist? The films on your photo-plates have all melted and run down to the bottom corner? Ah, that is a pity; but, you see, the place would not be so well worth photographing if I did not occasionally send the plants a heavy dew.'

We ordered horses to visit Papasaya, hoping to take part in what may be termed the national sport; but we were told that the mountain path was unsafe on account of the wet. Papasaya is a waterfall about twenty feet high, which every visitor to Samoa desires to shoot. A number of native girls go with the party, and it is their laughter and merriment which gives the sport its zest. 'You sit on the edge of the fall—wish you hadn't—give a gasp—shut your eyes—and find yourself under water in the pool below—to be fished out before you know what has happened by the girls who have dived after you.'

Apia harbour is merely a gap in the coral reef caused by the outflow of a small river. Fresh water is fatal to the coral polyps. To the right and left of the harbour the reef is about a quarter of a mile wide. One of the pleasantest recollections of our voyage is the afternoon spent on the reef in the Consul's company. We started in two 'dug-outs,' in charge of the Consul's 'boy' and a native woman. The canoes carried us over the deep pools, and our guides conducted us to the parts of the reef where animal life was most abundant. Here we waded in water from two to three feet deep; tumbling about at first in a very awkward manner, for the corals hurt our feet, although encased in shoes. The natives walked with naked feet, perfectly indifferent to the coral. The skin of their soles must be tougher than leather. The only things of which they seemed afraid were the great black sea-urchins, which were very numerous. They say that their spines are poisonous, but it is more probable that when one of the long spines has pierced the foot and broken off, the wound festers.

The rim of the reef is dry at low water and piled with dead and broken corals hurled up by the huge Pacific 'combers' which are always curling over it. On the ocean side it sinks with great abruptness to an almost fathomless depth. The corals on the face of the reef are of the same species as those which grow in the shallow water within it. We wondered how they could bear the beating of the waves, but we found that while we could easily detach any of the shallow-water corals with our hands, nothing would dislodge the corals which were exposed to the ocean. We wondered, too, how it comes about, if the reef is always extending outwards, that its raised rim gives

place to the lagoon behind it. The lagoon itself is carpeted with coral, which is always growing, always adding its inorganic framework to the floor. It must be that the rain which falls into the lagoon dissolves the carbonate of lime a little more quickly than it is deposited.

What a wealth of life the coral garden displays! We sadly wanted to carry a number of them home, to let their animal covering die and shrivel away in the sunshine, exposing the white framework upon which it rests. But Pater declared that our boxes were already full. The forms of the corals are very beautiful. Their prevailing colours were, however, much more sombre than we had been led to expect from the descriptions we had read. Most of them were dull yellow, brown, olive, or mauve. There was only one kind which was conspicuous for its brilliance. Its branching was very open, and the tip of each twig was a vivid heliotrope, apparently fluorescent.

If the corals were not brightly coloured, their dullness was more than compensated by the brilliance of the little fish which swam amongst them. It is quite impossible to give any idea of their metallic or gem-like hues. The most numerous species were of a blue, which is only equalled in Nature by the wing of a Morpho butterfly, or the breast of a humming-bird. Others, also very numerous, were of a bright, light green. What can be the object of this colouring? It is very difficult to explain in accordance with the now generally-accepted theory that all colouring and markings are Nature's cap of invisibility, which either hides an animal from the prey it seeks to capture, or from the enemy which seeks to capture it. The colours of the fish are so vivid that they can be seen at any depth, and one would think that it renders them conspicuous

to the hosts of sea-birds which are always hunting on the reef. We wondered whether, if the eyes of birds are like our own, the colour so dazzles them that they cannot tell whether the fish are only a few inches below the surface or as many feet. That was certainly its effect upon ourselves; but there were several natives on the reef who were catching the fish with their hands with extraordinary adroitness. It is evident that if the fish can be seen by birds—and possibly this is of no importance, since none of the birds are able to seize them when deep in the water—they must be invisible to every animal beneath them, which sees them through green water against the blue of a tropical sky. Our attendant caught us a very rare fish—the rat fish, so called from its chisel-shaped front teeth. It was sheltering in a hole in a great coral block, but she seized it, and after a hard fight, brought it to the surface, despite the poisonous spines which it carries on either side of its tail. We wish we could give a picture of the fish, for it is impossible to imagine anything so bizarre! Its general colour was a brilliant grass-green, marked with lines of vermillion in the oddest pattern. Around its little mouth the lines were curved like the tattooing on the lips of a Maori woman.

What concentrated life the reef presents! Its floor may be described as one continuous sheet of coral polyps folded over a calcareous skeleton, the varied branching of which exposes the greatest possible surface to the water. The water is alive with minute organisms for the nourishment of the infinitude of coral polyps; upon which, in turn, vast numbers of fish and lower animals browse. It is impossible to put down one's foot without touching sea-urchins, star-fish, crenatulids, great black *bêches-de-mer*, queer holo-

thurians two or three feet long, or other animals so strange that it seems as if in this warm water only the grotesque survive. Evolution has proceeded so rapidly that peculiarities of organization, colours, markings, spines, and other protective characters, have been carried to extremes.

The post-office at Apia is absolutely unique. It belongs to Mr Davis. Mr Davis chooses the pattern of the stamps, orders them, and pays for them out of his own purse. Then Mr Davis negotiates with the other Powers belonging to the Postal Union for the conveyance of his letters. New Zealand is very indulgent to Mr Davis, carrying his letters to Auckland and San Francisco for nothing. For their conveyance thence to their ultimate destination Mr Davis has to pay the same rate as the other Great Powers. Every letter carried from 'Frisco to London costs him *2d.*, and for other routes the tariff is that agreed upon by the Postal Union. The Postal Union consists of England, Germany, the United States, various other countries of greater or less importance, and Mr Davis. It is a profitable arrangement for Mr Davis, although he has no Government subsidy. It is the philatelists, not the Government, who make it possible for him to carry the letters of Samoa. He trades in stamps much as any other merchant trades in his goods, and is delightfully obliging. He carefully studies his market, and endeavours to stimulate as well as to gratify the tastes of his clients. Do you want a set of the current issue? Mr Davis will postmark them with the postmark of the day, and sell them to you for less than their face value. Nay, even obsolete stamps may be had for slightly more than their original cost. A complete set of the first issue would be almost priceless if only those which were used for letter-carrying

were in existence. But Mr Davis *owns the blocks*. He sold us a complete set postmarked 'Apia, May 16, . . .' for 2*s*. We suggested that while he was about it he might as well insert '1877' into the post mark. But at this Mr Davis drew the line. Still, 2*s*. was cheap for a set of stamps which are priced at £8 15*s*. in Stanley Gibbons' catalogue, and which are not forgeries! But perhaps they are forgeries! The question is beyond our comprehension. The courts have decided that a man can forge his own signature. Perhaps Mr Davis forges his own stamps!

We could not leave Samoa without having visited the house of the man who has made the island famous. Had Stevenson not made it his home, few people in England would know more about its situation than that it is somewhere in the mysterious Pacific. It is in association with Robert Louis Stevenson that Samoa has come to be so familiar that thousands of his admirers would be ready to start on a visit to it with his own simple directions, 'You take the boat at San Francisco, and then my place is the second to the left.'

We secured a buggy from a Chinaman to drive to Vailima. In the village where the pretty beehive huts nestle beneath the trees—each hut a perfect 'composition' in its shelter of plantains, bread-fruits, and cocoa-palms—we heard much laughter, clapping of hands, and singing. At least a hundred Samoans were running hither and thither with darts in their hands. Happy people—at play, as usual! This time the game was 'teá' or 'teá-tai,' and if one may judge of happiness by sparkling eyes, laughter and vivacious movement, what a lugubrious function an English football-field presents in contrast! The men were divided into two camps, and each camp was repre-

sented by three or four devils, with bold, black patterns on their face and chest. If they were not 'devils,' they were a colourable imitation. While the devils of one side hid behind a tree, or ran from one tree to another, the other side attempted to hit them with their wooden darts; and the men who were not engaged, the 'in' side, seated in a group on the ground, kept up a musical chant, marking time by alternately clapping hands and slapping elbows; or stopped to greet a hit with shouts of laughter. Pater made a photograph, and then allowed the men to put their heads beneath his focussing cloth, to their immense amusement. Their gestures showed that they found it extremely droll to see their fellows upside-down.

Then we proceeded, past the London Missionary Society's school for native girls—a well-kept, prosperous-looking settlement. For another couple of miles the road is bordered by small plantations of castor-oil plants, indigo, bananas, and cocoa-nuts, belonging to European settlers, and then, about a mile from Vailima, it enters the bush. It is steep all the way, but in the bush the wet clay was so heavy that our willing little horse could not pull the buggy any farther, even though it was empty, so we tied it to a tree and pushed on, on foot. Finding, however, that it was a very short way to the corner where the 'Road of the Loving Hearts' begins, we went back for the buggy, and, all working together, we enabled the horse to bring it up. The Road of the Loving Hearts is about half a mile long—a broad and well-made grass-track, which forms a pleasant approach to the house. And what a pleasant house it is! It would do credit to any English county. It is a two-storeyed bungalow, built in the form of a Z, the large hall

being on the left. This hall was Stevenson's favourite room. In it he died. It looks cool and spacious, almost baronial, being floored, panelled, and ceiled in dark wood, with latticed windows, and a broad staircase at the farther end. The bust of Stevenson's grandfather surmounts a large iron safe which stands in a corner. 'The old Scotchman looks as if he were always wondering how in the world he ever came to be in Samoa,' said Mrs Strong, who showed us the house. At the foot of the staircase are two sedent Indian gods, about as much like human beings as Indian gods usually are; but Mrs Strong told us that a Samoan chief, after gazing at them gravely, asked, 'Are they alive?' The Samoans do not attempt to represent the figure, either animal or human.

To the left of the house is the kitchen-garden, with a large summer-house in its centre. In the front is a well-kept lawn, with plenty of space for two sets of tennis. It is bounded by a hedge of hibiscus and a wall which separate it from the cleared land that slopes towards the bay.

The view from the rounded hill on which the house is built is very beautiful. Dense bush behind it; dense bush covering the mountain on our left as we gaze over the tops of the palm-trees to the blue water, just catching sight of the masts of the ships in harbour. It is a spot to dream in, to compose in, *perhaps*, but hardly the place in which to find energy to write out one's compositions. Poor Stevenson lived but a very short time to enjoy this, the third and the best of the houses which he built in Samoa. Still we cannot help thinking that his temper was that of the man who finds his pleasure in creating, and we doubt if he would for long have remained contented with the product of his labour. The difficulty of making the

park and garden must have been very great in a climate in which growth is so rapid that a hatchet is needed to clear a path, if, even for a month, it has not been traversed. The largest trees have been left standing. The grass was verdant after the rain, and four fine cows were ruminating in the shade. Pater set up his camera, adjusted the focus, and was proceeding with great deliberation to take a photograph, when he noticed that a fifth beast was coming towards him with lowered horns. It was not a cow, but a great black-and-white bull! His temper was warmed up to 95° Fahrenheit. He resented intrusion and did not appreciate the compliment which was being paid to the ladies of his party. Pater snapped the Thornton-Pickard shutter, snatched up his precious camera and retreated through the gate just in time to close it in the face of the infuriated bull. On the lawn a donkey was feeding. He, at any rate, showed no unreasonable antipathy to having his portrait taken.

The Samoan name for cattle is very amusing—'bulimacou.' 'What are these monsters?' they asked when the first cattle were imported. 'A bull and a cow,' was the answer; and ever since bulimacou has been the native word for all things beefy, whether out of a tin or alive and walking about. We did not come across much Pigeon English. For one thing, we could not speak it. No Englishman can, unless he has studied it as he would a foreign language. Its idioms are well defined, for it is the *lingua franca* in which the natives of different islands converse together or with other strangers. Our friend the consul asked a native: 'You savvy last consul?' 'Es, me savvy all-i-same consu—cocoa-nuttee no goodee—grassee no grow toppee.' The consul's predecessor was bald. 'All-i-same,' which is prefixed to almost all substan-

tives, is a reproduction of the 'faka,' 'after the manner of,' or 'like,' which the natives use incessantly, every substantive becoming an adjective when 'faka' is prefixed. 'Savvy' is due to the foolishness of early traders. They thought that any foreign word would be understood by a foreigner better than plain English. We have heard a paterfamilias on the 'Continong' request a German waiter, who spoke English as well, perhaps better, than he did to bring 'jambong et oofs' for his British family.

And now we and our baggage are safe on board the *Alameda;* four and a half dollars being the modest charge for transport from the shore! Our washing-bill is paid too, notwithstanding the fact that we can never again wear the white clothes in which we had hoped to cross the Equator. Mater was told that the Samoans were clever washerwomen, but something went wrong with our things. Although still wringing wet, they were burnt and blacked; and the scale of charges for all this mischief was somewhat surprising. We had to pay 17*s.* for our little collection of forty-nine things. The Apian washer-women adopt such a simple tariff—a dollar a dozen.

It does seem odd that these islanders, whose income is, on the average, probably less than a dollar apiece a year, if all the population of the islands be included, should request for a day's wages as much as would secure the labour of a whole Singhalese village. But the explanation is plain. 'We don't like work. We don't want work. If, to please you, we forego our national instinct, you must compensate us on an ample scale. Say, for one day's work, cotton enough to clothe us for the year.'

Whatever the price, we were glad to find ourselves and our baggage safely on board. There was only a

very slight swell, it was almost calm, but the waves caught us before we could scramble up the ladder, and one of our portmanteaus which the sailor on the ladder failed to catch, fell into the sea. Had it been rough, we might have had to resign ourselves to life in Samoa for another month. It would have been impossible to join the ship. We did not need the great, gaunt, iron skeleton of the *Adler* lying on its side on the shoreward reef to prove to us how little protection the harbour affords, and how dangerous an anchorage it is when a hurricane is raging. We could realize the awfulness of that day in March 1889, when Captain Kane steamed the *Calliope* out of the harbour, picking his way amongst the six other men-of-war which were gyrating round their anchor chains, or breaking loose to be thrown up high on the reef. The story has been told so often, and so well, that there is no need to tell it again. Stevenson's account is not perhaps so impressive as the simple narrative upon which it is based—the narrative of Captain Kane himself, written from a full heart the day after the disaster. For three hours the *Calliope* battled against the wind, under a full head of steam, before she made the narrow entrance to the harbour. As she passed the *Trenton*, which was bumping helplessly on the edge of the reef, the American sailors gave her a cheer, although they knew that their own end would probably come in a few minutes. As soon as he reached the open sea, Captain Kane called all hands on deck and signalled to them to kneel down—he could not summon a word to his lips—to give thanks to Almighty God for their escape. Then he went below to write his dispatch to the admiral at Sydney.

Great as was the feat of the only commander who saved his ship, the seamanship of the American admiral

was even more remarkable. When his cables had parted, and every stitch of canvas was blown away, the fires put out, the rudder broken, the wheel washed overboard, he sent his men into the rigging to link themselves together into a living sail, with which he managed to guide his ship on to the beach, thus saving all his crew but one.

The skeleton of the *Adler*, which will long remain a prominent landmark, must suggest many thoughts to visitors to Apia. The Samoans were fighting amongst themselves. The neighbourhood of Apia was in the hands of Mataafa, with whom the Germans had recently fought, and to whom they were bitterly opposed. Seven warships were lying in the harbour to keep the Samoans in awe—three American, three German, and one English. In a day the harbour was empty, and the Germans especially had to thank the Samoans for saving very many of their lives. The islanders behaved so generously that one wonders whether the coercion applied to them was justified.

Another subject for speculation is: from what did the hurricane save the world? The Americans were as much opposed to Tamosese, the Germans' *protégé*, as the Germans were to Mataafa. How much farther could the fighting have gone without the two Great Powers taking sides; and what would have followed the first broadside in Apia harbour? Fortunately, there is no need for us to write the 'might have beens' of history.

The Sandwich Islands

The steamer gave us a day in the Sandwich Islands, where we stored our memories with another series of

brilliant pictures: gorgeous flowers, avenues of 'royal' palms, blue-green water, dazzling sunshine. We landed early, prepared as usual to carry away as much of the island as we could collect in the time, but we found our butterfly-net, and even our pith-helmets, a little out of place in Honolulu, among trams, water-carts, fine streets, big stores, grand houses. We knew that the place was civilized, but did not expect to find a miniature San Francisco. How difficult it is to think of the Sandwich Islands except as the scene of the treacherous murder of Captain Cook, in 1779! We did not want to be met by naked savages with clubs and spears, but we were a little disappointed to find how completely American notions have taken possession of the islanders. They were all fully attired in white man's clothes, and the irresponsible, unconscious happiness of the Polynesian cannot show itself in a face framed by a stiff white collar; boots and trousers have put an end to romping; and the bonnets —what do the bonnets not suggest? It is all writ large in poppies and cornflowers. Social distinctions, social jealousies, social distrust. The dollar has done for Hawaii!

Of the 190,000 people in the islands, only 45 per cent. are natives. The rest are men of every white nation, as well as great numbers of Chinese and Japanese. One little Chinese lady whom we met, her tiny foot raised above the pavement on a thick white sandal, looked just like a figure from a rice-paper picture-book. Her brocades would have become a mandarin's wife.

Two companies of American soldiers were drilling in the park which surrounds the Government buildings, smart fellows, well dressed, with cartridge-belt round the waist. The sentries on duty had each a

hundred rounds of ammunition in his belt. A company of marines drilling in the streets were similarly equipped. This did not look like the 'perfect political security' of which the papers boasted.

We thought that we might reach the country by taking the tram to Waikiki, four miles along the bay; but almost the whole route is lined with houses. We lunched at the Sans Souci, and bathed upon the reef in water at 85°,—water to spend the day in,—but returned to the ship with very few prizes. The gardens were gorgeous with flowers, but we saw not a single butterfly. Some very large and handsome dragon-flies, of which we caught a few, hovered over the taro beds. Taro (*Colocasia antiquorum*) grows in water. It looks like a tall green caladium. Its tuberous root, which contains a great deal of starch, is pounded until it is of rather thinner consistence than dough, and is then allowed to ferment. The mush which results, called 'poi,' is the staple food of the natives. They cook it or eat it raw, or mix it with water, as a drink, and if we are to believe the testimony of European residents, or to lay stress upon the sleek condition of the people, there is no food more wholesome. We found it sour and nasty, but were told that we should soon come to like it, and that there is no stomach so capricious as to rebel under a diet of poi.

On our return to the quay we found the town band assembled to play us off. Flower-women were selling long strings of blossoms—only the flowers, white, pink, or yellow—strung on a thread. The white flowers were fragrant stephanotus; the pink, carnations. Many of the passengers wound these garlands, as well as the sweet-scented forest-vine, over their shoulders and round their heads and necks, falling in

with the custom of the natives when starting on a journey. We could not find it in our hearts to encourage such a wholesale destruction of the pretty things. Flowers strung in ropes with a thread through the centre retain their perfume but they are no longer flowers. Numbers of brown boys were diving for 'nickels.' Porters were hurrying on board with the last of the boxes of pine-apples and stalks of bananas which we were to carry to San Francisco. A large crowd had assembled to say 'good-bye' to their friends, and the air was full of the excitement which is always felt when a ship prepares to slip her moorings, to disappear upon the ocean even for a week.

As we went out of port we passed a Japanese vessel which had brought a thousand immigrants. They had smallpox on board. The yellow flag was, therefore, flying from her yard, and preparations were being made for the landing of her crowded freight at the pier of the quarantine station. The station is conveniently placed on a low island which lies to the side of the harbour, opposite to the town of Honolulu. As we steamed away, we had an excellent view of the coast of Oahu, the island upon which Honolulu stands, the capital of the group. Its mountains are lofty and very jagged, but totally destitute of forest, in which respect the island shows a remarkable contrast to the other tropical islands that we had seen. We left the leper island, Molokai, on our right, and saw neither land nor vessel afterwards until in seven days we passed through the Golden Gates and entered the bay of San Francisco. Auckland to San Francisco, by the islands, is 5,895 miles, and not a single vessel of any kind did we see on the voyage. What a wilderness of water to be lost in! What chance of being picked up by a

passing ship? 'Why do you always travel by P. & O?' we asked an Indian officer. 'Because I know that if anything goes wrong there is another ship of the same line not far behind.' The P. & O. has not yet extended its operations to the South Pacific.

CHAPTER VII

A GLIMPSE OF WESTERN AMERICA

SAN FRANCISCO is a wonderful city to an Englishman's eyes, but it does not properly come into our story, so we will content ourselves with describing only the things which struck us most, and amongst these we may perhaps place first the 'Seal-rocks.' Across the network of electric tramways, which in San Francisco render walking an extravagance, we were whizzed in about thirty-five minutes to Cliff House, seven miles, for the amazingly small fare of five cents. Long before we reached Cliff House we heard the sea-lions barking on the rocks. The noise resembled the baying of a pack of hounds. When we first caught sight of the animals we could hardly believe our eyes. The rocks seemed, from a distance, to be covered with mammoth slugs, for here the sea-lion (*Otaria californiana*), which is almost exterminated elsewhere, finds an asylum. The extreme simplicity of the creature is shown by the way in which it makes its home and carries on all the business of life within a hundred yards of an admiring crowd, always engaged in studying its domestic affairs from the balconies of the restaurant. On the lofty outer rocks a few big black beasts seemed to be keeping jealous guard, while the lower rocks were crowded with the great sea-lions, which lay in heaps, wriggling over one another in a most promiscuous way, raising

their heads and sparring in play like dogs, combing one another's manes, or chasing intruders away from the family group. They are polygamous and jealous. The biggest rule the roost, and soon send any youngsters who dare to be too familiar scuttling down the rocks. One matriarch, 'Mrs Butler,' always retains her station. Her sometime husband, 'Mr Butler,' 2,000 lbs. in weight, adorns the museum. It is funny to see the awkward movements of the seals on land. They raise themselves on their flippers, and draw their bodies up like clumsy 'looper' caterpillars. But when they reach the edge they tumble over with a rush, regardless of the rocks on which they bump and the waves, which look as if they would cast them up again, transformed in a moment from the most unhandy creatures in the world to the most graceful—rolling, diving, and rising in the water, like birds in the air.

On our road back to the city we passed a monument to Drake on a hill known as 'Prayer-Book Hill,' because Drake is reputed to have introduced the Prayer-Book into America. The 'Pirate Drake,' as recent writers have dubbed him, held Divine service on this hill. Pirate he certainly would be if, living in the nineteenth century, he carried on his trade of 'adventurer' after the manner of the sixteenth. But he would have been surprised to hear himself called pirate then. He was 'playing the game' according to the established usage, not only of that time, but of the two succeeding centuries. England and Spain were rivals in the new world. Practically, if not always avowedly, they were at war. Queen Elizabeth had no navy in the modern sense of the word. She subsidized privateers, and greeted with thanksgiving every blow which our intrepid captains inflicted on the enemy's

commerce. There were no international arbitrations and indemnities in those days. War paid its own expenses in a simpler way.

A day was devoted to the Stanford University. We were delayed at starting, but a flying tramcar enabled us to catch the train. With the same distance to traverse in London we should have been, perhaps, half an hour late. The ticket agent gave us sheets of cardboard with the months and days of the week printed down one side, down the other the names of all the stations on the line. They were punched 'Palo Alto'; 'June 6.' We took our seats in one of the long cars on bogie wheels, cushioned in red velvet, all one class, open from end to end of the train. Presently the candyman came along and pitched into each passenger's lap a square of peppermint chewing-gum, wrapped in paper. We ate the gum, but declined the boxes which he offered us on his next visit. Then came the newsagent, who pressed upon us newspapers and fruit, and insisted upon leaving a selection of new books for us 'to look at.' Presently the conductor, with the baggage-man and another assistant, made his way into our car. The conductor on an American train is an important official—a sort of captain and purser rolled into one. He took away our sheets of cardboard, and in their stead placed a red ticket in the band of Pater's hat. By this he could identify our party on his subsequent visits. It was being ticketed with a vengeance, but it is not a bad plan, and universal in the West. Pater forgot that he was wearing a label, but the conductor politely removed it as he was stepping off the car.

Not far from the suburbs of San Francisco we came to its city of the dead—a row of well-kept cemeteries, which compete with one another for popular favour.

Their marble chapels, trim lawns, firs, cypresses, and flowers, make them all attractive, but in the names written over the gateways, there was a considerable range of choice: 'Holy ✠,' 'Cypress Lawn,' 'God's Acre,' 'Home of Peace.'

All the towns along the line bear names which tell of the Spanish occupation of California. We stopped at Menlo, and went for a short walk among orchards and vineyards before proceeding to the university. The hot sun and semi-tropical vegetation were in marked contrast to the cold winds and sea-fret of San Francisco. Having bought some other fruit at a grocer's, we asked if he had any bananas. 'Oh, yes,' he answered, pointing to a box which lay on the sidewalk, labelled 'Per s.s. *Alameda*.' 'I will soon open that for you.' As it had been carried by our ship we felt that we had in some sort earned that fruit!

Just opposite the tall tree from which the place takes its name of 'Palo Alto' we entered the drive of Mrs Stanford's garden, and made our way to the house between rows of trees peopled with squirrels. On the ground were numbers of quails, for the birds are carefully preserved. As we walked through the grass, Puer almost stepped upon an animal of a different kind, which ought not to be protected—a viperish-looking snake, five or six feet long. It glided into a flower-bed, and curled itself up with its head towards us. When we threw things at it, it threatened to strike, but it would not leave the bed. We passed through the cactus garden, in which, from amongst dwarf species, covered with flowers, a number of big cacti stand like columns, twelve to fifteen feet high. But now we began to experience the drawbacks to surrounding a college with a site of 80,000 acres. It is a great thing for the students to have ample exercis-

ing ground, but it gives the visitor a fatiguing walk. When we reached the buildings we were received with the greatest kindness, and all the methods of this interesting 'mixed' university were explained by our courteous guides. In passing we cannot help remarking upon the aplomb with which American professors, and even professors' wives, make appropriate remarks. They have such an excellent idea of doing the honours of the institution which they serve. They expound their merits slowly, with emphasis, and in sentences which have an admirable head-line ring. We find it difficult to picture some of our friends at Cambridge acting the showman as efficiently at a moment's notice.

The exterior of the buildings is conspicuously plain, all attempt at architectural effect being reserved for the quadrangle of the great block, which is about a quarter of a mile in length. The court is laid with asphalte, and relieved by oval beds of palms and flowers. It is surrounded by the chapel, library, classrooms, and offices.

To the left of the main block is the boys' hall, to the right the residence of the girls. In America college students of whatever age are 'boys' and 'girls,' not men and women, as with us. Two students enjoy a sitting-room in common, with beds partitioned off. They take all their meals in the hall. Their good behaviour is taken for granted; no don resides in either house. The students make rules for themselves, and practically their conduct is not regulated by the college in any way. So our guides told us; although we found it difficult to reconcile the absence of control with the statement that the introduction of alcohol is forbidden, and smoking, in deference to Mrs Stanford's wish, looked upon with great disfavour. The council take cognizance of offences against the civil

law, but do not otherwise attempt directly to regulate the conduct of the students. The staff is large—thirty-two professors and thirty-eight lecturers. Most of the professors live in a pretty group of houses on the hill behind the college.

In the library there is a portrait of young Leland Stanford, and if one is to grasp the central idea of the university foundation, one must realize the part which this picture plays in the commemoration ceremonies. Fancy the quadrangle filled with students and their friends; the president on a rostrum; this portrait being behind him over the great gate. The President reminds his audience that they belong to the Leland Stanford *Junior* University—a foundation which exists to keep alive the memory of a boy whose early death shut the light out of his parents' life. When their only child had passed away, they determined to consecrate all that would have been his to youth in general. They devoted to the college all their wealth, endowing it with an estate which will amount eventually to ten million dollars. One room in a handsome museum contains the treasures which amused the boy during his short life—his toys, steam-engines, telegraph apparatus, suits of armour, and other curios collected when travelling with his parents.

We made our way down an avenue of palms to Palo Alto, determined after our reception by the college officers to collect a little gossip from less official sources; for there are two features of the Stanford University which make it an interesting subject of study—its democratic character, and the mingling of men and women, not only in the class-room, but in social life. We questioned the landlady of the little hotel. She had as her assistant a student who in the early morning takes down shutters, cleans windows,

sweeps out the bar, and then, having in return breakfasted at her expense, makes his way to his college duties; 'and no one thinks any the worse of him because he earns his living by doing my work.' The college fee is only twenty dollars a year, and residence in a hall costs but twenty-five dollars a month; so that many of the students can almost support themselves by working during the summer as fruit-pickers, for whom there is a great demand in this land of orange-groves and orchards. 'Do the young men and young women see much of one another in their spare time, or do they keep to themselves?' 'Oh, they bicycle together a good deal; but, of course, they have their own clubs, and are usually engaged for base-ball or hockey, or some other game. Some of the young ladies may like flirting better than athletics, but I have never heard a rumour against the character of any of them.' 'How do the boys behave without regulations?' 'Well, you know, they can't get anything to drink in Palo Alto. Sometimes they slip over to Menlo for it on their bicycles, and at Halloween or after the victory of a Stanford team they are noisy. But I suppose they are like boys at other colleges.'

Every one who visits San Francisco writes of the comfort and grandeur of its hotels. We almost felt as if we had a home again when we found ourselves settled in our little suite of rooms, separated from the general public in the corridor by a kind of hall-door and a passage; and with a bath-room of our own. We did our best to grapple with the American breakfasts, but soon concluded that only an anaconda could do the *menu* justice. We would have printed it if we had had a chapter to spare. Strawberries and cream to commence with, then 'mush' of various kinds, corn (maize), oatmeal, grits, &c.; barracouda and salmon among

the fish; green turtle or terapin in a silver dish supported over a spirit lamp; Chalcicana à la Chilana (Mexican 'fried various') swimming in butter; the Bostonian's beloved baked pork and beans, and many other entrées before one settles down to half a dozen kinds of bread and cakes, accompanied by very strong coffee with cream. An American likes to begin the day well.

Before we left we made friends with 'Tim,' finding him not a waiter after all, but a very human being. It was unlucky that we irritated one another at first; it was not our fault, but due to some acquaintances who joined our table. 'Is all Sacramento salmon as muddy as this?' was not a proper question to address to Tim. A word or two in praise of the 'praties' would have made him our friend at once; as it was, we had to put up with a good deal of inattention. The knives and plates made an unnecessary noise, and at last Tim knocked over Pater's glass of water. This was going too far. The head-waiter caught sight of it. But it was the beginning of a better understanding. Clapping his hand on Pater's shoulder, Tim said in a quick undertone, 'Now go and sit over there by yer wife, there's a good man. Oi'll put a clane napkin over this; and I'm sartain sure the young missie's too swate to notice it.' We had overheard Tim saying to another waiter in an aggressive undertone, 'I'm not going to work for nothing, it isn't loikely.' But he would never have extracted the 'tip previous' from Pater. It is against his conscience to put his dollar on the table before the meal begins, even when travelling in America. But Tim now gave up the attempt. 'Now, baby, what'll ye take?' Tim would say to Puer. 'Nothing! Whoy, it's just starving ye are. Now I'm going to bring ye some oice-crame. *No, thank*

you! What, ye prefer *milk*! A boy'll never do any good on milk. Look here, it's some more strawberries ye'll take, if I pick out the big ones and smother them in crame.' '*Cornbread*, sonny? why, *that's* no good; but oi'll bring it ye, anyway; ye must eat something.' 'What's crab farcé?' 'Why, farcy's just French for humbug. It's nothing but sausage-mate on crab-shells; and no good at that.' 'Now that man next ye has been longer at table than oi've ever seen him, and he's talked more to yer fayther this mornin' than he's talked for a month. He's mad, that's what he is—*mad*. He's just a banker or something, but he fancies he's always busy. As if *that's* what a man lives for.' It's a pity we did not know Tim until just as we were leaving. 'God speed ye, sir; God speed ye, ma'am; and a pleasant journey to all of ye back to the ould counthry.'

We left San Francisco for Portland by the *Columbia* —a handsome ship. The distance is 666 miles, and the passage takes fifty-two hours. We had large, well-fitted cabins, with a communicating door. The food was good and everything in excellent style, and the fare — five dollars! The usual fare is sixteen dollars, and when Pater entered the office he had no expectation of paying less; but the steamboat company and the railway were playing a little game of 'cutting rates.' Rate-cutting is an American invention which flourishes nowhere off its native soil. When our uncle was ranching in Montana the established railway-line found itself threatened by a rival. The fare for a certain section was $8.50, but to keep down competition the established line gave at the end of the journey a rebate of $9; the extra 50 cents being intended 'to cover the cost of beer!' If rate-cutting suits the company the passenger has no cause to grumble.

On this voyage we saw a very large number of whales. Their 'blows' were constantly in sight, and every now and again one of the monsters would show a great part of his head, body or tail. They seemed to be having a good time in the sunshine; except one poor fellow whose tragic fate quite saddened us. Hearing a great thud from far away in front of the ship, we walked forward, to see the tail of a whale standing vertically out of the water, directly in our course. Again and again the great tail was brought down slap on the surface, raising a wave, but the violent movement did not enable the whale to get its head up so that it could take a breath. We passed within a hundred yards of the poor beast, and saw that something like fifteen feet of its body was standing upright out of the water like a post, the tail coming down with great regularity, but more and more feebly, as we left it in our wake and lost sight of it in the distance. No one could give a confident explanation; but one thing was quite clear—some foe or foes were holding on to the whale's head. As a whale's brain is cased in a foot or more of solid bone, its head is very heavy, and there is little doubt but that its enemy succeeded in drowning it. But for what purpose? Thresher-sharks sometimes attack in company and attempt this manœuvre, but they make very little use of the carcase. Poor, inoffensive, defenceless whale! Like the overgrown Chinese empire, he is a tempting butt for sharks, sword-fish, and other fast-sailing, well-armed craft. The *Alameda* nearly ran into a dead whale as we entered San Francisco harbour in the night. It was putrid and distended with gas. We were told that if the engines had not been reversed in time we should have been nearly suffocated in our cabins!

We crossed the bar of the Columbia River at 4 a.m., and, although the sea was calm outside, we got a good idea of the awkward place it is. The short, abrupt waves looked as if they would be fatal to all small craft. Yet it is near the bar that the salmon fishers—chiefly Norwegians and Italians—get their best hauls. They were now on strike, and the canneries were idle, since it is impossible to find new men with a sufficiently accurate knowledge of the river. The sail up the Columbia to Portland is very beautiful. The Rockies at their highest form the background of the view.

On the ship we were badgered by a man who travels backwards and forwards from Portland to San Francisco solely for the purpose of touting for a sixth-rate hotel. We knew that an hotel which engages a tout is not likely to have any other claims to patronage, but we allowed ourselves to be driven to The ——; and this is the reward of our good nature! 'We shall only be here for a couple of hours; please let us have afternoon tea at four o'clock—nothing but tea and bread and butter.' 'Very good, sir.' At four o'clock we entered the dining-room, and after a great deal of bell-ringing we induced a waiter to attend to us. We repeated our order, but he did not appear again until it was nearly time to catch the train. Then he entered the dining-room bearing beefsteaks and other substantials. 'I ordered only tea,' Pater said. 'Well, if you want that kind of thing you must go back to Boston; we don't keep it!' At an hotel kept 'on the American system' meals are only served at fixed hours. We paid half a dollar each to discover how uncomfortable an American hotel could make us, but no one could have compelled us to consume the beefsteak.

In our hotel at Tacoma we read this notice: 'Per-

sons who put out their boots to be cleaned do so at their own risk.' What a terrible threat! It tempted us to put out our boots, to see what would happen. But is was not worth while. We found them in the morning absolutely intact, even to the dust which we had left on them the night before. This is the rule in American hotels. Boot-cleaning costs ten cents, and you must either yourself take the boots to the cleaner or send them by the 'call boy.' It is a dear country in little things. We did not see a coin smaller than a five-cent piece, which for all practical purposes is equivalent to an English penny. A quarter-dollar goes no farther than sixpence, and a dollar is expected in cases in which in England half a crown would serve. It is curious to notice how much the form of the coinage has to do with cost. The French franc, the English shilling, the American half-dollar go about an equal distance in the by-affairs of life. Tacoma is on Puget Sound. We rowed ourselves across its still water. Some Norwegian fishermen were using a seine net, in which they brought to shore a great variety of fish—salmon-trout, flat fish, etc. We greeted them with 'Ja vi elsker dette landet': it was all the Norwegian we knew, but it produced a great effect. As we lay on our oars a seal raised its head near to the boat and gazed at it with the unconcerned, curious gaze of a dog. It looked wonderfully like a wet Irish terrier without any ears. Once in Cambridge we had a seal as a pet. It was never happy unless it was either under Pater's chair or in his lap. Probably there is no other animal, a dog excepted, which so easily becomes completely dependent upon a human being.

The great saw-mill at Tacoma fascinated us. Huge Oregon pines are floated into a back-wash behind the

mill. Circular chains with upstanding teeth pass down into the pool. Lumber men push the trunks on to the chains, which pull them up into the mill at the rate of one a minute. The chain leaves them on a table. Two iron arms, raised by pistons, lean over the table and lift the great tree—five or six feet in diameter—on to a travelling car, laying it down as gently as if they were the arms of a mother placing her baby in its cradle. Away goes the car towards a vertical saw, which cuts off the outer slab. It comes back. The arms rise up again and turn the trunk on to its cut side. Another slice. The log is turned. A third; a fourth, and the beam is squared. Slabs two or three inches thick are then cut from it, and the central core, reduced to 9 inches by 20, is rolled towards a batch of saws which at one journey cut it into a score of inch-thick planks. On they roll—there is never a second's pause—towards a frame from beneath which a dozen circular saws can be raised by a man who stands in front of a series of hanging bars which look like the ropes of a peal of bells. These work the saws, which cut the planks to an appropriate length, and two or three minutes after the trunk has entered the mill, the planks are stacked on trucks, ready to be attached to the train; without having been touched by human hands. The iron hands with their single-pointed fingers lift the wood with such absolute lack of effort as to fill one with respect for their irresistible power. The refuse, which falls beneath the frames, slides down inclined shoots to the furnace, supplying the energy which drives the mill.

The sail up Puget Sound is not so beautiful as we had expected. Everywhere the Sound is enclosed by low hills clad with firs; but, although these are backed by lofty mountains, it is a very long distance from

the water to their base. Mount Ranier's giant wedge was rosy in the sunshine, and for the first three hours, from Tacoma to Seattle, we seemed to be steaming round it, although it was in reality fifty miles away. It is a wonderful mountain, which stands quite alone, and except for the fact that it is in view all day, being blocked out by the Olympic range only just before Victoria is reached, it would be difficult to imagine that it is so lofty. 14,444 feet the Yankees give it, each four being uttered with greater emphasis and deliberation than the four preceding; but the Canadian maps take off, we notice, nearly 2,000 feet! National jealousy! Even the poor mountain loses its head! It loses its name too, which must be almost as trying. Mount Tacoma it used to be called, and as Tacoma it is greeted by the Canadians when it peeps over their frontier; but the Americans rechristened it Ranier some time ago. It is a very singular thing that the giants on the west of the Rockies—Baker, Ranier, Hood, Shasta—stand quite alone, the hills about their bases being insignificant.

Tacoma and Seattle are singular illustrations of towns made, not developed. In each case a huge area is dotted over with detached houses, but the towns consist chiefly of vacant 'lots.' They wear a curiously expectant look. The prosperity prophesied when the Central Pacific Railway was opened is a long time in coming their way. Lots may be bought for a quarter the price they fetched in 1888-90. The boom has passed over, leaving very little real growth behind. Yet this open inland water has a great future. How empty the world is! Coal, timber, gold, fertile soil, unequalled water-ways and anchorage, and yet, although several of the towns are growing at an amazing

pace, the general surface of the island of Vancouver, of British Columbia, and the rest of the shores of Puget Sound, are far more thinly populated than mountainous Wales, the Hebrides, and many another ungenerous land.

CHAPTER VIII

CANADA

WE made the passage at night from Victoria, the capital of the province, at the southern extremity of the island of Vancouver, to the town Vancouver, on the mainland of British Columbia. It is a steam of about twelve hours. As Vancouver is approached the view up Howe Sound, just before the boat swings round into English Bay, is extraordinarily fine. Nothing could be grander than its interlocking wooded slopes, rising to snow-capped peaks; while the little steepled church upon the promontory adds to the picture a human touch. The situation of Vancouver is also very beautiful, and the view across the bay towards Stanley Park is exquisite; but in other directions the landscape is defaced by dismal patches of burnt forest. In Stanley Park we saw some huge cedars and Douglas firs—300 feet high by 15 in diameter, we were told. A most interesting reciprocity marks the trade of British Columbia and Australia. Canada sends to Australia posts and planks of fir, and paves her own streets with blocks of jarrah.

We should have liked to stay for a while at the sumptuous Terminus Hotel of the Canadian Pacific Railway, but so short a time was left that Pater was growing anxious. He wished to see his family a little nearer to the Atlantic seaboard; nor could we, any of

us, realize how easily we were to slip across the 3,000 miles which intervene between Victoria and Montreal. We went on board the train at 2 p.m. Our car was named 'Ashcroft.' All the sleeping cars have their towels, and other furniture. First on the train, behind two mighty engines, came the postal car, then names, like ships, which are marked on their glasses, the baggage car, a 'colonist' car, the ordinary first class, a tourist car, while two sleepers—'Tonquin' and 'Ashcroft'—brought up the rear. We were glad that we were in the last, as we were always able to enjoy the view down the line, behind the train. On these cars the ladies do not fare nearly as well as the men. They are obliged to dress in their berths—a very uncomfortable operation— and to wait their turn for the lavatory; whereas the men undress and dress in the smoking-room, which in some cars, contains several lavatory basins, supplied with hot and cold water. During the day the smoking-room makes a pleasant change for the men, whereas the ladies have to stay in their 'section.' We found our section a little cramped for four people, but it made up into two double berths, in which we slept comfortably enough.

The mountains are soon reached, at Morley, and for 600 miles the train winds round or cuts through the giants of the Selkirks and the Rockies. They were very beautiful as we saw them, with heads snow-capped, the white snoods of the caps reaching far down upon their shoulders, and glacier-ribbons falling on their breasts. We are not going to attempt to describe them. It would be useless. Six hundred miles of mountains! Any single league would make the fortune of a European railway-line. Two hundred peaks, or thereabouts, of first-class altitude—say 10,000 feet and upwards. Each mountain deserves a

picture to itself, but it was fatiguing even to follow the endless procession with the eye. At ten o'clock at night we could still see to read, thanks to the light reflected from the snow; but long before that time arrived, the sequence of mountains, lakes, and rivers seemed to have fused, in our minds, into a single type. And yet how wonderfully it had varied in different places and at different times of day! The water of the lakes was sometimes grey, but usually blue-green or blue, the rivers were always green, or white from recently melted snow; valleys and mountain sides were clothed with spruce, cedar, and Douglas fir; poplar, birch, and willow being rare additions to the foliage; the mountains were very rugged, very 'rocky,' with serrated tops, occasionally brown or yellow, but usually grey, and so sharp in the clear air that we did not appreciate their height unless they rose sheer up from the side of the line. These were the features of the landscape which in varying combinations made the glory of the views; the drawback to the scenery was league upon league of burnt forest, pine-stems standing bare like hop-poles, black and branched if the fire was recent, white and branchless if many years had passed since flames licked off the clothing of the bare hill-sides.

We made several acquaintances as the train rolled along. Among them were some members of the North-West mounted police—splendid, straight fellows. This is the life to make into an athlete an overgrown lad whom an office would kill—a life in the open air, a life of exertion and adventure, of long rides, and long tramps on snow-shoes. Those whom we met had not suffered from the hardships, although there are undeniable hardships to be faced. It is not really pleasant to sleep in a blanket on the snow, and it may

be cold. 'We were in a shanty up at the very farthest north, watching some Indians. We had to keep one man always on guard, and it was my duty to relieve Higgins at 4 a.m. Well, all the clocks and watches were frozen, so it was no good looking to them, but I could tell the time pretty well by the candle. At last the first rays of sunshine began to shoot over the snow, and the sun rises late in winter. I thought something had gone wrong, but the candle was just the same length as when I saw it last. I went to look at it. I felt it; there was no warmth. If you will believe me, it was frozen solid, *flame and all.*' Puer didn't believe him, but then Puer is sceptical.

The first time that we saw our negro porter make the beds we watched the process with great interest. Ours was an end section. Its two seats were placed face to face across the carriage. A wooden partition put up at the back of one of the seats cut our section off from our neighbours'. The upper bunk was let down from the roof on hinges. The lower bunk was made by pulling together the cushions of our seats. A rack of netting was let down at the side of the top bed and at the foot of the bottom one. These held our clothes. Sheets, blankets, and pillows were fished out from the space beneath the seats; curtains with flaps to button were drawn together, and in less than five minutes our section presented two broad berths. The upper spring mattress was much too springy. All night long it played bat-trap and ball with Pater and Puer, and when it threw them into the air they did not always come down into their own traps. But Mater and Filia, who had to undress in the lower berth, had a new experience to cope with—a sort of Davenport-Brother feat, which can only be accomplished with practice; and even at the best is apt

to bring on cramp. A certain physical conformation might render it impossible. We do not wish to be personal, but we have friends who would, we are certain, be compelled to sleep in their clothes.

Once when we had to get off the train in the middle of the night, Mater, who was making a great effort to dress without disturbing her neighbours, allowed her stockinged feet to project from beneath the curtain. Unfortunately, the tall negro-porter was trying to rouse himself for his duties at the station by collecting boots to clean. Rushing down the gangway, which was lit by a shaded lamp, he mistook Mater's foot for a boot. Her exclamation must have awakened the heaviest sleeper in the car!

It may sound greedy, but it must be allowed that the pleasantest half-hours in the day on a transcontinental railway are spent in the dining-car. It is so comfortable to sit at breakfast with snowy napery, bright silver, coffee, girdle scones, and honey in front of one, and the Shuswap lakes to glance at through the window. All the attendants, too, are most obliging. Civility is quite a 'speciality' of the Canadian Pacific. Part of the way we travelled with a blind Englishman who lives in Hawaii, 'Not to be a bother to my friends, you see. I can always come home for a day or two to see them when I want to. But I never cross the States. I always come up here to the Canadian Pacific, because I know that on this line I shall find some one to look after me. The only thing I can do on an American train is to sit down on the brake. The conductor is sure to shout out, "Now then, stranger, you get out of that!" and I have a chance of asking him to be so kind as to explain to me where I am to get to.'

The second day's ride up the Eagle Pass, by Ravel-

stoke, on the Columbia River, through the Albert Canyon, past the Loop, where the track twice folds upon itself, to Glacier House, was all too short. As soon as we had lunched we set out for the Illicilliwaet Glacier, an ice-field twenty miles long, the lower end of which, falling through the gap between Mount Bonney and Mount Sir Donald, blocks the end of the little valley behind the hotel. The ground was still covered with snow, and progress was difficult. Presently we were overtaken by the manager of the hotel, who was conducting a party. Had he known our intentions he would have offered us india-rubber boots and his own services as guide. He kindly called to us, 'If you will follow me, I will show you a short cut'; and six steps further he disappeared from view through a weak place in the snow. A very short cut, indeed, we thought it, towards the centre of the earth! He scrambled out, but later on his dog disappeared in the same way, and we spent a long time whistling down the hole without response. Mr Perley was growing anxious, when 'Spot' reappeared at the foot of a tree a long way off. The snow was supported by the stems of the trees, and kept from melting by their shade, but the earth on the open hill-sides was warm, and the streams of water which were rushing towards the river had caused the lower stratum of snow to melt. Beneath the unmelted snow was a vast series of caverns. A large ice-cave had been formed in the same way at the lower end of the glacier. It was a delightful retreat from the heat of the sun. We saw with remarkable clearness how some stones fixed in the ice and driven forward by its irresistible weight were scooping out the bed of rock down which the glacier slides. We could not help comparing the end of the glacier and the blocks of stone which it grasped

to a hand holding a plane, pushed down the valley by an arm several miles long.

.We walked up the pass to the summit of the railway in the Selkirks (4,300 feet), past a great bank of 'snow-lilies' (yellow dog-tooth violets), gloriously golden; watching the marmots, whose shrill whistle was to be heard on every side, the blue jays and other birds. This was better than going by train, for we walked on the top of the snow-sheds, instead of being carried beneath them. The mountains at the summit of the pass are extremely abrupt, the Hermit and Mount Sir Donald leaving but a narrow gap between them. We were in the centre of the vast mountain solitude. North and south the chain of the Rockies stretched for hundreds of miles, with many an unknown peak and unvisited valley. We could quite believe the assertion that 'previous to 1883 (when Major Rogers surveyed the pass) no human foot had ever penetrated to the summit of the great central range of the Selkirks.'

The train soon slid down to the station at Donald, on the Columbia River. This river, which we last saw flowing south, was now flowing north, for it makes a great loop round the northern end of the Selkirks, which it separates from the Rockies. The highest peaks of the Rockies rise to the north of Donald—Murchison, Lyell, Hooker, and the still loftier Mount Brown (16,000 feet). We reached Field in the evening, and spent two delightful days at the Châlet Hotel, where the manageress and the head-waiter, Alec, made us very much at home.

There is no way either in or out of Field except by the railway, and, therefore, no walks, except along the track or the 'tote' road which was used during its construction. To the ladies of the Settlement,

especially, life must prove somewhat confined. We set off in the morning down the track to visit the Natural Bridge. It is a complete bridge across the river, which plunges through its vaulted arches with a great roar and much spray, dropping about thirty feet. If there were any object in carrying a road across at this spot, it would merely be necessary to level the irregular surface of the rock. The view of Mount Stephen from the bridge is very fine. The larches were coming into leaf, and the whole colouring of the picture was more brilliant than anything we saw elsewhere.

Alec showed us some trilobites, and offered to put us on the way to the bed from which he had obtained these fossils, on the shoulder of Mount Stephen. It was about 2,000 feet above the hotel, and a very stiff climb. Climbing in the Rockies is a different matter from climbing in Switzerland—no paths, no signposts. The route to the fossil bed was indicated by some kind person who had blazed the trees the previous season, but usually it takes much longer to make out a path than to do the walking. There is a wonderful field for the mountaineer who hungers after untrodden peaks.

There were only six passengers in the train which carried us on to Banff: a quaint old Quaker couple from New England in the sleeper, and four men distributed amongst the colonist, tourist, first-class and observation cars. What an extraordinary undertaking the C.P.R. seems for the traffic! A whole army of men are employed in the mountain section. Every yard of the track is inspected by a watchman at least once a day, and on some sections he walks up the line before each train. Six miles is the distance usually allotted to a watchman, but in some places it is less.

We made friends with the man on duty at Roger's Pass, a nice young fellow, and could not help envying him his post—for the summer, at any rate. He was married, and had made a little garden by the side of his log house. Some radishes and a few other vegetables were showing above the ground. They would make a pleasant variety from the supplies which the store-car brings to his door once a week. What tranquillity! What a reduction of trouble! No road but the railroad. The shop brought to your door. Cooking, washing, sewing for the wife: for the husband his constant patrolling of the track. A life which 'allows us to read and think.'

The sharpness of eye and ear of the Indian is utilized at places where there is special risk from avalanches of ice or stones. He is content to sit and watch by the day, or, if need be, by the year! Mount Stephen is about 12,000 feet high, and so nearly vertical that it looks as if a stone thrown from the summit would certainly fall upon the train. The glacier on its shoulder had broken the day we ascended the pass, dropping hundreds of tons of ice down the slope towards the line, but doing no harm. Last February it very nearly eluded the vigilance of its Indian watchman, for without warning it destroyed the bridge just ten minutes before the train was due. In addition to the watchmen, gangs of platelayers and bridge-builders are always at work upon the track. It takes a vast number of people to look after one passenger train a day. Even with the goods-traffic, which is increasing, it is impossible for the line to pay the working expenses of the mountain section, let alone interest on the $75,000,000 which it cost to make.

The line crosses the Rockies at the Wapta, or Kicking-horse Pass (5,296 feet)—the Great Divide—where

at the same moment we saw one stream making its way westward towards the Pacific, and another starting for its long journey to Hudson's Bay and the Atlantic. This pass unites British Columbia, on the west, with Alberta, one of the North-West Territories, on the east.

Bathing, boating, and driving in the National Park, and a deliberate study of the Rockies, were our occupations at Banff. The atmosphere was so clear that we missed the beautiful effects that one looks for in mountain scenery. Sometimes we had the temerity to doubt whether mountains are interesting in themselves apart from the colouring and shading which atmosphere supplies. We could not tell whether the peaks were twenty miles or two hundred miles away, and consequently we could not guess their height. It is singular how well they deserve their name. They are magnified rocks, not mountains as we know mountains in Europe; often bare rock to the summit, with bold, irregular, angular outline. There is none of the alternation of grass and precipice with which one is familiar in Europe; nor are their bases clad with varied foliage. The fir is their only clothing—a ragged garment at best; but when it is torn by jagged edges of rock it ill conceals the huge naked slabs which lie on the 'dip' surface of the mountains. We feel that we are very hardy in passing judgment on the Rockies, without either fear or favour; but we chronicle our impressions as truthfully as we can. We were overwhelmed by their stupendous grandeur, we were bewildered with their variety of form, but we did not see any view as beautiful as many that we recollect in Wales, in Scotland, or in our own Lake District. It was atmosphere that was wanting. Atmosphere may not be as wholesome to breathe as

the treble-distilled air of the Rockies; but it makes prettier pictures.

We reached Calgary at 1 a.m. Uncle Lell was waiting for us on the platform. He took us to the Alberta Hotel, where we were soon in bed. At towns on the C.P.R. hours are regulated by the trains; not by the sun. 1 a.m. is a time of great activity at Calgary. It was late to settle for the night, but that indefatigable Puer had his father out of doors and took him round the town at 6 a.m. It was, when we saw it only a few years ago, a scattered settlement on the Bow River, with a great many vacant 'lots.' Now with its 40,000 inhabitants, electric trams, Government offices and a university, it is a marvellous example of the magical results which follow when the enchanter's wand of railway is laid upon the land.

After breakfast the team was harnessed, and we found the 'rig' filled with all kinds of luxuries which Uncle had ordered for our entertainment. Then he drove us fifteen miles across the prairie to his ranch. Prairie it is called in this district, although properly the open land to the east of the Rockies should be described as 'the plains.' In the States the name prairie is restricted to the patches of treeless land which occur within the forest area. Prairie vegetation is very different from that of the plains which cover Central and Northern Canada. But now we began to understand what plain or prairie means. Up and down hill we drove along a track, not made in any way, but smooth, except in a few places, where the wheels had cut into the ground, and the rains, turning the track into a water-course, had scoured away the soil; with nothing but grass on either side—no trees, no open view, unless we happened to be on the top of a ridge, when we saw similar ridges, wave beyond wave, reaching to the horizon.

Uncle's log-house is large and comfortable. A hall with the dining-room on the left and a large 'keeping room on the right, kitchen behind, five or six bed rooms above. It stands near the edge of the Bow River, and has a distinctly pretty view: a little island in the foreground, trees on the left bank, the Rockies far away on the sky-line. Some other ranches that we visited gave us a much truer idea of what life on the prairie usually means. Apart from its occupations, it is inexpressibly dreary. You step out of the front door on to the grass. Grass to right, to left, in front of you. No tree, no hill, not even a stone! No one point to catch the eye rather than another. Green waves, green waves to the horizon. But the waves are still. On the Atlantic the eye sees nothing but green waves, but they are alive, they move, one can watch them all day long. On the prairie they are dead; they have nothing to communicate. Green waves now, brown waves next month, white waves for six months out of every year. A man's hands sink deep into his pockets, and he goes indoors again— to light another pipe.

At Uncle's ranch we had plenty of fun. There were the stables and corral, with young horses in process of training—a short cut to the sixth standard, by the by. The three-year-old is driven into the corral, where it is kept without food or water for a day. It is then driven into a compartment of the corral called the 'squeezer,' because one wall of the enclosure is movable. This wall is pushed forward until the horse is squeezed between it and the end wall. In this helpless position a bit is put into its mouth and a halter on its head. It is then led out and fastened to a post, when it rears and plunges, trying to get free, until the halter has made its skin so tender that it cannot bear



A BUNCH OF MARES ON A CALGARY RANCH

to fight against it any more. Then it permits itself to be led. A saddle is put on its back; it is mounted and allowed to gallop away across the prairie, puzzled and terrified at its strange burden. In its hungry condition it soon grows tired. Then it wants to stop and feed, but it finds that its rider has a whip in his hand. With this he compels it to carry him back to the stable, where it arrives a 'broken horse.' With such a rough-and-ready method of education it is no wonder that the pupils are often not merely broken, but spoiled. We had a capital demonstration from one of the failures. A neighbouring ranchman—he lived only twenty miles away, and was, therefore, a near neighbour for these parts—rode over to look for some stray cattle. His horse was tired, so Uncle lent him a 'broncho' to continue his search. The great Mexican saddle was adjusted, and it was led out; but hardly was it clear of the stable door when it began to buck. Up, up, up it went, with its ears laid back and its spine arched like an angry tom-cat's, coming down each time with its four legs as rigid as the legs of a table. One of Uncle's horses broke its leg, bucking, simply under its own weight and that of its rider. This poor broncho had its 'sinche' (or girth) badly fastened and wished to remonstrate, but it began too soon, for its rider not being mounted, its rage was impotent; although it squeezed him up against the stable at one time in a very awkward way. The bunch of unbroken horses on the prairie were remarkably trustful of human beings, and we wanted to persuade our friends, that the frequency of bucking is due to the rough handling they receive when being broken, but the ranchers would not have it. Young horses buck, they say, while still in the bunch, and horses imported from England learn to buck from the others.

The habit seems to be contagious; but we should like to try what gentle usage and petting would do to prevent a young horse from adopting it.

Several cows and numbers of chickens roamed about the grass near the house, and a couple of acres of kitchen-garden were fenced in. Even now, at the end of June, the peas and beans were only just beginning to show above the ground, and the garden looked exceedingly bare; for the wind, the drought, and the frost kill any trees the ranchman plants for shelter. It is not only the climate which is unfavourable to trees, but the soil. Uncle had planted some close to the house, where they were sheltered from the wind, and he had carefully watered them, but all were dead. It appears that the fine soil of the plains, which has been in a great measure carried down from the mountains by the wind—the disintegrated felspar forming a very light dust—is most unfavourable to the growth of trees, owing to the fineness and closeness of its particles. Air cannot enter it, and the roots, as well as the leaves, of plants need air. Hence the plains carry only superficial vegetation, although along the river bank, and on the islands where gravel is exposed, trees grow freely. But the wind makes arable farming rather hopeless on the exposed land near Calgary. A field was pointed out to us which for a few short weeks had presented a promising growth of oats, but a prairie wind had blown over it, lifting every plant out of the ground, and carrying away several inches of the light, black soil. Its owner was philosophical. 'If the wind had not taken them, the late frost would have killed them; and any way, if they had survived the frost, they could never have weathered the drought.' Farms in this district will present a very different picture when the irrigation scheme now under con-

struction is in full working order. Many came to Calgary to start mixed farming; but this high land—it is more than 3,000 feet above sea level—where it cannot be irrigated, is good for one thing only—the rearing of horses. Cattle are unable to stand either the drought or the wind. If the season is drier than usual, they cannot go as far from water in search of food as horses can; while the cold wind drives them before it for immense distances, and often when it is accompanied by snow they seek any slight shelter the inequality of the ground presents, and are found in heaps, crowded to death. Horses, on the other hand, are strong enough to take care of themselves, and they looked extremely fat and well kept on a diet of 'blue-joint' and other hard grasses.

Puer wanted to fish in the Bow River, but judged the water too turbid for either minnow or fly. 'I will soon get some worms,' he said. 'And I,' replied Uncle, 'will give you a guinea for every one you find.' It gives one quite a shock to think that this rich soil, often ten feet deep, or even more, and almost stoneless, is treeless, and even wormless too. Worms are exposed to the same danger as the roots of trees. Boring far down into the light powdery soil in winter, to escape the frost, they are smothered in their beds; that at least is the fate which befalls inexperienced worms which migrate from surrounding areas. But what a soil it is for growing wheat where the climate is suitable! There are farmers who drive a furrow five miles long. A man mounts a 'sulky plough,' where he sits in comfort, like the driver of a hansom cab. His team of two or three strong coach-horses—no need of heavy-built, slow-moving shires—walks quickly down the furrow, makes one turn, comes back, and is taken to the stable. Think of the time wasted

in turning on a five or ten-acre field, not to mention the hammering of the headlands with the horses' feet, and the second ploughing which that necessitates. In Manitoba a double furrow is enough work for a team of horses, and it is cut without a pause. No manure is needed by the rich, dark 'vegetable loam'; and when the corn is ripe a battery of reaping-machines is marched on to the prairie. They go through the wheat in a long diagonal line, cutting off the heads only, thrashing them and putting the grain in bags as they go along. Then the straw, and the weeds, and the seeds of weeds are burnt, leaving a field which will be clean and ready for wheat again with one ploughing and harrowing. This is advanced farming, which, it is needless to add, is not common, even in Canada. But the most primitive Canadian farming is more effective and less troublesome than ours. Poor English farmer! 'You can't grow white straw after white straw.' No; and to get a crop even in rotation you need manures, ploughing and counter-ploughing, scuffling, hoeing, men to cut charlock and thistles, six months' anxiety, and, perhaps, at the end a wet harvest and sprouted corn. So rapid is the growth in the hot, dry Canadian summer that the grain is placed upon the trucks three months after sowing, or even sooner.

Although there are no worms on the prairie, and very few birds, there is abundance of animal life. The gopher, a pretty little rodent, neither squirrel nor rabbit, was always to be seen sitting on its quarters 'begging' at the mouth of its burrow. Its trustful curiosity won our hearts. But it paid dearly for its confidence in human nature, poor little thing! or must it thank its own extraordinary inquisitiveness for its fate? Unfortunately, the gopher is a nuisance. 'The

more tails you bring me, the better I shall be pleased,' said Uncle; 'when, after all my trouble, I do get a few vegetables about the end of August, and think that I will live upon them until the frost cuts them down in October, the gophers are before me, and get the lion's share. And although their holes are not big enough to be dangerous to the horses, the badger comes along after the gopher and enlarges its hole. Then my horse breaks its leg, and some day I may break my neck.' So Master Alfred, the housekeeper's son, and Puer were on the hunt from morning till night, and bagged in two days no fewer than forty-five tails. Wherever they saw a gopher bolting down its hole they set a spring trap, or even a simple running noose made from a boot-lace. The animal invariably came up within two minutes to see what had happened, and almost with certainty got itself caught. If its partner in life was down the burrow, she also came up on hearing her husband squeak, and shared his fate. The sport was rather tame on account of its ease. What a difference there is between the wiliness of the rabbit, who for generations has sharpened his wits at man's expense, and the guilelessness of the gopher, who, until the last twenty years, has enjoyed the prairie all to himself. The bison was the Indian's game. He did not concern himself about the insignificant little gopher! Gopher is a curious phonetic spelling of the old French-Canadian name 'gaufre'—an animal that honeycombs the ground until it resembles the 'gaufre' cakes, still popular in France. Our own word 'goffer' comes from the same source.

At night we heard the baying of the coyotes, or prairie wolves. It was just like the cry of a child in trouble. We shivered when we thought of a child out on this wilderness alone!

Behind the ranch the ground rises to about 700 feet, and from its highest point we obtained a wonderful view of prairie. 'Fancy that you can see to the end of it,' said Uncle; 'prairie, prairie, prairie for more than a thousand miles! Prairie to the shores of the Arctic Ocean.'

We had a delightful time with Uncle, riding, driving, fishing, inspecting the horses—he had more than two hundred for us to study—and being entertained with a long series of ranching stories. Among the supplies which he had laid in for our advantage was a bottle of 'mosquito oil.' With this we anointed our hands and faces when fishing, and it revealed a phenomenon which we should not otherwise have noticed. The weather was particularly fine and there was very little wind, but soon after we had put the oil on our hands they became coated with black mud. The air was charged with fine black dust, which is a terrible worry to the cleanly housekeeper. Uncle had also bought some great jars of insect powder and two pairs of bellows. With these, from time to time, he exterminated all the mosquitoes that were in the room. They no longer trouble him, for he is acclimatized, but they had a curious thirst for fresh blood. A new arrival was greatly flattered by the invitation of a high official of the Dominion to accompany him for a day's fishing. At last, when he began to feel that his features were losing all recognisable shape, he asked his new friend rather plaintively, 'How is it, sir, that the mosquitoes which are torturing me seem to let you severely alone?' 'Oh, the explanation is very simple: I always take a young Englishman with me when I go fishing.'

In many districts the title to the farms is rather vague. Every man has a right to 'homestead' any

160 acres (a quarter-section) which he finds vacant. When he has built a house and resided in it for six months, at least, in each of three years, the fee simple of the land becomes his own. But most of the ranchers have bought additional land, either from the Government, the C.P.R., or the Hudson's Bay Company; sometimes from all three. The price demanded twenty years ago, at the time of the 'boom,' was far beyond the value of the land, and the tenants having paid some instalments of the purchase-money, declined to pay any more. They continue to enjoy the land, and have a sufficient guarantee of permanent occupation, but they have not a good title to sell. Farmers in Western Canada grumble like men of the same profession everywhere else; but it is certain that the farmers in the old settled districts in the east are anxious to migrate to the rich virgin soil in the west and north-west. They believe that money is to be made on the new land. Life may be harder, but farming is more profitable on the open prairie than on farms which for many years have been enclosed. And it is a grand life. The Rancher's Club at Calgary shows a fine display of ruddy faces and vigorous limbs. It shows, too, more of manners and culture than one expects to find in the Far West, for a large proportion of its members are public-school and university men. If it be banishment, it is banishment in good company. Seeing them at the club, one would not think how hard the ranchmen really work and how hard they live; but they do live hard when they mean to succeed. Probably the ranchman who invests a good deal of capital, gives large prices for horses from England, and pays high wages, does not succeed so well, proportionately, as the small farmer. Every one is ready to tell you of men—in the story they are

usually Scotchmen—who came out ten years ago with nothing; saved their first year's wages, home-steaded a quarter section the second year, out of their savings and now are the owners of ever so many teams of horses, and reap ever so many acres of corn. Although the figures vary, the moral is always the same. Canada exports about £35,000,000 worth of agricultural produce (including animals, alive and dead) every year, while her population of 7,500,000 consume, in the towns and manufacturing centres of the Dominion, much more food than is exported. Those who produce the horses, the beef and mutton, the grain and cheese, make a good income, on the average.

There was no choice of trains, so we went on board at 1 a.m., glad to roll into any berths the porter chose to offer us. In the morning 'Paul' established us in great comfort in sofa-sections, on the two opposite sides of the car. Hour after hour the train rolled along an unfenced track. Nothing but a sea of prairie, billow beyond billow; very restful to the eye. No trees or houses whizzing past. Nothing to arrest attention. Nothing but green grass—very green and succulent just now, for it had been an unusually favourable spring. It seemed a great pity that no herds of cattle or horses were eating the grass, which in another month would be withered and brown; but only a very few farms were to be seen on the banks of the infrequent creeks. Cattle cannot be kept far from water. Some are driven on to the prairie while the grass is fresh, but it hardly answers; they must be taken away before it withers and housed for the long winter. The cattle native to this vast pasture have disappeared. Their 'wallows' and great heaps of their bones tell of their former abundance. But the only specimens of the bison now extant are preserved in

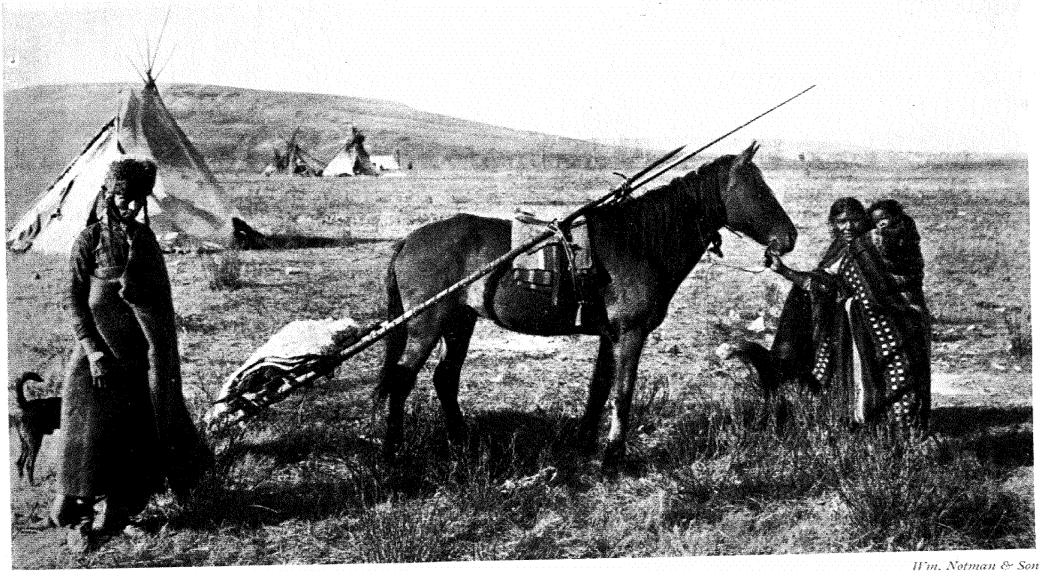


Photo. *Wm. Notman & Son*

INDIANS AT CALGARY MOVING HOUSE

parks; except for a small number of 'wood-bison,' which still linger in such utterly inaccessible spots as the shores of the Great Slave Lake.

We passed a number of Indian settlements. The tents were picturesque, and so, too, were some of the men, in blanket-coats and raw-hide trousers, feather in hat; and the women with bright-coloured blankets and necklaces of teeth and beads. But the majority were dressed in European costume—the men tall, with aquiline features; the women squat and ugly—dull, miserable beings, a great contrast to the Maori. They have their 'reserves,' 150 acres per man, which they hold in common and must not sell, and they receive Government rations; but they are very idle and will not cultivate the land, nor even make the bead ornaments, birch-bark canoes, and other trifles which they could easily sell. While incapable of civilization, they take no pleasure in mere animal life. Only war and the chase can make their eyes gleam. Agriculture is contrary to their instinct. One might as well expect a really good ratter to be happy turning a spit. In their present unnatural circumstances they are sombre, taciturn, forlorn-looking, with none of the sunny, live-for-the-day playfulness which excuses the Maori his dislike of work. They go out as harvest-men in summer, but otherwise they are of little use to the settlers or to themselves.

It was a beautiful evening, and we sat up late, so that Paul found us very unwilling to be disturbed for breakfast. 'You must come soon or you won't get any. It will be all over.' 'Oh, nonsense! I am not going to get up. Breakfast must wait.' 'It can't wait. They take the breakfast car off at half-past eight.' 'Well, there is plenty of time,' growled Pater; 'it isn't half-past six.' 'It's half-past seven, sir,' said

Paul; 'we lost an hour at Brandon.' Really the C.P.R. is too arbitrary! It takes an hour off and does not leave the breakfast-car on. We did not wish to lose an hour in the night, although we could easily have spared one from the day. Pater took us round the globe towards the East because he said that it would be much less fatiguing to find bed-time arrive too soon each day than to find it arrive too late. It was only when crossing the Continent that we found the sun getting up before he was called by the clock. On the ocean, where time is changed at mid-day, he is in too great a hurry to go to bed. We suppose the explanation is that in Canada the sun is very busy, especially in the summer; whereas at sea there is really nothing for his rays to do.

Winnipeg at noon. We spent an hour in the prairie-capital, and expressed suitable astonishment at finding wood-pavement, fine buildings, electric trams, electric light, where thirty years ago was open prairie. When at the time of Riel's rebellion Lord Wolseley took his small army from Fort William to Fort Garry (Winnipeg), he found whale-boats the best means of transport, and he spent six weeks on the journey, although pressing forward with the greatest haste. It took us eighteen hours and a half. If a second Riel arises, he will have to fly his flag over territory farther to the north.

Winnipeg is the centre of several growing industries. Glue, candles, soap are beginning to be made there, instead of the raw material being sent east to be manufactured, as heretofore. Tanneries and flour mills are also arising. But perhaps one of the most remarkable industries is the catching and storing of the excellent Lake Winnipeg 'white fish.' Ice is cut and stored during the winter. During the summer the

fish are caught by steam-trawlers and packed in the ice, to be sent *fresh* to the States the following winter, when the temperature is low enough for them to make the journey frozen.

The prairie had already given way to tracts of scrub before we reached Winnipeg,—the ground beneath the trees red with the blossoms of the Canadian lily,—but east of Winnipeg the character of the landscape changes in a most remarkable way. Bare granite boulders and slabs, surrounded by dwarf firs, cover the surface of the ground. In some places it is flat, in others hilly, with lakes of all shapes and sizes between the hills; some large, like the 'Lake of the Woods,' others mere ponds. There are thousands of these lakes between Winnipeg and Fort William, and the same inhospitable, impracticable granite-country extends along the whole north shore of Lake Superior.

Every one was excited about the impending elections. There were several energetic politicians in the smoking-room of the train, and amongst them the candidate for the district. 'Mac,' as his friends called him, claims that his people came to Canada from Scotland in 1747, 'and though we haven't seen the Mother-Country for five generations we love her dearly. In Canada we are loyal to the backbone—more loyal than you are in England. Radicals? We don't believe in Radicals here, sir. We should hang them if they came. When, in 1887, O'Brien and Kilbride came to Toronto to speak against Lord Lansdowne because he is an Irish landlord—though a good one—we nearly lynched them. We should have done it if the police had not interfered. And quite right too! It is the only way to treat such fellows. We don't believe in lynching in this country; but there are circumstances which make it necessary.' 'What do I think is the

best treatment for the Indians? A pound or two of strychnine.' 'Mac' is a fine fellow, with the courage of his convictions. but he expresses them in rather a sanguinary way.

It was nice to find ourselves on board the *Athabasca*, even though they kept us waiting in a ridiculous way at the steward's office for the allocation of cabins, which might just as well have been settled on board the train. It is not pleasant to stand for an hour at 6 a.m., without breakfast, waiting for an official who does not see fit to appear. Besides, we were really very weary. Three nights and two days in the train would not have tired us if only we had been allowed to sleep at night; but people who join the train at 3 or 4 o'clock in the morning are so proud of themselves for being awake at such an unusual hour that they take care that all the passengers in the 'sleeper' shall hear how lively they are. The lake happened to be covered with fog. There was nothing to do on deck; so we made use of our cool, clean, quiet cabins for a good rest. And what a change it was from the train! We had made up all arrears of sleep when we reached Sault Ste. Marie (pronounced Soo St Mary) next morning. We went through the locks on the American side, although Canada, too, has double locks. The boats prefer the American side because of the more important connections with railways, and also because rope and oil can be bought duty free. The river is three-quarters of a mile wide above the falls. The upper lake, the Lac Supérieur, is twenty feet higher than the lower lake, Lake Huron, and the river makes the fall in about half a mile. The proper thing to do, while the steamboat is lying at Sault Ste. Marie, is to 'shoot the rapids.' It looks impossible to take a boat through such water, but we were soon seated in the

bottom of a canoe, wrapped in American cloth, which, when shooting rapids, is a better protection than the British flag, even though Britannia is a recognised ruler of waves. Our two pleasant, French-speaking voyageurs poled the canoe out into the stream. Round we swung. They dropped the poles and picked up their paddles, a few strokes of which guided the canoe in safety past the larger waves. When we watched another canoe descending, it appeared to bound about in the most excited way, but from within the canoe the passage seems almost tame. Boat and water are moving together. The waves die away in front of the prow. There is no exhilarating sense of battling with them. Indeed, the boat does not appear to be advancing until one looks at the bank. In a very few minutes we found ourselves walking back along the bank watching the fishermen, who scoop out salmon with great ease in a small net on the end of a pole. The fish is fighting hard to come up-stream. The fisherman drops his net in front of it, and either the salmon is unwilling to yield the ground for which it has fought so hard, or else it fails to see the net in the swirling water. It is simply lifted out, standing, so to speak.

We watched the construction of the great lock 800 feet long, 100 feet wide, and 21 feet deep, 'the largest in the world.' The Canadians say that the lock on their side is the largest in the world; but we have observed already that science is *not* measurement within a certain distance of the frontier. International rivalry will give a bias to a foot-rule.

Already a 'whale-back' has carried corn from Fort William to Liverpool, and if, as is probable at no very distant date, the Welland and St Lawrence canals are enlarged and deepened to twenty-one feet (they are now fourteen feet deep), ocean steamers will go from

England to the head of Lake Superior, no less than 2,384 miles from the Straits of Belle Isle and the open ocean. No other country in the world can compare with Canada in the convenience of its water-ways.

Another quiet night and we found ourselves at Owen's Sound. Here we made up a little for the disappointment of being whirled past fields of flowers with no opportunity of collecting any. It was tantalizing to see the handsome flame-coloured tiger lily (*Lilium canadense*), a fine blue iris, and a cypripedium (lady's slipper) of extraordinary beauty—a mauve slipper with white standards—without being able to reach them from the train. In a marsh near Owen's Sound, a small blue iris, mallows with very large white or pink blossoms, and a white pyramidal orchis, were very abundant.

Toronto—we must not attempt to describe this handsome town—and on to Niagara Falls. The drive to Clifton House is not attractive. The bare American side of the gorge, with its great mills, worked by power derived from the falls, gives one the worst impression of the place; while the falls, when first seen, do not seize upon the imagination, for they are not beautiful, and there is nothing by which to estimate their size. We had come prepared to be impressed, and the disappointment was universal. Puer made no attempt to conceal his poor opinion of the whole affair. He hardly glanced at the falls. Any trivial thing—a passing cab or tram—was of more interest than Niagara. He even compared Niagara—to its disadvantage—with the water falling over the sluice at Chesterton lock. And Puer was true to himself. He spoke of the falls as he saw them when approaching from the station; a lock-sluice on the Cam, at the distance of a few yards, makes as large an image on

the retina as Niagara when two or three miles away. It is not until one has been to the edge of the falls on both banks and has measured with the eye the mile-long roll of water on their margin that one begins to realize that the whole interest of Niagara centres in the water. People do not go to Niagara to see a beautiful combination of wood and hill, vivified by a thread of living, leaping silver, but to see the utmost effect which nature can produce by the reckless use of water. Such a marvellous expanse of smooth green curve, from which depend row below row of snowy fringe, lost at last in translucent mist, and over-arched by ever-shifting clouds of spray! The observer can take in a part only at a time. Were the falls ten times as great as they are, his receptive powers would not enable him to appreciate the larger effect.

You have to reason about Niagara before you feel it, for Niagara is a question of figures. The contour-line of the Horseshoe Fall is 3,010 feet, of the American Fall 1,060 feet. The water which comes over the Horseshoe falls 158 feet; the American Fall, owing to the rapid drop in the level of the lower river, has 9 feet farther to descend. The green roll on the lip of the Horseshoe is supposed to be twenty-one feet in thickness. 107,000,000 gallons of water descend the falls each minute. Above the falls the river is two miles wide; below them its width varies, but averages about 1,000 feet. In the gorge, where it is 180 feet deep, but only 300 or 400 feet wide, it rushes down at the rate of more than twenty miles an hour. The falls of the Conway or of the Tummel appeal to the soul; only a barbarian would try to analyse their beauty. Niagara appeals to the head; it has to be worked out.

When the figures are grasped, the tourist is in a

position to interpret what he sees. It was strange to find how our estimate of the falls grew as we watched them. Every hour seemed to make them vaster, grander, more beautiful. We were thankful that Pater had arranged for us to stay close to them for several days. In a day we could not have made their acquaintance. We should never have come to be on speaking terms. In fact, we should have left with the feeling that Niagara had been sermonizing us all the time in a very loud voice, and had proved rather a bore. As it was, we came to know one another very well indeed; for not only did we stand with the crowd in the mid-day sun watching Niagara's uttermost effect of brilliance, force, and noise, but we studied the falls in their softer moments also. Late at night, and alone, with the spray dripping from our waterproofs, we walked to the head of the falls on the Canadian bank. The moon, now in her third quarter, revealed an infinity of water tumbling out of sight into the all-enveloping mist. There was a top to the falls, but no bottom and no farther side. In the morning we took the *Maid of the Mist* to their foot. This is far the best way of seeing them. The falling water almost came down on to us and was all round us as the little steamer jumped about on the great waves which are always fighting one another in the receding angle of the Horseshoe Fall. For an hour at a time we stood on Prospect Point, fascinated by the depending curtain of silver lace, which is always changing, yet always the same—re-formed each second, yet lasting for ever.

We went behind the falls in oilskin trousers, coats and hats. It was a wet expedition, but not otherwise interesting, for we could see nothing. We could not hear one another speak, and after a minute we seemed to have lost the sense of hearing altogether, for we

were not aware of the noise of the falls. The photographer at the top explained the expedition to us. 'What! you won't be photographed! Why, that's all people go down for, to be photographed in those clothes.'

We had delightful rooms at the angle of the hotel facing Niagara. Pater grumbled at the price, but it was very pleasant to be able to sit upon our own verandah watching the water. The drawback to the situation was the noise of the falls and the vibration of the ground. Although we were half a mile from them, and 200 feet above the river, we had to resort to all kinds of expedients, to prevent the windows from rattling, before we could get to sleep at night. Pater solved the difficulty at last by fastening a strap to the handle of the French window, passing it over the back of a chair, and hanging a portmanteau from its other end. It acted like a hand constantly pulling on the handle. He offers the invention to any visitor who may be similarly placed. We tried to sleep with windows open, but the noise made it impossible.

On Sunday a more than usually insinuating cabman tried to secure us as we left the hotel. 'No, thank you,' said Pater, thinking to give him a final answer; 'we are going to church.' 'Let me drive you there. Then I will meet you and take you about all day for $2. It's cheap driving, but it has to be done.' So we secured a carriage and pair—the only cheap thing we found at Niagara—and made the round in comfort. First to the 'whirlpool,' where we descended to the water's edge in a cable-tram. It is not a whirlpool in the ordinary sense, but a particularly fierce part of the rapids at a slight angle in the river. No one has passed it alive swimming, although several people have gone through it safely in a long barrel with a

keel and a pointed end, a hole in the side for the head, and two rings in the interior, through which the arms are passed. The stream carries the barrel seven miles in twenty-one minutes, and there is nothing remarkable in the feat of crouching inside it, for it is a vessel which cannot miscarry. But it is curious that even on the spot one hears the fable that swimmers have passed the rapids in safety, and even the still more absurd statement that human beings have come over the falls alive. Captain Webb tried to swim the rapids, and our guide pointed out the exact place where he was drowned. For several days before attempting the passage he studied the landmarks, and he thought to escape the whirlpool by keeping well in to the American bank; but apparently he lost his presence of mind, went too close to the bank, and struck his head against a rock before the whirlpool was reached. At the whirlpool the stationary waves rise to a great height, the water is sucked in beneath them and comes up boiling. It carried Kendall down when he attempted to swim through it in a cork jacket, and threw him up like a piece of drift-wood, insensible although fortunately alive, on the Canadian shore.

Much more remarkable than passing the rapids in a barrel, which is so safe that it might be made a popular amusement, was the passage by the old *Maid of the Mist*. She had been unsuccessful, was mortgaged, and, lying in American waters, she was liable to be seized for debt. So at daybreak she slipped her cable and steamed downstream with three men on board to navigate her. At the whirlpool she went under and nearly foundered, but, once this was passed, '"they'll have fleet steeds that follow," quoth young Lochinvar.'

A less fortunate ship, the *Caroline*, came over Niagara in 1837, as matchwood! At the date when the Queen

acceded to the throne, there was much dissatisfaction in Canada, amounting to a weakly supported rebellion, owing to causes which are not easy to understand now, since they were almost entirely political and seem to have been as easily removed by Lord Durham in 1838 as they had been created by Pitt in 1791, when he divided the vast territory into Upper Canada, which was English, and Lower Canada, which was French. Lord Durham united the two provinces into a harmonious and contented Canada. But at the accession there was a real rebellion, and the American ship *Caroline* was fitted out to harass the loyal Canadians; she was to be a filibuster, in fact. But her career was short: Sir Allan McNab ordered his men to cut her moorings in the night, and she floated down to the falls. It is commonly asserted that no trace of the ship was subsequently seen, but this is probably a poetical addition to the story.

The picture of the falls which will remain in our minds for ever was a view from the Canadian side, late on the afternoon before we left. The sun was low, and in consequence dark shadows defined every irregularity in the contour of the falls, and threw each tassel of spray into strong relief. Half the Horseshoe was in shade, half glistened in the sunlight, while a superb rainbow added colour to the picture. It rose as a perfect arch; one limb resting on the centre of the Canadian, the other on the American Fall. The two nations united by the emblem of Hope! For one hundred years no hostile force has crossed the long, unguarded frontier. A century of peace is a conclusive test. Never again will the two nations of English-speaking people, each a fraternity of many diverse races, decide conflicting interests by force of arms.

Onward toward the east by lake and river. It is

luxurious travelling on smooth water, with a cool cabin to rest in when tired of watching the ever-changing banks, the towns and villages and the passengers on the landing-stages. It was Dominion Day, 1st July, when we left Lake Ontario and entered the St Lawrence. The villas on the 'Thousand Islands' were decorated with flags. Hats and handkerchiefs were waved as the boat passed. It is a country to keep loyalty alive. For the first half of the distance between Lake Ontario and Montreal the north bank of the river is British, the south belongs to the United States; then, while the river trends northwards, the boundary keeps straight to the east, along the forty-fifth parallel of latitude. The two Powers, which have, unfortunately, been more than once in conflict, watch one another across the longest common frontier which separates any two countries in the world. And many of the dwellers on the Canadian side are descendants of the 40,000 United Empire Loyalists, who, remaining faithful to the Mother Country, sacrificed their homes in the States when, in 1783, the latter succeeded in wresting their independence from Great Britain. In 1812 they had to fight to prevent absorption by their late fellow-colonists, who thought to take advantage of our troubles in Europe and to conquer Canada. The history of their relations in the past, as well as the instincts and genius of the two nations, show many just causes and impediments to a union between Canada and the United States. Not that *la belle Canada* would entertain such a proposal. She is safely wedded to John Bull; and there was no doubt as to the warmth of the salute waved to the Union Jack, on Dominion Day, whenever our boat drew in to the Canadian shore.

About six o'clock on the evening of the second day



Photo. *Wm. Notman & S*

VICTORIA SQUARE, MONTREAL

we passed under the new bridge of the C.P.R. at Montreal, built in little more than a year and at a cost of only $1,000,000; whereas the Victoria Bridge took six years in building, and cost $6,000,000. The new bridge is a mere steel skeleton, and looks a flimsy structure when compared with the other's great square iron tube on mighty stone buttresses, each buttress presenting a sharp edge up-stream to cut the ice. It is to be hoped that it will be as little injured as Stevenson's masterpiece when, like it, it has stood for fifty years. Below the bridge we shot the Lachine Rapids. It is an odd thing for a steamer to do. Placing ourselves at the stern, we were able to see the waterfall down which the boat had dropped. The shelf of rock was clearly visible on either side of the narrow channel through which the water swirls. It is astonishing to see a steamboat heading for such a place, but the passage does not seem to give any trouble. It would puzzle the boat to go up the rapids again! On the upward journey she goes round, by a canal with locks.

Montreal is a wonderful city, certainly the finest colonial town in the world. Even the citizens of Sydney acknowledge that the palm must be given to Montreal. Its glory is its situation around the base of the 'Mont Royal,' within the embrace of the mile-wide St Lawrence, and its charm depends very much upon the trees, which convert all the broad streets into boulevards. On every side towers and spires rise above the foliage, for Montreal is very rich in churches. Like the houses, they are built of bright grey stone, and they are, many of them, very handsome externally and richly decorated within. This is especially true of the Jesuit Church and Nôtre Dame, the decorations of which are in much better taste than is common in

Catholic churches. The lady chapel of Nôtre Dame—built of maple and satin wood—is really beautiful. How wisely the Canadians have chosen their national emblems—the beaver and the maple leaf! The beaver the type of industry, the maple one of the most bounteous natural products of the Dominion; its sugar pleasant to the palate, its wood giving grace to the houses, its leaf glowing in autumn with the colours of the sunset.

We gave a large part of a day to the McGill University. Professor Callendar took us over the physical laboratory, which is luxuriously complete. At home our students are always in advance of our plant for teaching and research. Here apparatus of all kinds, by the best makers, is waiting for students competent to use it. The Professor showed us many interesting things, amongst them how to read the temperature at various depths below the surface by means of a system of thermometers, any of which can be made to tell its tale by an electric signal; he also enabled us to see through Puer, a rare opportunity indeed! Puer, determined not to be taken in, had slipped a penny up his sleeve, but when his arm was placed in the path of the Röntgen rays we could recognise the coin. The engineering laboratory at McGill is as complete as the physical, and behind the University is the beautiful Victoria Hospital, built at the expense of Lord Mount-Stephen and Lord Strathcona. Its pathological department filled Pater with admiration, for he does not know of any hospital in Europe so well equipped.

Of course we stopped at the Windsor. Every one does. One of its omnibuses, drawn by four horses, took us up to the hotel. Its hall, or 'rotunda,' is a great gathering-place for politicians, and here we had an

illustration of lobbying, which was amusing, although Pater was annoyed at being made the tool. 'Mr Rendall, I think,' said a fussy man dressed in black frock-coat and check trousers, as he seated himself beside Pater on a bench. 'No; I am Dr Hill.' 'I apologise; I thought I recognised a man I had met out West. But I see you are not a Canadian. Where do you come from?' 'Cambridge.' 'Ah, the University?' 'Yes, the University.' 'Do you see that man standing near us? He is one of the greatest men in Canada—Sir Oliver Mowat, Premier of Ontario. For twenty years he's been before the public—*sans reproche*. I know him intimately. Can slap him on the shoulder in the street. But I don't like to disturb him when so many people are talking to him.' Presently Sir Oliver's little court dispersed. Our new 'friend,' who had been watching him keenly, rushed up to him. 'Sir Oliver, this is Dr Hill, a distinguished member of Cambridge University, whom I particularly wish to introduce to you.' Sir Oliver was very courteous, and sitting down, greeted us kindly. In a few minutes our friend took possession of him. 'I wanted to speak to you, Sir Oliver, about my son-in-law, Mr ——. You will remember that when he was displaced from the customs it was proposed to give him a pension.' 'No,' said Sir Oliver, 'I have forgotten; what is your name?' We, too, have forgotten his name, nor have we received a reminder, an educational journal, edited by himself, which he promised to send; but we have not forgotten our lesson in lobbying.

Such old travellers were we that, although our cabins on the *Vancouver* were the farthest for'ard and next the winch, and the ship was loading all night to start at daybreak, we none of us complained of want of sleep. The 180 miles to Quebec was made in eleven

hours, and early in the evening we anchored beneath the Heights of Abraham. When we landed we were astonished at finding ourselves in France. The people's faces were French. French was spoken on every side, and all names, signs, and notices were printed in French; while the most extraordinary cabriolets, hooded two-wheeled vehicles of a bygone century, were waiting on the landing-stage to carry us up the hill. When we reached the Terrace we gazed over the quaint old-fashioned skirts of the town, over the shipping which lay in the spacious harbour, across the mighty St Lawrence to the transpontine portion of the province of Quebec. Then we looked up to the citadel and the Heights of Abraham, which stretch away behind it, to where, on the open plain, stands a lofty monument to Wolfe. Close to us on the Terrace was the monument to Montcalm. We thought of that wonderful night of 12th September 1759, when Wolfe led his soldiers up the steep path to the heights behind Montcalm's supposed-to-be impregnable position. Already wounded, he placed himself at the head of his Louisbourg Grenadiers and charged the French. A ball struck him in the chest, but he told the nearest officer to support him until his soldiers had passed onwards without noticing their loss. Carried to the rear, he declined to send for a surgeon, since he knew that surgery was of no avail. 'They run! they run!' cried one of his companions, who thought that the General, who was lying in a torpor, was already dead. 'Who run?' asked Wolfe. 'The enemy, sir.' Then Wolfe sat up, gave directions as to the way in which their retreat was to be cut off, and added, 'God be praised! I die in peace.' The end for which he had schemed and worked with the enthusiasm of a young and ardent mind was reached; he sank back contented, nor did he rally again.

'Wolfe is mad,' was said to George the Second. 'Then I wish the mad wolf would bite some of my other generals,' was the king's witty and appropriate retort. It was an almost mad attempt to bite the French, but it succeeded, and it settled the history of the British in America, securing to us just at the time when our fortunes were desperate, not only Canada, but also the southern colonies, now the United States. And the best of it is that the bite was not poisonous. It was a fair fight, and not rabid passion. Montcalm and Wolfe were heroes worthy to meet face to face. They met, and both fell. Honour was satisfied, and the 70,000 French colonists accepted the decision of the lists with cheerfulness. They still clung to their old ways, for the rural Frenchman is very conservative. They preferred feudal government to our civil code; in 1775, the British were obliged to restore the old laws regarding property, although the criminal code, which endowed the 'seigneur' with powers of life and death, was not restored. The people of each seigneurie continued to grind their corn in their lord's mill, however inconvenient it might be to carry it thither, and however exorbitant the tax; they gave him a tithe of the produce of the fisheries, allowed him to fell timber, to exact fines when they sold their lands, and many other privileges which were very irksome; for they preferred to live as Frenchmen were living at that time in France rather than to enjoy the privileges of British citizenship. They were very French then, and they are the same still; more French now by far than the inhabitants of Paris or Marseilles. And yet they are among the most loyal of the subjects of the Queen. The natural boundaries of an empire are not fixed by areas of race, language, or religion; else would the British Empire be a singularly incoherent collection of states.

We left Quebec in the morning, and all that day and the following night we were still on the St Lawrence, although we had run more than 300 miles. Then we passed the island of Anticosti, 160 miles long by 30 wide. This island was purchased some years ago for $200,000, by M. Menier, of chocolate fame, who, until recently, kept the property for sporting purposes, with which end in view he turned out carribou (woodland reindeer) and beavers. Now, he has built a railway and is turning it into a model industrial settlement. In former days the island was known as a hungry place of pilgrimage for shipwrecked sailors. As it had no harbour, it was sometimes very difficult to bring off a shipwrecked crew.

Later, Newfoundland appeared on our port and Labrador on our starboard bow. Snow covered the hills and lay in drifts on the beach. Not a trace of habitation nor a sign of human occupation was to be seen. Puer and Pater want to come back some day to the coast of Labrador with a tent and their fishing-rods, to experience the relief of real isolation. M. Menier's Anticosti put the idea into their heads. But when we saw the lighthouse on Belle Isle we felt that at last we had reached the most solitary spot in the world. Here is a place which affords opportunities for reflection. Snow covered the hill on which it is perched, some two or three hundred feet above the sea. Green grass was beginning to appear in patches. Clothes were hanging in the sun to dry. The men seemed to be preparing a garden, and there was evidence that they were giving a hearty welcome to the tardy spring, which had hardly come to them on 6th July! We presume that the lighthouse is abandoned when the Straits are frozen up, but it must be occupied again before the ice breaks. Then, until the

frost closes in again in November, there is nothing for its guardians to do but to tend their lamp and to watch their fellow-creatures passing far below them on the decks of ships. Yet the latitude is exactly the same as that of Cambridge. How the population of the world would have to flit if its motion were reversed and it began to spin towards the West, instead of towards the East! The prevailing warm winds of the northern temperate zone would then be south-east, instead of south-west, and they would drive the warm water from the Equator to Kamchatka and Labrador, instead of Britain and British Columbia.

The wonderful luck which had followed us round the world held good to the end of our travels. The passage to the North of Newfoundland is not attempted before 1st July, on account of the ice. 'Yes,' said our captain, 'you will be surrounded by icebergs when you reach the Straits of Belle Isle; but I am afraid that you will not be able to see them, on acount of the fog.' The Straits have a parlous reputation for fog. But it was a superb, sunny evening when we entered them. A cloudless sky was just beginning to absorb the ruddy rays of the setting sun. Against this rosy background glittered fifty floating mountains of green-blue ice, rounded near the base where the waves had leaped up them during their voyage from the ice-field from which they had broken away, splintered as if by a blow from some Titan's hammer, so jagged were their summits.

At night the fog settled down, and as we lay in our bunks we almost laughed at the humour of the fog-horn, which growled its threats to the ships which were not there, and to the mighty silent craft which crowded round us, but took no notice of its warning. We were told that all night long sailors were lying

along the edge of the deck listening for the lapping of the water against the sides of the icebergs. The air had cleared again when we came to breakfast, and still there were fifty bergs in sight. One was about half a mile wide and flat at the top.

It may have been a laughing matter for us, so completely does one abandon oneself on board ship to the luxury of being taken care of, but it was no joke to Captain Williams. He had not undressed since we left Quebec, and now he was to be denied that privilege until we were close to England. Mischief was brewing. The barometer was falling very fast. Rain fell, and sea and sky looked 'very nasty.' Then it began to blow from the N.E., and it did not cease for four days, hammering us all round, N., N.W., W., S.W., S., S.E.; it boxed the compass. We should have been ashamed of the Atlantic if it had not given us a taste of its temper; but we were glad that it stopped where it did, and was content without carrying away any of our top hamper. Two years ago a sea swept away from this same ship wheel-house, captain's cabin, and the poor captain himself. We could not stay below; the ship was crowded with passengers, and there were no amusements, except such as we brought with us. There was one occupation we never missed, however—we were never absent from a meal, such old salts had we grown by this time; and we never missed our morning bath but once, when the bath steward said that the water would not stay in it, and we should, therefore, be obliged to take it dry. Of the more than two hundred passengers whom the *Vancouver* carried, we were almost the only ones who claimed the baths. We did not think to measure the roll that day, but towards the end of the storm, when the sea was calming down, the indicator registered 24°. As it was

by no means pleasant in the little drawing-room, we preferred to get wet-through on deck, and showed great ingenuity in discovering a yard or two of shelter for our chairs. One day Pater and Filia had their chairs lashed on the lee of the engine-house. They had to grasp them with both hands at every roll, otherwise they would have tumbled out; but they were enjoying themselves talking and watching the waves. Suddenly the cord by which the quarter-deck man had lashed their chairs broke. Pater and Filia fell forward with their chairs on their backs just as the ship dipped the scuppers of her hurricane-deck in the sea. Fortunately, there was a life-line in front of them, which they grasped, hanging like acrobats with their feet in the water. The record posted each day showed great ingenuity in describing the weather. The wind was 'a fresh breeze,' 'a fresh gale,' 'a strong wind,' 'a strong breeze'; and the sea was sometimes 'a high sea,' and at others 'a rough sea.' No doubt the weather varied from the captain's point of view, but from ours it was uniformly bad.

The north of Ireland looked very lovely in the sunshine. 'Such a view is a compensation for all the discomforts of the voyage,' said one of our passengers who had not enjoyed the trip. The shores of Lough Foyle were emerald indeed. Our American passengers were amazed at the appearance of fertility. Fields of potatoes were solid green. The new-mown meadows were the colour of the heart of a well grown lettuce. Large stooks of hay were being scattered in the sunshine.

As we passed the Giant's Causeway we had a splendid view of its basaltic columns. It was interesting to compare them with the much larger and more regular columns which we had seen in Tasmania, at the opposite side of the world.

At Liverpool we were hurriedly thrown ashore, as if the *Vancouver* were glad to get rid of us—she had, as a matter of fact, just time to land us and to creep into dock before the tide was too low. The 'creepers' wound up our bags and boxes, big and little, deck-chairs, camera, rugs; and when, at the expense of an hour and infinite trouble, we had reassembled almost all our belongings, the custom-house officers searched them with relentless zeal. We were accustomed to being bullied by custom-house officers. We had seen our things turned out of their trunks on to the wharf at San Francisco—a litter of frocks and underclothing —by an official whose actions said more eloquently than words, 'Can't you see it is only a question of a dollar? You would give a good many dollars to terminate this martyrdom! But you are obstinate heretics, and I have no pity for your sufferings!' 'You will not do anything to corrupt a Government servant? Oh, you really need not make yourselves uncomfortable on my account!' But why were we searched at Liverpool? What did the officer expect to find? We were coming from a land where all commodities carry duty—cigars a heavier duty than in England, and tea and spirits but little less. Was it likely that Pater would fill our boxes with bottles of rye-whisky, or try to save three-halfpence a pound on tea?

London to Liverpool *via* the Suez Canal, 27,000 miles.

Home! But ready to start again the moment Pater gives the signal. He promised to 'show us our native country,' and he has shown us only a part. South Africa, India, the West Indies, and many a distant isle remain to be seen. Until he takes us round the rest of the Empire we shall give him no peace.

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