ISLANDS OF DESPAIR
Islands of Despair

BEING AN ACCOUNT OF A SURVEY EXPEDITION TO THE SUB-ANTARCTIC ISLANDS OF NEW ZEALAND

BY

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WITH 37 PHOTOGRAPHS AND 2 MAPS

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ACKNOWLEDGMENT

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EXPLANATORY NOTE

The major part of this book deals with a group of islands discovered by Abraham Bristow in 1806 and named by him the Lord Auckland Group. This name has never been generally used. In the days of the sealing gangs the group was known as Bristow's Land, and later the islands became commonly known as the Auckland Islands. This latter name is still in general use, and as it has been adopted in scientific and other works, there seems to be little doubt that its use in this book is fully justified.

NOTE

Unless otherwise stated, the government referred to in this book is the New Zealand Government.
Introduction

On 26th August 1939 the German steamer *Erlangen* of 6101 tons slipped unobtrusively from her berth at Dunedin, ostensibly bound for Port Kembla to coal. It was fairly obvious at the time that war with Germany was imminent, and considerable interest had centred round the activities of this ship. Her master, Captain Alfred Grams, was in a dilemma, as although he had about 175 tons of coal in the bunkers that amount would soon be exhausted, and in the absence of instructions from his owners he decided to proceed to Port Kembla.

But the *Erlangen* did not arrive at Port Kembla, and her probable movements were causing some speculation amongst those interested enough to wonder what had become of her. Some months later news was received that she had arrived at Santiago under sail. However, this explanation was not accepted without reservations, and it was suspected that additional fuel was obtained from another source. In some quarters it was thought possible that she might have obtained a supply of firewood from the Auckland Islands, one of the groups of sub-Antarctic islands lying to the south of New Zealand, and which were known to be partially forested.

On 16th February 1941 two unidentified ships were sighted east of New Guinea, heading in a southerly direction. These ships were subsequently found to be the German auxiliary cruiser *Orion* and her supply ship the tanker *Ole Jacob*. Although this may not have been considered particularly significant in itself, the matter became more interesting when the pocket battleship *Admiral Scheer* was sighted on February 22nd in the Indian Ocean, also heading south. It seemed reasonable to conjecture that these three vessels were
heading for a rendezvous, which might well be at the uninhabited Auckland Islands, or possibly at Campbell Island.

The New Zealand War Cabinet had previously decided that these unoccupied islands were a potential danger to the security of shipping in the Pacific, and arrangements were now hastily completed for their occupation by small coast-watching parties whose duty would be to report by radio details of any ships seen. The first men left Wellington in the auxiliary schooner Tagua in March 1941, and established camps at Port Ross and Carnley Harbour in the Auckland Islands, also at Perseverance Harbour in Campbell Island. Prefabricated huts were erected for living-quarters, these having double walls of plywood with an exterior covering of fabric. Each camp was established in a secluded spot, but in a place where easy access was available to a good position for keeping a look-out. In addition, each camp had a well-concealed emergency hut at some distance from the main station. It must be understood that each of the camps was occupied by four unarmed civilians, and in the event of any camp being in imminent danger of discovery by an enemy vessel it was desirable that the men should be able to evacuate it, and beat a retreat to a more secure position. Each camp was to report by radio at pre-arranged times daily. Fully-charged radio batteries were also maintained at the emergency huts.

In view of the war situation in the Pacific at that time, it was most uncertain as to when a relief vessel would be able to visit the islands, and an endeavour was made to supply each camp with sufficient food to last its occupants for a period of about three years. The 57-ton auxiliary ketch Ranui was also based at Waterfall Inlet in the Auckland Islands to act as a mobile coast-watching station and to provide an emergency means of transport between the stations and New Zealand.

Further cause for suspicion was soon forthcoming in connection with the activities of the Erlangen, as a considerable area of recently felled bush was discovered in the north arm of Carnley Harbour, near what is known as Round Point. The
work had been done unobtrusively. From the sea there was no sign of anything having been touched, but from the hills the denuded area was readily visible. Tools with German markings made it seem even more likely that the Erlangen was responsible. Confirmation of the theory eventually came from Captain Grams himself, who reported that after leaving Dunedin, New Zealand, he abandoned the idea of making for Australia, and decided to call at the Auckland Islands to await developments. Upon seeing the extent of the forest of rata he conceived the plan of utilizing it for fuel to take his ship to a neutral port. Difficulties soon arose, especially over the matter of getting the wood on board ship. Finally he decided to risk beaching the Erlangen, and by working long hours his crew managed to cut and load 20–25 tons of wood daily. In the meantime the chief officer and the Chinese quartermasters made two sails out of tarpaulins, and rigged the masts with yard-arms improvised from derricks. The long voyage to Chile was eventually accomplished, although not without incident. Fuel became so short that many of the ship’s wooden fittings were fed into the furnaces, and food was in very short supply. Nevertheless there can be no doubt that the exploit amply demonstrated the resourcefulness of Captain Grams.

It seems probable that the enemy became aware of the occupation of the islands, as this could readily be done by maintaining a conscientious radio watch. At all events no visits were made by enemy vessels, whether or not any such visits had previously been made.

At the end of the first year of coast-watching the number of men at each station was increased to five, and the personnel were encouraged to utilize their spare time by exploring and mapping the islands, and by making scientific studies. Indeed it became the practice to include in the parties men who had scientific interests so that the maximum advantage could be gained from a unique opportunity of undertaking continuous scientific observations. A further innovation was the commencement of meteorological observations.
This coast-watching expedition, in common with many others in various parts of the Pacific Ocean, was organized and maintained by the New Zealand Ministry of Works. It was the policy of that department to endeavour to arrange for a surveyor to accompany each expedition, so that an accurate map could be made. In most cases the existing maps were on a very small scale, and showed little detail. Furthermore most of the existing surveys had been carried out in the nineteenth century, and the latitude and longitude, especially the latter, could not be relied upon.

Although one surveyor had been located at Carnley Harbour with the first coast-watching party he had been unable to achieve any worthwhile results on account of the necessity for carrying out other duties, and also because of the difficult country and the persistent bad weather. This was unfortunate, as the existing map of the islands was known to be extremely inaccurate; indeed, it was commonly suspected that the errors in the chart might have been responsible for a number of tragic shipwrecks that have occurred in the Auckland Islands. Furthermore, the production of a detailed map was very desirable in connection with the extensive scientific investigations which were being carried out by members of the coast-watching parties.

For these reasons it was decided towards the end of 1943 to send a special survey party to carry out the necessary work. The result of this decision was that I was summoned to Wellington and asked if I would be willing to undertake the job. I had only recently returned from two years of somewhat similar work in the North and Central Pacific, and I had no hesitation in accepting, even though I felt a bit sceptical about the added inducement of possible treasure to be salvaged from the wreck of the General Grant.

Plans for the organization of the survey were immediately put in hand, and it was agreed that I would take two other men as permanent members of the survey party. These were Mr. Les Clifton, a mining engineer who had already spent a
year on Campbell Island, and Mr. George Easton, who was a survey cadet. Other men could be borrowed as required from the personnel of the coast-watching stations. Then followed the work of ordering stores and equipment. In some cases this meant getting articles made to our requirements, such as light-weight tents and special clothing. Much practical advice came from men who had previously been to the islands, and this was very welcome, as I had little idea of the nature of my future home, in fact I had barely known that the Auckland Islands existed. I soon learned that the most important article of clothing was the parka, a light waterproof smock with an attached hood.

As a safeguard in the event of capture by the enemy it had been decided that all members of the expedition should be enlisted in the armed forces. I was already a serving member of the Royal New Zealand Air Force, but the other men were all civilians. Consequently, shortly before our departure, they were enlisted in the Army and issued with a special kit of clothing suitable for southern latitudes. A thorough medical examination was also carried out, as it was most important that every man should be in good health. A fairly comprehensive medical kit was held in each camp, but of course it could not be expected that any but the most simple ailments could be successfully treated.
ONE

Arrival at the Islands

The survey party, together with relief parties for the coast-watching stations, travelled from Wellington, New Zealand, in the auxiliary ketches New Golden Hind and Ramui, but both vessels called at Dunedin to complete loading. I was on board the former vessel, and we finally left Port Chalmers at 8 a.m. on Christmas Day, 1943. Towards evening of the next day we were off Stewart Island, and as the weather was squally and both wind and sea were rising, Captain Webling decided to anchor in Port Pegasus to await better conditions. We were safely at anchor by 8 p.m. and there we remained until the following evening. This respite also provided an opportunity for catching a plentiful supply of fish to take with us.

As the weather showed signs of improvement, the captain decided to sail at 7.30 p.m. on the 27th. On reaching the open sea we found that the wind had gone down, although there was still a big southerly swell. The little vessel made good progress, however, and at 5.30 a.m. we had the Snares Islands on our beam, about a mile off. These islands are small and really amount to little more than a cluster of large rocks. A number of the local residents swam out to inspect us—these being crested penguins.

Conditions were very pleasant during the morning, with a smooth sea and warm sunshine, and the ship was making just over seven knots. Such conditions do not last long in these regions. The wind soon started to freshen from the west and an
occasional rain squall passed over us. Captain Webling expected to sight the Auckland Islands about 3 a.m., and his main concern was whether the weather would remain reasonably clear until then. Conditions deteriorated steadily during the night. When I came on deck about 4 a.m. the little ship was pitching and rolling in a rising sea and visibility was extremely poor. However, the captain told me that he had sighted land through a brief break in the murk a few minutes earlier. Fortunately he knew the coast quite well, and this brief glimpse was sufficient for him to identify the land as being part of Enderby Island, which is located at the north-eastern extremity of the Auckland Islands. The islands are very dangerous to approach in conditions of poor visibility, especially in sailing vessels with comparatively low-powered auxiliary engines, and such conditions are all too frequent in this locality. On some occasions visiting ships have had to remain at sea for days on end waiting for enough visibility to enable them to find their way into harbour. Extensive reefs situated off the north-eastern coast, and an isolated submerged rock known as Bristow Rock, which lies three miles north of Enderby Island, are sufficient to command the respect of seamen in any but the best of weather.

However, we were most fortunate, and within a short time we were anchored near the head of Port Ross, and were receiving visits from inquisitive sea-lions. The captain had decided that the weather was deteriorating too rapidly for him to anchor near the camp in Ranui Cove. He was proved right, for later in the day a furious gale was sweeping down the harbour. This gale subsequently increased to such an extent that the anchor started to drag, and we had to shift to another anchorage close inshore at Terror Cove.

Port Ross was originally named Sarah's Bosom by the discoverer of the islands, Captain Abraham Bristow, who visited the harbour in his ship Sarah and was favourably impressed with its potentialities as a sheltered refuge for refitting. The harbour was later visited in 1840 by Sir James Clark Ross with
his ships Erebus and Terror. He referred to the port as Rendezvous Harbour. Despite this the harbour is now generally known as Port Ross, although the earlier names are still occasionally encountered.

As already mentioned, the islands were discovered by Abraham Bristow, who was a captain employed by Samuel Enderby and Sons. This firm was engaged in the whaling industry, and Bristow was returning to England in the Ocean of 401 tons when he sighted the group. An extract from his log, dated 18th August 1806, reads as follows:

“Moderate and clear; at daylight saw land bearing west by compass, extending round as far as north-east by north, distant from the nearest point about nine leagues. The island, or islands, as being the first discoverer, I shall call ‘Lord Auckland’s’ (my friend through my father) and is situated according to my observations at noon, in latitude 50° 48’ south, and longitude 166° 42’ cast by a distance of sun and moon I had at half past ten a.m. The land is of moderate height, and from its appearance I have no doubt but it will afford a good harbour in the northern end, and I should suppose lies in about the latitude 50° 21’ south, and its greatest extent lies in a N.W. and S.E. direction. This place, I should suppose, abounds with seals, and sorry I am that the time and the lumbered state of my ship do not allow me to examine.”

The following year Bristow returned to the islands in the Sarah, and on 20th October he anchored in what he called Sarah’s Bosom. He thereupon took formal possession of the islands for the British Crown, and named some of the more prominent geographical features, including the very conspicuous peak known as Mt. Eden, and these were later published in the Oriental Navigator. He also liberated a number of pigs on the main island. It is of interest to note that on his return voyage the Sarah was captured by a privateer named the
Revenge, but was shortly afterwards recaptured by the Enterprise. It is also interesting to note that for the next quarter of a century the islands were usually known as "Bristow's Land" by the crews of sealing vessels, who were the only visitors.

The Auckland Islands cover a total area of 465 square miles, and consist of one large and five smaller islands, together with a large number of islets and detached rocks. The large island is 24½ miles long and has a width varying from three to 16 miles, while it has an area of 114,600 acres. To the south of this island, and separated from it by Carnley Harbour, is Adams Island, which has an area of 22,600 acres.

To return to the New Golden Hind: we were still lying at anchor in Terror Cove, while the wind appeared to increase in fury. Even on the next day it showed no signs of abating. The glacial valley at the head of the harbour acted as a great funnel and the wind fairly shrieked down it, whipping up sheets of spray and creating small whirlwinds which were locally known as "willi-waws". As the visibility was now much better we had a good view of our future surroundings. The harbour was ringed by steep hills, overlooked by Mt. Eden with its conspicuous rock knob. The lower slopes were densely covered with the southern rata, which was in bloom at the time and presented a spectacular sight. Above the rata forest there appeared to be open country which promised easy travelling conditions. Never was anything to prove more deceptive. Despite the fact that we were anchored in Terror Cove, and Erebus Cove was just beyond a small headland, it was not for some months that we had an opportunity to land at these historic spots.

The next morning, 31st December, the weather was much improved, and we left at 4.30 a.m. for Ranui Cove, where we anchored an hour later. This is not a safe anchorage except in favourable weather. The ship's lifeboat and two dinghies from the camp completed the unloading of stores by 11.30 a.m., and the ship then sailed for the camp at Carnley Harbour. We spent
the rest of the day carrying the stores from the landing-place to the camp buildings. This camp was located in heavy bush close to the water’s edge, and was admirably sheltered.

The next few days were fully occupied in getting ourselves established and becoming acquainted with our new surroundings. When the weather permitted we undertook reconnaissance expeditions in the adjacent country, and erected trig stations where they would be required in the course of the survey operations.

It was on one of these occasions that I had my first encounter with sea-lions. This was midsummer and the hours of daylight extended from 2 a.m. till 11 p.m. After the evening meal on 2nd January I went by dinghy to Ewing Island. This island is completely covered with *Olearia Lyallii*, which is a fairly large tree of a prostrate habit, so that while there is dense foliage overhead the forest floor is fairly clear except for the sprawling tree-trunks. I was trying to find a suitable site for a trig station, and after crossing the centre of the island I followed the coast-line, where in due course I found a satisfactory position. Actually this was quite close to where the dinghy was beached, but on trying to make my way to the boat by following round the coast I found my progress was blocked by low cliffs, and I was forced to make a detour through the bush.

It was now quite dark in the olearia forest. I had not proceeded far when there was a loud woof, and an angry sea-lion lunged viciously at me from the gloom of the forest floor. I beat a hasty retreat, fervently hoping that I would not trip over a tree-trunk or some other hidden obstacle. Having perceived that the sea-lion showed no inclination to pursue me I then re-examined the cliffs, but was forced to conclude that there was no alternative to crossing through the forest. With considerable misgivings I re-entered, choosing a route well clear of my previous one. However, I soon discovered that there was more than one sea-lion camping in the forest, and I had many anxious moments before I reached the open beach.
When I returned to camp my tale was received with some amusement, but I must admit that I never overcame my dislike for travelling without a light after dusk. After all, those sea-lions did mean business, and I certainly would not have liked to step much closer to one of them. In daylight they are easily avoided, but even then it was by no means uncommon for a new man at the islands to pocket his pride and scale a handy tree when surprised by a sea-lion.

The next morning we had a visit from a sea-leopard, which had come ashore at the head of the cove only a few yards from the camp buildings. These creatures are not very often seen here, and in fact it was the only one I saw during my sojourn on the islands. I would say that this specimen would be about nine or ten feet long, and it was quite well marked with the characteristic spots. The array of teeth was suitably impressive. As the sea-leopard is very sluggish in its movements on land we were able to examine it at close quarters. After a short time it wriggled clumsily into the water and made off at a good speed. Much to our delight it practically collided with a sea-lion in the narrow channel, but neither of the parties appeared to be in an aggressive mood. After a quick pass at one another they went their respective ways.

On 4th January the Ranui appeared. She carried a deck-load of sheep to serve as a supply of fresh meat for us, and it had therefore been necessary for her to wait for reasonably good weather before leaving Stewart Island. The sheep were landed on Ocean Island, where there is a reasonable amount of natural forage which was to be supplemented when necessary by baled hay brought from New Zealand.

The following day the New Golden Hind returned from Carnley Harbour, and arrangements were made for her to sail for Dunedin in the afternoon. She left at 2 p.m. and landed some of us on Enderby Island as she passed. After a brief exploration of the island we returned to Ranui Cove by dinghy. This happened to be one of the very few real summer days we had, with very little wind and brilliant
sunshine. Next morning things were back to normal with heavy fog hanging low on the hills and the rain falling steadily.

The persistent rain and the peaty soil created something of a problem in maintaining serviceable paths in the vicinity of the camps. Gravel is scarce, as there are very few beaches, and in any case the peat would not provide a suitable foundation for a gravel path. The problem was fairly satisfactorily solved by laying "corduroy" paths consisting of short lengths of Dracophyllum longifolium laid side by side. The dracophyllum is a scrubby tree not unlike the common manuka of New Zealand. The main disadvantage of this type of path was that it became dangerously slippery once the bark had worn off.

A few days later George and I set out on our first cross-country trip, with the object of erecting trig stations on Meggs Hill and other suitable hills in the area between Ranui Cove and Haskell Bay. We left camp at 8.20 a.m. and soon found that we had a long day ahead of us. The country looked fairly easy, with open strips of tussock separated by lanes of rata forest and scrub. These lanes run more or less parallel to the direction of the prevailing westerly winds. Judging by the remains of large rata trees left in the tussock strips I concluded that the rata forest is retreating, and is unequal to the job of surviving in the face of the salt-laden westerly gales. We found the tussock country easy enough, although very wet, but our real difficulty was in forcing a passage through the strips of rata forest. These were quite wide and thickly interlaced with dense scrub, so that they posed quite a problem to us with our rather awkward loads of long poles, haversacks, and other equipment. We found that the scrub was particularly difficult in the sheltered confines of the many watercourses we had to cross. At all events it was nearly 3 p.m. when we reached Meggs Hill—a distance of about 2½ miles from the camp. However, we had now acquired a certain amount of technique, and had also located what we thought would prove a better route home, so we decided to push on and erect a further trig
on a hill near Kekeno Point. We left this trig at 5.30 p.m. and arrived home at 8.20 p.m.

The next fine day I went to Crozier Point to locate a trig which I also intended to use in astronomical observations for true bearings. There is a large rookery of Auckland Islands shags at this point, the nesting area being on a series of rock terraces which are inaccessible to the wild pigs—the hardy descendants of those liberated by Bristow in 1807. I am afraid I was not particularly impressed by the shags. I cannot regard them as beautiful birds.

The short trip to Crozier Point was of particular interest, as the track led past several bushes of New Zealand flax, which appeared rather incongruous in those surroundings. Actually this is a link with the past, as the flax was planted by Maoris in the early 1840s. Mr. George W. Printz of Riverton, New Zealand, visited what was then known as Bristow’s Land in 1841 as ship’s boy in a sealing vessel, and after killing a number of seals in the vicinity of Port Ross the ship proceeded to the southern part of the Group. Upon returning to Port Ross another ship was found at anchor, this vessel having brought about seventy Maoris from the Chatham Islands.

It appears that the Maoris were members of a tribe that was originally domiciled in the Cook Strait area, but which was suffering considerably in tribal warfare. As a result the tribe decided to move to the Chatham Islands, and it is believed that the trading brig Lord Rodney was seized and the captain, Harwood, compelled to convey the tribe to the islands. It is understood that about nine hundred Maoris were transported. Upon arrival they proceeded to subjugate the peace-loving Moriori who were already in occupation. The new arrivals soon found that conditions were not what they expected. In addition the islands could not support the increased population. Various disputes broke out and reached their climax when a French whaler arrived at Waitangi in 1839. The Maoris boarded the vessel and after a misunderstanding with the Frenchmen they killed some of the crew and then took possession
of the ship, which they burned. A French frigate *L’Heroin*, commanded by Captain Cecille, was on the New Zealand coast at the time, and hearing of the outrage she proceeded to the Chathams to chastize the Maoris. It appears that the natives had warning of the coming reprisals and, acting on the advice of one of their number who had previously visited the Auckland Islands, they sailed for those islands in the brig *Hannah*.

It is believed that most of the Maoris were unpleasantly surprised when they experienced the climatic conditions prevailing at the islands, and at least some of them wished to return to the Chathams. However, the commander of the brig had no desire to transport them back. He forestalled them by leaving at an unexpected time so that the Maoris, having no alternative but to make the best of things, proceeded to build a *pa* near Crozier Point. They apparently did not get much pleasure from life, and although they had brought a fair quantity of stores with them they suffered considerably through being unable to grow potatoes and other vegetables successfully in the peat. They also found, as did we, that although fish could be caught they were unfit for eating on account of the numbers of worms in the flesh. It is probable that these domestic problems were largely responsible for a series of disputes which followed and eventually led to a group of the Maoris leaving Crozier Point and establishing themselves on Enderby Island.

A number of the Maoris managed to leave the islands in the early 1850s by vessels which were visiting there, and the remaining forty-seven were evacuated in 1856. Their relatives at the Chatham Islands had heard of their unfortunate circumstances and chartered a brig to bring them back. During their stay at the Auckland Islands the Maoris became associated with the Enderby Settlement, a subject that will be discussed at a later stage.

Apart from the flax bushes already mentioned I did not see any sign of the remains of the *pa*, and there is nothing to indicate where the Enderby Island *pa* was located, although it
would almost certainly have been near the sandy beach facing Port Ross.

The evening of 16th January promised to be reasonably clear and not too windy, so I decided to start observations for latitude, longitude and azimuth. After comparing the chronometer with the time signals on the radio George and I repaired to Lookout Point. It was cruelly cold and rather windy, and I was glad when at 2 a.m. the clouds were thickening too much for further work. Both of us felt the need for a good tot of rum before crawling into bed.

On 19th January the New Golden Hind arrived from Dunedin with stores and the relief party for Campbell Island, but as weather conditions were unfavourable she anchored well up the harbour until the next day. The Ranui, which had been lying in Erebus Cove, also came round to the camp with her. Since the New Golden Hind had more passengers for Campbell Island than could conveniently be accommodated, Captain Webling inquired if it would be practicable for the Ranui to accompany him. As it was necessary for us to visit Campbell Island to carry out astronomical observations, and a certain amount of other survey work, I decided that we would make the trip at this stage, and agreed with Captain Worth that the Ranui would remain there until we had finished. Accordingly the survey party was embarked on the Ranui and both vessels sailed at 4 p.m. The New Golden Hind went to Carnley Harbour, while the Ranui anchored in Waterfall Inlet.

Waterfall Inlet is one of the more attractive of the many inlets on the eastern coast of the Auckland Islands. Like all the others it is heavily bush-clad on its lower slopes, and a beautiful waterfall cascades into the head of the inlet. A depot had been established there for the Ranui's stores, and the next day the ship's crew attended to the victualling of the ship and filled the fresh-water tanks. A pipe-line had been laid from a point well up the main stream so that it would discharge direct into drums placed in the lifeboat. The full drums were then rowed out to the ship and lifted aboard by winch for discharge into the
tanks. In the afternoon George and I climbed the steep hillside south of the inlet and got our first view of Carnley Harbour, even though it was only a small part of the entrance that we could see. Upon returning to the ship I slipped into a hole on a sea-lion slide, and got myself liberally plastered with evil-smelling and tenacious mud. And then amongst the high tussocks alongside the water we saw our first sea-elephant. These are not plentiful on the Auckland Islands, and it was not until we reached Campbell Island that we saw them in any numbers.

Next morning we sailed for Carnley Harbour, which we entered in perfect weather. At 10.15 a.m. we were lying alongside the *New Golden Hind* in Tagua Bay. Some of the men from the camp on Musgrave Peninsula came out to see us and exchange local news, but in view of the excellent weather the two skippers were anxious to get away. They had hopes of reaching Campbell Island before the weather deteriorated. We left our anchorage at 11.30 a.m. and sailed into a calm sea with the *New Golden Hind* about three miles ahead of us. All sail was set, but with only a light breeze the canvas was of no use except to steady the little ship. Even in the smoothest of seas her movement was often uncomfortable. At nightfall we were still enjoying perfect weather, and in fact we had travelled thirty-five miles before the hills of the Auckland Islands were lost to view.
At 5.30 a.m. on Sunday, 23rd January, Campbell Island was sighted. The captain had made a good course, and we were heading for the south-western part of the islands. As we approached, the course was altered to take us past Courrejolies Point and round the North Cape, and since visibility was good we got a fine impression of the nature of the island, which appeared to consist entirely of barren rocky peaks, with steep cliffs rising from the sea. A number of off-lying rocks served to heighten the illusion of extreme ruggedness.

By 10.45 a.m. we were at anchor in Perseverance Harbour, and shortly afterwards we were joined by the New Golden Hind. This harbour provides reasonably good anchorage, but is frequently swept by violent westerly storms, and on occasion the Ranui has had to use her engines as well as both anchors to avoid being blown on to the rocky coastline.

Campbell Island was discovered in 1810 by Captain Hasselbourgh, who was in command of the Perseverance, and he named it after his employers, Campbell and Company of Sydney. After returning to Stewart Island to report his discovery to his principals, and to pick up men and stores, Hasselbourgh returned to Campbell Island, and shortly afterwards he was accidentally drowned. On 4th November 1810 he sailed down Perseverance Harbour to visit a gang of men he had working near the entrance, and his small boat was capsized in a sudden squall. At the time he was accompanied
by Elizabeth Parr of Norfolk Island, and three men and a boy. One man and the boy reached shore safely, while another man named Bloodworth had gone to the assistance of the woman. Finding that she could swim he went to help Hasselbourgh, but the latter was so hampered with a heavy coat and sea-boots that he was already drowned. Bloodworth then went to the aid of the remaining man, only to find that he too was beyond assistance. In the meantime Elizabeth Parr was getting into difficulties, and it is recorded that Bloodworth swam over a mile supporting her by one arm, only to find on reaching shore that she was dead. The three survivors followed the coastline to a point where they could hail the Perseverance, and the next day the scene of the tragedy was visited and the woman was buried. No trace was found of the bodies of Hasselbourgh and Allwright.

It was not unknown for women to travel on sealing vessels, and it is of interest to read that in 1838 Reverend J. Wilkinson testified as follows:

"Morality is at the lowest possible ebb, and is much the worse among tribes frequented by sailors. The women are very much affected by venereal disease of the most virulent type. I apprehend there is not one in fifty of them without this disease. Sometimes the women go to sea. Two or three instances I know of masters of vessels giving as much to their women as £100 and carrying them off with them on their voyage. Then they leave them on the islands, or take them with them, according as they can agree with the women themselves. Similar traffic appears to have been carried on in Sydney amongst European females. Convict women desirous of leaving the settlement were especially addicted to this method of effecting their escape. Traces of Elizabeth Parr's burial plot are still extant on the south-west arm of Perseverance Harbour. It was reputed to be the grave of a Frenchwoman, arising, no doubt, from the fact that the officer of a French expeditionary ship lost his life in the harbour, and is buried not far from the grave of the other."
There is still little information available about sealing exploits on Campbell Island. One report, however, is quite interesting and worthy of record. On 10th January 1839 the Enderby schooner Eliza Scott (Captain John Balleny) arrived at Campbell Island in company with the cutter Sabrina (Captain Freeman). Captain Freeman went ashore to try for skins and found three men and a woman who had been there for four years and who were in a wretched state. During that interval they had obtained only 170 skins. The marooned persons were taken aboard the Eliza Scott on the understanding that their skins were to become the property of the Enderby Company. It was suspected that the unfortunate castaways had been left on the island by the New Zealander.

Then in 1883 the American sealer Sarah A. Hunt called at Campbell Island, anticipating a good haul following on the previous close seasons, but was unsuccessful. The captain was also financially embarrassed, as he owed his men a considerable amount of wages. He overcame his problem by sending his two officers with gangs of men in two whale-boats to the other side of the island. Then as soon as they were out of sight he put to sea, and when he reached Lyttleton he reported all hands lost. At the end of the year the Government ship Stella called, and found the second mate and his crew, who were so weak that they had to be lifted into the Stella’s boat. They reported that at one time they had been blown off the island for a week, but had eventually got back again. No sign was found of the other mate and his boat’s crew.

Campbell Island was occupied for many years as a sheep-station, but with indifferent success. The island is completely covered with tussock and patches of scrub, and mustering was very difficult. This was also complicated by the inadequacy of the fencing. Although a certain amount of fencing was done it would not have been economic to subdivide into paddocks the whole area of about forty-two square miles.

The lease of the island, at £15 per annum, was held for a long period by Captain Tucker of Gisborne, and it was later
taken over by Messrs. Murray and Mathewson of Dunedin. In both cases a manager was put in charge, with a staff of up to eight men. The number of sheep carried appears to have been about 7500, and the annual wool clip usually amounted to about 100 bales. The station buildings, yards and jetty were situated on the shores of Perseverance Harbour.

Captain Tucker also entered into an arrangement with Mr. Norton to operate a whaling station as well as managing the sheep-station, and this scheme appears to have worked quite well. At all events a similar plan was started by Murray and Mathewson, who arranged for the steamer Himitangi of 323 tons to tow the launch Komuri to Campbell Island for service in the whaling season. The Komuri was unfortunately lost very soon after her arrival in 1917. Her engine broke down when she was well out in a heavy sea, and she had to be abandoned. The crew had a desperate pull to the shore in a surf-boat which they had in tow at the time. The Komuri, which was of about 10 tons, was valued at £1000.

At various times shipping difficulties caused the shepherds to become extremely short of rations, although of course they always had plenty of meat. Good flounders were also obtainable, especially in North-East Harbour. These transport problems also worried the lessees of the sheep-station, as they preferred to have the wool shipped promptly for fear of damage by the great number of rats on the island.

In the 1920s it was apparently becoming increasingly difficult to find shepherds willing to live in the isolation of Campbell Island, and the place was at times left unoccupied. In 1926 the Tutanekei took a party of shepherds there after the station had been abandoned for nine months, and the first difficulty proved to be in regaining possession of the house and store-shed from the rats. They had brought a cat with them, but he proved unequal to the task, and the rats were shot by the hundred. Also they could find no sign of the station horse, but eventually its carcase was seen where it had got bogged in the peat. Mr. Warren of this party tried a new idea in communi-
cations by bringing two homing pigeons. One of these refused to leave the island and eventually drowned itself in the sheep-dip, and although the other bird left, it did not succeed in reaching New Zealand. Warren remained on the island continuously for five years, and during that period the number of shepherds with him varied from two to seven. He reported the usual trouble in obtaining regular shipping, and there was one interval of two years and four months without a ship.

Warren returned to New Zealand in 1931 and that appears to have been the end of the effective operation of the sheep-station. The station buildings and jetty in Perseverance Harbour soon deteriorated, and when we visited them the station could certainly not be considered worthy of being called a going concern. However, there is still a large number of sheep, probably about 1500, surviving on the island.

A whaling industry was started on Campbell Island in the early part of 1909 by a party of eleven Pelorus Sound whalers. They travelled in the Government ship Hinemoa, taking with them a launch equipped with an oil engine, and also a 32-ft. whale-boat. They intended to co-operate with the lessee of the sheep-station on the island, and upon arrival they proposed to shear the 7500 sheep, after which they expected to have time to erect the whaling-station in time for the start of the season. A report was received from the station in 1909. The men had found the ruins of an old whaling-station at North-East Harbour, complete with jetty. They did not favour this site, however, and built their new station at North-West Bay. Although there was no shelter for ships in this bay, they managed to find a safe place for their whale-boat and launch. They had captured thirteen whales and would have got more had they not lost some of their gear. They also reported that they were considering erecting try-works to enable them to obtain oil as well as whalebone.

This gang operating from North-West Bay was led by a man named Norton, and in 1910 a second whaling-station was
proposed in North-East Harbour by the Cook brothers, who had had several years of whaling off North Auckland. Cook's party had no interest in the sheep-station, but intended to develop the whaling industry seriously, with a view to obtaining both oil and whalebone. They also intended to can the whalemeat for the Oriental market, and to convert the refuse into fertilizer. They had obtained a special vessel from England for use as a whale-chaser, and a communications vessel was being built for them in Auckland to ply between Campbell Island and Bluff.

In 1910 Norton's gang captured nine right whales of very large size, and although they were still not obtaining any of the oil their profits from the whalebone, together with their interest in the sheep-station, had brought them a satisfactory financial return. In February 1912 nine men from Norton's gang arrived in New Zealand by the Hinemoa for a holiday. They reported that in 1911 they had secured eight whales.

It was not until 1911 that Cook's party got established, with a personnel totalling fifteen men. Their chaser Hananui was a 44-ton vessel capable of ten knots, and was commanded by Captain Carmichael. This ship was equipped with a harpoon-gun. During their first season they killed thirteen whales, which produced 200 tons of oil, as well as whalebone.

From all accounts the two parties got on well together, and Cook's vessel was at times used to transport the island wool to New Zealand. Norton, however, was worried about the matter of more regular communications with New Zealand, as he had great difficulty in getting stores and mail. He also complained that his men could not undertake sealing, as the sealing season was always closed before the licences arrived. He had endeavoured to charter the Hinemoa or the Tutanekai, but considered that the charter fee of £500 fixed by the Government was excessive. In any case he thought he should not have to pay more than a proportion of the actual cost, as visits were supposed to be made to the provision depot. In 1914 he said that the depot had not been visited since 1908, and although
1. Seals at Enderby Island: the *Nau* Golden Hind at anchor.
2. *Top:* Entrance to Carney Harbour. Perpendicular Head on right.
his men had used some of the stores (for which he had paid the Government) these stores had not been replaced.

I have not been able to discover when the whaling-stations ceased operations, but at all events the old buildings are in a dilapidated state at the present time.

So much for the facts surrounding the early days of Campbell Island, but mention should also be made of a legendary "lady of the heather". The early whaling crews apparently reported having seen a lady on the shore of Perseverance Harbour, dressed in the Royal Stuart tartan, and with a Glengarry bonnet and a sprig of heather. The story relates that the woman's mother was Meg Walkinshaw, who met Bonnie Prince Charlie at Holyrood during his brief stay in Scotland. Meg followed Charles to France, and on her death she left a daughter who was regarded by the Jacobites with deep suspicion. They believed that she acted as a spy on their movements on behalf of the British Government, and in order to get rid of her they decided to carry her out of the country. It was supposed to be a man named Stewart (after whom Stewart Island was named) who carried out this task. He is said to have sailed in a whaler from Dundee, kidnapped the woman, and transported her to Stewart Island and then to Campbell Island. Before abandoning her he built her a sod hut on the shores of Perseverance Harbour.

Whether or not there is any basis of truth in this legend, it is a fact that the remains of a sod hut are still to be found in Camp Cove, with a path of marble pebbles leading down to the beach. Also there is a tiny patch of heather beside the hut.

Campbell Island is comparatively small, having an area of about forty-two square miles, and it is not nearly as rugged as it looks from the sea. The whole of the island is covered with tussock growing in peat. Consequently walking conditions are not easy. In sheltered places there is a certain amount of scrub, but there are no trees on the island.

The object of our visit was to obtain a new value for the latitude and longitude of the island, and to check on the
accuracy of the existing survey. The basic survey of Campbell Island was the work of a French expedition which had been sent to observe the transit of Venus. Although cloudy weather prevented their achieving their primary objective, they did carry out a fairly complete survey. Certain deficiencies in their surveys had been corrected by Les Clifton during his previous stay on the island. The French expedition was also responsible for the numerous French names for prominent natural features.

It was on Sunday, 23rd January 1944, that we arrived on the scene, and on the same day we made a quick inspection of possible sites for a measured base-line, a line finally selected immediately behind the old sheep-station buildings. This site also had the advantage of being very convenient to the Ranui. The next day we spent erecting beacons on some of the hills we intended to use for trig stations. Also on that evening the sky became fairly clear towards 10 p.m., and I worked till 2 a.m. on observations for latitude and longitude. The following days were spent on finishing the erection of beacons and in getting the base-line cleared and measured. We also constructed a tide gauge in the harbour so that we could establish the mean sea level.

Several rookeries of sea-elephants were established on the shore near our anchorage. The occupants were bachelor bulls who had come ashore to shed their coats, none of them being very old. They are immense creatures, but are most lethargic when ashore, so it is quite easy to approach as close as one wishes. Certainly they rear up and lunge towards the intruders, coughing a blast of moist air that reeks of stale fish. But this is all bluff, and when they realize they are not frightening anybody they wriggle reluctantly towards the sea, occasionally looking back hopefully to make sure that the visitor is still there and that their painful journey is really necessary. They are unable to raise themselves to any extent to help themselves along, and progress over the boulders gives every appearance of being a tiring business.

These bulls had been ashore for some time judging by the
depth that they had wallowed into the peaty mud. I was told that it was not unusual for a sea-elephant to wallow so deeply that he would be quite unable to get himself free again. With experience we found that it was advisable to approach a rookery from the windward side. The smell is almost intolerable.

The older bull elephants have a pronounced enlargement of the nose which is somewhat like a trunk, hence the name elephant seal. Unfortunately the breeding season was well past at the time of our visit, and the pups had already gone. No doubt they would have been just as attractive as the adult of the species is repulsive.

During our operations on the island we lived aboard ship as the coast-watching camp did not have sufficient accommodation for three extra men. It was often after dark before we reached the ship, but dark or not we soon learned to remember that our boots had to be thoroughly washed before we stepped on to the well-scrubbed deck of the Ranui. The threat of being thrown overboard was not one to be lightly disregarded in those latitudes. Les told us how cold the water was when he fell off the tide gauge.

On Friday, 28th January, the weather was fairly good and I made a start on the triangulation observations at St. Col Peak. This peak is so sharply defined that when the theodolite was set up there was no possibility of walking round it, and I had to crawl precariously between the legs of the tripod every time I wanted to shift to the other side of the instrument. I also got observations completed at another point about two miles further off, and the next day I carried out similar work on Mt. Dumas, which is one of the highest points on the island, its altitude being 1650 feet.

Three days of impossible weather followed, but on Wednesday, 2nd February, I visited Beeman and also a point on the shore of the harbour to observe angles. This completed the necessary triangulation work. All that remained to be done was another couple of hours of astronomical observations. These
were accomplished on Friday 4th, and the next morning I informed Captain Worth that he could return to the Auckland Islands as soon as he wished. He decided to leave at 2 p.m., and a party was immediately dispatched in pursuit of fresh mutton. The men returned with four prime lambs, but in the meantime the weather had changed for the worse, and we stayed where we were. For this decision we were all grateful, as the weather became really bad, and it was not until February 10th that we finally got away.

We sailed at 10.25 a.m. to the sound of the bagpipes played by a member of the coast-watching party, which was remaining on the island. This farewell aroused a certain amount of criticism from the mate of the Ranui, who averred that it would assuredly bring us head winds. However, I suppose they were inevitable anyway.

Some time during the afternoon Campbell Island slipped out of sight astern. I was not sorry to see the last of it, as for me it had merely been an interlude in the main programme of work. I would not recommend Campbell Island to anyone—it is too small and too dreary.
THREE

Enderby Island

Friday, 11th February, found us pushing into a moderate sea against a light wind. The weather was heavily overcast and it was raining steadily. As the day wore on the wind increased to gale force and the sea rose rapidly, so that the Ranui began to take a bit of water aboard, and it soon became necessary to wear sea-boots in the forecastle. The wind was shrieking and wailing in the rigging, and the spray hissed as it was whipped off the crests of the waves.

About 2 p.m. Captain Worth got a brief glimpse of land slightly on our starboard bow, and he altered course accordingly. This brought the sea almost abreast. He had to reduce speed, as the motion of the ship was becoming violent. By 4 p.m. he was able to recognize the entrance to Carnley Harbour, and we entered the heads with sheets of spray flying over the tops of the masts. It took us a long time to reach Tagua Bay, as progress was nil during the passage of the heavier squalls. Our arrival in this sort of weather took the camp personnel rather by surprise.

Although the next day was still somewhat boisterous with occasional rain squalls we continued our journey to Port Ross. It was regarded almost as an insult to be served with bully-beef for the evening meal at Ranui Cove, after having dined regularly on Campbell Island mutton.

After living so long on board the Ranui circumstances demanded that the first day ashore be declared washing-day,
and we all made good use of the wash-tub and the bath. Drinking and cooking water was obtained from rain-water tanks, but to conserve the supply we adopted the practice of using creek water for washing. All the creeks in the northern part of the islands are discoloured by the peat, and have a light chocolate colour, but this does not in itself affect the potability of the water. All of the streams, however, are subject to pollution by seals and penguins.

The weather was lovely, quite warm with plenty of sunshine. The hillsides around the camp were ablaze with flowering rata, and dozens of tuis and bellbirds were disporting themselves, completely regardless of our intrusion in their domain. The fine weather was soon succeeded by stormy days, with high winds and driving rain, and all hands were more or less confined to the camp. In my case I took advantage of the opportunity to prepare the plan and final records of the work done at Campbell Island.

The evening of 17th February was clear and calm, so George and I repaired to the astronomical station. Except for a brief cloudy interval about midnight, which break we utilized to boil the billy, the conditions remained very good till 2.15 a.m. Passing clouds were then becoming very troublesome and we had to abandon observations. However, I felt confident that sufficient observations had now been completed, and this subsequently proved to be the case.

Sunday, 20th February, turned out to be a perfect day, and after lunch we decided to make a picnic trip to the little bay just north of Deas Head. Being reluctant to see a good day lost we combined business with pleasure and erected a trig beacon on the head. Deas Head provides a fine example of columnar basalt, and is 205 feet high. The bay itself is a very attractive spot and would have made a splendid camp site.

One of the men also managed to shoot a couple of goats, which are still reasonably plentiful in this vicinity. As far as I have been able to ascertain, goats were first liberated on the
islands in October 1865, when some were landed at Erebus Cove from H.M.C.S. *Victoria*. About the beginning of the next month further goats were put ashore in the North Arm of Carnley Harbour from the paddle-tug *Southland*. In 1880 the sealing vessel *Friendship* reported seeing about two dozen white goats on Enderby Island. Then in 1890 Mr. F. R. Chapman reported that goats which had been landed on Figure-of-Eight Island in Carnley Harbour appeared to be thriving. It seems certain that it is only in the northern part of the group that these animals have survived. The whole of the islands were traversed by the survey party, and we saw no goats, or traces of goats, south of Port Ross.

By this time we had been long enough on the islands to realize that it would be essential to establish temporary camps as bases for our survey work, even in localities reasonably handy to the main camps. This was because we would then waste only a minimum of time in travelling on the occasional days that were suitable for survey work. Also it would mean that we would not have to run the risk of being stranded without adequate food and shelter if the weather should deteriorate rapidly and prevent our returning to the main camp by boat. We had already decided that the difficulty of overland travelling was such that we would rely on sea transport as much as possible. The weather had a disconcerting way of changing very suddenly, and even the most sheltered harbours could quickly become dangerous for open boats. For this reason it was a general rule that "Mae West" life-jackets were to be carried on all boat trips. Actually this was quite a practical idea too, as the jackets were both warm and waterproof, and most of us got into the habit of wearing them for reasons of comfort rather than prudence.

During my previous short visit to Enderby Island I had decided that that island offered the most favourable country for a measured base-line for the triangulation system, and I accordingly arranged that our first field camp would be there. Captain Worth agreed to bring the *Ranui* round to the main
camp on Monday, 21st February, provided of course that the weather was reasonably suitable for landing us on the island.

Monday proved to be an overcast day with a fresh wind from the south-east blowing at about force five. Since this wind was blowing directly on to the sandy beach at Enderby Island we anticipated that we might have some difficulty in landing our equipment through the surf. Nevertheless we got ourselves and our supplies ashore in a reasonably dry condition, although a certain amount of spirited opposition from the resident sea-lions forced us to land at the extreme end of the beach. The Ranui then left for her anchorage at Erebus Cove, arrangements having been made for her to return on Saturday, as I hoped to have the work completed by that time.

The three of us then prospected for a suitable camp site, the essential requirements being shelter, water, and proximity to our dump of supplies on the beach. On my previous visit I had selected a site near a good stream, but on inspecting it now we found that it was overrun with sea-lions of all sizes and ages. We soon found a satisfactory site further inland, in good shelter and alongside a fair-sized stream. All the same we did not persuade ourselves that the stream was not polluted by sea-lions, as there were plenty of them about. We managed to get all our supplies up to the camp site and had our tents erected before a steady drizzle set in.

Since this was supposed to be only a very short job, I had decided that we could manage without a mess tent on this occasion. This proved to be an unfortunate decision, as the weather turned out to be most unsuitable for alfresco cooking and dining. Our sleeping-tents were of the small mountain variety, approximately 8 ft. by 5 ft. and 4 ft. high. They were complete with flys and waterproof canvas floors. The idea was to cut a quantity of ferns and spread them in a thick layer, and then to erect the tent so that its floor lay on the ferns. No poles were necessary when we camped in the bush, as the ridge of the tent and fly were suspended from ropes stretched between
4. King penguin, Campbell Island.
5. (Top) Albatross on Campbell Island.
6. (Bottom) Sea elephants.
convenient trees. Having got the tents up our sleeping-bags and personal effects were arranged inside.

All the cooking was done on a battery of Primus stoves built into a wooden carrying-case. Cooking on a Primus stove does not, of course, allow of any fancy dishes being prepared, and apart from the morning porridge it was confined to heating tinned foods. At Enderby Island we set up our stoves under a large rata tree. In wet weather the cook had to attire himself in oilskins and sou’wester to attend to his duties. When the meal was ready we had the option of eating it under the tree to the accompaniment of frequent copious drips, or else trying to eat it in the rather cramped confines of our sleeping-tents. We decided that the extra work of transporting and erecting a mess-tent would be amply justified on every occasion in the future.

It rained steadily all night, but our camp was well sheltered from the boisterous wind. I found that I had insufficient fern under my tent, and the ground had become so waterlogged that the tent floor was lying in water. The rain continued till 4 p.m., but it was succeeded by mist, which effectually prevented any work being done, and in the evening the rain started again.

Tuesday night our sleep was disturbed by a couple of sea-bears which were trying to find their pups. The pups were in the stream alongside our tents, but unhappily the mothers approached from the other side of the camp. As a result the mothers bellowed continuously on one side of us, and the pups bleated on the other. This went on for about an hour before the animals exercised enough initiative to find their way round the tents.

During the wet and misty weather which prevailed during the next few days we had ample opportunity for observing the activities of the sea-lions. Actually the male of the species is correctly known as a sea-lion, the female is a sea-bear, and the young are known as pups. The sandy beach at Enderby Island is frequented by hundreds of the creatures, and they are
also very commonly seen in other parts of the islands in lesser numbers. They are sometimes known as hair-seals, their skin having little or no commercial value. At times, however, the animals have been killed for the sake of the oil which can be obtained from the blubber.

The sea-lion, or bull, is a bulky animal, dark brown in colour, and the older ones have a considerable growth of shaggy hair rather like a mane. The female is smaller and sleeker, with a colour ranging from light brown to silvery grey, and the pups are similar in colour. All of the animals have large liquid eyes. The ears are very small and the creatures do not appear to hear very well, but they have a very keen sense of smell.

During the winter months the sea-lions go to sea, and disappear almost entirely from the islands, only an occasional one being seen. About the beginning of November the males start to return to the beaches, where they select their individual allotments. They are in fine physical condition at this time, but as they never leave the beach until the breeding season is over at about the end of February they are then in somewhat of an emaciated condition. All the females that come ashore on the allotment of any particular bull are regarded by him as belonging to his harem, and during the period of the breeding season he is fully occupied in preventing the bears from escaping, and in driving off bachelor bulls who may attempt to invade his territory. As there are always plenty of bachelor bulls in the vicinity of the harems, the master of each harem has to keep a constant vigil, and on a calm day the roaring of angry bulls could be heard at Ranui Cove, three miles from the beach. Actually it was not often that the bulls came to grips, probably because most of the harems were controlled by huge old battle-scarred bulls whose appearance was so formidable that any interlopers hastily made off when their intentions were detected. Some of the bulls had shocking injuries, but these of course may have been sustained in fights with other creatures at sea.

When landing on the beach at this time of the year it is
Quite necessary to select a spot well removed from the nearest harem, as the bull treats a man in exactly the same way as if he were a bachelor bull with designs on the ladies of the harem. When a sea-lion gets up on his flippers he is capable of a very good turn of speed for a short distance, and although we often went fairly close to them to get photographs I personally always took good care to make sure that there was nothing on the ground that would be likely to trip me when I beat an undignified retreat with an angry bull at my heels.

During my first visit to Enderby Island the pups were being born, and by now they had grown considerably, and were very entertaining to watch. A large fresh-water pond near the beach was in much demand for a swimming-pool. Usually dozens of the pups were disporting themselves in the filthy water, while the mothers lolled indolently on the bank, listlessly flicking at flies with their flippers.

There was still quite a number of harems on the beach at this time, and I had noticed that one of them was situated close to a steep bank. I found that I could approach from behind the bank without being seen, and upon reaching a good position overlooking the harem I would toss down a pebble or a piece of turf. The old bull would soon become frantic in his endeavours to discover the origin of the disturbance, and would charge back and forth in a distracted fashion. His onslaughts were made in total disregard for the comfort of the bears and pups, as he thought nothing of hurling himself over their prostrate bodies.

It is interesting to note that the sea-bears in particular often penetrated a considerable distance inland, and we came across occasional ones at an altitude of several hundred feet. Sometimes very young pups were also found in unexpected places well away from the sea. It was always somewhat of a mystery to us why these bears would struggle their way to such places. Perhaps they wanted to get away from the rough and rigid discipline enforced in the harems.
We also found that our camp was located on the established route of a number of yellow-eyed penguins. Every evening they would approach from the beach, and when they reached the camp they would stop abruptly and stare at us in utter disbelief, turning their heads slowly from side to side. After about fifteen or twenty minutes it would occur to them to make a detour, and off they would go. Sometimes, however, they would not think of that, and the whole contingent would silently return to the beach. On one such occasion I followed them and found that the whole party had formed a rough circle on the beach, and was discussing the matter with the seriousness that it undoubtedly merited. These penguins are quite attractive birds, but their appearance is rather spoilt by the pallid yellow eye with its tiny black pupil.

The weather eventually improved, although it never became good, and on most days we experienced periods of fog or drizzle. In due course we got the base-line measured on a reasonably level stretch of country at the top of the north-western cliffs. This line, which was about three-quarters of a mile long, was fortunately almost clear of scrub, being covered chiefly with *Bulbinella rossi* and in places with the remains of pastures of English grasses. The bulbinella is not unlike a hyacinth in general appearance, with an orange-coloured flower, while the English grass is a relic of the Enderby settlement. Enderby Island is comparatively free of large bush, although in some places the scrub is almost impenetrable.

With the base-line measured and checked, George and Les started on topographical work, while I proceeded with triangulation observations. On Saturday, 26th, the *Rani* arrived as arranged, and as this happened to be a fairly good day Les was left to advise the skipper that we would require two more fine days to finish the work, and also that we could do with some more rations. The captain had anticipated this, and readily obliged. He also decided to come ashore and inspect the camp. Furthermore, while crossing our improvised bridge he managed to drop a tin of bully-beef in the seal-polluted bog.
7. *Top*; Camp on Enderby Island.
8. *Bottom*; Seal pups on Enderby Island.
9. (Top) Summit of Mount Eden
10. (Bottom) Rata Forest on Musgrave Peninsula
Les volunteered to retrieve it, and was successful in falling in himself.

Then we had more seal trouble at the camp, and Les had to get up at 5 a.m. to chase away a bear that was getting mixed up with our cooking utensils and cutlery. It was bellowing to its pup, which was in the stream just alongside it, but neither of them seemed to have enough sense to get together. When Les drove the bear away she was most upset, and bellowed all the more from a new position just behind my tent.

During our stay on Enderby Island we saw quite a number of the wild cattle which are the descendants of those landed there in 1895 from the Government ship Hinemoa. In that year Mr. T. D. A. Moffett of Invercargill, New Zealand, secured a lease of Enderby and Rose Islands at an annual rental of £5 5s. In 1916 the Rachel Cohen returned from a sealing expedition to the islands, and reported that the progeny of these cattle were in a very bad way, as they had multiplied to such an extent that there was insufficient food. Many had died from starvation and the remainder were in a weak and emaciated condition. Some of the beasts were wading into the sea to eat kelp, while others had swum to Rose Island only to find that food was equally scarce there and that there was no fresh water. The second engineer of the vessel, Mr. O. Magnus, expressed surprise that Commander Hooper of the Government ship Amokura had not notified the condition of the cattle and reported it to the Government.

There is quite a number of cattle still living on Enderby Island, and some were shot to provide fresh beef for the personnel of our expedition. It was our practice to select only young bulls for this purpose. Although Enderby Island has an area of 1770 acres the land cannot be regarded as very productive. As much of it is scrub-covered it would not be capable of supporting a great number of cattle.

Furthermore the whole of the island is infested with rabbits. It is believed that these animals were introduced by Ross in 1840, and the schooner Friendship, which visited the Auckland
Islands in 1880, reported that Enderby Island was overrun with them. Many of them have a very attractive blue-grey fur, and are believed to be of French origin. Although these rabbits appear to be perfectly healthy, the same cannot be said of those on Rose Island, as they appear to suffer from some disease or mineral deficiency which renders the bones extremely brittle.

It was on one of the wet days when I was taking a stroll along the sand dunes beside the beach that I stumbled on the almost unrecognizable remains of a building. This, together with the odd patches of pasture, was the only remaining evidence of the occupation of this island by the Enderby settlement in the 1850s. The activities of this settlement will be described in a later chapter.
We had undertaken that before leaving Enderby Island we would erect a memorial tablet at the burial place of seamen lost in the wreck of the *Derry Castle*. This tablet had previously been carved and painted, and on Monday 28th Les and I made the journey to the scene of the wreck on the extreme northern point of the island.

On 12th March 1887 the iron barque *Derry Castle*, commanded by Captain Golfe, left Geelong for Falmouth with a cargo of wheat, and for 192 days she was not heard of. It happened that on the early morning of 20th March the barque was making about twelve knots with all sail set and a fair wind. It was the chief officer’s watch. The night was hazy with an overcast sky. About 2 a.m., without any warning whatever, the vessel ran on to a partially submerged reef. Her impetus carried her almost over the rocks, so that the bow dropped into deeper water while the stern remained on the reef. The ship listed to starboard and immediately began to break up in the heavy seas. All hands mustered at the stern, but the boats were smashed and only life-belts were available. The ship then broke in two amidships and the men either jumped into the sea or were washed overboard. Despite the fact that the shore was visible only 200 yards away only eight of the twenty-three men managed to reach land, and the captain and both mates were lost. It is reported that when daylight came the castaways saw the sailmaker, who had climbed the mizzen-mast of the
ship and had clung to it all night, leap into the sea and swim towards the shore. Possibly due to his being stiff and numbed by the cold he did not succeed in reaching land, and his shipmates had to watch him being swept out to sea.

The survivors, finding themselves on a bleak and inhospitable shore, set about searching for shell-fish, and amongst the kelp they found the bodies of the captain, the chief officer and an able seaman. They had been badly battered in the surf. The eyes and other parts had already been eaten by skua gulls, so that the bodies were hardly recognizable. After removing the clothing for the use of the survivors the three men were buried in a grave dug with a knife.

Meanwhile the castaways had found that shell-fish were very scarce, and as they had no matches they were in a serious position. Fortunately there were no cliffs at the point where the ship had struck—in fact the vessel need only have been a hundred yards further to the north and the tragedy would not have occurred—so the men were able to set about exploring the island. Their jubilation can be imagined when they found a tiny hut, but they were bitterly disappointed to find that it contained no food apart from a bottle of salt.

This hut, as will be seen later in this book, was erected by the castaways of another wrecked ship, the Invercauld. Although it is not now easily found, the hut is still in existence, and was seen by members of the survey party.

From Enderby Island the unfortunate men could see the provision depot at Erebus Cove, but without a boat they were quite unable to do anything about it. Certainly there was plenty of timber available from the remains of the Derry Castle, but the men were without tools of any kind.

During the first week the castaways lived very poorly, as the only food that had washed ashore was two tins of herrings, a pumpkin, and some wheat which soon became mouldy and started to sprout. They attempted to eat seal-meat, but found they could not stomach the raw flesh. They were unable to
find birds' eggs, although they did eat one shag. Their diet therefore consisted mainly of shell-fish, and under these conditions the men soon wasted away. For bedding they had two blankets and a number of bags, while they were forced to use seal-skin fastened with rope-yarn for foot-wear.

Naturally the castaways were desperate to make a fire, both for warmth and to enable them to cook the wheat while it was still usable. One man had a revolver cartridge in his pocket, and it was decided to try to use it to start a fire. The bullet was removed and replaced by a piece of cotton which had been thoroughly dried by wearing next to the skin. The cartridge was then wedged in a piece of wood and detonated by striking it with a sharp stone. The flash caused the cotton to smoulder, and it was gently fanned to a flame. Having got the fire going a roster of fire-watchers was drawn up to ensure that it was never allowed to go out. The men toasted the wheat over the fire, and then crushed it and ate it mixed with hot water.

After about a month two more bodies were washed ashore. The survivors thought they could identify one of them, but the other body had been reduced almost to a skeleton by the skuas. These remains were buried with the others, and an effort was made to erect a monument on the spot. The ship's wheel was placed at the captain's head, and at the other end of the plot a life-belt was set up on a post.

During the following weeks the men gazed long and often at the provision depot across the cove, even though some of them were not sure that it was not just a rock that they could see. After a period of ninety-two days on the island they found an old axe-head half buried near the hut, and realized that at last they might be able to construct a boat. They carried timber over from the wreck, and fashioned it into a rectangular boat six feet long by two feet six inches wide. The seams were caulked with rope-yarn pushed into place with a piece of hoop-iron they had found near the axe.
The boat was launched and with Sullivan and Rennie aboard it left for Erebus Cove. During the absence of these two men a ship was sighted entering Port Ross, and the remaining six men hurriedly piled fuel on to their fire to make plenty of smoke. However, their consternation can be imagined when the ship immediately put about and left. The men conjectured that she must have been a seal-poacher, and that the captain thought that the men had been left there to keep a watch for poachers.

On the third day after the departure of the boat smoke was seen rising near the provision depot. They then knew that their companions had reached their objective. Shortly afterwards the two men returned with plenty of food and clothing. The whole party then transferred to Erebus Cove. They had to use their improvised boat for the job, as although there was a boat at the depot it was unfit for use. As will be mentioned later in this book, this provision depot was erected and maintained by the New Zealand Government for the use of castaway seamen.

The company now had adequate supplies of all necessities, and was in reasonably good health, although some of the men were suffering from exposure. They were very concerned as to when the Government vessel Stella would arrive on her routine visit, and on 19th July they were greatly excited when after dark they heard the rattle of an anchor chain. They hailed the ship unsuccessfully. As it was too boisterous for them to go out in their boat it was not until the next morning that they found that the visitor was the sealing vessel Awarua commanded by Captain Drew. The ship had called to pick up a dinghy which had been left there on a previous occasion.

Captain Drew took the castaways aboard and transported them to Melbourne. It is understood that the Awarua had a very bad passage and was nearly lost. Actually the men would have had a very long wait for the Stella, as she had visited the depot only a day or two before the Derry Castle was wrecked.
The scene of the wreck was later visited by Captain Fairchild of the Stella. He found the figurehead of the barque, and erected it beside the lonely grave. Other relics of the wreck were found at the provision depot at Erebus Cove, including a slate on the mantelpiece inscribed as follows:

"Sacred to the memory of the Captain, first and second officers, and twelve of the crew who lost their lives by the wreck of the Derry Castle on the north side of Enderby Island, March 20, 1887."

The writing appeared to have been done with a piece of burnt shell. On this visit Captain Fairchild erected a boat-shed and left a boat on Enderby Island, and also erected finger-posts indicating the location of the provision depot. He reported finding a number of huts, constructed of tussock and fastened with thongs of seal-skin, which had been used by the castaways.

The figurehead of the Derry Castle has now been taken to New Zealand, and the memorial board that Les and I took to the scene of the wreck was intended to be a substitute. The Derry Castle reef was easily found, and we soon located the grave, which is on a low bluff and is surrounded by a circle of stones.

There is still a fair amount of wreckage in the vicinity although the timber is now useless, due to the effects of over half a century of exposure to the elements. There is an occasional unexpected relic to be found, too, as one of us discovered when he realized that the white object he had kicked on the beach was a human skull.

At this juncture it should be mentioned that a further wreck occurred on Enderby Island a few years later. In 1895 Captain Fairchild reported finding the wreckage of an iron ship on the north-eastern coast. The rocks were strewn with wreckage and also with a large quantity of Australian wool. There was no sign of there having been any survivors. It was
at first suspected that the vessel was the barque *Stoneleigh*, which was missing en route from Melbourne to London, but it was later considered to be more likely to be the French barque *Marie Alice* bound from Sydney to Antwerp. Neither ship was ever heard of again.
FIVE

Chambres Inlet

It was our intention to make our next camp in either Haskell Bay or Chambres Inlet. The latter would be more suitable from the point of view of locality, but after studying it through binoculars on my previous trip down the coast I was doubtful as to whether it would provide practicable access to the high country. The valley sides appeared to be unduly steep, and seemed to consist largely of vertical cliff faces.

In the meantime, the weather was most indifferent, the odd good day being sandwiched between long periods of wet, windy and foggy weather, and I was hoping for a reasonable spell of continuous fair weather before we left. This optimism caused considerable amusement among the old hands on the ship who had had previous experience on the islands. They assured me that the weather was astonishingly good, and that the only change I could reasonably expect would be one for the worse. I was never quite sure whether these remarks were made seriously, so I remained optimistic, and decided to carry on with survey work on the small islands round Port Ross in the hopes of better weather coming along. I also went to the extent of plotting a graph of barometer readings, and recorded the actual weather against the graph, but soon found that this got me nowhere.

During this period I revisited Deas Head, and found a sea-elephant there. It was injured and was being considerably
tormented by the skuas, so I was not surprised when it left again soon after I had landed. The Ranui crew went to Lindley Point and reported that there was another one there. The following day I visited Ewing Island, and after completing my triangulation observations I sat down on some rocks to eat my lunch. There was quite a number of sea-lions lying side by side in the tussock nearby, and I was interested to note that they seemed to get along together very amiably when there were no sea-bears about. All the same it was only necessary for a new arrival to approach within a certain distance for a riot to break out, and this would continue until the interloper made off. The old shaggy bulls commanded a great deal of respect, and if two of the younger ones started quarrelling it required only one word from an old bull to restore peace. They kept me interested for quite a long time before Les and George arrived from the other side of the island, Les being particularly lucid about the unreasonably tangled nature of the scrub.

The weather was still much the same. It was at last beginning to become impressed upon me that I could not reasonably expect any improvement. I therefore decided that on the first good day we would leave for our field-camp. Graham Turbott, the naturalist who was also meteorological observer at Ranui Cove, immediately went to Crozier Point and captured three adult shags. These he banded and put in a crate with the instructions that one was to be released at Waterfall Inlet and the other two at Carnley Harbour. He was anxious to discover whether the birds would come home, or if they would merely take the easy way out and join forces with other shags near where they were released. The experiment had interesting possibilities, as we lightheartedly visualized the inauguration of a shag-mail service between our field-camps and Crozier Point. Unfortunately for the birds, they had to remain in captivity for three days before they were eventually released. Graham tried to interest them in a helping of canned salmon, but they treated it with disdain.

On Friday, 10th March, we got away. We ran into Haskell
Bay, and this confirmed my view that it was much too close to Port Ross to meet our requirements, so we went on to Chambres Inlet. On entering this inlet we found that it was rather better than it had appeared from out at sea, and that it had two heads, each leading into a typical glacial valley, and separated by a knife-edged ridge. We decided to camp in the northern arm, where there was a very large stream of beautifully clear water. The ship was able to come in very close to the steep shingle beach, and in little more than half an hour we had everything ashore.

We built the camp just sufficiently far back from the beach to ensure plenty of shelter, and in a handy position for obtaining fresh water. On this occasion we had brought a large tent for use as a mess-room. As soon as this was erected all our stores and other equipment was deposited in it. Then each man was free to select a site and erect his sleeping-tent. The sun was shining at the time, and I found a pleasant sunny spot where I pitched my tent and stowed away my bedding. Then a couple of men were left to organize things in the mess-tent while George and I spent the remainder of the day cutting a rough track, parallel to the valley stream, towards a point where we thought we could climb the valley sides. On this occasion I had brought a fourth man with me, so that we could work in two groups of two men. We were still unfamiliar with the country, and I felt that in view of the possibility of injury or other mishap it would be undesirable to have men working alone.

I was awakened at 1 a.m. by a strange scratching sound on my tent, and thinking it would be a mouse I thumped the canvas a few times. The noise persisted, so I crawled out of my sleeping-bag to investigate. On shining my torch along the tent-fly I found that the intruder was a whale-bird, which was making a rather pathetic attempt to climb up the tent. I chased him away, and he then tried climbing someone else's tent, and I resumed my sleep. There were a few seals around, but no sign of any penguins.
When entering the inlet in the ship we had noticed a very large land-slip on the southern side of the valley. It seemed likely that this slip would provide a good means of access to the ridge on that side, as it commenced well up the hill and extended right to the floor of the valley. We had therefore decided to cut our way to the foot of the slip, which was about three-quarters of a mile from the camp, and all hands were employed on the job in the morning. When we reached the slip we divided into two parties. Two men climbed the slip to clear a route from it to the open country on top of the ridge, while George and I started cutting a track up the northern side of the valley.

At first the job was easy, just a matter of clearing the undergrowth from the rata forest and cutting off an occasional big branch that obstructed the track. These southern ratas are big trees, but with a prostrate habit of growth, and in most places the sprawling boughs can easily be climbed over without the necessity for much cutting. As we got higher we entered a zone of scrub, consisting largely of Coprosma foetidissima and Suttonia divaricata. This belt of scrub is virtually impenetrable on account of the dense growth of interlacing boughs, and cutting through it is a laborious and unpleasant task. The coprosma has a rather objectionable smell, but we were already well inured to smells, as the deep mud under the scrub is always very foul. As we approached the ridge the scrub became more patchy and a large amount of Dracophyllum longifolium was encountered. The open areas among the patches of scrub were covered with a tussock grass growing to an average height of about four feet, and as we got on to the windswept ridge the scrub disappeared entirely and we were in a tussock meadow. However, we found that wherever a little shelter was available the dense tangled scrub reappeared. The tussock grass grows on peaty trunks, and in crossing the meadow we had perforce to wend our way between these trunks. Frequently we came across holes in the peat, which were usually filled with stagnant water. Sometimes these holes were concealed by overhanging
foliage, and they then provided first-class entertainment for persons not directly concerned.

Our policy of cutting tracks up to the tussock country from every camp site was well repaid. Although it meant a hard day's work or more at each camp, once the job was done we had relatively quick and easy access through the forest and scrub. The tracks, unfortunately, deteriorated rapidly with use and soon became veritable bogs.

George and I had got nearly to the open country when we called work off for the day, and we were back at the camp by seven-fifteen. Our companions were already back, and reported that their journey was unsuccessful. After reaching the top of the slip they had encountered vertical rock faces, and they had found no way to get round the obstacle.

Next morning I woke at 4.30 a.m. to hear steady rain falling, so I pushed down the button of the alarm clock gratefully. It was still raining when I woke again at 9 a.m., so work was out of the question. Actually I was not sorry, as I had rheumatism fairly badly in my knee, and also my tent required attention. Upon arriving home the previous evening I had found that the blowflies had had a real field-day. They had blown everything from my leather field-bag to my oilskin trousers. These blowflies are disgusting brutes. The first ray of sunshine and they appear in hordes and will lay their eggs on anything at all, even including billies and slasher blades. But wool is their real joy. Leave a blanket or a pair of socks in an accessible place and you will return to find a crust of eggs an inch or more deep, with blowflies completely embedded in the mess. It is fiendishly difficult to get the eggs out of woollen articles. I was interested to find that none of the other men had had any trouble, and I soon saw that I had made a mistake in pitching my tent in a sunny place. At the first opportunity I shifted it to the darkest corner I could find.

In the afternoon the rain stopped and I strolled down to the beach, but found that the sand-flies were terrible. I was just about to leave when I saw a full-grown boar just across the
creek, casually rooting amongst the ferns. I sneaked back to the camp for my Webley revolver, but when I returned he had gone. During our stay on the islands we saw a good number of pigs, and quite a few of them finished up in our cooking-pots. They are descended from those liberated by Captain Bristow, and have spread to every part of the main island. In the summer months they appear to live chiefly by digging for roots in the high country, but during the winter they are driven by the weather to the lower levels, where they seem to subsist largely on kelp. It was impossible to estimate their numbers, but we formed the impression that they were not particularly numerous.

Rain fell again next day, and we were confined to camp. However, I spent a bit of time collecting moths and spiders for Graham, and one of the other men caught a tiny mountain trout which I duly preserved in spirits. Bellbirds and tuis were around us in considerable numbers, and we also had a brief visit from a handsome green and red parakeet.

When the weather improved enough for us to resume our work George and I carried on with our track in alternate sunshine and rain, and were soon in the open tussock country. I sighted a large boar rooting just ahead of us, and George crept up on him and hurled his slasher. The pig looked round in astonishment, then trotted off quite unconcerned, but a bit resentful. The rain was now very steady and low cloud was swirling round us, but as we were both completely wet through we decided we might as well carry on. We were making for a hill about two miles down the ridge, and although we made good progress at first we found we had to cross a small gully full of thick matted scrub. Soaked to the skin, neither of us derived much amusement out of fighting our way through this obstacle, but we eventually reached our objective, which was a very high semicircular wall of rock. On getting our trig signal erected we were rewarded by a temporary lifting of the cloud, giving us a fine view of Chambres Inlet and the eastern coast. The trip home was hard and unpleasant, and we had
some little difficult in crossing the big stream, as it had risen considerably with the heavy rain during the day. We reached camp at 7.45 p.m. to find an enormous meal awaiting us. The others had returned at 3 p.m. after another unsuccessful attempt to scale the cliff face.

The next day was wet again, but after lunch George and I climbed Mt. Eden and erected a beacon. We found that the conspicuous knob at the top was quite a sizeable affair, being about fifty feet high. We also visited another slightly higher hill which we had noticed was almost always shrouded with clouds, even on the finest of days. This one we named Cloudy Peak. On our return journey we came on some young pigs feeding in a clear patch in the tussock, and I managed to shoot two of them with my revolver. They subsequently added up to a very tasty addition to our rations.

In the meantime the others reported having at last found a means of access from the top of the slip, but that it was rather difficult and would not stand up to much usage. They had also erected markers above the cliffs so that the route could be located by anyone wishing to descend from the ridge.

We had another disturbed night with a sea-bear calling to her pup for long enough, and then the wretched whale-bird came back. However, the morning gave promise of a clear day, so one party commenced topographical work, while I set off with the fourth man to erect beacons to the west and south. We climbed up the north side and skirted round the flanks of the hills till we reached the head of the valley, where we erected a signal on what we knew as Bivouac Hill. An overhanging rock ledge at this point had been used as a bivouac on a previous occasion. Visibility was very good, and I got my first sight of Disappointment Island, the offlying island on which the Dundonald was wrecked. We could also see right down the forbidding western cliffs to Bristow Point sixteen miles away. It was against this line of cliffs that the General Grant was wrecked. Up to the north-west the cliffs extended towards the Column Rocks, but on this stretch of coastline
we could see one or two small breaks where there might be tiny beaches. This part of the western coastline claimed the Invercauld as its victim.

From Bivouac Hill we pushed south to a higher barren peak which we subsequently named Stony Peak. The walking conditions were now excellent, as we were above the level of the tussock, and the only growth was mosses and lichens. It was very exhilarating to be able to travel at a reasonable pace instead of struggling through scrub and tussock growing in boggy ground. After leaving Stony Peak we went about a mile further to the south to another high knob, and then we struck across tussock country to the ridge south of Chambres Inlet. We soon located the markers indicating the cliff route, and successfully negotiated this obstacle course, although I could see that it would be a difficult route if one was carrying instruments. We had to scramble from one rock ledge to another, walk under small waterfalls, and in one place where the rock ledges disappeared we had to climb over the branches of trees till another ledge became available, even though it was only two or three inches wide.

It was late when we got back to camp, to find George already there. At 8.15 p.m. there was still no sign of Les, who had been later than George in leaving the hills. It was getting very dark, and we were beginning to feel a bit concerned about him when we heard shouting in the distance. On investigating with lanterns we found that the unfortunate Les had got off the track in the darkness, and was unable to find it again. When we got him back to the camp we saw that he had a huge hole torn in the knee of his trousers and his wrist-watch was wrecked. He was, however, remarkably fluent in his opinion of the local country. He wasn’t hungry, he said, although he subsequently despatched an enormous meal, but he wanted lots of tea, and in the course of the next half hour he consumed four pint mugs of scalding tea. If we hadn’t heard him calling he would probably have had a night in the bush only a quarter of a mile from the camp.
11. Perched rock near Musgrave Inlet
12. (Top) Musgrave Inlet and Lake Hinemoa
13. (Bottom) Rock-hopper penguins
I felt rather sorry for Les, as it seemed to me that life in our bush camps was a little hard on him. He had been included in the survey party on account of his previous experience at Campbell Island, but he found that the Auckland Islands were a much tougher proposition. He was a short, rather stocky man, with a very genial disposition, and I never once saw him really ruffled. In fact he was an ideal type for a base-camp in these isolated islands. He was somewhat older than anyone else in the survey party, and I know that he found our work very arduous, although he would never admit it, and was always ready to do his share. And so, every time we left to camp in the bush, I felt that taking Les away from the comfort of the base-camp was rather like ejecting the family cat from its favourite chair in front of the fire.

Les was admired and respected by us all, and it was with great sorrow that I learned of his death in an aircraft accident a few years after his return to New Zealand.

The day after the episode of Les getting lost we climbed the cliff route to resume the erection of trig signals to the south. By noon we had reached the point where we had stopped work the previous day and we made a brief halt for lunch. We had to make it brief as we were wet and cold, and we would have stiffened up too much if we had stopped for more than a few minutes. The country here consists only of wind-swept rocky hills and immense gorges, sometimes with spectacular waterfalls. As the afternoon advanced we were troubled a good deal by cloud, and it was not long before we had to abandon work and return to camp.

Having now completed the erection of trig signals in the vicinity of the inlet I was ready to commence the angular observations. My first trip was to a trig about three miles from the camp. It will give some idea of the difficult nature of the country when I mention that it took me and my companion two and three-quarter hours of very hard work before we reached the trig. This despite the fact that we had cut a track through all the thick scrub and bush. Admittedly we both had a
fairly heavy and rather awkward load, but just the same the country is most unreasonable. The worst bit was the last quarter mile, which took us more than half an hour. The trig was on a wall of rock about 50 feet high and 5 feet wide, and with a stiff southerly breeze blowing and our clothes wet through we were rather cold by the time I had finished. Observations at each trig usually required about an hour, but when rain or snow squalls and low cloud were troublesome I was often three or four hours getting work completed at a single station.

The next few days we were confined to camp while a furious gale raged. We considered ourselves fortunate in being camped in bush heavy enough to afford reasonable protection from the wind. We could hear particularly violent gusts screaming down the valley, growing louder and louder until they passed over our tents with a roar and disappeared out to sea in a whirl of spray.

Chambres Inlet might be taken as a text-book example of a glacial valley, and I believe it is the best of the many good specimens to be found in the Auckland Islands. The floor of the valley is quite flat, and the stream flowing down it does really meander most of the way. The valley sides are of the classic U-shape and are very steep near the top—in this case being vertical on the south side and actually overhanging in some places. I would say that the breadth at the top of the U would be about a half to three-quarters of a mile, and the height of the U would average about 1000–1100 feet.

Thursday, 23rd March, saw the finish of the gale, but it was succeeded by a steady downpour which rapidly converted our clear stream into a raging torrent of discoloured water. We were beginning to look for the Ranui, as our rations were running rather low. It had been difficult to estimate our probable requirements, and we had erred on the wrong side. I decided that if the ship did not arrive within two days it would be necessary for two of us to travel overland to Ranui Cove. The distance was about six miles, and we thought the journey
could be done in six or seven hours. Actually we still had a fair supply of some items. In an effort to use these we produced some rather unique dishes. For instance our midday meal would consist of soup and a sort of salad made by mixing salmon, cheese, butter and jam in equal quantities.

Today I saw the last of my whale-bird. I was down on the beach when I saw him skimming down the stream. A skua saw him at the same moment and the whale-bird just disappeared in a flurry of feathers. I did feel a little sorry for him, although he had done nothing to endear himself to me, and I am sure he was entirely devoid of intelligence.

The morning brought no improvement in the weather, but at noon the Ramui arrived. The captain came ashore, and I explained to him that I would like to get in another day or two of good weather before leaving. He agreed to stay in the inlet, provided the wind did not trouble him. We all went aboard the ship in the afternoon, and as the wind started to freshen the captain decided to shift to the south arm of the inlet where there was a little more shelter. We returned to camp just before dark, and had a rather wet trip as both sea and wind were against us.

The wind blew furiously during the night, and the next morning was bitterly cold with fierce hailstorms. I was a bit concerned as to whether the Ramui would have been able to hold on in the teeth of the gale, and I decided to walk round the rocks to the south arm to investigate. I did not get far when I saw the lifeboat coming in, shipping sheets of icy water as she headed into the wind. The crew said their anchorage was quite secure provided the wind did not shift.

Next day was fairly clear except when squalls passed over, so we set out for Mt. Eden. The wind was still quite strong and bitterly cold, and when I placed the tripod over the trig a gust of wind picked it up and dropped it again a few feet away. Fortunately the theodolite had not been mounted on it. This indicated the futility of trying to work in the meantime, so we sought shelter behind some rocks. Occasional snowstorms passed
over, and after waiting some time we had to abandon any further idea of work. We left the theodolite in a secure position and returned to camp.

The following morning, Monday, 27th March, found the weather worse than ever, so in view of the food situation I decided to return to Ranui Cove. The ship came as close in as she could, but found the wind was too strong and had to seek shelter behind a point. The lifeboat then came in for us, and as we were leaving the camp standing we were able to get out to the ship in one boatload. On reaching base-camp we all revelled in the luxury of hot baths and clean dry clothes.
Continued bad weather confined us to office work and other camp jobs for some days, but Saturday, 1st April, broke fine, calm and clear, after a light frost. George and I decided we would try to reach Mt. Eden from Laurie Harbour, so we set out in the dinghy and ran about four miles up Port Ross, where we beached the boat near the foot of a slip. After a strenuous scramble up the somewhat overgrown slip, and then through some reasonably easy scrub and tussock, we reached the summit at 11.30 a.m. Observations were soon completed, and we went on to Cloudy Peak, which was still clear of cloud. The wind was getting strong, but we managed to finish work at that station also. It was just getting dark when we reached the boat, and we had a very unpleasant two-hour trip in a choppy sea before we arrived home.

On the next fine day I carried out observations at Meggs Hill and Kekeno, which meant the completion of the triangulation work in the vicinity of Port Ross. Since Mt. Eden and Cloudy Peak had also been done I decided that Chambres Inlet could be by-passed in the meantime, and that we could make our next camp in Musgrave Inlet. Accordingly I arranged for the Ranui to stand by for a suitable day for shifting down the coast.

Actually it was not until Friday, 14th April, that we were favoured with reasonable weather, and a call had to be made at Chambres Inlet to collect our tents. On arriving at Musgrave
Inlet the ship was fortunately able to come very close inshore, so we had no trouble in getting our belongings ashore and erecting the tents before darkness fell.

Musgrave Inlet was quite different from what I had expected. I had been told that the inlet ran nearly through to the west coast, in fact that only a low saddle about 300 ft. high separated it from the western cliffs. However, in actual fact it proved to be surrounded by the most rugged country we had yet seen, and the "low saddle" turned out to be a towering series of precipices reaching up into the mantle of low cloud. Down these impressive rocks faces tumbled a number of spectacular waterfalls, many of them several hundred feet high. The sides of the inlet were terribly steep, and for a great part of their length consisted of sheer rock faces which would be quite unscaleable. After studying the valley sides through the binoculars we selected a place that seemed to offer some possibilities, and decided to make our way towards it. After clambering over the boulders along the coast for about half a mile we set to work cutting our way up the hillside, and by late evening we had a track of sorts that gave access to the tussock country.

Next day we all made for the high country, to commence locating trig stations in suitable positions. Unluckily the brilliantly sunny morning soon deteriorated into thick fog and we had to return to camp with very little achieved. In fact we had some difficulty in finding our way back. In the afternoon George and I visited a fair-sized lake which we had seen from the hills. It proved to have been formed by the valley stream being dammed by the old terminal moraine of the glacier. We had hoped to find ducks on the lake, but unluckily the only sign of life was a few seal pups happily disporting themselves. We subsequently decided on the name Lake Hinemoa, in recognition of the number of visits that had been made to the Auckland Islands by the New Zealand Government vessel of that name.

After several days of wet and cloudy weather we again
attempted to reach the high peaks at the head of the inlet, but once again cloud descended, and by 11.30 a.m. conditions were becoming bad. We knew we were near the summit of the ridge, so we decided to keep on climbing. Eventually we found there was no more hill to climb, so we drove in the trig station mark and erected a beacon over it. As visibility was only a few yards we did not linger any longer than necessary.

Similar weather again next day, so I decided not to waste any more time by being caught in the cloud, and we turned our attention to finding a route out of the south side of the valley. This was not particularly difficult, as we found we could get up the rock walls by climbing trees and scrambling off the upper branches as we reached each one of the series of terraces. It was particularly annoying, though, when the cloud banks we had so confidently expected did not materialize. It would have been an ideal day for reconnaissance work at the head of the inlet.

The blowflies were still bad, and most of us had a certain amount of trouble with them, despite the most elaborate precautions. I adopted a practice of tying my tent up securely and then piling fern fronds in a thick layer all over and around the entrance, and this seemed to be fairly effective. The flies did not trouble us in wet weather, fortunately.

The next fine morning we all climbed the southern track to reconnoitre and erect trig signals. On leaving the track we erected guide flags to enable us to find our way back, as the route passed through a narrow gap in the sheer cliffs, and there seemed to be no other way down. Walking conditions were very bad on account of recent heavy rain, and this was made worse when rain recommenced at 11.30 a.m. There was no cloud, so we kept going. Two men struck off to the east, while Les and I pushed westwards till we reached a barren hill with an altitude of 1935 feet. It commanded a fine view of the western coast and Disappointment Island, but as it was snowing, hailing, raining and blowing a moderate gale we did not pause to admire the landscape. After getting our beacon up
we decided a fitting name for the spot would be Bleak Hill.

From there we made our way to a peculiar natural feature which I had previously seen from the Ranui when well out at sea, and which consisted of a massive basalt archway. The aperture under the arch proved to have a length of 195 ft., a breadth of 25 ft., and a height of about 20 ft. We sheltered in it for a few minutes to eat a little chocolate and biscuit. The noise of the wind howling through the opening was rather eerie. Les was of the opinion that the Giant’s Archway, as we called it, was the result of wind erosion. A trig signal was erected with some difficulty on top of the arch, and then we headed for home. I was rather concerned about finding our marker flags in the swirling mist that now surrounded us, but luckily it lifted at an appropriate time. I was also worried about Les, as the weather seemed to have got into his system and at one stage it was doubtful whether he would be able to keep going. We eventually arrived home wet to the skin and plastered with mud. I cleaned my clothes by the simple expedient of wading into the deep stream and washing them while I was wearing them.

Two days of very heavy rain followed, together with a strong easterly wind that swept right into the inlet and created a heavy surf. Life in the camp became very uncomfortable, and the only place where we could keep reasonably warm was in our sleeping bags. So we all remained in bed except at meal times. During a brief lapse in the rain one of the men essayed a trip to the mess-tent clad only in his sea-boots and underwear. The delight of the spectators can be imagined when he lost his footing in the deep mud.

When the rain stopped we emerged to take stock of the situation. The creek was still a raging torrent and was quite impassable, while large quantities of kelp had been flung right into the bush. These heaps of kelp provided a good source of crabs and squid for me to take back to Graham, but later on became rather troublesome through attracting large numbers of small flies. They also brought pigs to the
neighbourhood, and I shot a fine young one with the Webley. With the easterly breeze and the roar of the surf it was not difficult to get within easy range.

With improved weather we decided to try to work on the northern side again, but found the route was now very difficult. The big boulders alongside the water had become very greasy with the kelp, and the cut track was little else than an elongated bog. Every day for five days we toiled up the track and then up the tussock-covered ridge, hoping that the cloud would lift for an hour or two at midday. But it never did, and our daily five-hour journey was always in vain. At the end of the fifth day our feet were in a bad way with continual walking in water, and I had to bind mine with elastoplast. The sixth day we decided to have a spell from the daily grind, and of course that was the day that the clouds did lift. However, I managed to reach Musgrave’s Knob, which was fairly handy to camp, and I got observations completed there. The seventh day broke clear and we made the long journey to the western coast. We arrived there just as the clouds started rolling in again, and had to return to camp with nothing achieved. We reached home to find the Ramu waiting, and I am sure nobody was disappointed when I decided to leave for Port Ross in the morning.

It was very disturbing to realize how little work we were getting done in these camps, as in both Chambres and Musgrave Inlets the job was hardly half done, and a further visit would be inevitable to at least one and possibly both of these inlets.
SEVEN

The Wrecks of the Invercauld and the Compadre

On Wednesday, 10th May, we were still working on various jobs preparatory to leaving for field camp again when a radio message came from New Zealand advising that the coast-watching station in Carnley Harbour was to be closed down. The personnel were to be returned to Wellington as soon as possible, except that I was authorized to retain any of them that I might be able to employ on the survey party. All the camp stores were also to be shipped except for such as would be useful to us when working in the southern area. In the morning I flashed the message by Aldis lamp to the Ranui, which was anchored in Erebus Cove, and she picked me up and we proceeded to Carnley Harbour. The men there were greatly surprised by the news, and although some of them were anxious to return to New Zealand, others were equally keen to join forces with the survey party.

It took us a couple of days to sort out the surplus stores and load them aboard the ship. The camp was well back from the landing place, and we had a long way to carry the cases. Then the "official" photographs had to be taken of the closing of the camp, and of the camp pets. These included two young pigs, who slept under the camp building, and would willingly have slept inside had they been allowed; also a number of cats. All of these animals had been captured when young and they had soon become domesticated. The oldest cat had an engaging habit of climbing up on one's shoulders by the simple method
of walking up one's clothes. Arrived there, he would coil himself round one's neck and purr noisily.

Having got everything aboard we sailed for Port Ross, and as there was a stiff southerly blowing we had a very lively trip up the coast.

I had decided that while the *Ranui* was engaged in the work of returning the Carnley Harbour party to New Zealand the survey party would camp at the head of Port Ross in what is known as Laurie Harbour. From this camp we hoped to be able to cover most of the Hooker Hills, which occupy the north-western part of the islands. I had also decided to retain Bob Pollard as an extra man, but agreed that he would make the trip to New Zealand as an additional deck-hand for the *Ranui*.

The Hooker Hills also have their historical associations, the best known being the wreck of the *Invercauld*.

The *Invercauld*, of 888 tons, commanded by George Dalgarno, was bound from Melbourne to Callao in ballast. She sighted the Auckland Islands when about twenty miles off, but as night fell a thick fog descended and the breeze dropped to a dead calm so that the ship was at the mercy of the strong ocean currents prevalent in this locality. The barometer was falling rapidly, and about midnight a violent gale sprang up. Sail was crowded on the ship, but it was not long before the islands were again sighted, and at 2 a.m. on 10th May 1864 the ship struck. The crew all struggled towards a small rocky cove nearby, and nineteen of the twenty-five men managed to get ashore. They got what shelter they could among the rocks till daybreak, when they visited the scene of the wreck. The ship had broken up in a matter of minutes, and all the food they found was a little salt pork and some sodden biscuit. They also found the bodies of the other men.

Sufficient timber was salvaged to enable the castaways to build a rough hut and to light a fire. Four days were spent in this refuge, and then the men decided that there was little hope of obtaining more food from the wreck, so they resolved to try to scale the cliffs in search of food. They reported the
climb as being extremely difficult, as the cliffs were about 2000 ft. high and almost perpendicular. On reaching the summit they found themselves little better off. However, they did find fresh water and some roots that they were able to eat. After spending the night in an improvised shelter they pushed on towards Port Ross, but found that the thickness of the scrub resulted in the journey requiring several days. The cook and three seamen died during the journey, and all the others were weak from hunger and cold.

On reaching the harbour they ate shell-fish, and occasionally managed to kill a seal. It was at this time that the castaways separated into several parties, thinking that they would have a better chance of survival in this way. The captain, the mate, and four seamen remained at Port Ross for some time, but there appears to be no record of what happened to the others. It is, of course, necessary to understand that it was not until later that the provision depot was erected at Port Ross.

The shell-fish were soon finished, and it was only rarely that a seal was seen, so the captain's party constructed a primitive canoe from seal-skins and three branches, and in this they crossed to Enderby Island. Here they found plenty of rabbits to add to their diet. They also built a tiny wooden hut and four grass huts "like the cabins of the Eskimos". At Enderby Island three of the seamen died and were buried in the sand. From time to time the survivors crossed the harbour in their canoe to look for seals and to see if any of the other parties had returned.

Then one day when they were crossing the harbour they saw the Portugese ship Julian entering the port. They paddled furiously towards the ship, which had called to have a leak repaired, believing that ship repair facilities were available at the town of Hardwicke, of which more will be heard later. The three survivors were taken aboard the Julian and safely transported to Callao. They had spent twelve months and ten days on the Auckland Islands.

It should be mentioned here that on 3rd September 1865
the small vessel *Flying Scud* visited Erebus Cove, where Captain Cross found the body of a man lying beside the ruins of a house. The house was one of the Enderby Settlement buildings, but the identity of the body was a mystery. A roofing slate beside the man had some almost illegible scratches on it, the only definite word being "James". Also alongside the body were two bottles of water and a small heap of mussel shells. The man had clearly died of starvation, and fairly recently, too, as some flesh still remained on the body. One foot was bound up with woollen rags, and the implication was that he had realized he was no longer able to seek his daily food and had resigned himself to death. There can only be conjecture as to the identity of this man, but it is believed that he may have been James Rigth, who was one of the *Invercauld* who separated from Captain Dalgarno. The body was buried by the crew of the *Flying Scud*, and a board was subsequently erected over the grave by the crew of the tug *Southland*.

The *Invercauld* was not the only ship that met her doom in the northern part of the islands. In fact there were two others, of which the first actually occurred in the same year as the *Invercauld*. In this case the ill-fated vessel was the *Minerva*, but nothing further is known except that the ship was wrecked in 1864 and four survivors were rescued on 25th March 1865. This record is reported to have been seen on a stave found on the coast of Port Ross by the survivors of the *General Grant*, which was wrecked in 1866.

The third casualty was the *Compadre*, and although the location of this wreck has not been definitely established it was probably in the vicinity of the detached rock off the northern coast which we named the Compadre Rock. This vessel was an iron barque of 800 tons, bound from Calcutta to Chile with a cargo of bags. On 16th March 1891 a fire was discovered in the after hold, and although water poured into the hold continuously from 10 a.m. till 6 p.m. it was obvious that the fire could not be extinguished, and the captain decided to make for the nearest port, which was Bluff. The
ship made fair progress for two days, but then a westerly gale blew up with violent squall.

At 7 a.m. on 19th March land was sighted about twelve miles off on the starboard bow. The Compadre was labouring heavily, and one particularly heavy sea burst in the forecastle ports and also the cabin. This allowed air to reach the fire, which rapidly became uncontrollable. The decks were constantly being swept by the heavy seas and it was impossible to work the pumps. The carpenter sounded the well and reported eight feet of water in the hold. The ship was now in a sinking condition, and the captain abandoned hope of saving her. It was hopeless trying to launch lifeboats in such a sea, so the master squared the mainyard and steered for the coast. Just before striking, oil was poured astern, and although this proved a great help the vessel still struck very violently. All hands had meantime climbed out on the jib-boom, and at the critical moment they all leaped or were thrown off on to the rocks. There was no loss of life, although some of the men were injured. The ship was completely destroyed within ten minutes.

The castaways then scaled the cliff, which was several hundred feet high, and made for a high peak from which they hoped to get a better idea of their surroundings. On reaching their objective they saw a flagpole close to a beach, and at once made towards it. When night came on they decided to head for a handier beach, where they found some shell-fish. They were already suffering badly from hunger, as they had had only one meal since the fire had started. It was then discovered that a Norwegian, Peter Nelson, was missing. An immediate search was unsuccessful, the night being very dark, with unceasing rain and occasional snow. The search was resumed in the morning, but without success. However, the men did locate the provision depot at Erebus Cove, and there they lived for two weeks. A note in the depot informed them that the Government vessel Hinemoa had called there a month before.

The castaways then decided that they would divide into two parties, and the mate, Mr. Bales, left with one group for
Carnley Harbour. It was a gruelling journey, as they had no boots and only inadequate clothing, their idea being to leave as much clothing as possible for the use of Captain Jones and the other members of his party. After six days they reached the provision depot at Camp Cove in Carnley Harbour, but they were in a sorry state with cut and swollen feet, and many of them were suffering from rheumatism.

The stores in the depot were found to be complete, and the men also found an old whale-boat. Although this was in poor condition they used it a great deal until they were caught in a gale and broke both oars. They made a safe landing on Adams Island, but the boat was smashed. However, they knew there should be a boatshed on the island and after two days' searching they found it and were able to recross the harbour to the depot. Whilst at this depot the men constructed two further shelters for their use, these being built mainly of turf and rata branches.

In the meantime Captain Jones and his men seemed to be living reasonably well at Port Ross, and they are reported to have caught and killed eight sheep and three goats. These sheep were evidently those landed at Erebus Cove by Captain Fairchild in the Government steamer Stella in 1888.

Both parties were picked up by the sealing vessel Janet Ramsay after they had spent three and a half months on the islands.

It was on Wednesday, 17th May, that the Ranui transported us to Laurie Harbour. The head of the harbour proved to be largely mud-flats, and we could not find a very suitable camp site. Also with the much shorter period of daylight now available we had to work very hard to get our tents up before dark.

We did not have a spare man this time, and next morning Les was left to construct the camp furniture and to assemble the boxes of stores in some sort of order, while George and I tackled the familiar job of track-clearing. We worked to a system now, and the leading man would just cut enough scrub
to enable him to move ahead, while the following man would
cut out the smaller bushes and shift all the cut branches to the
sides of the track. Periodically we changed positions. By night-
fall we had reached the top of the valley side, and found we
were alongside a great overhanging rock which would serve
both as a temporary shelter and as a landmark to indicate the
position of the track.

Then followed the normal spell of bad weather, which was
even more unpleasant than usual on account of our poor camp
site. The water supply was very indifferent as the main stream
was too far off and was inaccessible except at low tide. The
tents were very cold and damp, although burning a hurricane
lantern in them all day helped a little. It was 17th May when
we pitched camp, but it was not till the 27th that the weather
improved enough for us to start work, and even then we were
driven home by low cloud, high wind, and bitterly cold rain
squalls before we had done more than erect two trig signals.
One of these was alongside an old post which had undoubtedly
carried a signboard indicating the direction to the provision
depot.

The 28th was much better, and I carried out observations
at the two trigs. There had been a hard frost and crossing the
tussock meadow was noticeably more difficult as all the foliage
was frozen and had to be forced apart.

We were beginning to find the shortness of the days a
serious inconvenience. It was 8.45 a.m. before there was enough
light for us to see the track, and that meant it was usually
about midday before we could reach our working area. At
first sight the solution would seem to be to camp in the higher
country, but in view of the extremely few days when it was
possible to work, and the difficulty of getting tents and pro-
visions to such a site, a scheme of this nature was not worthy
of consideration. Living conditions during bad weather would
be miserable in the extreme—we thought it was cheerless
enough when we had the shelter of the bush and could go for
a walk without running the risk of getting lost in the dense
swirling fog that would almost always envelop a high-level camp. Actually I had originally planned to establish camps in the high country, but that was before I became so intimately acquainted with the islands and their peculiar problems.

The next two days we climbed the hill only to be driven back by fog and rain without any work being done. The overhanging rock provided welcome shelter for us, as we always waited some time in the hope of an improvement. One day, just before dark, I saw a big boar investigating our rubbish pit, and I shot him with the revolver, but he was too old to be fit for eating.

At this time of year we had no opportunity of assessing the weather before we left, as we had to be on the track as soon as it was light enough to see, unless of course a gale was blowing and survey work automatically became impossible. However, our patience was rewarded on Wednesday, 31st May, by a very good day, and I managed to complete the triangulation observations, although interrupted by periods of rain. George and Les had a long tramp towards the north-west cape to carry out topographical work.

We all returned to the main camp at Ranui Cove that evening, leaving our tents standing in Laurie Harbour. George and Les were to return there later, but my work in that area was finished.
I now anticipated being in the base continuously for over a month; so George and I erected a tide-gauge in the inlet, and readings were taken every half hour from 8 a.m. to 8 p.m. for twenty-eight days. From these readings we deduced the position of mean sea level on the tide-gauge, and were later able to refer the heights of all the trig stations and other points to this level. We were also able to determine the range of the tides, which proved to be very small, being 3 ft. 6 in. at spring tides and 1 ft. 10 in. at neap tides. A curious phenomenon was noticed on about half the days, in that there was a false high tide. The level would rise gradually to what appeared to be high water, then would fall about an inch, only to rise again a further three and a half inches. The interval between the false and the true high waters averaged one and a half hours. This phenomenon was also observed by Sir James Clark Ross when he visited the islands in 1840, and to the best of my belief has not been satisfactorily explained.

The bad weather which followed, including a heavy fall of snow, did not worry us at all, as we had plenty of work to do, with the calculation of the triangulation and the plotting of topographical work. In fact it was a treat to be able to look out of a window at the rain and hear the wind roaring in the trees, all the time knowing that one had dry clothes and warm, dry feet. One could have a hot bath as often as one cared to boil the copper to fill the bath, and when I got up in the
morning I did not have to shudder at the thought of having to dress myself in the cold sodden clothes that had got soaked the day before and were still plastered with mud. In the field camps we got wet through every day, so there was no point in putting on dry clothes. The only time we were dry was when we were in our sleeping bags. Although various attempts were made, we never succeeded in finding a way to dry clothing when we were camped in the bush.

While we were living at Ranui Cove we assumed a share of the general camp duties, and every man took his turn at cooking and reading the tide-gauge for a day at a time. Also periodic visits had to be made to Ocean Island to feed hay to the sheep, as the automatic feeder proved to be only semi-automatic.

It was not until 19th June that George and Les had weather fair enough to enable them to leave for Laurie Harbour to finish their part of the job. Much to my surprise they were back in time for the evening meal on the 23rd. Despite squally weather they had experienced unusually favourable conditions and had completed the necessary work in that locality. They had been working along the western coast somewhere about the spot where the Invercauld was wrecked. Although the cliffs are sheer in most places, and reach a maximum height of 1600 ft., George had seen places where he thought it would be possible for them to be scaled.

On Saturday, 24th June, George and Les carried out some work on the western coast of Port Ross. The chief matter of interest was that they located the substantial brick foundation on which a German expedition set up its instruments to observe the transit of Venus in 1874. This was in Terror Cove, and the Germans reported that the weather they experienced was "the most wretched imaginable", even though their visit was in midsummer.

Sir James Clark Ross had also used Terror Cove as the site for his observations in 1840, and reported that his men had to dig through peat twelve feet deep before reaching a suffi-
iciently firm foundation for the scientific instruments. It is of interest to note that Ross’s observations for latitude and longitude were checked in the course of our survey, and the differences between his values and ours amounted to only eighteen seconds of latitude and thirty seconds of longitude—a relatively insignificant amount.

Ross mentioned that by the side of a small stream, and on the only clear spot he could find, the ruins of a hut were discovered, and he subsequently learned that this wretched habitation had been used for some years by a deserter from an English whaling ship and a Maori woman.

There is a tragic episode associated with Terror Cove. Captain Lovett, of the sealer Sally, was en route to the Auckland Islands in 1825 when he picked up two escaped convicts, Wilson and Shaw, who were at sea in a whale-boat. On continuing his voyage he encountered the Harriett, which was working in Waterfall Inlet and was commanded by an ex-convict named Guard. The Harriett was already fully laden, but Guard induced Wilson and Shaw to desert from the Sally and join his ship, possibly from a friendly feeling towards ex-convicts. However, before sailing he discovered another very rich rookery, and immediately regretted having taken on the two men, firstly because he feared they would spread the news of the new rookery before he could return to it, and secondly because he was afraid of trouble from the owners of the Sally. He accordingly decided to leave the two men on the island. He anchored in Port Ross and was successful in losing the men in the bush at Terror Cove. There they were left from November until April of the following year. Towards the end of this period Wilson died, and Shaw was in such a weakened condition that he was unable to bury his friend. He did scoop out a hollow at the edge of the bush but he found he was unable to drag the body to it. He had no option then but to cover the corpse with branches and other debris, and it was not buried until a sealing vessel arrived some time later.

Just to the south of Terror Cove, and separated from it by
14. (Top) Giant’s Archway
15. (Bottom) Sea elephants and their pups
16. *(Top)* Cavern Peak

17. *(Bottom)* Sooty albatross on nest
Johnson Point, is another small bay known as Erebus Cove. On visiting it at the present time there is little evidence of the tragic associations of the place. The tiny cemetery, however, would lead one to suspect that this may have been a place of comparative importance, as indeed it was.

Erebus Cove was at one time the seat of government of the islands, and the headquarters of the Enderby Settlement. Previously Sir James Ross had reported that Port Ross seemed to be a favourable site for a penal settlement for the accommodation of convicts from Australia and New Zealand, although it seems likely that he had Laurie Harbour in mind as the actual site for such an establishment. Also, M. Dubouzet, one of the officers of D'Urville's expedition, expressed the opinion that Laurie Harbour would be the most suitable site for a town. These early visitors stayed only a short time and perhaps had little opportunity to assess the comparative merits of the various bays in Port Ross. At all events it seems to me that Enderby made a wiser choice when he decided on Erebus Cove for his township.

In 1846 Charles Enderby, of the English firm of Samuel Enderby and Sons, published a brochure entitled "Proposal for re-establishing the British Southern Whale Fishery, through the medium of a Chartered Company, and in conjunction with the Colonisation of the Auckland Islands as the site of the Company's Whaling Station". The booklet recounts the reasons for the sorry plight of the British whaling industry, and goes on to outline how Enderby considered the industry could be rehabilitated by operating from a base at the Auckland Islands. Since Abraham Bristow, who discovered the islands, was employed by the Enderby firm, it is possible that this may have had some bearing on the choice of site, and furthermore Sir James had commented on the suitability of the place as a base for whaling-vessels.

In 1847 the Enderby firm was granted a thirty-year lease of the islands, at a peppercorn rental for the first two years, and at an annual rental of £1000 thereafter. The next move
was to establish the British Southern Whale Fishery Company in 1849, with a capital of £100,000. Charles Enderby was appointed the company's commissioner at the Auckland Islands. Although the proposals were vigorously supported by the Enderby Company and various influential individuals, there appeared to be a certain amount of concern among prospective investors as to the suitability of the islands for such a settlement.

In a further pamphlet Charles Enderby set out the reasons which had led him to make this choice. He also emphasized that the colonization of the group was to form an important part of the company's work. He claimed that the islands were exceedingly healthy and had a very rich virgin soil, capable of feeding on one acre as many sheep as could be fed on six acres in Australia, while the land was equally suitable for grazing cattle and horses, and growing all such produce as was usually grown in England. He also expected to establish a ship-repairing industry and he hoped that the islands would become a regular port of call for refitting and victualling ships.

Also in 1848 it was decided that Charles Enderby was to be given Her Majesty's Commission as Lieutenant-Governor of the Auckland Islands.

Towards the end of 1849 Enderby and a number of colonists left England in the ships Samuel Enderby, Fancy and Brisk. The Samuel Enderby arrived at Port Ross on 4th December, and Enderby was somewhat disconcerted when the ship was met by a number of Maoris in a small boat. He had not had information of any inhabitants. The other ships arrived before the end of the month, and a start was made on the establishment of the settlement. The colonists included many skilled tradesmen. Unfortunately the settlers soon found that they had been grossly misled about the nature of the islands, and they were greatly disheartened by the peaty and swampy ground and the almost impenetrable scrub. Also they found that the height of summer brought little else but high winds
and plentiful rain, and they must have wondered what the winter would be like. Nevertheless, the work was pushed ahead vigorously and on 1st January 1850 the settlement was formally named Hardwicke, in honour of the Earl of Hardwicke, the Governor of the company.

During the early part of 1850 the township and the port became very busy. Her Majesty’s ships Fly and Havannah arrived, and on one occasion six ships were at anchor in the harbour. All the same, the settlers began to show signs of discontent, partly upon the non-arrival of livestock and food from Australia, and partly because of the rather domineering manner of the Lieutenant-Governor, who was alleged to be both a “law-maker and a law-breaker”.

The Maori population, too, posed a problem, but Enderby disposed of it quite successfully. He took over the land they were occupying, but paid reasonable compensation for it, and allowed them to use what vegetables they had managed to grow. All the Maoris were then employed by the company, and some of them proved particularly successful as boatmen. It appears that at least for a time there was a feeling of apprehension amongst the colonists by the presence of these Maoris, but apart from one or two incidents following on the Maoris being given liquor there was no real trouble. The two chiefs were employed as constables, and proved quite satisfactory in this capacity.

Meanwhile the results of whaling activities were proving disappointing. In February the Brisk made a long voyage to the south, and although she sighted many whales the seas were too rough to permit of any captures being made. Later in the year the whaling-vessels made a few kills, but nowhere near up to expectations, while the shore-based whalers had no success at all.

The development of Hardwicke continued, and it is reported that eighteen dwellings were erected, in addition to the barracks and Government House, while the necessary workshops had also been completed. Half a mile of road had
been constructed, and a gaol had been prepared on Shoe Island, a tiny island near the centre of Port Ross. It is understood that this building was commonly known as "Rodd's Castle", as Mr. J. S. Rodd, the surgeon, had been its only occupant, he having been gaol for drunkenness.

Horses, cattle, sheep and pigs had been brought to the group, but the colonists found themselves quite unable to grow vegetables or other crops. To cope with the problem of the wind an elaborate system of shelter belts had been provided, but this was only one of the problems. The other insurmountable ones were the peaty ground, the frequent rain and the chronic lack of sunshine.

Towards the end of the year the colony was visited by the Governor of New Zealand, Sir George Grey. It is understood that his visit was marked by particularly unpleasant weather, and he left with grave concern for the future prospects of the settlement.

Enderby, however, carefully concealed the misgivings he must have had, and in his reports to the directors of the company he continued to be optimistic and full of enthusiasm. All the same it was impossible to disguise the fact that the expected amount of oil simply was not being shipped to England, and the directors were naturally becoming concerned.

In 1851 the whaling fleet was increased to eight ships, and in addition a small schooner was purchased to transport stores from Australia and New Zealand to Hardwicke. This, of course, further diminished the capital of the company, and the directors realized that the activities of Mr. Enderby would have to be investigated. Two special commissioners were instructed to proceed to the islands and to investigate fully all matters concerning the company. They were empowered to dismiss any of the company's officers or to remove the settlement to another location if they considered such action to be warranted.

The special commissioners reached Hardwicke on 18th
December 1851 and found things to be in a hopeless state. At this time twenty acres of land had been cleared and fenced, and five acres had been brought under cultivation. It seems likely that most of this area was on Enderby Island. Nearly a mile of road had been constructed, and a storehouse, stockyard, smithy, cooperage, boathouse, wharf and thirty dwellings erected. The settlement alone had cost about £30,000, disregarding the cost of acquiring and operating the ships, while the proceeds from the first year's operations amounted to less than £3000. Since the township was obviously incapable of supporting itself a complete failure was inevitable. The special commissioners were accordingly forced to decide that the settlement should be abandoned, and since Enderby was still convinced of its ultimate success a difficult situation arose. Eventually Enderby resigned his post as Chief Commissioner and also his office as Lieutenant-Governor.

Although this action effectually severed his connection with the company, he maintained that he was still Lieutenant-Governor until such time as he should receive advice that his resignation had been accepted by Her Majesty's Government. This decision did not make for easy administration, as the management of the colony and of the whaling-station necessarily overlapped a great deal. The uneasy peace came to an end with the death of a seaman. One of the ships returned to base to report an outbreak of scurvy and dysentery. The more serious cases were admitted to a building ashore and put under the care of Mr. Rodd. Neither the temporary hospital nor the doctor's ability was above reproach, and a few days later one of the patients died. Enderby considered this was due primarily to neglect, and refused to permit the burial of the body until he was furnished with a satisfactory certificate setting out the cause of death. The body was buried in defiance of his order. The dispute rapidly developed, and in a short time Enderby was virtually a prisoner. When H.M.S. Caliope arrived he appealed to the captain to support him, but although the captain agreed that Enderby was still Lieutenant-Governor
he could appreciate the delicacy of the situation and he refrained from intervening.

Shortly afterwards Dundas and Preston, the two special commissioners, forcibly prevailed upon Enderby to accompany them to New Zealand in the Black Dog. Immediately upon arriving in Wellington Enderby commenced legal proceedings against them for forcing him to leave the islands, and for withholding payment of his salary. The case was heard in the Supreme Court and the judge decided that Dundas and Preston had not exceeded the authority vested in them by the company. Nevertheless, he ruled that they were not permitted to institute proceedings against Enderby over the matter of their arrest, and he also ordered the payment to Enderby of £400 pending settlement of the question of his salary. A few days later the special commissioners sailed, leaving Enderby stranded in New Zealand. He appealed to Sir George Grey for assistance in restoring him to his rightful position as Lieutenant-Governor of the islands, but that gentleman was no doubt aware of the dangerous situation, and declined to take any action on the plea of having no funds available.

Since it was thought that the abandoning of the colony might lead to disturbances among the settlers it had been arranged that H.M.S. Fantome should remain in the harbour throughout. Ironically enough, a whale was sighted in the harbour while these operations were in progress, and it was captured by boats sent out from shore. It is understood that this was the only whale ever killed by the shore station, and the capture caused a great deal of excitement.

Some of the Maoris had already taken advantage of the opportunity to return to New Zealand on homeward-bound ships. But the majority still remained, and these regarded the break-up of the colony with great concern, as they would speedily be reduced to the miserable life they had endured during the early years of their stay on the islands. They sought a passage to New Zealand in the Fantome, and when this was
declined they appealed to Sir George Grey. He made the necessary arrangements for them to be supplied with a number of sheep and a good whale-boat, and they remained at Port Ross until 1856. They are understood to have suffered considerably after the colonists left, and a number of them are believed to have died.

In August 1852 the Enderby settlers sailed from Port Ross for Sydney, where most of the company's property was sold by auction. It is believed that most of the colonists settled in Australia.

Charles Enderby, upon his eventual return to England, spent much time and energy in endeavouring to restore public confidence in his actions, but with little success. The whole glorious scheme had failed so utterly that nobody seemed very interested. The directors of the company, however, were still anxious to recoup some of the expenditure invested in Hardwicke, and they offered the place to the British Government for use as a convict station. No doubt they were looking for compensation for such improvements as roads, buildings and the wharf. The Government was not interested in the proposal, but in 1853 it agreed to the surrender of the lease of the islands, stressing that no compensation would be paid as there was no immediate intention of occupying the islands. Here an unforeseen difficulty arose. The islands had been leased to S. Enderby and Company, who had sub-leased to the Southern Whale Fishery Company. The lease accordingly could not be surrendered without the consent of Charles Enderby, which, of course, was not forthcoming for the convenience and benefit of the directors of the other company. The directors therefore decided that there was no alternative but to wind up the affairs of the company, and this was done in 1855.

During the period that the company had occupied the Auckland Islands five weddings had been solemnized before Lieutenant-Governor Enderby, sixteen births were recorded, and four deaths occurred. Two of the deaths were of very
young children, one aged two and a half months and the other three months. All the bodies were interred in the cemetery at Erebus Cove.

The town of Hardwicke was visited by Captains Musgrave and Cross in the Flying Scud on 2nd September 1865, and Musgrave reported that scarcely a vestige of the settlement remained. Certainly he found the bare level spots where houses had once stood, and also the ruins of the shelter fences surrounding the garden plots, but there was no sign of any edible vegetable, and hardly an exotic shrub except for a few flax bushes and two small trees.

When the Hinemoa visited Erebus in 1890 the site of the town was still vaguely discernible, as the scrub gave the appearance of having been cleared at some time. A closer inspection disclosed some heaps of roofing slates, while the tiny cemetery was also found.

At the present time the site of Hardwicke has almost completely disappeared, although the cemetery is still there and has in fact increased in size through becoming the last resting-place of a number of shipwrecked seamen. It has been the practice of the occasional visiting ship-master to see that the cemetery is kept clear of scrub and as neat as possible.

As already mentioned, we also found traces of the settlement's activity on Enderby Island. Some of our party visited Shoe Island to see if there was any sign of the Enderby gaol, or "Rodd's Castle", but they were unable to find anything. It seems that the gaol was just a wooden hut. No doubt Enderby considered that prisoners would have little desire to escape by swimming to the mainland.

In view of the miserable failure of the Enderby settlement, it might seem unlikely that other attempts would be made to settle on the islands. Nevertheless, an inquiry was made by Messrs. Young and Ford, who applied to the New Zealand Government for a lease of the group in 1861. Since the islands were not included in the area administered by New Zealand,
18. (Top) Summit of Cavern Peak
19. (Bottom) Provision depot at Camp Cove
20. (Top) Carnley Harbour and Adams Island from Tagua Bay

21. (Bottom) Sea elephants: note the enlarged nose resembling a short trunk
the matter was referred to the Colonial Office. In the meantime
the Enderby lease had lapsed through non-payment of rent,
and in 1863 the whole situation was clarified by passing an
Act which extended the boundaries of New Zealand suffi-
ciently to include the Auckland Islands.

As far as is known, Young and Ford must have abandoned
their scheme, and it was not until 1874 that a further applica-
tion was made. This time it was by Dr. F. A. Monckton of
Invercargill, and he was successful in obtaining a licence to
place stock on the islands. Dr. Monckton had previously
visited the islands in the tug Southland in 1865 in search of
castaways. He had been a surgeon in the Crimean War,
and although somewhat unconventional, he was reputed to
be a capable and resourceful doctor. It is said that on one
occasion he successfully amputated a man’s leg with a carving-
knife and an axe, and that he would extract people’s teeth
in the street without any hesitation.

It was the doctor’s intention to give up his practice and
live in Port Ross. He sailed from Riverton in 1874 with a
number of cattle, but was driven into Port Pegasus in Stewart
Island by bad weather. Owing to the non-improvement of
the weather he decided to allow the cattle ashore to seek food,
and when conditions eventually did improve he found that he
was unable to find the beasts in the bush. Apparently he then
had no alternative but to abandon his scheme.

About 1890 further inquiries were received as to the
possibility of leasing the islands, and John Hay, a surveyor
from the Southland district, was instructed to report on the
suitability of the group for such purposes. He visited the
islands in the Government steamer Hinemoa in 1891, accom-
panied by Mr. Knight of Akaroa, who wished to inspect the
islands before deciding whether to apply for a lease. Mr. Hay
inspected the country surrounding both Port Ross and Carnley
Harbour, although his investigations were restricted by the
usual bad weather. He reported very briefly on his inspection
and summarized his observations as follows:
"The formation of the Auckland Islands is, no doubt, all that one could desire for sheep country—beautifully rounded rocky hills and spurs, attaining an altitude from 1500 to 2000 feet with a north-easterly aspect; but as it has such a scarcity of nutritive grasses, and also an undoubtedly excessive rainfall, I fear, with all these drawbacks in the way, the country is not suitable or adapted for sheep farming."

He also mentioned that Mr. Knight's opinion of the adaptability of the islands for sheep-farming exactly coincided with his own.

Despite these unfavourable reports the Auckland Islands were divided into three runs and offered at auction on 21st November 1894. The northern area was leased to W. J. Moffett for £10 per annum, and the southern part of the main island to H. H. Martin for £7.10.0 per annum. Adams Island, which is a good deal smaller than either of the other runs, was taken up by F. J. Hatch for £2 per annum. All the leases were for a period of twenty-one years from 1st March 1895, and were restricted to the grazing of stock. No sealing activities were permitted. A fourth run, including Enderby and Rose Islands, was offered in 1895, and was leased to T. D. A. Moffett at an annual rental of £5.5.0. Although Mr. Moffett had three head of cattle landed on Enderby Island in 1895, there is no record of any other activity on the part of the lessees, and it is impossible to know what were their intentions.

In 1900 a more serious attempt was made to occupy the group for grazing purposes, when Mr. G. S. Fleming of Southland had the lease of all four runs transferred to him. He is reported to have erected three buildings at Carnley Harbour, of which the remains of at least one are still in existence, and he is believed to have landed about 2000 sheep on the islands. Fleming took up residence at Carnley Harbour, and incidentally appears to have put the contents of
the Camp Cove provision depot to an unauthorized use. When the shipwrecker crew of the Anjou reached that depot in 1905 they found the stores somewhat depleted, with special reference to sugar and tea. These items were later found in Mr. Fleming’s hut, and it is probable that they had been borrowed to meet a temporary shortage, rather than that they had been appropriated.

In 1907 a scientific expedition visited the Auckland Islands and was convinced of the desirability of preserving the native flora and fauna of the islands. The following year one of the scientists, Dr. Benham, wrote on behalf of the Otago Institute to Mr. Fleming, informing him of the views of the scientists. He also explained that it was considered that the islands should be made a Government reserve, and that the Minister of Lands was in agreement with such a proposal, but had pointed out that Mr. Fleming’s lease would not expire till 1916. Dr. Benham therefore suggested that perhaps Mr. Fleming would consider surrendering his lease, particularly as it was understood that the sheep station was not paying its way, that only a few sheep had survived, that it was impossible to muster them, that they were not properly cared for, and generally that the whole scheme was a farce. He concluded by saying that he trusted that Mr. Fleming would not think him impertinent.

Mr. Fleming replied under the date of 10th August 1908. He pointed out that goodwill alone had cost him £600, and whilst he admitted that his station was temporarily in financial difficulties he expected better returns when the Land Act was amended to make allowance for improvements. He was confident the station would then be a payable proposition. As for the difficulties in mustering, they were caused by the sea-lions. His dogs would persist in chasing seals rather than mustering sheep, and he could not correct them either by coaxing them or by thrashing them. His troubles would be largely overcome once the bush was cleared, but he was not prepared to do this at his own expense. He went on to explain that he considered there was already far too much land locked
up in reserves and out of production, and he did not know how the public debt would ever be repaid when land was reserved just to look at. He offered the Institute as much land as it was prepared to cultivate, but he would not sanction keeping it for picnics. He concluded by saying that he considered the Institute's letter was harmful to him.

At the next meeting of the Southland Land Board Mr. Fleming appealed for assistance by making allowance for improvements at the Auckland Islands. He explained that he wanted to fell bush and scrub so that he could get sheep from the harbours to the open tussock country. If he were paid for such improvements it was his intention to employ men in various parts of the islands, and he explained the potential value of such an arrangement in the event of further shipwrecks. He also enclosed a copy of the letter he had received from Dr. Benham describing it as "the coolest thing he had ever heard of".

Despite his enthusiasm, Fleming forfeited his lease in 1910, and the islands were again offered to prospective graziers, with the exception that Adams Island was excluded. No bids were elicited, and a further auction was held three months later. The run was stated to have an area of 116,000 acres and the upset rental was fixed at £20 per annum. On this occasion the bidding was quite spirited and reached £43. The successful bidder was a syndicate comprising Messrs. G., C., and A. Moffett. I have not been able to ascertain whether this syndicate made any effective use of their lease, although they were reported to be confident of success. They had inspected the islands and considered them well suited for pastoral activities.

Prior to the leasing of this run Adams Island was gazetted as a reserve for the preservation of flora and fauna. No pigs or cats have ever been seen on Adams Island, and this is readily explained, as the pigs are the offspring of those landed at Port Ross by Bristow, and they are therefore confined to the main island. The cats are presumably the descendants of shipwrecked cats, and there has been no known wreck on
Adams Island. There is little doubt that pigs are the worst offenders as far as destruction of plants and ground-nesting birds are concerned, while cats are hard on the smaller birds.

Upon the expiry of the Moffetts’ lease the whole of the Auckland Islands was, in 1934, made a reserve for the preservation of flora and fauna.
In the meantime we were still living in the main camp at Port Ross, awaiting the return of the *Ranui*. George and Les were working around the islands in the harbour, and they also visited the area about Matheson Bay and Webling Bay, while I was engaged on the rather laborious adjustment of the triangulation. I had no calculating machine, and the computation by logarithmic tables was very tedious, some of the individual adjustments requiring up to sixty hours' work each. As George completed sections of topographical work they were plotted on to the final plan, so that we could see the map of the islands gradually taking shape. During this period the tidal observations were finished, and we constructed concrete monuments at the astronomical station and near the tide gauge, the height of the latter above mean sea level being engraved upon it.

It was not until 9.30 a.m. on 19th July that we heard the siren of the *Ranui*, and everybody rushed to the landing, where we launched the dinghy in record time. Soon we were aboard the little ship and had taken delivery of two bags of mail and parcels—our first letters since 20th January. However, everybody was engaged on the job of unloading stores and getting them stowed away, and it was not until late in the evening that I managed to find time to open my mail. In addition to impressive piles of letters, most of us had received large numbers of magazines and newspapers, which were to prove very welcome.
The *Ranui* had encountered very bad weather on the New Zealand coast, and when off Cape Saunders she ran into a gale of about seventy-five miles per hour. The captain decided to return to Dunedin for shelter, but on reaching Taiaroa Head after dark the ship was rolling so heavily that the signal station could not read his identification signals. It was necessary to lash a man to the deck-house, where he stood flashing the identification signal for half an hour before permission was granted for the ship to enter harbour. It must have been an unenviable job with heavy seas washing over the deck continuously. And there was more trouble to come yet, as the ship encountered a heavy snowstorm, with visibility nil, when proceeding up the channel, and she damaged her rudder on a sandbank. She was docked at Port Chalmers for repairs. Although she had to seek shelter at Stewart Island, the run through to Port Ross was uneventful.

After staying with us for another day the ship left for Waterfall Inlet to refuel, before proceeding to Campbell Island with stores and mail.

The fresh fish and bread brought by the *Ranui* was very acceptable, although I must admit that several of the camp personnel baked excellent bread. In our field camps we were forced to substitute ship’s biscuit for bread, and in an endeavour to obviate the necessity for this I had ordered a large quantity of bread from Dunedin. This we cut into thick slices and dried out in the oven of the range, and after cooling the dried slices were packed in air-tight tins. This dried bread kept indefinitely in the tins, and although it was extremely crisp and hard we found it a welcome change from biscuit. Fortunately the climatic conditions were ideal for keeping butter, and pound blocks packed in the ordinary way were still in perfect condition after a period of two years.

The weather during July and August proved to be much better than might have been expected, and the appearance of an occasional fine day made me wish that I was in a position to put it to better use. Of course nothing much could be done
in the absence of the ship, and in any case the weather conditions at the camp were inclined to be misleading. The winds that sweep the high country are cruelly cold on any but the mildest days, whereas in the bush one is reasonably well protected from the icy blast. Occasionally we would get an extra-specially bad day, such as Sunday, 6th August, when the camp was rocked by a whole gale accompanied by torrential rain. This storm was unusual in that it was associated with vivid flashes of lightning and peals of thunder that shook the camp. It was the first thunderstorm that I had experienced on the islands, and since it reached its height at about 9.30 p.m. it was quite impressive. This storm was followed by a southerly wind with fierce squalls of hail and snow.

On Saturday, 12th August, the Ranui returned from Campbell Island. She had been especially welcome there, as apart from the matter of the mail and stores she took them the five men on the island hadn’t seen anybody but each other since we left them in February. Captain Worth told me that the weather had been very bad when he was in Perseverance Harbour. In one of the gales one of his anchor chains parted, and the seas were frequently breaking over the deck of the ship, even though he was as close inshore as he could safely go. So he was only too pleased to get away as soon as the weather permitted.

I had decided to make our next camp in Carnley Harbour, where we would be able to use the base camp previously occupied by the coast-watching party. We were now experiencing the worst of the winter, and the extra comfort of a weatherproof camp would not come amiss. I proposed to use Carnley Harbour as a base for all the southern area, although we would still work from field camps when necessary.

On Monday, 14th August, we went up Laurie Harbour in the ship and dismantled our field camp, after which we proceeded to load a large quantity of stores aboard the Ranui, including most of our personal effects, as we did not expect to revisit Port Ross for some months. The next day we sailed just
THE AUCKLAND ISLANDS
before noon, and by nightfall we were settled into the abandoned camp on Musgrave Peninsula. The following day was spent unloading stores. This was quite a lengthy job, as the landing place was at the foot of a cliff about twenty feet high. When the cases were unloaded on the tiny beach they had to be lifted by means of a winch to the top of the cliff. From there it was about half a mile to the camp, but as most of our stores were intended for consumption at field camps, and would have to be reloaded on board ship as required, we just stacked them under a tent fly near the winch. Any items that were needed at the base camp were carried up when required. The base camp itself was in a splendid position with a fine outlook up the north arm of the harbour, and although this site was somewhat exposed to the furious north-westerly winds, I considered it infinitely preferable to the totally shut-in situation of the camp at Ranui Cove in Port Ross.

A few weeks of disuse had had its effect on the camp, and we had a good deal of cleaning-up to do. Mice had been everywhere, and the range was both dirty and rusty. We did miss the electric light and the radio at first, as the generating equipment had been returned to New Zealand. We were now able to take possession of a fine 14 ft. dinghy, complete with outboard motor, which had belonged to this camp. The boat was kept in a cave quite handy to both the camp and the anchorage, and it was hauled up a slip-way with a winch. This cave also served as a store for drums of petrol.

On 17th August the Ranui left us, and as the weather was moderately good we decided to spend the day on reconnaissance near Camp Cove. We called at the Ranui’s anchorage to bid her farewell, and Charlie Carlson gave us a bottle of beer for lunch. Upon reaching Camp Cove we were particularly interested in the remains of the provision depot, which had provided succour to the crews of the Compadre and the Anjou, and also Mr. Fleming. There was still an ample supply of religious pamphlets and tracts in it, but apart from them there was really nothing of interest save the names of many of its previous
occupants, which were deeply carved on the walls. After lunch at Coleridge Bay we set out to climb a hill south of the Tower of Babel, but after reaching an altitude of about 800 feet we found the scrub too much for us and we abandoned the attempt. So after landing on Masked Island for the benefit of Graham’s scientific pursuits, we headed for home. Graham had been relieved as meteorologist at Port Ross by Bob Pollard.

Graham was normally on the staff of the Auckland Museum, and he was therefore no novice when it came to collecting specimens. Up to now he had been confined to the Port Ross camp by his duties as meteorological observer, and these duties also meant that he could make only very brief trips away from his instruments. Furthermore, he had been preceded in the Port Ross area by various other skilled naturalists, so the field was rather restricted. He was therefore highly enthusiastic over his transfer to the survey party. Apart from having much more time available for his work he would also be visiting localities that had never before seen a scientist or indeed any species of man.

Graham was fairly tall and very lean, so he proved to be almost a match for George in getting over the country. He had unbounded enthusiasm, and even in the worst of weather he would find something to investigate. He was inclined to be a bit taciturn, but after an especially fruitful day he would radiate satisfaction and would go around muttering “magnificent” to no one in particular. Bringing home a collection of specimens for Graham was as richly rewarding as giving unexpected presents to an appreciative child.

The day after the Ranui’s departure was windy, with passing showers, and we spent it improving an existing rough track to Wilkes Peak. Since we were working fairly close to the camp we had the unusual luxury of the cook arriving at midday with thermos flasks of hot soup and tea. Our standard midday meal was a small packet of biscuits and a cake of dark chocolate, as this was easy to carry and could be eaten while working.
Any reasonably clear stream provided a drink, except in winter, when all the high country was frozen more or less continuously.

On Saturday, 19th August, we climbed to Wilkes Peak and then found easy going to Cavern Peak. This latter is quite a remarkable mountain, as it is the remnant of a volcano, and the south-eastern side has been completely blown away, leaving an enormous rent with vertical sides hundreds of feet high. There is a small cave near the summit which can be entered fairly easily. Although the weather had been unpleasant with a good deal of low cloud and thick snow, the cloud now lifted and we were able to get our bearings. George and Graham immediately set off for a very conspicuous flat-topped mountain which we later named Mt. Raynal, while Les and I erected a trig station on Cavern Peak. We then went to what is known as the Giant’s Tomb and erected one there. Both Cavern Peak and the Giant’s Tomb were visited by Musgrave and Raynal, who were wrecked in Carnley Harbour in the Grafton, as will be related shortly, and the names are derived from Musgrave’s account of them. We found travelling conditions ideal, as all the boggy places were frozen hard, and it was only on the lower levels that things were in any way difficult. Cavern Peak has an altitude of 2180 feet, and most of the surrounding country averages 2000 feet.

During the following days the low cloud kept us off the higher levels, but the opportunity was taken to clear a route giving access to Mt. D’Urville from a small bay east of Tagua Bay. The first reasonable day thereafter George and I made a reconnaissance trip to the peak. Only the worst parts of the route had been cleared, and it took us an hour and a half to reach the summit, which is 2099 feet above sea-level. We had just got to the top when we were enveloped in a thick snowstorm, but it soon passed over and we were able to push on down the long ridge east of Deep Inlet, where we put a trig station on a basalt dyke that we named Pyramid Rock. The weather was squally and visibility was zero at times. The snow
CARNLEY HARBOUR

was fairly deep and frozen hard enough to be dangerous. During the day the wind increased in force and we had a very wet trip home across Tagua Bay.

Three days of heavy snow followed, with the wind reaching gale force. So we were confined to camp, where we were joined by the two pet pigs that had been abandoned by the coast-watching party. They soon made themselves at home, as did the station cats, who had made an earlier return.

The gales were succeeded by several days of low cloud, and we occupied ourselves in clearing and measuring a base-line. By having this base-line in the southern part of the islands we would be able to plot our field-work as soon as it was executed. We had almost completed the northern area down to as far south as Musgrave Inlet, and I now wanted to work from the southern end up towards that inlet. When the two independent systems eventually met at Musgrave Inlet we would have a direct check on the accuracy of the work.

A stretch of level land is desirable for base-line measurement, but there is no such land within two hundred miles of the Auckland Islands. At first I thought it might be possible to locate a reasonable line on the high bare ridge near Mt. D’Urville, but I soon abandoned this idea on account of the virtual impossibility of getting calm enough weather for the measurement. So we decided on a location on Musgrave Peninsula, which was certainly not level, but had the great advantage of being very handy to camp and also being unaffected by cloud. Clearing and measuring occupied four days.

As a matter of fact a few days’ work in the soft peat was particularly welcome to me at this stage. The ridge near Mt. D’Urville is strewn with flat rocks like large dinner plates, and these tip and tilt when trodden on to such an extent that I had badly strained the muscles of a foot when travelling over them. This strain became increasingly troublesome, and for some weeks I was forced to wear a tight bandage on my foot every day I expected to do much walking.
Our next trip was in the dinghy to Musgrave Harbour, where Les and I scrambled up a big slip and established a trig station on Dromedary, while George and Graham scaled the Tower of Babel and erected a signal there. The latter point was named by the crew of the *Grafton*, on account of its impressive series of terraces.
On Saturday, 26th August, the weather was cloudy and showery, so Graham and I decided to make an overland trip to the scene of the Grafton wreck. The journey took about two hours each way, although we subsequently found a much quicker route. The remains of the vessel were still lying on the beach, so we had no difficulty in locating this tragic spot.

In 1863 Mr. F. E. Raynal, a retired French sea-captain, was in Sydney when he was approached by a friend concerning a proposal to mine argentiferous tin on Campbell Island. Raynal had had eleven years' experience as a gold miner, and he agreed to make the trip to Campbell Island, but in view of his long absence from the sea he declined to take command of the vessel. Consequently, an American, Thomas Musgrave, was engaged as captain of the expedition's vessel, a small schooner with a carrying capacity of about 80 tons named the Grafton.

The Grafton, with her crew of five, sailed from Sydney on 12th November 1863, and had a very rough trip to Campbell Island, where she arrived at 11 a.m. on 2nd December. During the following days Raynal and Musgrave searched in vain for the supposed tin mine, but after a short time Raynal became seriously ill and narrowly escaped death. Musgrave continued the search, but on 29th December it was decided to abandon the scheme and return to Sydney, calling at the Auckland Islands en route in the hope of killing some seals.
At 3 p.m. on 1st January 1864 the Grafton entered Carnley Harbour. Raynal was still very sick and could scarcely stand upright. No suitable anchorage was found that night, and next day the ship entered the north arm. A strong breeze made progress slow, and this breeze later increased to a moderate gale. By this time Musgrave was becoming weary of trying to beat up the harbour against the gale, and as he had found bottom in six fathoms near the eastern coast of the arm he decided to anchor until the wind moderated. Both anchors were put down with thirty fathoms of chain on each. Musgrave recognized that the ship was in a dangerous position, as she had very little swinging room and she was already straining at the anchors.

At 7 p.m. on 2nd January the starboard chain parted, and the other anchor started to drag. Musgrave now considered that there was little chance of escape for them, as they were too close inshore for them to have any hope of slipping the cable and beating out into the harbour. After 10 p.m. the wind blew with unparalleled fury and about midnight the ship struck. She was soon lying broadside on to the beach, and the seas were making a clean breach over her. The crew collected their personal effects and what small supply of food remained, and huddled together on deck to wait for daylight.

As the wind was still blowing with great fury, some difficulty was experienced in getting ashore, especially as Raynal was still an invalid. A sail was used as a tent, and the men managed to get a fire going. Then Raynal was left to tend the fire while others searched for a cave which might provide better shelter for the party. Their search was fruitless, and after some discussion it was decided to salvage as much timber as possible from the wreck to enable them to build a cabin. A site was selected near the beach, and the job was put in hand. The cabin was 24 ft. by 16 ft. with a stone chimney 8 ft. by 5 ft. Construction took a long time, as the only available tools were an axe, an adze, a hammer, a gimlet, two pickaxes and two spades.
While the hut was being built the men lived chiefly on seal-meat, as they found the sea-lions very numerous. Musgrave reports that they also shot and ate large numbers of "widgeon", which in reality were shags. Various excursions were made in their small boat, including one long trip to what is now known as Victoria Passage, and is the western outlet of Carnley Harbour.

It was not until 5th March that the house was finished and the men were able to shift from their miserable quarters in the makeshift tent. The corner-posts of the house were made from the masts of the schooner, and the mortar for building the chimney was made by Raynal from lime he obtained from sea-shells. The sides of the house were constructed mainly from bush timber, and were well thatched with brush and tussock to keep out the weather. Raynal and Musgrave occupied one end of the room, and the three seamen the other, while a dining-table 7 ft. by 3 ft. was situated in the middle of the room.

Both Musgrave and Raynal report the misery they suffered from sand-flies, and it is rather surprising that they did not discover that by moving just a little further from the beach they would have escaped most of these pests. The blowflies were there in those days, too, as Musgrave complained of the filthy mess they made.

On 7th February the castaways took their boat to Musgrave Peninsula, where they found a point which commanded a good view of most of the harbour, and there they erected a large flag on a pole. A bottle attached to the pole contained information as to the whereabouts of the shipwrecked men.

Having completed the house the men decided that it should have a name. Every man wrote his suggested name on a slip of paper and put it in a hat. One of the seamen then drew out a paper and found that the name of the dwelling was to be Epigwait. This name, which was suggested by Musgrave, is an American-Indian word meaning "a dwelling by the water".
Apart from their trips in search of sea-lions and "widgeons" the men had little to do, and seemed to rely on Raynal's fertile imagination for what few diversions they enjoyed. He was responsible for starting educational classes, and also manufactured a chess set and dominoes. Although he made a pack of playing cards he found that Musgrave was such a bad loser that he judged it best to destroy the cards.

The men found a nest containing three young parakeets, and although one of these soon died, they were able to make pets of the other two, and the male bird quickly learned to speak. Unfortunately one of the birds was accidentally killed by having a pot of water set down on it, and the other one pined away and died a few days later.

The favourite place for obtaining seals was a small island near the head of the north arm, which they named Figure-of-Eight Island on account of its shape. It was on this island that they found a few bricks and places where tents had been pitched and a fire lighted. They conjectured that this camp site had been used by sealers, and this encouraged them to believe that perhaps they might yet be found by some visiting sealing ship. On a later trip up the western arm they also found bricks in Camp Cove and some pieces of wreckage. These signs of previous occupation made the castaways anxious to establish a permanent lookout in a place that would command a view of the entrance to the harbour. However, they found no suitable place that could be readily reached from Epigwaitt, and the scheme had to be abandoned.

During the winter the matter of providing food was an ever-present problem. Almost all the sea-lions had left the islands. Long journeys had to be made before even one could be found, and the unfortunate men were no longer able to reject the old bulls. They were grateful for any sort of beast. The need for clothing and footwear was also becoming urgent, but Raynal succeeded in tanning seal-skins, and with them he made both clothing and moccasins.

By the end of the year the men had become very despon-
dent as it seemed that no vessel was likely to appear, and Raynal reports that on Christmas Day the five men were sitting listlessly in the hut. Suddenly it occurred to him that it might be possible to construct a boat that could carry them to New Zealand. He immediately communicated his idea to the others, and work was put in hand at once. The first requirement was more tools, and these, of course, had to be improvised. Raynal, with much ingenuity, constructed a forge and bellows, and the iron ballast from the Grafton provided the anvil. With this equipment he set to work. Using rusty bolts and similar pieces of iron from the wreck he made various tools, including pincers, tongs, punches, chisels, and hammers. With a cold chisel of his own manufacture he cut notches out of a piece of hoop-iron and made a saw. This work occupied all of January, and only an auger was now required. But here Raynal was defeated, and try as he would he could find no way of making this most necessary tool.

His failure led him to consider the advisability of abandoning the idea of building a boat of 10 or 15 tons as originally planned, and adopting a new scheme of enlarging and strengthening the small boat already in their possession. This suggestion was approved by the others, although they realized that the boat would not be able to carry more than three persons. The scheme was to increase the length of the boat from 12 ft. to 17 ft., and to raise the gunwale by a foot.

It was essential that the boat should be completed and seaworthy before winter. In any case it proved to be most inconvenient to be without her as a means of transport when the men were requiring seals. The party worked long hours on the job. Since the work had to be done on the beach they suffered agony from the sand-flies. Musgrave specialized in making sails and rigging, while Raynal had the job of making about 180 bolts and 700 nails and spikes. This work was mostly done in the evening, and the daylight hours were spent searching for rata trees that were straight enough to provide
planks, which of course had to be laboriously sawn with the piece of hoop-iron.

About the end of June the boat was launched, and the men were rather disturbed to find how delicately she was balanced. This matter was remedied by loading about a ton of ballast into her. The next day a successful trial run was made to Camp Cove, and it was now only a matter of waiting for suitable weather for the long trip. Two of the seamen were left at Epigwaitt, and the other three men took the boat to Camp Cove, where they had decided to lie in readiness for departure. They had cooked a good supply of seal and shags to consume on the voyage.

They set sail on 19th July 1865, and after clearing the eastern entrance to Carnley Harbour they made good progress. After passing the northern end of the islands the south-westerly wind increased to gale force, and all the men were miserably seasick. The following day was much worse and the seas became too dangerous for the Rescue, as the boat was named, to continue running before them and she was forced to lay-to. Conditions were substantially the same on the third and fourth days, but on the morning of the fifth Stewart Island was sighted, and at 11 a.m. the Rescue entered Port Adventure. Here they were fed and clothed by Captain Cross, who next day took them in his cutter Flying Scud to Invercargill, New Zealand.

Musgrave then appealed to Government officials to send a ship to rescue the remaining men, but his petition was in vain. However, a public meeting was called by Mr. Macpherson, and a subscription list was opened which soon produced enough funds to finance a relief expedition. The only reasonably suitable vessel immediately available was Captain Cross's Flying Scud, and she was chartered for the job, Musgrave agreeing to go as navigator.

The Flying Scud left Invercargill on 30th July, but it was not until 8 p.m. on 23rd August that the tiny ship anchored in Camp Cove. The next day she went up the north arm to
22. (Top) Monumental Island and Victoria Passage; Adams Island in background.
24. (Top) Waterfall blowing backwards in wind; note frozen tussocks beneath spray
25. (Bottom) Summit of Mt. D'Urville
Epigwatt and the remaining two men were picked up. They related that they had been very short of food, and had been forced to catch and eat mice. Furthermore, they had been unable to agree and were on the point of separating and living apart.

Before returning to New Zealand the Flying Scud visited Port Ross, where, as has already been recounted, the crew discovered a dead body, this probably being a castaway of the Invercauld. On 5th September the cutter sailed for Stewart Island, arriving there after four days of rough weather. At Port Adventure they picked up the Rescue with the intention of towing her to Invercargill for exhibition. Unluckily the tow-rope parted when the boats were crossing the New River bar, and the Rescue was lost.

Musgrave then travelled to Melbourne by steamer, and he was successful there in arousing the interest of the Government in the possibility of further castaways being on the Auckland Islands. The steam corvette Victoria commanded by Captain Norman was dispatched to the islands, and Musgrave accompanied her as pilot. It appears that the vessel made a fairly thorough search of the harbours and inlets, but no further evidence of castaways was found, and the visit is chiefly remarkable for being responsible for so many of the place names in the islands.

In the meantime the New Zealand Government had at last become interested, and the paddle-tug Southland was sent to the islands. When she arrived at Port Ross the body found by the crew of the Flying Scud was exhumed and examined by Dr. Monckton, after which it was placed in a coffin and re-buried in the cemetery established by the Enderby Settlement. The crew of the Southland also released about a dozen domestic fowls and planted a quantity of potatoes, while carrot and turnip seed was sown. Similar work was done in Carnley Harbour, after which the vessel returned to New Zealand without finding any sign of further castaways.

And so ended another tragic chapter in the history of the
islands—fortunately this time without loss of life. Graham and I had no difficulty in finding Epigwaitt, as the rusty stove and some of the ship's spars were still there, although heavily overgrown with ferns. We did not wonder at how Musgrave complained about the gales, as the camp site he had selected was very exposed, and we could not easily understand why he had not gone just a little further into the bush. However, he probably wanted to be as close to the sea as possible, in case of a long-hoped-for visit of a sealing-vessel.
ELEVEN

Western Harbour and the Sealers

Trig stations had now been established on all the hills that could be reached from our camp on Musgrave Peninsula, and before theodolite observations were commenced it was necessary to erect more signals near the western coast. So on Tuesday, 5th September, we shifted to a field camp in Western Harbour. The day broke gloriously fine and sunny after a heavy fall of snow overnight, and the scenery as we sailed down the harbour was really attractive. The Ranui left us as soon as we had got our belongings ashore, as the weather was then threatening, and Western Harbour did not offer a secure anchorage. We found a reasonably good camp site and worked desperately to get things under cover before the rain started. It did start, too, and fell heavily all night.

Next morning was windy with frequent violent hailstorms. Les and Graham were left to organize the camp, while George and I started clearing a bush track up the western coast of the harbour. The job proved easier than usual, and we were interested to find that we were on the route of an old sealer’s track. We did not follow it all the time, but at various points the evidence of previous clearing was unmistakable.

The fur-seal is a timid animal which does not frequent the open beaches, but prefers a rocky coast, the more inaccessible the better. The sealers camped in the harbours, such as Western Harbour, and then travelled overland to the western cliffs, where they were lowered by ropes to the rocks below. Usually
two men were lowered to each rookery with a supply of food and blankets, as they were often a week or more in cleaning it up. The fur-seals were found in crevices between rocks, or in small caves. They were killed with a club, but the sealers usually carried a gaff as well, so that when a seal was in a place where the club could not be used his head could be gaffed into a better position for clubbing. The skins were then hoisted by rope to the cliff top, and if the overland trip to the camp was not too arduous the blubber would also be hoisted up, and carried to the camp to be melted down in a try-pot. Often it was a long journey from the cliffs to the camp, and in such cases the blubber would be left. The skins were salted, then rolled up carefully and packed in casks.

After a few visits by sealers the rookeries soon became depleted, and so a constant search was made for new rookeries. When one was found every endeavour was made to keep its location a secret from other gangs.

The value of the skins seems to have fluctuated a good deal from season to season, but appears to have ranged from 10s. to 25s. each. Usually the crew of a sealing vessel was paid by a system of "lays", and a seaman who was on an 80th lay would receive one skin out of every eighty obtained on the voyage. As a matter of interest, the brig Active used the following system in 1821:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Lay</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>10th</td>
<td>lay</td>
</tr>
<tr>
<td>1st mate</td>
<td>25th</td>
<td>&quot;</td>
</tr>
<tr>
<td>2nd mate</td>
<td>35th</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cooper and carpenter</td>
<td>50th</td>
<td>&quot;</td>
</tr>
<tr>
<td>Boat-steerers</td>
<td>65th</td>
<td>&quot;</td>
</tr>
<tr>
<td>Seamen</td>
<td>80th</td>
<td>&quot;</td>
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<tr>
<td>Steward</td>
<td>100th</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

As a further sidelight on the matter of conditions of employment, it is interesting to record a list of stores shipped to a party working on the islands:
12 casks flour  2 boxes soap
11 casks pork   1 cask beer
24 casks beef   2 chests tea
22 bags sugar   2 puncheons
2 casks ironmongery  1 hogshead rum
2 casks slops    2 kegs tobacco
(seamen’s clothing)

During the peak of the sealing years an almost incredible number of seals was killed. For instance in 1823 an American schooner named *Henry* obtained 13,000 skins from “the Aucklands and adjacent islands”. The ship masters were usually reluctant to state exactly where they were working, and the shipping returns often referred only to “the sealing islands”. The *Midas* is known to have obtained 1600 skins in ten days at the Auckland Islands, but doubtless a proportion of these would not be from fur-seals. Actually, it was quite a profitable proposition to kill sea-lions, or hair-seals, as, although their skins were of little value, they produced quite a lot of oil. An old bull, known as a “wig”, would yield five or six gallons of oil, although the sea-bears or “clapmatches” would not be so profitable.

In August 1825 the *Yankee* arrived in Sydney with 2000 fur-seal skins from the Aucklands, but although the *Sally* arrived at the Aucklands on 3rd November of the same year, and spent three months there, she obtained only 300 skins, and was unfortunate enough to lose six men through drowning. Strangely enough the *Samuel* was at the islands at the same time and left on 5th December with 2000 skins.

As may be imagined, the life of a sealer was a hazardous one, and tragedies were by no means uncommon, although there are few records now available. For instance, there is an episode involving four convicts who escaped in a small boat from Norfolk Island, and who were picked up by a whaling vessel which happened to be shorthanded. After working on
her for some time the men joined a sealing gang on Stewart Island, after which they were taken on the crew of a sealing ship named the *Adventure*, commanded by Captain Keith, who apparently promised to take the men to England upon completion of his sealing work. However, he found he was running short of supplies and he put the four convicts ashore on the Snares Islands with no food except some potatoes. Although the men resisted, they subsequently found they were not badly off, as mutton-birds were plentiful and the potatoes grew reasonably well.

Unfortunately, they struck trouble of an entirely unexpected nature. One of the men became subject to attacks of melancholia, and he would go away for weeks at a time and live in a cave on a cliff face. The others had no idea how he subsisted during these periods, although they surmised that he must have been able to get birds’ eggs. At all events he was never seen to leave the cave during these absences. As time went on, the man began to show signs of violence, and the other three became apprehensive for their own safety. They accordingly decided to dispose of him, and when a favourable opportunity occurred they cast him over the edge of a cliff. To their dismay the body was caught on a projecting ledge of rock, from which it could not be dislodged, and there it remained until the attentions of the birds gradually reduced it to a skeleton. This process apparently occupied many days, and profoundly affected the remaining men.

It was only to be expected, then, that they gave an enthusiastic welcome to Captain Coffin of the whaler *Enterprise*, who was attracted by their smoke signals. Although at least four vessels had previously passed close to the islands, the convicts had not signalled to them for fear of being sent back to Norfolk Island. Now the tragic episode of their companion’s death had preyed so much on their nerves that they were unable to remain there voluntarily. Unfortunately for them Captain Coffin took them to Port William, where he transferred them, much against their wishes, to a vessel bound for Sydney. Upon
arriving at that port they were identified as escaped convicts, and were sent to Norfolk Island for execution.

Another sealing tragedy of a different type occurred on the Snares Islands in 1831, when Captain Bucknell of the Currency Lass (90 tons) left a gang of ten men with two boats at the islands. There is only a small boat harbour, and running off it is a deep cave which has a narrow entrance, but widens into a spacious dome-shaped aperture. The rock ledges inside this cave were found to be a favourite haunt of the fur-seals. One boat with two men was sent into the cave to disturb the seals, while the other boat waited at the entrance, so that the seals could be clubbed as they emerged. Unfortunately, nobody had realized just how many seals were inside the cave at the time, and the whole lot came charging out in panic and capsized the waiting boat, whose seven occupants were thrown into the sea amongst the infuriated seals. When the other boat came to the rescue the water was tinged red with the blood of the unlucky men. However, four of the men were rescued, and the lacerated body of one of the others was recovered later.

A detailed account is also available of a sealing expedition to the Auckland Islands in 1841. This gang used North Harbour as a base, and had considerable success in some rookeries at what was known as Blackness Point. Some of the rookeries could not be reached from the sea, and it was decided that the men would lower themselves over the cliffs with ropes. A boat party guided the shore gang to the best position to come down the cliff face, and it was arranged that the carcasses of the seals would be rolled over the cliff edge to the waiting boat. Seven men descended 300 feet from the top of the cliff to a rock ledge, where a large cave was found, with rock shelves six or eight feet above the floor. The men immediately fell to work clubbing the numerous seals which were lying amongst the rocks.

Suddenly disaster struck. The panic-stricken seals on the raised ledges simultaneously charged towards the sea, and
tumbled down amongst the men on the floor of the cave. In the partial darkness the confusion was indescribable. The carcasses of seals piled up in the narrow entrance to the cave until both light and means of escape were cut off. One of the men got into a corner where he struck a light and kindled a small fire with blubber. Two other uninjured men were able to join him, but a fourth man was found to be critically injured. Another man was later discovered wedged amongst a mass of seals, some of which were still alive and had to be killed before he could be freed. The men then set to work clearing the pile of seals that obstructed the outlet of the cave, and amongst the pile they found the bodies of the other two men, both terribly mutilated. The bodies were wrapped in skins and lowered from the ledge, after which they were buried at sea.

Occasionally, of course, tragedies must have occurred when no survivors were left to tell the tale. For instance, on 23rd July 1879 Captain Drew of the Awarua left a gang of seven men on the Auckland Islands, and then went to Campbell Island, where he left seven more. He returned to the Aucklands in October, and remained there for fourteen days without seeing any sign of the men. Concluding that they must be working down the coast in the whale-boat, he decided to leave four months' provisions for them, and then returned to New Zealand via Campbell Island. He again visited Port Ross early in 1880, and found the Campbell Island gang established there—they having been brought from Campbell Island by the Friendship. These men reported that they had searched as far as possible for the missing men, and had been assisted in the search by an American whaler, which had sent her boats right round the islands. The only outcome of this search was the discovery of some timber from a small boat in Carnley Harbour, and they were forced to conclude that this must have been the wreckage of the sealing gang's whale-boat, which had evidently been capsized in a squall.

The peak of the sealing activities on the Auckland Islands was confined to the early part of the nineteenth century. The
slaughter of the fur-seals was so heavy during this period that the animals were all but exterminated, and by 1826 it was no longer an economic proposition for sealers to operate continuously at the islands. In 1829 the American schooner *Antarctic* anchored in Carnley Harbour, and after a four-day search with two boats no fur-seals and not more than twenty sea-lions were seen. However, as has already been observed, sealing trips were still made intermittently during the following years, although it is unlikely that any spectacular results were achieved. In 1881 the New Zealand Government decided to exercise some control over the sealing activities, and Captain Grey of the *Stella* was asked to report on the matter to the Legislative Council. Provision was made for controlling the industry, but offences against the regulations were naturally difficult to detect.

In July 1889 the crew of the *Janet Ramsay* appeared before a Court for seal poaching. They had been to the Macquarie Islands, but had been blown off by violent gales, and it had taken them six weeks to beat back to land again, only to find that weather conditions still did not permit them to get ashore. In the meantime the ship had been badly strained by the heavy seas and it was decided to return to New Zealand to refit. Unluckily, further serious damage was sustained on the homeward voyage, and it became necessary to call at Port Ross, where the ship was beached and repaired. While there the crew saw a notice proclaiming that the close season for seals ended on 1st June 1889, and as it was now 3rd June they obtained a number of skins. When the ship reached New Zealand it was found that the close season had been extended to 30th December. The misunderstanding was reported to the Customs Authorities, who decided to prosecute. The Court was of the opinion that the men were fully aware of the extension of the close season, but the magistrate imposed the minimum penalty of conviction and a fine of £5 plus a further fine of 5s. for every seal killed.

Further sealing regulations gazetted in 1909 aroused a
certain amount of criticism. In the first place, it was held that the restriction relating to age and sex was impracticable, as it was obviously impossible for a man in a dimly lit cave and surrounded by frightened and angry seals to determine either the age or sex of any of them. Seal-skins at that time had a market value of about 25s. each, and it was considered that the Government levy of 10s. per skin was too high. In many quarters, too, it was held that some relaxation of the regulations controlling the killing of sea-lions was desirable, as these animals are much heavier consumers of fish than are the smaller fur-seals. It was also suggested by some sealers that a further clause should be inserted in the regulations, making it an offence to leave a carcase of a seal in a rookery, as the seals will not return to a rookery where a carcase has been left. They mentioned a case where a sudden change in the weather forced a gang to leave a rookery before all the carcases could be removed, and even after a period of forty years no fur-seal had ever been seen there again.

Despite the new regulations and the greatly diminished number of seals, occasional visits were still made to the Auckland Islands by sealing vessels. In 1916 a party of seven men was landed there by the Rachel Cohen, and since they were equipped with a launch they were able to visit a number of well-known rookerries. A start was made by calling at Disappointment Island, where 107 fur-skins were obtained. The gang then visited the famous Red Rock rookery, but it was found that half of this historical rookery had been destroyed by a land-slip. Actually this was the first time this rookery had been reached from the sea, and the day’s work yielded fifty-one skins. A day spent at the Quartette rookery produced sixty-four skins. Bad weather prevented them from using the launch on some occasions, and during these periods they were able to get a few sea-lions on the beach near the camp. An accident occurred on one of these occasions and one of the men was badly gashed by a wounded sea-lion.

The party had a serious misfortune on 28th September
when the launch dragged her anchor in a gale and became a wreck. However, the men managed to repair a reserve launch which had previously been damaged, and on a later trip were able to get fifty-one skins from the north-west rookery. A further accident was narrowly averted on this occasion when a frightened seal dived over a rock onto the back of one of the men, knocking him sprawling. Another seal landed on his leg, but strangely enough he was neither bitten nor hurt.

It was then decided to try the southern end of the islands, and the gang set out in the launch, which they had fitted with a mast and sail. On reaching the entrance to Carnley Harbour, they decided to round Gilroy Head and go into Fly Harbour. This turned out to be an unfortunate decision, as the boat struck very squally weather. Eight attempts were made to enter Fly Harbour, but on each occasion the boat was blown out to sea and had to beat her way back again. It was not until mid-afternoon of the next day that they were successful, after having been twenty-eight hours in the open boat in the most miserable of conditions. Their troubles were by no means ended, as their clothing and their swags were completely soaked, and their provisions were mostly ruined. To make matters worse, they found no seals, either in Fly Harbour or in Carnley Harbour.

Three of the party decided to walk overland to Port Ross, and left from the north arm. The trip required three days of arduous and unpleasant travelling, and they reached Port Ross to find the launch was already there. The Rachel Cohen arrived on 1st November, and all hands loaded the cargo of about 500 skins and 3 1/2 tons of oil, obtained in a period of just under three months.

Whilst dealing with the subject of sealing on the Auckland Islands some mention should be made of whaling activities, although it must be remembered that whaling enterprises would necessarily have little interest in the islands, except as a place to obtain fresh water, and perhaps to refit their vessels. The first nation in the field appears to have been France, and
about 1837 a French vessel was responsible for erecting a large hut in Laurie Harbour. The United States Exploring Expedition, which visited Port Ross in 1840 in the Porpoise, found that three French whalers were using the harbour as a base, the ships being the Jean Bart, the La Manche and the L'Herion. It seems that the French interest did not last much longer, and it was not until the Enderby Settlement was established that really serious whaling activities were commenced. As has already been recounted, this venture was singularly unsuccessful, and, as far as I have been able to ascertain, no subsequent whaling stations have been maintained on the islands.

Returning from this digression on the days of the sealers, we were still clearing our track up the hills west of Western Harbour. The job was soon completed and we pushed on through the familiar high tussock to a group of rocks which, on account of their distinctive shape, we called the Finger Rocks. These had an elevation of 1374 ft. and offered a suitable site for another trig station.

Next day we were greeted by a high wind and steady rain, but three of us made a start on a track up the eastern side of the harbour, and by nightfall we had it completed, and a load of trig poles, bracing wires, iron spikes and iron pipes deposited at the top in readiness for better weather. Upon returning to camp I found a large black cat occupying my tent.

Friday, 8th September, treated us to a whole gale, but it was fairly clear overhead, and George and Graham climbed to the high plateau west of the Tower of Babel. However, the wind was too much for them, and they were unable to erect any trig signals. Meanwhile Les and I took a trip towards Victoria Passage, where we managed to get a signal up in a semi-sheltered position, but the wind was cruel. We were quite close to the western cliffs, and a stream that normally discharged over the cliffs as a waterfall was being blown back in a cloud of spray that looked like smoke. As soon as the spray
fell on the tussock it became ice. We ate our simple lunch in the
welcome shelter of a rock outcrop overlooking Victoria Passage,
and were rewarded by a most inspiring view of angry seas
hurling themselves through the passage and against the
western cliffs of Adams Island. We were fascinated watching
the huge seas climbing up the Adams Rocks, and we wondered
if one of them would reach the top. Surely enough one did, but
it was not until some weeks later that we found that the height
of this particular rock is 388 feet.

Our vantage point provided us with a very good view of
Victoria Passage, and although it was hardly what we had
expected from Captain Musgrave's description, it definitely is
not a passage to be recommended. In this weather, of course,
the great seas surged through the passage and buried Mono-
mental Island in a seething mass of white water. Even on the
calmest of days there was always a strong surge through the
passage, and huge whirlpools and eddies could be seen inside
the entrance.

The only ship that is known to have used this entrance is
the steam corvette *Victoria*, commanded by Captain Norman
in 1865, and it is reported that her master had an anxious time
as the ship inched her way through. The passage has also
been used several times by small boats, probably on every
occasion at slack water. Captain Lovett of the *Sally* passed
through successfully in a whale-boat, but he reports that his
other boat missed the tide, and neither boat nor seamen were
ever seen again. Another successful passage was by the cast-
aways of the *Anjou*, as will be described later. Victoria Passage
was also negotiated safely by Captain Catling in the 20-ton
cutter *Enterprise*, and on other occasions in his 4-h.p. launch.

The bad weather continued for several days, and although
I did carry the theodolite up to the Finger Rocks I was driven
home by high winds and heavy snowstorms. The only consola-
tion was in having the theodolite there ready for work, and
that did mean something, as with its sturdy case and tripod it
seemed to get heavier every day I used it.
During our enforced idleness in the camp we were interested to observe the first sea-lions reappearing in the harbour, after spending the winter months at sea. Most of them were bears, and they were very sleek and glossy. Even the old wigs seemed to be less shabby and disreputable in appearance after a few months of regular food. All of the birds were also acquiring their spring plumage, and even the woebegone shags were looking glossy and almost handsome.

During this period the weather was quite clear, except when squalls of hail or snow were passing over, and it was most irritating to be prevented from working only by the persistent strong wind. In the summer and autumn our chief worry had been low cloud, which of course was beyond our control, but now that the low cloud was no longer a trouble I determined to find a solution to the problem of the wind. The answer appeared to be a portable shelter, which would have to be light enough to be easily carried over the very rough country, and would also have to be strong enough to withstand the furious squalls without any danger of carrying away and wrapping itself round the theodolite. I knew that any windproof material, such as canvas, would be unsatisfactory, as it would act as a diaphragm, and when it shuddered in the wind it would make the instrument vibrate. However, I thought that a large piece of hessian that we used for wrapping the tripods would prove suitable, and this was attached to a pair of straight poles that we cut from the bush. Two guy ropes were attached to each pole. The idea was to anchor the feet of the poles in rock crevices, or to build large loose rocks around them, and then to hold the poles erect by attaching the guy ropes to iron spikes driven in rock crevices. The screen was about six feet high by eight feet long.

It was not until 16th September, after we had been confined to camp for seven days, that the weather moderated enough for it to be worth while attempting work. On that day I was able to carry out observations at a trig near the south-west cape, and the screen proved to be an outstanding success,
providing a reasonable amount of very necessary shelter to both instrument and observer, and making just the difference between work and no work. It took a certain amount of wrestling by both men to get it erected, of course.

Next day Graham and I climbed the Tower of Babel, which has an altitude of 1835 feet and which we found was at the eastern end of a fairly extensive plateau. The plateau consisted entirely of bogs, which fortunately were firmly frozen and therefore easily crossed. My observations at the trig occupied four hours, as the snowstorms were very frequent. Since we were thoroughly wet and the temperature was below freezing point our clothing soon froze rigid, and we were rather relieved when the job was finished. I had scarcely thawed out by the time we got back to camp, and had a severe attack of cramp during the night. Actually, conditions were not much better at the camp, except for shelter from the wind, as our tents were coated with frozen layers of hail and snow.
ON ONE of the days that we visited the Finger Rocks I took the opportunity to visit Cape Lovett. The cliffs are approximately 1200 feet high at this point, and run in an unbroken sweep from Bristow Point to the south-west cape. It is indeed an inhospitable stretch of coastline; one would hardly believe that there would be any survivors of a vessel that was wrecked against that forbidding line of cliffs. Yet the incredible did happen.

The French steel barque Anjou of 1642 tons, commanded by Captain Le Tallec, was bound from Sydney to Falmouth in January 1905 with a cargo of wheat, and was experiencing foggy weather with only light winds. The master believed her to be well to the north of the Auckland Islands, when a line of cliffs was seen dead ahead. A few minutes later the vessel struck. It was about 8.30 p.m., and an attempt was made to launch the boats, but when one was smashed immediately the captain refused to make any other move until daylight. Although this was much against the wishes of the crew, it was a very wise and courageous decision, as the vessel was still afloat in the morning, and three boats were safely lowered at 6 a.m. After a long pull, the twenty-two men reached Victoria Passage, which they negotiated with great difficulty. The captain got through at 10.30 a.m., but it was not until 4 p.m. that the third boat managed to enter the harbour. It rained
26. The author at Western Harbour.
27. (Top) Triangulation work on Bleak Hill
28. (Bottom) Victoria Passage
heavily all day, and the men spent the night in the bush, probably in Western Harbour.

The next morning a signpost was found indicating the direction to the boatshed, and they soon found the shed in Camp Cove. There they sheltered for nine days, living on birds, seals and shell-fish, but on the tenth day they accidentally found the provision depot, with its very welcome supply of food, matches and dry clothing. The men had suffered considerably from the cold and also from dysentery, but the latter trouble soon disappeared. A message in the depot indicated when the Government vessel was likely to arrive, but in the meantime the men erected a flagstaff on Adams Island, where an ensign was hoisted on the occasional day that the weather permitted. Owing to the smallness of the depot and the large number of castaways it was also decided to erect additional huts from scrub and tussock.

Fearing that the Hinemoa might be delayed in coming to the depot, the men endeavoured to conserve the supply of canned food and biscuit as long as possible, and some of them visited the provision depot at Norman Inlet to obtain further supplies. They had also noticed that the supply of tea and sugar was very inadequate, but this was easily accounted for when the missing goods were found in the hut of Mr. Fleming, the lessee of the islands. The castaways had separated into two groups for the purpose of seeking food. Their officers reported that the morale and behaviour of the seamen had been excellent.

Captain Bollons brought the Hinemoa to anchor in Camp Cove on 7th May. He was not surprised to find the depot occupied, as he had already found a message left by the castaways at Norman Inlet. After replenishing the supplies at the depot the Hinemoa returned to New Zealand via Campbell Island, the castaways having been on the islands for just over three months. On 17th May the Mayor of Dunedin called a public meeting at the Town Hall to consider the establishment of a relief fund for the shipwrecked men. However, it was
found that the French Government and the New Zealand Shipwreck Society were making all the necessary arrange-
ments in that respect, and no fund was required. Captain Le Tallec expressed his appreciation of the gesture, and also
congratulated the Government on its policy of maintaining the
provision depots.

Most of these provision depots were established in the
1870s as a direct result of the disastrous wrecks of the Grafton,
Invercauld and General Grant. They were located at Erebus
Cove, Norman Inlet and Camp Cove on the Auckland
Islands, while further depots were situated on the Snares
Islands, Campbell Island and the Antipodes Islands. After
the wreck of the Derry Castle had shown the need for boats to
be available on the smaller islands, boatsheds were constructed
and boats left on Rose Island, Enderby Island, Ewing Island
and Adams Island. It was not until after the wreck of the
Dundonald in 1907 that a boat was left on Disappointment
Island, and it is fortunate that this omission did not lead to
serious loss of life.

As a matter of interest, the principal contents of the
provision depots were as follows:

| Biscuit     | Blankets  |
| Preserved meat | Knives    |
| Dripping    | Fishing lines and hooks |
| Tea         | Matches   |
| Sugar       | Axes      |
| Salt        | Saws      |
| Medicine    | Rifles and ammunition |
| Clothing    | Cooking utensils |
| Boots       |           |

The boatsheds contained a boat with oars and rowlocks, and
a supply of biscuits and matches.

The maintenance of the depots was discontinued in 1929, for
the simple reason that the islands could no longer be
regarded as a hazard to shipping. This was partly because of greatly improved methods of navigation, made possible by the universal use of radio, partly because of the almost complete disappearance of sailing vessels, and partly on account of the old shipping route from Australia to Cape Horn being very little used.
THIRTEEN

Adams Island

On Monday, 18th September, the Ranui shifted us direct from Western Harbour to Adams Island. We had been thirteen days at Western Harbour, and were really due for hot baths and laundry facilities, but the weather seemed to be too good for a day or two to be wasted by going to our camp on Musgrave Peninsula.

We established our new camp in a small bay just across the western arm from Trinity Cove, and the Ranui found an excellent anchorage in the latter place. At the camp site we found a good shingle beach, good clear water, a good camp site, and lots of busy blowflies. The bell-birds and tomtits were ridiculously tame, as they had never seen so much as a cat in their lives, and had no cause to be afraid.

While working from Musgrave Peninsula we had already made one visit to Adams Island, travelling by dinghy to a cove just west of Grafton Point. In this sheltered and attractive bay we found the ruins of a hut, which in all probability is the one occupied by Fleming when he was leasing the islands. Adams Island is not so heavily covered with scrub as the main island is, and we managed to get up to the main ridge after about two hours of steady climbing. The monotony of the journey was relieved when we came across an albatross feeding its chick. The parent bird vomits the partially digested food, which is then transferred to the chick by the simple process of the insertion of one beak in the other. We were
able to watch the proceedings from a distance of about six feet. Adams Island is a well-established nesting ground for albatrosses, and is the only place on the Auckland Islands where they can be found in any great numbers.

After lunching briefly in the shelter of an outcrop of rock overlooking Fly Harbour, George and Les visited the Dome, while Graham and I went on to Mt. Dick. There was a good deal of snow, and it seemed to emphasize the rugged nature of the country. Mt. Dick, which is 2190 feet high, is only half a mountain, the other half having presumably been destroyed by an eruption. We approached the peak from the west, and on reaching the summit found ourselves looking down a vertical rock face several hundred feet high. The precipice rose from a glacial valley in which we could see a sizeable lake, which we subsequently named Lake Turbott.

The place where we were now camped was some distance west of the point where we had landed before, as I wished to concentrate on the western end of the island at this stage. The fine weather did not last long, and although we got our camp established in favourable weather the next morning we awoke to find rain falling again, and a fresh westerly blowing. In view of the extreme improbability of much improvement, I told Graham that if he wished he could make a scientific expedition to Lake Turbott for a couple of days, provided one of the other men was willing to accompany him. Graham was most enthusiastic, and as George agreed to go with him, they left immediately with a tent fly, sleeping bags and food.

Les and I settled down to the more humdrum task of clearing a track through the bush. Our labours created a certain amount of consternation amongst the bell-birds, who loudly protested at this violation of their domain. We also upset the routine of a number of penguins who were in the habit of spending the night in a swampy place about 600 feet up the hillside. As we were returning to camp we met some of these birds on their way up their well-beaten and rather greasy track. They have a definite system about this. One bird
appears to go ahead as a scout, and he is followed by others at intervals of about one hundred yards, while the main body of birds is a considerable distance back. Periodically the leading bird gives an "all clear" signal, which is relayed down the line, and everyone is happy. However, on this occasion, probably for the first time ever, the leading bird encountered trouble in the shape of Les and me, and he emitted a piercing scream of alarm, which was echoed down the line. He then turned about and beat an undignified retreat to his followers down below. No doubt the ensuing deliberations would be of a similar nature to the ones I had previously observed on Enderby Island.

Next day there was a high wind, but it showed signs of easing later in the day, so Les and I set out with a heavy load of equipment. When we reached the high ridge the wind had gone, although the visibility was rather poor on account of a hazy atmosphere. However, we made the trip to Mt. Dick, and I just managed to complete my observations before the wind shifted to the north-west and a blanket of cloud dropped on to the hills. We considered ourselves extraordinarily lucky. As we were on our way home we were joined by Graham and George, who had had a strenuous but profitable excursion to the lake, and were well supplied with scientific specimens.

When we reached camp I found my tent in a shocking mess. I had gone to considerable trouble to seal it up with fern fronds, but it seemed as though the only effect of this was to prevent the flies getting out after they had found the way in. The layers of eggs were so thick that dozens of flies were completely buried in the encrustation. Since it was after dark it was extremely difficult to get the flies out of the tent, and I finally achieved this by placing a hurricane lantern a few yards from the tent, and then beating the canvas to disturb the flies. Attracted by the light, they would fly towards it, and then of course the problem was to get the lantern back into the tent without bringing all the flies with it. At all events it was after midnight before I had the tent reasonably clean, and
even then I had several hours’ work next day getting the eggs out of such things as packets of tobacco and the sleeves of my oilskin coat. I also shifted my tent to another place. I think that every member of the survey party found these loathsome insects the most objectionable feature of the islands.

Meanwhile the weather became very bad, and for four days we were confined to the camp. Although the fifth day was little better, Graham and I decided to visit the next bay. We kept to the boulder beach as much as possible, but had to scramble through the bush in some places. Graham was after specimens, and when I spotted a falcon perched on a tree and took a shot at it with my revolver I astonished myself when it fell to the ground, shot through the neck. We also found a tunnel in a rock wall, complete with glow-worms and a few of the flightless ducks which are fairly common in the harbour alongside Adams Island.

When we reached the bay we found a natural garden, chiefly filled with what is known as the Macquarie Island cabbage, Stilbocarpa polaris. These natural gardens are quite common on Adams Island, the outstanding example being Fairchild’s garden, which is near the western end of the island. Fairchild’s garden covers about 400 acres, and is full of magnificent herbs, some of which have very beautiful flowers, which seem rather incongruous on these bleak islands. The most striking is undoubtedly the incomparable Pleurophyllum speciosum with its broad corrugated leaves and its prolific spikes of aster-like flowers.

The next day was wet again. We were thoroughly fed up with the persistent bad weather, and our supply of food was running low, so at 8 a.m. I made a pre-arranged smoke signal to the Ramui, which was still at anchor in Trinity Cove. As there was no reply George and Les decided to go across in the boat, which we launched with some difficulty in the surf. They returned to report that the ship had engine trouble, and the port engine could not be started. The engineer had been working for four days on a replacement for the defective part
Later in the day the wind dropped completely, and the captain took the risk of coming over to our camp in the ship. He explained that the engine was now in working order, but he was unable to say whether the repair would prove entirely satisfactory, and he was therefore anxious to return to New Zealand as soon as possible. Actually the defective part was in the starting motor, and once the engine was running everything was all right. However, in these waters it was most essential that both engines should be ready for immediate use in an emergency.

These circumstances enforced an immediate change in my plans, and as it was quite likely that the ship would be away for some time I decided to dismantle the field-camp. I arranged for the ship to pick us up in the morning, and George and I climbed the hills to retrieve the instruments we had left there some days before. It was an unpleasant journey in low cloud and drizzle. Next day we had got all our camping equipment on the ship when the wind suddenly freshened to an uncomfortable degree, and we had a rather hazardous trip to the ship, which had already got under weigh. On arriving at Tagua Bay a gale was blowing, and we did not take anything ashore except our immediate requirements. Needless to say we all enjoyed much-needed hot baths that evening.

We made the trip to Port Ross on Thursday, 28th September. A westerly gale was blowing, and as we passed the entrance to each inlet a furious blast of wind would scream through the rigging and make the little vessel heel over, while the tide rip off Kekeno Point was very unpleasant.

At the camp we found unexpected news awaiting us. The *Ranui* was to proceed to Bluff to load aviation fuel for the use of a flying-boat which was going to make an aerial survey of the islands. I am afraid we were most sceptical of the feasibility of the project, as we knew the weather would be most difficult, and also I could not think of any place where a flying-boat could be anchored in reasonable security. I advised Wellington by radio of our doubts, and went to some trouble
to furnish facts in support of our views. However, this new scheme did not really matter much, as the *Ranui* had to go to New Zealand, anyway.

Conditions appeared to be favourable on 6th October, and the *Ranui* sailed at 11 a.m. for Bluff, but she was forced to return when she encountered bad weather from the north-west, with every indication of worse to follow. George and Les, who were making the trip as extra deck-hands, came ashore looking somewhat the worse for wear. Next day the wind increased to a full gale, but by Sunday, 8th October, it had gone round to the south-west and was becoming squally with occasional snow, so the ship sailed at 11.30 a.m. Since she was empty, we knew she would have a lively passage in the big seas we could see heaving beyond Enderby Island.

We had no further news of the ship until 20th October, when we were advised that she had left Bluff on the 18th on the return journey. She arrived on the 21st, with 2000 gallons of aviation spirit and some long-awaited mail. Two days later we sailed for Carnley Harbour to resume survey work and to discharge the fuel. The aerial survey was to be carried out by a Catalina flying-boat based at Bluff, and the fuel was for emergency purposes only, as it was not expected that the aircraft would alight at the islands. The aviation spirit was in 44-gallon drums and was to be unloaded in some convenient place in Carnley Harbour, while a mooring buoy was to be anchored in Camp Cove. The *Ranui* had been instructed to stand-by in Carnley Harbour until the flying was finished.

These arrangements suited us nicely, as they did not interfere in any way with our plans for continuing the survey. If the aerial survey were to prove unsuccessful, there would still not have been any interruption in the progress of the land survey.

As we approached Waterfall Inlet we were pleased to greet our “pilot”. When the *Ranui* used to stay at Waterfall Inlet a red-billed gull attached itself to the ship as a pet, and was well fed for its trouble. Apparently this bird used to keep a
constant vigil during the absence of the ship, as on every occasion that the Ranui approached within a few miles of the inlet the gull would appear on deck and pilot her into harbour. If the ship happened to be going elsewhere the bird would remain aboard until the inlet was getting an uncomfortably long way off, and then it would reluctantly fly home.

Carnley Harbour was in a kindly mood when we entered the heads. It is by far the best harbour in the Auckland Islands, and I do not think that any harbour in New Zealand itself can compare with it. The imposing eastern entrance has a minimum width of six and a half cables and the harbour itself has an area of twenty-eight square miles. There are so many bays and coves that the internal coast-line of this harbour has a length of no less than sixty-seven miles. Its chief disability, of course, is the fact that it is so frequently swept by violent gales, and visibility is often poor on account of the "williaws" which whirl spray off the surface to a height of a hundred feet or more.

The aviation spirit was unloaded into a tiny cove on Musgrave Peninsula. The drums were lowered into the water and towed ashore, where we rolled them to a safe position above high-water mark. The following day the moorings were anchored in Camp Cove.

We then settled down to continue topographical work and to observe angles at the trigs we had already established, also at a number of resected points. There was little of particular interest, as we had already traversed the ground on reconnaissance. But we soon found that anyone visiting the trig on Flagstaff was due for a warm reception from a pair of skuas that were nesting there. One would be trudging along with no particular worries when there would be a whirr of wings and a skua would complete a dive-bombing approach, only to soar into the air in readiness for another dive. Although we were frequently attacked in this way nobody was actually hurt by the birds. I am afraid I could never overcome a feeling of disgust at these skuas, as nothing seemed too filthy for them
to eat, and they were robbers of the first order. A momentarily unguarded egg in a shag rookery was gone in an instant if a skua happened to be about—and one always was. We had noticed that they were very partial to eggs, even rotten ones discarded by the cook. We also had occasional trouble through their eating the red calico we used on our trig signals.

Curiously enough, although these birds had so many unpleasant characteristics, they had a passion for external cleanliness. No other birds spent so much time washing themselves, but perhaps the need was not so great! We even found skuas bathing in rocky pools on the high bare peaks. I don’t know what brought them to those altitudes where there would seem to be little chance of finding food, but they are very curious birds, and most likely they had seen us and thought we might be worth following.

There was one particularly bold skua frequenting our camp, and I suspected him of thieving the cats’ food. One morning I found him handy to the cats’ dish, so I threw a beef bone at him, one about seven inches long. It hit him on the legs, and to my astonishment he just turned round and swallowed it. At least he got it partially down, to a point where it bulged conspicuously on either side of his neck. He then casually flew off.

The skuas are considered to be somnolent during the day, and to pursue their prey chiefly at night. To investigate this theory Graham spent a night near the nest on Flagstaff. I don’t know who slept the soundest, the skuas or Graham, but he was rather non-committal when asked next day about the success of his experiment.

We were still dogged by bad weather, but it was not nearly so exasperating when we were living in a reasonably comfortable camp. The ship was anchored in Tagua Bay, and every day some of her crew would be ashore. It was in this period that the craze for card games reached its peak, and the champion for each evening had possession of a pennant, and the sole use of the only chair with an upholstered seat.
In the early part of November we made several boat trips to Adams Island and one to Dromedary, while overland excursions were made to Mt. D’Urville, the Lion Rock and the head of Deep Inlet. The loose flat rocks near Mt. D’Urville still troubled me, and my feet were so much softened by continuous walking in wet boots that they were often bleeding when I arrived home.

About the middle of the month the Ramui went to Port Ross for fresh meat, and arrived back with the news that the flying-boat had been overhead twice, but on neither occasion was she able to do any work. The Port Ross meteorologist was sending weather reports at 3 a.m., 6 a.m. and hourly thereafter every day.

The second half of November was typically bad. I was anxious to get to Mt. Raynal, and as it would be a long trip we made several early starts on promising mornings, only to have to turn back when the cloud came down round the hill tops. However, on these trips we always had the interest of talking to the albatross chick who was in his nest half-way up to Wilkes Peak. He was getting to be a big bird and had lost most of his down, so no doubt he would soon be ready to seek his own food. He never got quite accustomed to seeing us, and he would still get panicky if we went too close to him. Like many other sea-birds he had a tendency to vomit his last meal over us in his agitation.

The nellies, or giant petrels, are particularly objectionable in this respect, as they will most deliberately eject a foul-smelling oily liquid over an intruder. This interesting habit has earned them the name of “stink pot”. The nelly is a true scavenger, and any choice object such as a dead seal will attract them in large numbers. They have no ideas of delicacy in their eating habits, and usually gorge themselves until they are unable to fly. This difficulty is overcome by sitting around for a while, but if they should be disturbed during this period of rest they simply vomit enough of their meal to lighten them sufficiently to let them get into the air.
Albatrosses are unable to get into the air except in favourable conditions, and their nesting places are usually situated on eminences where they are able to take advantage of favourable air currents. On a calm day it is quite easy to catch an albatross, since it is unable to rise clear of the tussocks. The only point to remember is to grab it by the beak. The first flight of an albatross chick can easily be its last, as a small error of judgment can result in a crash and a possible broken wing.

Royal and wandering albatrosses always nested in the open tussock country, but the smaller sooty albatrosses invariably chose rock ledges, usually in entirely inaccessible places. There were several nesting on the rock faces of Cavern Peak, and while we were working there they gave us a wonderful exhibition of flying, flashing close by our heads with the air whistling through their wings. Often pairs of birds would fly in formation, and the precision of their flight was almost incredible. The sooties are smaller than the more familiar royals and wanderers, and are greyish-black in colour, with a circle of white feathers round the eye that gives them a quizzical appearance.

It was about this time that Graham learned that a falcon is a bird to be treated with respect. He had accompanied George on a boat trip up the north arm to take magnetic observations, and they called at Figure-of-Eight Island on the way home. Graham found a falcon’s nest with three eggs, and while robbing it he was attacked by a parent bird which drew blood from his head.

It was not until 29th November that we reached Mt. Raynal. We had left very early, and after a hard four hours’ march we were on the summit of this conspicuous flat-topped peak, at an elevation of 2114 feet. There was scarcely a breath of wind, and no cloud at all except for a very thin veil of cirrus at a great altitude. It was the best day I was ever to experience during my stay on the islands, and I was quite sure that the flying-boat would be working over the northern part of the
islands. I immediately commenced my triangulation observations, and later did some topographical work, as this peak commands a splendid view in every direction, especially into Norman Inlet, which is immediately below it. Then we had a quick meal and a drink of pure fresh water from a rocky pool, this being much more satisfying than the icicles we had been sucking at intervals on our way up.

Observations had not been finished for more than fifteen minutes when cloud began to form around the peak, so we had not had much time to spare. On the way home we made a detour behind the Giant's Tomb to do some topographical work near the head of Hansfield Inlet, and it was then that we heard the thunder of aircraft engines. The sound came from the direction of the western coast, and later we could hear it from Adams Island. Finally we saw the Catalina streaking up the eastern coast at a height of about 1000 feet, just below what was now a substantial layer of cloud. Speculation was rife that evening. Most of the men believed that the flying-boat had just arrived, but I rather optimistically considered that it had been working over the northern area until the clouds appeared, and then had flown down our way to let us know it had been on the job. I was wrong. The aircraft had reached the islands at the same time as the cloud had come down, and nothing had been achieved except for a few oblique photographs of the western coast which were quite valueless, except for pictorial purposes. When we were advised of this sorry state of affairs I think we were all convinced that the proposed aerial survey was just a glorious dream, as, of course, most of us had already anticipated. We had enjoyed six hours of cloudless weather and the meteorologists had let us down. Our suppositions were correct, and after waiting at Bluff for a further period the Catalina was recalled to her base and the aerial survey was abandoned.

We had no radio in the base-camp at Musgrave Peninsula, but on Friday, 8th December, a message was received on the ship's radio advising that she was to leave for New Zealand
about the middle of the month. We were at that time planning to camp in Tandy Inlet, but this trip to New Zealand necessitated a change in our plans, and I decided that we would be better to move to Port Ross. We had plenty of office work on hand to keep us occupied. I discussed the matter with the captain of the ship, and we agreed to leave for Port Ross next morning, and also that if the weather permitted we would travel up the western coast and call at Disappointment Island.
FOURTEEN

The General Grant and its Gold

The morning of Saturday, 9th December, proved to be almost calm, and could hardly have promised better for our trip. We had loaded everything except our bedding the previous day, and after an early breakfast we were aboard the ship by 8 a.m. On passing through the heads we found a moderate south-easterly swell, but the weather was still good. So we turned south and rounded Gilroy Head, and after passing Bollons Bay it was not long before we had Fly Harbour abeam. Fly Harbour is the only sizeable inlet on Adams Island, and is chiefly remarkable for a bar of kelp which rises in deep water, and, although it would be difficult to penetrate, it effectively smooths out the ocean swells that would otherwise surge into the harbour. It seems probable that the inlet was named after H.M.S. Fly rather than after the insects, which are probably as plentiful there as elsewhere on the islands.

The southern coast of Adams Island was a remarkable sight, with an almost unbroken series of sheer cliffs, rising to an estimated maximum of 1500 feet just south of Mt. Dick. Streams debouched over these cliffs as waterfalls, which reached the sea in a single mighty leap of not less than 1200 feet in some places. We passed very close to the Lantern Rocks and the gaunt Adams Rocks, and by noon we were off the south-west cape. Here we could see hundreds of black-browed mollymawks nesting on ledges, where they were secure from the depredations of wild pigs.
30. (Top) Skua gull
31. (Bolton) Ranui in Carnley Harbour
The wind was freshening now, and as we made our way towards the grim buttresses of Cape Lovett and Bristow Point I was beginning to think that things might not be too pleasant before the day was over. Once we had passed Bristow Point we eagerly scanned the cliffs for caves such as the one the General Grant is believed to have entered.

The General Grant, of 1095 tons, commanded by Captain Loughlin, sailed from Melbourne on 4th May 1866 with eighty-three persons on board, including six women and several children, also a miscellaneous cargo consisting chiefly of wool and hides. Land was sighted about 10 p.m. on 13th May, and was believed to be Disappointment Island, as about an hour later the main island was seen dead ahead. The wind was light and the sea choppy, so that the vessel barely had steerage way. She could not clear the land, and at about 11.30 p.m. she struck the cliffs and carried away her jib-boom. She then dropped astern to a projecting point where she carried away her spanker-boom and rudder, after which she drifted into a great cave. Here the foretopmast touched the roof of the cave and dislodged great pieces of rock, which stove in the forecastle. The ship lay there all night, striking heavily forward all the time, but with twenty-five fathoms of water under her stern. As soon as it was light a boom was rigged over the stern and the boats lowered. The pinnace was launched first, and three men were sent in her with lines and a kedge to be laid for hauling out the other boats. The gig came next, with the chief officer, three seamen and one passenger, and she got safely out of the cave.

At this stage the maintopmast came down, and allowed the ship to drift further into the cave, also starting a bad leak in the hull which caused the vessel to settle rapidly. The tide was starting to make, and the wind and sea were beginning to rise, so matters had become desperate. An attempt was made to hoist the stewardess, Mrs. Jewell, into a boat, but she fell into the sea. Her husband leapt after her and got her into a boat, where they were joined by two others who had
also jumped into the sea. The seas were now sweeping over the poop of the \textit{General Grant}, so that the longboat was floated off the deck, and about fourteen persons scrambled aboard her. The position was critical, and all the boats had to get out of their dangerous position in the cave. The surge off the rocks was too much for the longboat, which was swamped, and only three of its occupants were rescued. The captain and one seaman could still be seen on the mizzen-mast when the ship sank. The two boats which had got out of the cave lay-to for a while, but no more survivors were seen. Their fifteen occupants decided to make for Disappointment Island, as it was clearly impossible to scale the sheer cliffs of the main island.

Apparently the boats did not reach Disappointment Island that day, and were forced to seek shelter in the lee of the Sugarloaf Rocks. They reached Disappointment Island next morning, but soon decided to row round the north-west cape to Port Ross. This journey apparently occupied a day and a night, and ended with the castaways safely ashore in the harbour. All of them were suffering considerably from exposure, as they had very few clothes. Although they were able to start a fire they had nothing but empty soup tins to cook in, and the whole party had only four or five knives amongst them. They later found the remains of a hut, which was possibly at Hardwicke, and they were then able to live in a somewhat greater degree of comfort.

The problem of clothing was overcome to some extent by manufacturing caps, coats, trousers, moccasins and even underwear from seal-skins. Unfortunately, the men were unable to find the supply of food which had been left in Port Ross by the \textit{Victoria} a year earlier, and they were forced to subsist chiefly on seal meat, although this was varied on the occasions when a goat or a pig was captured.

The months slipped by with no sign of any ship, and it was decided to send what the men called “messengers”. These were in the form of small boats about three feet long, and each had a tall mast to which was attached a bright piece
of tin to act as a sail and to attract attention. Details of the location of the castaways were carved on the ships. There is no record of any messenger ever having been found.

In December some of the men decided to try to reach New Zealand in the 22-ft. pinnace. The little craft was decked over with seal-skins, and was loaded with provisions, including a goat and two kids which had been captured on Enderby Island, some smoked seal, birds’ eggs, and a few jealously hoarded tins of soup and beef. Fresh water was carried in vessels made from seal-skins. Four men, including Bartholomew Brown (first officer), William N. Scott, Andrew Morison and Peter McNevin made the trip, and the boat sailed on 22nd January 1867. No charts or navigating instruments were available, and nothing was ever heard of the men again.

The remaining ten men and one woman carried on as usual, watching in vain for a ship, seeking food, and suffering greatly from dysentery. During an expedition towards Matheson Bay they found a crude hut made of scrub, inside which were three bunks and a barrel inscribed “Minerva of Leith, May 10, 1864, and March 25, 1865”.

In August 1867 David McLellan became ill. He was aged sixty-two, and he died on 3rd September.

On 6th October a sail was sighted in the west, and bonfires were lighted and the boat launched. The day was clear, and it seemed impossible that the signals would not be seen, but the ship bore away. This bitter disappointment led the castaways to shift to Enderby Island, where they considered that it would be easier to attract the attention of passing ships.

The next disappointment came on 19th November when another ship passed the islands without seeing the signal fires. However, it was only two days later that the brig Anherst, commanded by Captain Gilroy, was sighted off the eastern coast, and the boat put out to meet her. Rescue had come at last, and the ten survivors were taken to New Zealand after their eighteen months’ exile on the Auckland Islands.

In January 1868 a subscription list was opened in Dunedin
for the castaways, many of whom were entirely destitute. Vigorous representations were also made to the Government regarding the establishment of provision depots on the islands, and it was urged that a steamer should be dispatched to search for other possible survivors. The Colonial Secretary acknowledged the request, and advised that the Amherst was being sent to Campbell Island in case the pinnace had drifted there, after which she would visit the Auckland Islands. He also advised that in the next session the Government would propose a vote for a provision depot at the islands.

It is interesting to note that in 1945 a member of the crew of the Ranui found a slate at the foot of a tree near the provision depot at Erebus Cove. On the face of the slate was the inscription:

“Sacred to the memory of Bart Brown, C.O., Wm. N. Scott, A.B., Andrew Morison, A.B., Peter McNevin, A.B., who started on the 22nd January, 1867, for New Zealand in boat without chart, compass, or nautical instrument. Blessed are they that die in the Lord.”

The inscription was very neatly scratched on the slate, which had previously formed part of the roof of a house at Hardwicke. On the reverse side was a record of the rescue of the ten survivors by the Amherst.

It was only to be expected that the news of the wreck of the General Grant would arouse speculation as to whether her gold could be salvaged. Her manifest showed that she carried 2570 oz., but a number of goldminers were passengers on the ship, and it was commonly believed that they had a considerable amount of gold in their possession. In any case it was evident that sufficient gold was aboard to repay handsomely any successful salvage expedition.

It was not long before the first attempt was made, and in 1868 the paddle-tug Southland left for the scene of the wreck. On board was James Teer, who was a survivor of the wreck,
and could therefore be relied upon as a capable guide. The tug is reported to have located the cave, but was unable to enter it on account of unfavourable weather. It is believed that subsequent disputes amongst the personnel led to the attempt being abandoned.

In 1870 the topsail schooner *Daphne* made an attempt to salvage the gold. Upon reaching Port Ross the cook and a boy were left in charge of the schooner, while the captain and five men took a whale-boat round the north-west cape in search of the cave. They were never seen again. The cook and the boy took the ship's dinghy and searched the northern coast, where they found part of a boat and an oar. Apparently they were not able to identify these definitely, as after experiencing much difficulty in getting the *Daphne* back to Bluff, New Zealand, they engaged a full crew and returned to the Auckland Islands to resume the search. H.M.S. *Blanche* happened to be engaged on survey work along the eastern coast at the time, and her officers assisted in the search for the six men, but without success.

The next attempt was made by the steamship *Gazelle* in 1877, and once again a survivor of the wreck was included in the expedition, this time the man being Cornelius Drew. The *Gazelle* also succeeded in finding the cave, and the crew were fairly confident that they had located the wreck. Unfortunately, the weather was bad, and they were unable to get a diver down, so the attempt had to be abandoned.

In 1893 a salvage syndicate was formed in Invercargill, but the scheme fell through before it reached the stage of sending a vessel away.

In 1911 Captain N. C. Sorenson of America, who was formerly a diver employed by the Auckland Harbour Board in New Zealand, announced that he was forming a salvage syndicate, and he expected to expend about £10,000 on his expedition. The syndicate had a capital of £30,000 and Sorenson believed that the value of the gold was between £300,000 and £400,000. He expressed the opinion that ship-
masters were reluctant to indicate how much gold was aboard their vessels, on account of the prevalence of piracy, and he believed that 170 bags listed as containing "sundries" actually were bags of gold.

Mr. Sorenson said that previous salvage attempts had failed because they approached the wreck from the sea, and were therefore defeated by bad weather. He proposed to anchor in an inlet on the eastern coast, and to construct a road on the western cliffs. He would then erect a cantilever extending about 25 feet beyond the cliff edge, and from the cantilever two cables would be let down to the sea and anchored. It would then be possible to operate an elevator from the cliff-top to the sea, and a diver would be able to enter the water regardless of the weather conditions, and without being in any great danger. He was arranging for the heavier equipment to be made in England and Australia, but the smaller items were to be manufactured in Dunedin, New Zealand. When interviewed in November 1911 his Dunedin representative, Mr. May, advised that the construction work was expected to take about six months, and that he intended to make a preliminary trip to the islands to determine what equipment and length of cable would be necessary.

In 1912 the Sorenson Salvage Company purchased the steamer Wairoa, of 95 tons, and arrangements were made for the vessel to be fitted out in Dunedin. She was to be commanded by Captain Perriam of England, who was reputed to be familiar with the scene of the wreck, while Sorenson was to act as diver. At this stage Mr. May estimated that the expedition would cost £15,000, but he revealed that he now had positive information that there was £500,000 worth of gold in the wreck. A number of working bullocks were purchased in Heriot, and were put in charge of Mr. R. Harris, of Roxburgh, who with two other Roxburgh men was accompanying the expedition.

On 13th May 1912 about fifty people assembled at Port Chalmers to see the Wairoa leave for the Auckland Islands.
She was scheduled to sail at 4 p.m. and when she was still there an hour later it was discovered that a writ of attachment had been nailed to the mast, restraining the vessel from leaving port pending settlement of a claim for £400 due to Messrs. Stevenson & Cook for repairs. Apparently the finances of the syndicate were unable to meet this emergency and the expedition was abandoned.

Mr. May returned to America, but early in 1914 he advised interested persons in Dunedin that he intended to resume operations. He had previously obtained from the Southland Land Board a licence permitting him to erect machinery on the islands, but the Board now advised that unless he commenced work by July 1914 his licence would be cancelled. Urgent representations were made for an extension of time, as the syndicate had been reorganized under the name of the American Deep Sea Exploring Company, and had purchased a ship called the Robert Henry. The licence was extended until October 1914, but no further extension could be offered, as another applicant was seeking a licence, and May had already held his for a long time without getting anything done. As it happened, the Robert Henry was lost in American waters, and the whole scheme collapsed.

The next attempt to salvage the gold commenced in 1915, when Captain Catling purchased a 20-ton cutter named the Enterprise, and made a reconnaissance trip to the islands as a preliminary to a serious effort to recover the treasure. During this visit he decided on the probable location of the wreck, and made detailed plans for the salvage work.

Catling sailed again from Dunedin on 29th February 1916, with a crew of four. He intended to do the diving himself, and he had engaged a Norwegian mate and three seamen. The cutter, which had a 14 h.p. engine, was provisioned for six months, and carried modern diving equipment, a dynamo and submersible electric lights for use if night diving was found necessary, and a telephone for communication between diver and boat. He also took with him a launch powered by a 4 h.p.
engine, and two small boats. On his way south he called at Stewart Island, and finally left Wilson's Bay for the Auckland Islands on 13th March.

Catling had decided to base his expedition at Carnley Harbour, and he entered Victoria Passage on 15th March. On the 18th he started out in the launch for the General Grant cave, but he was driven back by a gale, and continuous gales of great violence followed for a period of six weeks. The Enterprise was lying in Western Harbour, and during this interval the crew made an overland trip to Smith Harbour to inspect the locality of the wreck from the cliffs. This trip left the men completely exhausted, on account of the difficult terrain. When the weather improved the launch succeeded in reaching the cave, but soundings had just been commenced when the wind got up and the launch was very nearly wrecked on a submerged rock, which is uncovered only in rough weather.

On 13th May, fifty years to the day since the wreck of the General Grant, moorings were laid at the entrance to the cave and the Enterprise was brought round from Western Harbour. The weather was fine and the little vessel lay outside the cave all night, although a close watch was kept. Catling estimated that the cliffs were 650 feet high at this point, and were overhanging in many places. During the next day he made several dives, but was unsuccessful in locating the wreck. By that time the wind was freshening again, and the party had to return to Western Harbour, where they were weather-bound for more than a month.

Catling then shifted camp to North Harbour, and on the first suitable day he took the Enterprise round the north-west cape to the cave. On this occasion he had made only one dive when a very sudden change in the weather made him leave hurriedly, and since the wind blew from the north-west he had to run for Carnley Harbour again. However, this incident was followed by a remarkable spell of good weather, and he was able to take his cutter right into the entrance of the cave.
Catling examined the sea floor just outside the cave, especially alongside buttresses of rock on the southern side of the entrance, as it was there that the *Gazelle* had reported finding the remains of the *General Grant* in 1877. However, he found only a ledge of rock which he considered might have been mistaken for a wreck by men who were hampered by working in a heavy swell. Catling found the water very clear, and while examining the ocean floor outside the cave he had suspended himself below the *Enterprise* while the cutter moved slowly back and forth over the whole area. The sea bottom was practically a level sheet of rock, although there were several rock pinnacles right at the entrance which Catling considered would prevent a sunken ship from being carried out to sea.

He therefore commenced a thorough examination of the cave itself. He rowed into it and dropped an anchor, and the *Enterprise* was pulled in stern first. Although the weather was still very good there was a considerable surge inside the cave, and he had some difficulty in diving. Nevertheless, he succeeded in examining the bottom of the cave carefully, and although he found two pieces of timber jammed between large boulders, there was no other sign of wreckage, and no sign of any gold. If the gold had been in the form of dust it would probably have been washed out to sea, but Catling was sure it had been in bars, which would not easily have been shifted. The water was 30 ft. deep at the mouth of the cave, and 21 ft. deep at the inner end. The roof was about 60 ft. high, and he estimated that the cave ran about 600 ft. into the cliffs. The cave narrowed towards the centre and then opened out into a large dome-shaped chamber which was both higher and wider than the rest of the cave. At the inner end there was a steep boulder beach. Catling was positive that it was the right cave, as there was no other one that resembled it, and he considered that a ship the size of the *General Grant* could have entered it quite easily. He spent two days examining the floor of the cave, but it was quite bare.
It was a bitter disappointment to Catling to realize that all his careful planning had been in vain, and he returned to Dunedin on 9th July 1916, fully convinced that the gold had been obtained by a prior expedition. He expressed the opinion that the treasure had in all probability been lifted by the men from the Daphne, and when they were drowned the gold went with them. He thought it unlikely that anyone else had got it, as the news would have leaked out sooner or later.

So ended a very courageous and well-planned salvage attempt, with a result that would seem to give fairly conclusive evidence that any further expeditions would be futile. However, it seems possible that yet another attempt may be made to locate the elusive treasure. A cable message from Brisbane, Australia, dated 13th June 1950, indicates that Mr. H. Marfleet hopes to recover about £500,000 worth of gold from the wreck of the General Grant. At that time Mr. Marfleet was working as a member of a salvage crew off Moreton Island, and he was studying modern techniques with a view to employing them at the Auckland Islands. Mr. Marfleet stated that he was in possession of notes written by William Sanguilly, who was a survivor of the wreck. Sanguilly was in charge of the cargo, and acting under instructions from the master of the ship he had marked a consignment of gold as spelter, with the object of deceiving possible pirates who were believed to be among the passengers and crew. At the time of writing this chapter there has been no further report of Marfleet’s activities.

It will be readily understood that we scanned the line of cliffs with the keenest of interest, although our course from Bristow Point to Disappointment Island took us fairly well off-shore. It would seem probable that the General Grant cave is located about or just south of the Beehive Rocks.
Disappointment Island and the Dundonald

The Ranui was now approaching the Sugarloaf Rocks, and the weather was beginning to look unpleasant. The wind had freshened a little, and the cloud base had dropped to about 400 feet. Rain followed, with extremely poor visibility—in fact we could see nothing at all. Speed was reduced to dead slow, and it looked as though our pleasure trip was over. I, for one, was glad that we were a reasonable distance off that line of towering cliffs. Graham could see his chances of landing on Disappointment Island reduced almost to vanishing point, and I don’t think anyone could have looked more dejected.

But our luck was still with us. After about an hour we could see signs of an improvement in the weather. It was soon clear enough for Captain Worth to ring for full speed again, and by the time we had the Sugarloaf Rocks abreast conditions were almost perfect. The fog was still hanging low overhead, and there was no certainty that there would not be more bad weather. Under these circumstances the captain did not consider it advisable to make more than a brief stop at Disappointment Island, and when we reached Castaways Bay the boat was quickly launched and a landing party sent ashore. I remained aboard the Ranui and sailed round the island, taking photographs and making sketches, as I had previously abandoned any idea of camping on the island.

Disappointment Island reaches a maximum altitude of 1035 feet, and is extremely rugged and deeply fissured. Every
slope is dotted with thousands of mollymawks sitting on their raised nests, so that the hillsides are just like a pincushion of white specks in a background of tussock. The rocks off-shore are carved into fantastic shapes by the action of the sea. As we sailed along the south coast a whale blew very close to us.

A short run to the Sugarloaf Rocks followed. These rocks rise to 255 feet above sea level, and are completely barren except for some patches of stunted tussock and bulbinella. The Sugarloaf Rocks provided sheltered water for the overnight stop of the castaways of the General Grant, who were on their way to Disappointment Island.

On returning to Castaways Bay we found that Graham and George had captured a brace of mollymawks, a rock-hopper penguin and a cape-hen, while Les had concentrated on geological specimens. None of them seemed to be very enthusiastic about the island, although they would naturally have liked to have been able to spend a little more time there.

It seems most likely that it was on the western coast of Disappointment Island that the Dundonald was wrecked. She was a steel four-masted barque of 2205 tons, commanded by Captain Thorburn, and had left Sydney on 17th February 1907 with a cargo of 30,000 bags of wheat. For two days before the time of the wreck she had no sight of the sun, and her position by dead reckoning led her master to believe that she would pass the Auckland Islands about midnight on 7th March. At about 8 p.m. on that day the wind increased to gale force, and the ship was under short canvas in a big sea when the mate sighted land ahead. She struck forward, then swung round on her keel, until her stern was close to the rocks, which were about 50 feet higher than the masts.

It was impossible to get the lifeboats over the side, but Captain Thorburn thought the ship might lie as she was until daybreak, so he ordered all hands forward to avoid the possibility of casualties through falling masts and spars. However, the vessel commenced to settle rapidly and heavy seas broke over her. Some of the men climbed into the rigging, but others,
including the captain, were washed overboard or trapped below. Daybreak came to reveal eleven men clinging to the foretopmast rigging, while three others had managed to get ashore by scrambling on to the cliffs from the jigger mast. A line was heaved to them and made fast to the cliffs, and the eleven men got ashore by this means. It was then discovered that two more men were stranded on a rock ledge, and they were rescued by lowering a rope from the cliff top. This brought the number of survivors to sixteen, which meant that twelve men had been lost. Many of the survivors had stripped off most of their clothing in readiness for swimming, so they were in no condition to meet the wintry weather of Disappointment Island.

The mate believed that they were wrecked on the main island of the group, and after the men had salvaged some sail-cloth and rope they commenced a search for the provision depot. It was, of course, not long before they reached the summit of the island, and they could then see the main island about five miles away. The only food offering was mollymawks, which were eaten raw, but the main concern was lack of water. Eventually a good stream was found on the eastern coast of the island, and the party moved there, except for the mate, who was a man of sixty-two and had become partially paralysed by exposure. A supply of food and water was taken to him daily, and since some matches had been found the food was now cooked. On the twelfth day the mate died, and he was buried in the peat.

The men did not care much for seal flesh, and greatly preferred the mollymawks, but as these birds were almost at the stage when they would be big enough to fly it began to look as though the food supply would be flying away. They decided to try to smoke some birds, and built a smokehouse of tussock. About thirty birds were hung in it, and a smouldering fire started. Unfortunately, the fat dripping from the birds fell into the fire and ignited the rope yarn holding the birds, so that the whole apparatus collapsed. The men were
living in huts made of tussock, and dressed mainly in sailcloth and seal-skins.

After living on Disappointment Island for four months the men found the food situation was becoming desperate, and a serious attempt was made to construct a boat. The frame was made from branches lashed together. Due to the scarcity of any sizeable scrub on the island, it was a very frail craft. The framework was covered with sailcloth and the boat was ready for launching. A trial cruise proved successful, and it was now necessary to await suitable weather for the trip to the mainland.

July 31st proved to be the big day, and a party of three set out on the perilous voyage. It was agreed that if the men found the provision depot they would light two fires, but to the keen watchers on Disappointment Island there was no sign of any such signal. After a day or two had passed they concluded that the tiny coracle must have foundered, and they decided to build another. One was soon completed, but was rejected as unseaworthy, and a bigger and better one was then built with capacity for four men.

On the ninth day after the three men had left a single fire was seen on the main island, and the men were mystified by this until they sighted the boat returning. Everyone crowded round the voyagers to hear their tale. They reported that they had had great trouble in finding a suitable landing place, and then when they started to climb the cliffs they encountered misty weather, so that it was not until the third day that they were able to explore the country. They had taken only two birds each with them, as they expected to find plenty of food on the main island. Unfortunately, they could find none at all, and on the fourth day they returned to the landing place half starved. Thereupon they concluded that there was no depot on the main island, and they decided to return to Disappointment Island as soon as the weather permitted.

The other castaways were not yet disheartened, and they resolved to make a further attempt to reach the depot. On
22nd August, while they were still awaiting suitable weather, a ship was sighted about two hours before dusk, and a great fire was lit. During the night the flames leapt so high into the air that it seemed certain the ship could not fail to see this beacon. Nevertheless, in the morning she had disappeared, and the castaways decided that she must have been reluctant to approach through concern for her own safety. A new idea now occurred to the men, and they commenced catching albatrosses that were feeding their chicks, and sewing strips of cloth round their necks bearing messages. Since the birds always returned to their nests without the messages it was concluded that they must have found some way of tearing them off.

The grass huts proved to be somewhat of a fire hazard, as the men were now living largely on seal meat, and the blubber caused frequent fires. One hut was destroyed by fire, and the three occupants were lucky to escape with only their whiskers burnt, these being rather greasy and consequently highly inflammable.

It was two months since the first boat had returned before the sea was calm enough for the next crossing. A slab of peaty turf was cut and lined with stones, and a fire placed in it. This was loaded on the boat with a supply of fuel, while sufficient seal meat was carried to last for two days. No sooner had the four men left than wind and sea began to rise, but it was impossible for them to turn back. They made the journey safely, but the boat was capsized in the surf at the landing place, and the fire and most of the meat was lost. The boat was completely wrecked, but the canvas from it was salvaged. The men also had some matches, but these had got wet in the surf, and although they tried to dry them in the sunshine next day they were unsuccessful in getting a fire started. The crossing was made on 6th October, and on the 10th the men reached the head of Laurie Harbour, where they found a finger post indicating the location of the provision depot. Here they were delighted to find a store, a sleeping hut, and a
boathed complete with boat. This last item was especially welcome, for they had expected to have to build another boat themselves. It was dark when they arrived and they were unable to find the matches, but they did locate the biscuit supply.

Next morning the four men lit a fire and had the luxury of clean clothes, after being seven months without ever removing the tattered apparel they were wearing. On 12th October they set sail for Disappointment Island, but found the sea too rough to permit a passage between the northern islands, and were consequently forced to return to the depot. The following day conditions were better, and they succeeded in reaching Disappointment Island. Their companions did not recognize them in their new clothes, especially as they had already given them up for lost when no signal fires had been seen. A tin of biscuits brought in the boat was eagerly received.

The next day seven men were ferried across to the landing place and given instructions as to the route to the depot. The boat then returned to Disappointment Island to pick up the remainder of the men, who were taken to the depot by sea. Once there the men settled down to a more comfortable life, even though the fifteen men had to share the twelve suits of clothing in the depot. A further change of diet was available, also, as they discovered the cattle on Enderby Island.

A message left by the Hinemoa led the castaways to believe that she would be calling again shortly, and in the meantime the men rebuilt the flagstaff which had fallen down, and made a large flag bearing the word “welcome” in readiness for the rescue ship. They also built a wooden jetty for convenience when using the boat, and to provide a mooring for it. A further task they resolved to do was to bring the body of the mate, Jabez Peters, from Disappointment Island, and to bury him in the cemetery near the depot. Unfortunately, the weather was too boisterous for the trip, and the job had not been done when on 15th November the Hinemoa arrived.

Since the ship had a large scientific party on board, some
38. (Top) Disappointment Island
39. (Bottom) Castaways Bay—Disappointment Island
The author beside a provision-depot signboard, Musgrave Inlet
of whom were to be taken to other sub-Antarctic islands, the castaways could not be relieved immediately, but the captain gave them stores and promised to return shortly. It was on 26th November that the Hinemoa returned, and at 5.30 a.m. on the 27th she left for Disappointment Island. Four of the castaways took a special box and disinterred the mate’s body, having an arduous trip over the rough country with their burden. The body is reported to have been perfectly preserved in the peaty ground. Captain Bollons had a coffin constructed for the body, and upon regaining Erebus Cove he read the burial service in the presence of the castaways and the ship’s personnel. The shipwrecked men were reported to be deeply gratified by the knowledge that Mr. Peters had been decently buried in a proper cemetery.

It appears that Disappointment Island had previously been thought an impossible place for shipwrecked men to get ashore, and so no boat had been left there. This matter was subsequently attended to, and a boatshed was built in Castaways Bay. It is still there, although the boat is in a condition similar to the other boats on the islands, and is no longer serviceable.

During the visit of the Hinemoa to Disappointment Island the crew were most interested to inspect the Dundonald settlement. They found that they had to crawl on hands and knees to enter the huts, and although it was dark inside they were quite warm and comfortable. They were constructed in hollows made in the peat, over which a light frame of veronica branches was placed, and the frame covered with sods and thatched with tussock. Each hut had its own fire. Inside they found bone needles, mats made from bird-skins, and seal-skin shoes. The castaways also used mollymawk skins for soap and towel—rubbing their faces with the greasy side and then drying with the feathers. The Hinemoa crew were especially amazed at the frail construction of the first coracle, which was still in the bay, and was brought to New Zealand, where it has found a resting place in the museum at Christchurch.
After our brief call at Disappointment Island we sailed at 4.45 for Port Ross, and we were soon approaching the western cliffs near the north-west cape. It is in the vicinity of this cape that the cliffs reach their maximum height of 1600 feet. We were unable to decide definitely at what point the *Dundonald* crew had landed on the main island. Although there is a small beach near the cape I myself consider it more likely that a landing place was found just north of a distinctive pierced rock. This spot is due east of Disappointment Island, and would give steep but practicable access to the main ridge of the large island. The castaways would be more likely to find their way to Erebus Cove from this point than from the north-west cape, and it would also be more favourably placed for reaching from Disappointment Island in the primitive boat that they used.

The fog had now lifted to its normal height of about 800 feet, and we had a splendid view of the Column Rocks, which are an unmistakable landmark at the north-west cape. Once round the cape we were in more familiar waters, and we had an uneventful run to Port Ross, arriving at 7.30 p.m. Enderby Island and the gentler slopes of the Hooker Hills looked almost civilized territory after the gaunt, cliff-bound coastline we had been watching all day.
SIXTEEN

Tandy Inlet

After visiting Waterfall Inlet for fuel, the Ranui left for New Zealand on 14th December. Both Les and George were given the opportunity of a trip home with her, and a similar arrangement was made for Graham. The remainder of us formed a rather lonely party.

At the main camps there was a more or less regular routine, although it was always disrupted to a certain extent during the periodic visits of the survey party. The cook for the day would arise about 6.30 a.m. and get the range started and the breakfast on. About 7.15 he would arouse the other men, and the meal would be on the table by 7.30. The cook, after washing the dishes, would then be responsible for cleaning and sweeping the rooms. This would also entail the removal of the battered remains of the whale-bird that the station cat invariably caught during the night and partially consumed in the battery room. During the day the cat normally never shifted very far from the range. The amount of work done by the cook depended entirely on his interest in the job. A keen man would pile fuel on to the fire and get the kitchen to a high enough temperature for baking bread. He would produce some very good loaves, too. Other cooks specialized in pastry and fancy dishes, and would scorn to offer a meal straight from tins.

The meteorologist had regular rounds to make of his instruments, including periodic trips to Lookout Point to get a true indication of wind direction and velocity and the height of the
cloud. He would then have to make up his observations in
code form for transmission to the Weather Office.

The radio operator was responsible for transmitting the
weather reports and other messages at fixed intervals through-
out the day. He also looked after the maintenance of the radio
equipment and the electric-lighting installation. All stations
had small petrol-driven generators for charging the batteries,
but at Carnley Harbour a wind-driven generator was used with
some success, while at Campbell Island a small hydro-electric
plant had been established.

None of these jobs occupied more than a few hours a day,
although they did have to be done at fixed intervals every day
of the week throughout the year. In addition, there was always
incidental work to be done, at which everyone lent a hand.
There would be firewood to be cut and carried to the camp,
and occasional boat trips to Ocean Island to feed the sheep.
Maintenance work was also necessary on the camp buildings
and the corduroy paths.

The original purpose of the camps was to maintain a coast-
watch, and this utilized a great deal of time. In the summer
months it meant a constant watch from about 2.30 a.m. to
11 p.m. This continuous watch had been relaxed when we
arrived, and only a periodic inspection was required at specified
times. Later on it was abandoned altogether. For this reason a
party of three was now quite sufficient to run a camp. The work
could have been done by two men, but it would be unwise to
reduce the staff of an isolated camp to that number. The
greater the numbers the smaller the likelihood there would be
of trifling incidents leading to serious friction.

Most of the permanent hands at the camps depended on
scientific work as a means of occupying their periods of leisure.
There was plenty of bird life in all parts of the group, and a
good dinghy with outboard motor was freely available for
scientific purposes.

During the evenings we had the benefit of the radio, and
a plentiful supply of books and magazines. Although several
of us carried on with our normal work on most evenings, Saturday night was always regarded as a special occasion, and we would play cards or sometimes table tennis. Photography was a popular hobby for most of the men. The bath-room could be blacked-out for use as a dark room, and after dark we used the kitchen. Conditions for photography were very seldom good, and almost all our pictures were taken in dull or even wet weather. Although the results consequently lacked the clarity and sparkle that we sought, they were none the less typical of the atmosphere of the islands.

During this period in the main camp I was occupied with plan work and computing, and of course every man had his turn at cooking. The weather also seemed to be kinder, and occasionally we had a really nice day. Sunday, 17th December, being such a day, I decided to take advantage of it by visiting Crozier Point. There was brilliant sunshine with just a slight breeze, and the coastal scenery could almost have been mistaken for some less remote part of New Zealand territory. The shags at the big rookery were very busy hatching eggs and stopping gulls from stealing them. There were a few chicks out, but most of the birds were seriously engaged in sitting on, and periodically examining, their eggs. The shags are notoriously ungainly in flight, and so when one tried to alight in the narrow confines of his nesting area he would almost invariably misjudge his landing and would be assailed mercilessly by the outraged occupants of the area into which he had unwillingly trespassed. After beating a hasty and undignified retreat, he would be greeted fondly by his mate, and all would be well.

It was also about this time that I discovered a newly born seal pup a few yards from the Lookout Point astronomical station. Since this station is 188 feet above sea level, and quite a distance from the sea, I was rather interested to see how often the mother would make what would certainly be an arduous journey to visit her pup. I regret to say that either she had met with some mishap or else her maternal instinct was not strong enough, as every day I visited the pup he was noticeably
weaker. On sunny days he would be trying to shade his eyes with a pitiful little flipper, while hordes of flies buzzed busily around him. Mother finally appeared after eight days, which I considered to be rather a long time between meals. A few days later I called to find the little chap dead, probably from lack of food.

All four of us were now preparing for Christmas, and on the 23rd we took the dinghy to Ocean Island for fresh mutton for the special dinner. There were only two sheep left and they had become cunning enough to be extraordinarily difficult to find. Of course we did find them, and after driving them into the open we caught them by simply running them down. Skinning and cleaning operations were watched by a horde of mackerel gulls, black-backed gulls, and the ubiquitous skuas, while I also noticed a nelly keeping an eye on proceedings from a discreet distance.

Everybody contributed something towards the Christmas dinner. The result was a noteworthy spread. It was also a spread of such proportions as would satisfy the most ardent trencherman, and it left all of us distinctly uncomfortable. Two of the men decided that an afternoon nap was indicated, but the other two of us preferred exercise, and we rowed over to Ewing Island, where we annoyed a few sea-lions and penguins.

At this time we were experiencing a minor drought. Owing to the polluted state of the streams in this part of the island we relied on tanks for a water supply, and these were now very low, so that as much water as possible had to be taken from the creek. This was now quite a deep chocolate colour. Rain is normally so frequent that the tank storage provided was not great, and this sometimes caused us minor inconvenience. We never did have to wait very long for more rain.

On 30th December Bob Pollard, the meteorological observer, reported sick with a poisoned finger. He explained that some weeks earlier he had put a sea-leopard’s head in a pool of water to decay, and a few days ago he had attempted to pull out the teeth for souvenirs. In doing this he had scratched
his finger on one of the teeth, and this poisoning was the result. Next day he was much worse and he was unable to move about, although he was bathing the finger frequently. Fortunately, his previous training as a chemist stood him in good stead, and he soon found a treatment that was successful in removing the infection.

The Ranui reappeared in the cove at 5.30 a.m. on 18th January 1945, with a large quota of very welcome mail. I was pleased to see George back again looking for more work, but unfortunately for us both Les and Graham had been relieved.

It would have been a serious blow if George had not returned. He had been doing most of the topographical work, and he knew exactly what had been done and the best way to get to the areas that were not yet finished. I think he must be over six feet tall, and with his long legs he could step over big tussocks that everyone else had to climb over. Towards the end of a long day struggling over wet tussocks was a laborious business, especially when we were well laden with equipment. Chiefly for this reason, George was able to cover the ground much more quickly than the rest of us, and the reward for this was in being dispatched to the more distant areas. As a result, I regarded him as invaluable, more especially as his work was always conscientiously and carefully done.

George took life very seriously, even when it came to the matter of food. I think he was the most consistent user of the vitamin tablets and tonic preparations that had been supplied to us as substitutes for fresh food and adequate sunshine. I must admit that he always seemed to be in robust health, but whether that was due to his diet is rather open to question. The rest of us, who were less mindful of our daily intake of calories and vitamins, seemed to suffer little through our ignorance. Some of us were affected at times by troubles such as rheumatism induced by exposure, but this was only to be expected. No matter how cold and wet we might get, nobody ever caught a cold.

On 21st January we sailed at 9.30 a.m. for Carnley Harbour,
where we loaded our camping gear, and the next day we went up the coast to Tandy Inlet to establish our first field-camp of the new year. It was an unusually good day, and we were greeted by swarms of blowflies and sand-flies. We had some trouble in finding a suitable camp site, as the land was swampy and foul with seal tracks, but we finally settled on a site on an elevated promontory. Here we could escape both the bogs and the sand-flies. Unfortunately, access from the landing-place was very difficult, and we left most of our stores near the beach under the cover of a tent-fly. On this occasion George and I had two new assistants, Bob Pollard and Tubby Wenham. Although Bob had been at the islands for twelve months, this was his first camping trip, while Tubby was a new arrival.

We did not have any definite routine in our bush camps, as our activities were necessarily influenced so much by the weather. During the first two or three days at each location, while we were occupied in getting our camp reasonably habitable and in cutting access routes through the bush and scrub, we were able to work in any but the worst of weather. Also if we were in an area that was unfamiliar to us we were able to reconnoitre in any weather provided the visibility was reasonable. But when we had completed these jobs we had to wait for clear days without too much wind.

When my alarm clock woke me in the early morning I would crawl out of my sleeping bag and start to prepare the breakfast. At the first sound of pots rattling George would appear to lend a hand, and after a short time the steady roar of the Primus stoves would bring tousled heads from the other tents, and dishevelled figures would trudge through the eternal mud to the stream for a morning wash. If I awoke to hear the rain beating on the tent, or a high wind roaring in the canopy of rata trees, I would leave the breakfast for someone else to prepare. On really bad days it became somewhat of an endurance test to see who would yield first and decide to cook the meal.

Breakfast consisted of porridge, followed by hot canned
tomatoes and usually some form of canned meat or fish. There was also dried bread or biscuit and hot tea.

Unless the weather was completely hopeless we would then set out for work. Each man dressed according to his fancy, but he would almost invariably wear a hooded parka, heavy boots, canvas gaiters and a balaclava. On cold days woollen mittens and waterproof gloves were in demand, and if travelling conditions were known to be comparatively easy, we often wore oilskin leggings.

If no field-work was possible we had to fill in time as best we could. The mess tent was about 10 ft. long by 6 ft. wide, and contained a reasonably large table that George and I were able to use to a limited extent for preliminary plan work and computations. We usually had at least one naturalist in our party, and he would happily employ himself in searching for specimens or undertaking some form of systematic observations.

When we were confined to camp the midday meal would consist of hot soup, followed by dried bread and biscuit with butter, jam, cheese and honey. We had our main meal in the evening. This would usually include dehydrated potatoes, canned vegetables and bully beef, and either a canned plum pudding or canned fruit eaten with a prepared cereal.

It would have been impossible to make these camps comfortable without an outlay of time and material that would be quite unwarranted for temporary occupation. Although at times we tried lighting fires to dry our clothes and for that peculiar satisfaction that comes of sitting beside a camp fire at night, they were not spectacularly successful. It was always either raining or blowing, and smoke would swirl everywhere, so that one after another we would give up in disgust and go to bed.

The day after our arrival at Carnley Harbour was devoted to our now familiar task of clearing a track through the forest and the thickest of the scrub. The next day we managed to get some beacons erected on the high country. On this occasion
the route was quite interesting, and in one place passed through natural corridors in a great basalt dyke. The tangled scrub we encountered at intervals in the tussock country was most exasperating. The two newcomers found it an arduous day, arriving home rather much the worse for wear.

On 25th January we started work on a track up the north side of the valley. On this occasion we had the big stream to cross, and we had to go some distance upstream before we found a suitable place for crossing. Even here the stream was about fifteen feet wide, but good rocks were available for stepping stones. It would be difficult to cross there after much rain, and even on that occasion Bob succeeded in slipping and falling in, to the huge delight of everyone else. Bob had decided that camp life was grand, and he regretted that he had not been able to get out with us earlier. George and I reminded him that this was mid-summer, and even on the Auckland Islands conditions are a little more pleasant in the summer time.

Tandy Inlet was at one time a favourite camping site for sealers. On the ridge just to the north of the inlet is a conspicuous rock mass which resembles a church and steeple when viewed from the sea, and this was known to the sealers as the Chapel Rock. It was evidently used by them as a landmark when approaching the inlet. From the inlet it is a comparatively short distance to the western cliffs, and no high ridge has to be crossed. In fact, the saddle separating the two coasts is no more than 700 feet high, and the distance from the inlet to the western coast is less than three miles. The western cliffs are 580 feet high at this point, and it is almost certainly here that the Sorenson Salvage Syndicate proposed to construct the access road to their projected cantilever. Although they mentioned Smith Harbour, it must be understood that Smith Harbour is a secondary inlet intersecting Tandy Inlet.

We found plenty of evidence of prior occupation by sealers. Some stumps of felled trees were seen, and an old track to the western cliffs was visible in some places, although now badly
overgrown. Flax bushes were flourishing on the beach, which is one of the very few sandy beaches in the islands. Bob also took me to see a discovery of his—the letters H M S B L painted on a vertical rock face. Although the remainder of the letters had been removed by the weather, we had no difficulty in deciding that this had been done by men from H.M.S. Blanche when she was engaged on survey work in 1870.

We were unfortunate to strike a great deal of bad weather again. Although the winter and spring were bitterly cold we usually had a reasonable number of clear days that were quite suitable for survey work, except for occasional periods when storms temporarily blotted out the hills. In the summer and autumn we had to contend with the same high winds, but the somewhat milder temperature favoured the formation of thick cloud, which often mantled the hills for weeks at a time. Rain did not trouble us very much, although at Tandy Inlet we had enough of it to make the place a morass, and our already difficult access to the beach and stream became almost impossible. Tubby often managed to lose control of his legs when negotiating the track, usually when he was carrying a clean towel, but he was by no means the only victim. The night of 31st January was the wildest I have ever spent in a tent, and sleep became quite impossible as the wind reached hurricane force.

On 3rd February we had a better day, and I got observations completed at Smith’s Crag and Omega Peak. Smith’s Crag is a great buttress overlooking Smith Harbour and Norman Inlet. Both of these two inlets have been carved out by one glacier, and Falla Peninsula is very nearly an island.

Rather to my surprise, the following day also promised to remain fine and clear, so we made the journey to Bleak Hill. There I just succeeded in completing observations when thick cloud started to form around us. We had some difficulty in finding our way home, as visibility was only a few yards. Actually, we were very fortunate when the cloud lifted momentarily, as it showed us that we were heading for Musgrave
Inlet instead of Tandy Inlet, and although the weather closed in again immediately we were able to get on our correct course. We reached home thoroughly soaked from the steady rain and the high wet tussock. Tubby was little better than a cot case, and Bob was gone in the ankles.

It should be mentioned at this stage that we never used a compass when travelling as it would be even worse than useless. The rock outcrops, which are extremely numerous, are highly magnetic, and no reliance can be placed on compass bearings. I found that a magnetic variation of 40° east could be changed to 20° west by moving the compass three feet, this being at Meggs Hill, and subsequent observations elsewhere proved equally unreliable. Sir James Ross also recorded in 1840 that Shoe Island is highly magnetic.

Three days later I was able to visit Chapel Rock and the Giant’s Archway, although the wind was uncomfortably strong. Tubby had a particularly trying day, as for a start he fell down in a filthy seal wallow, and then, later in the day, he went up to his hips in an equally foul-smelling bog. He was interesting himself in collecting botanical specimens at this time, but on more than one occasion he became so upset when he was struggling through tangled scrub, or when he fell into a hole, that he would scream with rage and would fling his hard-earned specimens into the air, where they would be whirled away by the wind.

Whilst we were at Tandy Inlet the Ranui had been to Dunedin to pick up the relief party for Campbell Island, and she called in to collect us on 10th February. This time we had our work done and were waiting for her.
SEVENTEEN

Farewell to the Islands

There was still some work to be done from Carnley Harbour, so I decided to move there while the ship visited Campbell Island. After seeing us established in the camp on Musgrave Peninsula, the Ranui sailed on 12th February for Perseverance Harbour.

It was necessary to carry out azimuth observations on Musgrave Peninsula, but during our previous stay at the camp there had never been a night that was both reasonably calm and clear. On 17th February, when we were about to retire at 10 p.m., I was surprised to see a clear sky. George and Tubby were immediately dispatched to fit an electric torch in the referring mark half a mile down the coast, while I got my observing equipment set up at the astronomical station. Although condensation of moisture on the lenses caused a great deal of trouble, it was a successful evening, and by 2 a.m. the job was finished. Curiously enough it was twelve months to the day since we had done similar work at Port Ross.

On the 20th Bob and I visited the Giant's Tomb and Cavern Peak to observe bearings to the new trigs we had recently erected near Tandy Inlet. It was an unusually good day, and we made the most of it. We did not get home till 8.30 p.m., but George and Tubby, who had been to Adams Island, were later still, and we dined at 10 p.m. The following day was also good, and we went to Wilkes Peak and Mt.
D’Urville to do topographical work, while George and Tubby went to the Tower of Babel. Other excursions about this time took us to the eastern end of Adams Island and to the Lion Rock.

From 22nd February till the middle of April we had almost uninterrupted bad weather, with fierce gales and occasional snow. Fortunately, a very occasional reasonable sort of day enabled us to finish what field work remained to be done, and for the rest of the time George and I were occupied with our computations and plan work. It was a problem finding useful occupations for the other two men, and I am afraid they were left largely to their own devices. The occasional day of field work helped, and a stock job was the erection of a rock cairn on Flagstaff. The rocks had to be carried on our backs from the beach, a distance of over a mile and a climb of 700 feet. I don’t know how many loads we took, but the job certainly provided a lot of useful exercise.

Bob was unlucky enough to twist his ankle badly when landing from the dinghy one day at a point well down the harbour. Since it was early in the morning he had to be left sitting in the boat all day, and he was unable to get about again for some time.

Towards the end of March we had completed the field work, and were just about finished all the office work that could be done at that stage. So all of us began to suffer from boredom, and everyone was making surreptitious trips to the lookout in the hopes of seeing the Ranui coming.

It was not until we had finished our evening meal on 10th April that we heard her siren, and everyone rushed for seaboots and oilskins. It was as dark as pitch, blowing a gale, and raining in torrents, and I can still remember slithering down the steep track to the cave where we kept the boat, and arriving at the ship dripping with rain and spray. We had not had any contact whatever with the outside world for two months, and we wanted to hear the news and to see other faces. And to get our mail.
The most important news to us was that the meteorological station at Port Ross was to be closed down immediately, and all personnel returned to New Zealand, with the exception of the radio operator. We had intended to reoccupy the camp at Chambres Inlet, but a change of plans was now necessary, as the radio man could not be left alone at Port Ross. It was therefore decided that only George and Tubby would go to the Chambres Inlet camp.

On 12th April we left Carnley Harbour for the last time—rather a sad farewell as I had always enjoyed staying there—and a few hours later we were ashore at Port Ross. On the 14th the ship took George and Tubby to Chambres Inlet, and then went on to Waterfall Inlet for fuel. She returned to Port Ross on the 16th, but it was not until the 20th that the weather moderated enough for us to be able to load her. This was quite a job, with over 300 cases to be carried to the landing, ferried out to the ship, and loaded into the hold by hand. More bad weather was to follow, and it was not until 9 p.m. on 26th April that the ship sailed for New Zealand.

George and Tubby arrived at the camp on 2nd May, and reported the completion of work at Chambres Inlet. Tubby had had a narrow escape on the rock ledges of the cliff path. He had missed his footing and fallen some distance, fortunately breaking his fall on a clump of scrub. He ricked his back, however, and was unable to get about for some days.

On 15th May the Rangi returned, and the following day she took George down the coast to carry out magnetic observations, and to collect the camping gear from Chambres Inlet. Having got George’s field observations from Chambres Inlet I was meanwhile engaged on the final stages of the triangulation calculations and plan work.

When George returned on the 26th the only outstanding work to be done was a series of magnetic observations at Terror Cove and on Enderby Island. These were completed on the 29th and all hands turned to the task of packing stores and equipment in readiness for the evacuation of the islands. We
commenced loading the ship on 2nd June, and at 5 p.m. on Sunday, 3rd June, we sailed for Wellington.

By the time we were off the north-east cape it was completely dark, and nobody had either the pleasure or the sorrow of watching the islands disappear astern. A moderate north-westerly was blowing, and the Ranui was making a lively trip, so that one had to wedge oneself securely to be sure of not being thrown out of one’s bunk. On the evening of the 5th we saw the miracle of the lights of Dunedin, and the following night we had a similar treat, as Christchurch was in sight. When we had rounded Banks Peninsula a north-wester made things uncomfortable, and although it did not last long we encountered such a heavy swell that Captain Worth had to heave-to for a while. Then when we were off Cape Campbell a violent south-westerly blew up, and created a most confused sea. The little ship was plunging and rolling all ways at once until sail was hoisted, and then she really flew along so that we entered Wellington Harbour with a flourish.

Then began the rather sad business of winding up the affairs of the expedition, and bidding farewell to those good companions who had shared solitude for so many months. Life in a place of extreme isolation does not suit everyone, and in fact did not suit some of those who went to the Auckland Islands. But those few were the exception, and the great majority of the expedition personnel adapted themselves splendidly to their unusual surroundings and duties, and it was with genuine regret that we had to go our various ways.
Some reference should be made in this book to two other small groups of islands in the sub-Antarctic region near New Zealand. Seldom visited and little known, they are called the Antipodes Islands and the Bounty Islands.

The Antipodes Islands were discovered in 1800. Captain Waterhouse was en route from Sydney to London in H.M.S. Reliance when he sighted the group, and as he was at the time near the antipodes of London he named them the Penantipodes Islands. Although this name was used in the early part of the 19th century it has subsequently been corrupted to Antipodes.

The main island of the group is about five miles long by three wide. The island has no harbour, but rather precarious shelter can be obtained at Ringdove Bay, and also off the landing place near the north cape. North of the main island are two islets named the Bollons Islands, one of them having a remarkable archway caused by erosion of the sea.

The landing place gives fairly easy access to the summit of the cliffs which surround the island. These cliffs reach a height of 500 feet, in some places. The highest point on the island is Mt. Galloway, which has an altitude of 1,320 feet. It is reported that a lake with an area of about 14 acres is located on the summit of this peak. The southern part of the island is occupied by a plateau about 800 feet above sea level, but a great part of it consists of bogs. There is a good
water supply, one particularly good stream discharging near the landing place. The islands are entirely volcanic in origin.

The group is treeless, and the main vegetation is the ubiquitous tussock. There is a certain amount of scrubby veronica and coprosma, while a few patches of *Stilbocarpa polaris* are also to be found.

The Antipodes were soon found to be a rich source of fur-seals. The first sealing gang was left there about July 1804 by an American vessel, the *Union*, of 99 tons, and her tender, the *Independence*, of 40 tons. The *Union* then proceeded to Tonga, where her captain was killed, and the vessel was later wrecked. The *Favorite*, of 245 tons, was then dispatched with the *Independence* to the Antipodes. The sealing gang was found to have taken and cured over 60,000 fine skins. The two ships then separated, and the *Independence* was never heard of again.

The 45-ton brig *Venus* landed a gang on the island in 1806, this gang being picked up by the *Star* with 14,000 skins. An even better haul of 39,000 skins was obtained in 1807 by the *Commerce*.

The fur-seals were practically exterminated in very quick time, and the group slipped into obscurity. In common with the Auckland Islands and Campbell Island, a provision depot was established at the Antipodes, and this led to periodic visits being made by a Government steamer to check on the contents of the depot, and to look for possible castaways.

In 1888 the *Stella*, in her round of the depots, landed three goats and six sheep on the Antipodes. Also some trees were planted and grass seed sown. On this occasion a board was found erected on a tussocky ledge above the landing place. The inscription read "To the memory of W. Foster, chief officer of the schooner *Prince of Denmark*, who was unfortunately drowned in the boat harbour, December 17, 1825."

Towards the end of 1893 Captain Fairchild was taking the *Hinemoa* on her round of the depots when he sighted a flag-staff on the Antipodes. On landing he found eleven survivors from the wreck of the *Spirit of the Dawn*. 
This vessel was an iron barque of 716 tons, built in 1869. She was bound from Rangoon to Talcahuano (Chile) with a cargo of rice. About 4.30 a.m. on 4th September 1893 the lookout reported that he thought he could see breakers ahead. There was a thick fog at the time, and Chief Officer Horner could not identify the breakers, but he called Captain Millington and ordered the helm to be put hard up. The vessel barely had steerage way and did not respond quickly enough to clear the rocks, which soon became clearly visible. All hands were issued with lifebelts as the ship struck. She sank so quickly that there was no time to lower the boats. Most of the men climbed into the mizzen rigging, where they remained until the first and second officers managed to get the starboard boat floated off the deck. The captain and four others were drowned, but the remaining eleven members of the crew all managed to get into the boat.

The boat drifted out to sea, but later in the morning the fog cleared, and the survivors pulled towards the island. About 3 p.m. a suitable landing place was found, and the boat was made as secure as possible.

The castaways found an overhanging bluff where they decided to camp. They cut tussock to lie on, and spread the boat’s sail over themselves during the night. They had been able to get some shellfish, which they ate raw. They were afraid that it might be poisonous, and ate it sparingly at first. Fortunately plenty of good water was available.

Next morning, when the men went down to the beach they were dismayed to find that the boat had broken adrift and was gone. This was a serious blow, as it ended all hopes of escaping from the island. They looked round for wreckage from the ship, but found none. She had run on to a reef which extends for about half a mile from the southern end of the main island. Many of the men had very little clothing, and were consequently ill-equipped for their stay at the Antipodes.

A penguin was captured and eaten raw for breakfast. The two officers and two of the seamen then decided to walk round
the island in search of a better camping place. They found the walking conditions rather arduous, and on the first day they covered about half the distance. That night they slept in the tussock. They caught an albatross, but it was very unpalatable in a raw state, and they could not eat much of it. In the morning they forced themselves to finish it, and as the weather was again very foggy Mr. Horner thought they should retrace their steps to the landing place. The second mate, Morrisey, argued that having got this far they should carry on. Horner had his way, and they returned to the rest of the castaways. They arrived back, hungry, wet and weary, and informed the others that there was nothing to be found on the island.

The men tried eating nellies, but the legs were the only parts fit for consumption. However, more penguins then began to arrive, and these were eaten in great numbers. A favourite practice was to scrape the fat off the skins, and use it as a sandwich filling between slices of an edible root. Meanwhile they were keenly observing the increasing size of the penguins, and anticipating the arrival of the laying season. The first egg was laid on 2nd October, and the finder caused a great commotion with his excited shouts. The men soon found that the penguins were very vicious during the laying period, and the job of gathering eggs was no sinecure. After about two weeks the eggs became addled, but the men cached about one hundred dozen in holes to keep them going.

The egg supply was becoming precarious when another species of penguin came ashore and commenced laying. The men considered the eggs to be excellent, even though they had to be eaten raw. It was perhaps at this time that the lack of a fire and a frying-pan was most bitterly regretted.

Shortage of clothing was another problem. It was partially solved when a new camp site was found under an overhanging cliff. The sails then became surplus and were fashioned into clothing. Needles were made out of albatross bones and mittens were unravelled to provide thread.

The men also erected a flagstaff, on which they secured an
old flag, a piece of canvas, and an old red singlet which had been washed ashore.

On the seventeenth day after the wreck they saw a barque, and again on the following day a full-rigged ship passed the island. Neither was more than three miles off, and it would have been easy to intercept one of them if the boat had not been lost. The men shouted so loudly that they were hoarse for days afterwards.

Finally the Hinemoa arrived off the island and spotted the flagstaff. Her crew were very surprised to learn that the castaways had not found the provision depot. The only explanation was that the men had shown little inclination for exploring the island, partly because they were not well enough fed, but probably more because they had little clothing and were afraid of death through exposure.

The castaways had kept reasonably good health, except for a half-caste Indian who suffered from frostbite in his feet. He lost four toes from one foot and two from the other. His companions had cut off the affected parts with limpet shells. All the men had suffered from the cold, particularly at night, when they would seal up their shelter with tussock and lie close together for warmth.

It was fortunate that the Hinemoa had sighted the flagstaff, as she had already visited the provision depot and was preparing to leave the island. The eleven survivors had been on the island for eighty-eight days.

Another wreck occurred on the Antipodes Islands in 1908. The victim this time was the French ship the President Felix Faure, a steel four-masted barque of 2860 tons. She had sailed from New Caledonia and had been driven south by bad weather. Captain Noel thought he was about seven miles south of the Antipodes when breakers were sighted on the starboard bow. The ship was sailing in the prevalent thick foggy weather at the time. The captain made every effort to clear the reefs, but without avail, and the ship ran on to the rocks. The lifeboat was provisioned and launched, and the entire crew of twenty-two
got safely aboard. They pulled for the shore, and although the boat was completely smashed on the rocks all the men got ashore without mishap. All the stores and provisions were lost.

Night was advancing, but some of the men decided to climb the cliff to get some idea of what the island had to offer. When they reached the open country at the top they were overjoyed to find the provision depot. The rest of the crew was immediately summoned. Although the hut was designed to accommodate about six men, the entire crew of twenty-two found they could squeeze into it. There was not enough room for them to lie down, so their first night on the Antipodes Islands was spent standing upright.

Next morning the supply of matches was found, and a fire was started. Unfortunately the food supply, like the hut itself, was never intended to meet the demands of such a large party, and it was soon exhausted. A search had to be made for an alternative supply, and the albatrosses were the first to fall victims. They were plentiful enough, and easily captured, but the castaways did not find them very good eating. Penguins were tried next, and these were eaten regularly until the time came for them to leave the island. After that the men were forced to live on albatrosses and shellfish.

Then particularly good fortune befell the men. They found cattle tracks, and these led to the discovery of a well-grown calf. It was soon caught, and held by twelve men while its throat was cut with the point of a file. It yielded a good supply of excellent beef. A bull and a cow had been left on the island by the Hinemoa, and the castaways later found the skeletons of these animals. The remains of the sheep were also seen. The skin of the calf was used for making footwear.

It is interesting to note that at no time did the castaways see any seals.

The shortage of space in the provision depot had led the men to build two additional huts. These were made from the branches of stunted shrubs, and were covered with tussock and
peat. The men were unable to make them waterproof, and they leaked very badly during periods of rain.

The cold winds and the bleak climate were the men’s worst enemies. They had little clothing and very few blankets. The fire was kept going as continuously as the limited supply of firewood permitted, but the men found the only way to keep warm was by constant exercise. The position was improved somewhat when they found some suitable wood for building additional rough bunks into the provision depot.

Plenty of old magazines were found in the depot, but very few of the men could read English.

At last came the day of relief, when a naval vessel was sighted. Fuel was piled on to the fire, and the castaways were overwhelmed with joy when they saw a boat being lowered to pick them up. The ship was H.M.S. *Pegasus*, which was on a cruise to the Chatham, Bounty and Antipodes Islands. She arrived in Lyttleton on 15th May 1908, two months and five days after the wreck.

Captain Noel expressed his appreciation of the Government’s action in maintaining the provision depot. He was rather critical of some deficiencies in its contents, particularly the absence of tea and coffee. He attributed the wreck to bad visibility and inaccurate charting of the Antipodes Islands.

The Government steamer made its last visit to the islands in 1927, the maintenance of the provision depots being abandoned after that year. In 1947 the icebreaker *Northwind* from the American Antarctic Expedition left some cases of provisions at the depot. A small scientific party visited the islands in 1950, and reported that all the contents of the depot were in good order. This party found the islands supporting a wealth of bird life, but saw no fur-seals apart from one aged bull.

The Bounty Islands were discovered in 1788 by Captain Bligh, who named them after his ship, the *Bounty*. An extract from his *Voyage of the Bounty* reads as follows:
"On the 19th at daylight we discovered a cluster of small rocky islands, bearing east by north four leagues distant from us. We had seen no birds or anything to indicate the nearness of land, except patches of rock-weed for which the nearness of New Zealand sufficiently accounted. The wind being at north-east prevented our near approach to these isles. The weather was too thick to see distinctly, their extent was only three and a half miles from east to west, and about half a league from north to south; their number, including the smaller ones, was thirteen. I could not observe any verdure on them; there were white spots like patches of snow. The westernmost of the islands is the largest, they are of sufficient height to be seen at a distance of seven leagues from a ship's deck. While in sight of the islands we saw some penguins, and a white kind of gull with a forked tail. Captain Cook's track in 1773 was near this spot but he did not see the islands; he saw seals and penguins hereabouts, but considered New Zealand to be the nearest land. I have named them after the ship, the Bounty Isles."

It is to be recalled that it was later on during the same voyage that the famous mutiny took place, and Bligh made his long journey in an open boat.

The group is in the form of a rough semi-circle, about three miles long. Only nine of the islets have any appreciable size, and all are severely eroded by the action of the sea. The islands offer no shelter of any description in stormy weather, and in such conditions no part of the land is beyond the reach of flying spray.

At sea level the rocks are as smooth as glass and extremely treacherous to walk on. This smoothness is mainly due to the action of the sea, but there is little doubt that the polishing action of the feet and flippers of millions of penguins and thousands of seals has contributed to some extent. During the breeding season vast quantities of guano are deposited on the
islands, but the winter storms sweep most of it off again. There is no reliable supply of water on the group. A certain amount of brackish water is impounded in hollows in the rocks, but it is polluted by the penguins.

Like the other islands in this region, the Bounties provided a rich harvest of fur-seal skins, which was soon to be exploited. Strangely enough, one of the earliest sealing expeditions had a profound effect on the introduction of Christianity into New Zealand itself.

It happened that on 1st July 1807 the *Santa Anna*, of 202 tons, sailed from Sydney to the Bounties. She made a call at the Bay of Islands in New Zealand, and while there picked up a Maori chief named Ruatara. This chief was most anxious to travel to England to meet King George III, and knowing that the *Santa Anna* was bound for the Bounties and thence to England, he decided to throw in his lot with the sealers.

On reaching the Bounties, Ruatara and thirteen others were left to kill seals while the ship returned to New Zealand and Norfolk Island for supplies. The ship was delayed for a long time at Norfolk Island and again at Sydney, finally leaving Sydney on 14th October 1808. When she reached the Bounties she found the sealing gang had undergone severe privations through lack of food and water. The *Commerce* had called earlier in the year, and had provided some stores. She also took delivery of 3000 skins. Since her departure conditions had become worse and three men had died. The *Santa Anna* loaded the cargo of 8000 skins, and sailed for London. Upon arrival, Ruatara was not given any opportunity to see King George. The captain of the ship treated him most harshly, and refused to give him either wages or clothing. He was eventually put aboard the convict ship *Ann*, which was bound for New South Wales. On that ship he was befriended by a missionary named Samuel Marsden. When they arrived at Sydney Ruatara stayed with Marsden until he could return to New Zealand, after which he did everything possible to help Marsden and the cause of Christianity. Had it not been for this friendship
with the Maori chief it is likely that Marsden’s work in New Zealand might well have been a hopeless task.

No information is available to show to what extent the Bounty Islands were visited by sealing gangs in the following years. In 1831, however, two of the Enderby Company’s vessels visited the islands. They were the brig *Tula*, of 148 tons, commanded by John Biscoe, and the cutter *Lively*. They had left the Chatham Islands in company, but became separated in thick weather. On 19th December the weather was still very thick, with an easterly gale and heavy seas. The captain was worried, as he had had no sight for three days, and knew he was near the Bounties. The large number of penguins and quantities of kelp confirmed this. The bad weather persisted, with continuing easterly gales and much rain, but on the 22nd conditions began to improve, and at 9.30 a.m. the islands were sighted. A short time later the *Lively* was also sighted. Boats were sent ashore, but they returned to report having seen only five seals, and those were on a rock where landing was impossible. The boat crews landed on another of the islets, and there found the remains of a hut. Its roof was constructed from the skins and wings of birds, and inside it was a baking dish, a water cask, a provision cask, half a bottle of oil and some firewood. It was evident that it had been used fairly recently by Europeans.

The Bounty Islands became part of New Zealand territory on 9th July 1870. As a matter of interest the deed of annexation reads as follows:

“I, George Palmer, Captain of her Britannic Majesty’s Navy, and at present commanding her Majesty’s ship *Rosario*, do hereby make known to all whom it may concern that by virtue of an order from Commodore Rowley Lambart, G.B., A.D.C., commanding H.M. ships in these waters, I have this day taken possession of the Bounty Islands, in the name and on behalf of her most Gracious Majesty Queen Victoria, by the Grace of God, of the
United Kingdom of Great Britain and Ireland, Queen Defender of the Faith, etc., and I do hereby declare the said Bounty Islands to be annexed to her Majesty's Colony of New Zealand. God save the Queen! Given under my hand this ninth day of July 1870, off the Bounty Islands. George Palmer, Captain of H.M.S. Rosario.

The proclamation is accompanied by a brief descriptive passage, which relates that the islands are very exposed and completely barren. One of the western islands has a blowhole which throws water and spray to a height of more than 300 feet. The islets are in two groups with what appears to be a clear passage between. The maximum height is 280 feet.

A provision depot was erected on the Bounty Islands, but it was destroyed soon afterwards, probably by lightning. On subsequent visits of the Government steamer the weather was never fine enough to permit building materials being taken ashore for repair purposes. However, a sail had been rigged so as to hold a supply of rain water. Actually the lack of this depot did not cause much concern, as there is no record of any vessel having been wrecked on the Bounty Islands.

Vessels approaching the islands get their first smell of the penguins while they are still some distance off shore. As they approach, the stench becomes almost indescribable, and the noise is deafening. The largest islet has an area of about thirty acres, and every available square inch seems to be occupied by penguins. Captain Fairchild estimated that there were five million penguins living on a total area of about one hundred acres.

Although landing on the islands presents some difficulty to men, it is no trouble to the penguins. They dive towards a sloping rock face, and as the sea surges forward they swim rapidly under water. Just as the wave is about to retreat they leap forward and land neatly on the face of the rock. Then two or three vigorous jumps, and they are well out of reach long before another wave crashes on the rock.
Apparently when the Government vessel made its periodic visit to the Bounty Islands it was standard practice for the steward to require all personnel to change their clothes immediately upon returning to the ship, on account of the terrible smell of penguins and guano. Incidentally, it is the guano deposits which Captain Bligh thought might be patches of snow.

Although all of the sub-Antarctic islands are clear of the pack ice, icebergs are at times encountered in these waters. On one voyage the *Hinemoa* passed five bergs, the largest being 300 feet high and about 2½ miles in circumference.

The scientific party which visited the Antipodes Islands in 1950 also made a brief call at the Bounties. The leader of the expedition expressed the opinion that this group has the most spectacular concentration of sea-birds to be seen anywhere in the world. Apart from the millions of penguins the islands provide a home for mollymawks, petrels, shags, gulls and terns.
Any account of these sub-Antarctic islands would not be complete without some reference to Macquarie Island. This island is not in New Zealand territory, and is in fact an Australian possession, but geographically it is in the same region as the Auckland Islands and Campbell Island. The author has not had an opportunity to visit Macquarie Island, but has naturally been interested in the nature of the place and its historical associations.

Macquarie Island, like Campbell Island, was discovered in 1810 by Captain Hasselbourgh, and was named by him in honour of the Governor of New South Wales. Although Hasselbourgh is officially credited with the discovery, it must be mentioned that upon his arrival at the islands he found on its shores the wreckage of what appeared to be a large ship. This was possibly either the Boussole or the Astrolabe, the ships of the French explorer de la Perouse.

The island is approximately in latitude 50° 30’ south and longitude 159° 3’ east, and is about 600 miles south-west of New Zealand. The main island is about 20 miles long and four miles broad, with a maximum height not much over 700 feet. About 30 miles further south is an outlying island known as the Bishop and Clerk, while another islet called the Judge and Clerk is about seven miles north of the main island.

Macquarie Island is desolate and miserable to an extent that cannot readily be conceived. There are no trees of any kind,
and it is only in the more sheltered places that even the hardy
tussock can survive. In many of the more favoured spots there
is a profuse growth of *Stilbocarpa polaris* and *Pleurophyllum*. The
hills rise abruptly from the sea, leaving only narrow shingle
beaches.

The island possesses no harbour, but there are a number
of broad open bays that can be used when the wind is in a
favourable direction. The best of these is probably Caroline
Cove, which is sheltered from all directions except south-west.
Unfortunately the south-westerly is the prevailing wind at
Macquarie Island, so visiting ships more frequently anchor at
the Nuggets or Lusitania Bay, both of which are on the east
coast.

The hills are blown completely bare by the wind, and the
exposed rock is deeply fissured by the weather. There are a
number of small lakes on the island, but the streams issuing
from them are badly polluted by the penguins.

Following on the discovery of Macquarie Island immediate
steps were taken to establish a sealing industry on its shores.
The first cargo of skins was brought back by the *Elizabeth and
Mary* in 1811, and she reported that the *Star* had sailed for
England, while the *Sydney Cove* and the *Unity* were both at the
island. The *Sydney Cove* returned a month later with about
100 skins and 40 casks of sperm oil. A regular trade then began,
and the *Aurora*, the *Concord* and the *Mary and Sally* sailed for
Macquarie Island.

On 4th October 1811 the *Concord* reached Sydney from the
island with tales of very bad weather. She had left Sydney on
1st June and did not reach Macquarie Island until 12th July.
Two boatloads of sealers came out to meet her, but as a gale
suddenly blew up she was forced to take the boats and crews
aboard and hastily put to sea. She was unable to regain the
island for six weeks, whereupon the boat crews were put ashore
with a supply of provisions. Two days later the *Concord* was
again blown off the island, and on this occasion Captain
Garbut decided to return to Sydney. He said that the sealing
gang was in a bad way through lack of food and other necessaries, as their supply ships had not arrived. The Mary and Sally had been sighted but she was unable to land stores and it was thought she had gone on to Campbell Island. The men said there had been much snow and the cold had been intense.

On 27th November the Mary and Sally arrived at Sydney. The Captain confirmed that the bad weather at Macquarie Island had decided him to make for Campbell Island, where he landed an oiling party. He then returned to Macquarie Island, where he landed a sealing gang with provisions, but he was again blown off and had to return to Sydney with an empty ship.

The Concord made a further voyage to Macquarie Island to obtain sea-elephant oil and seal-skins. On 24th January 1812 a boat was sent round the western coast to pick up skins, but it capsized in the surf and all six hands were lost. The vessel left for England on 10th March with 13,700 skins and 50 tons of oil.

Meanwhile the Perseverance sailed on 23rd February and returned on 7th May with 9000 skins and 66 tons of sea-elephant oil. She brought the news of the accident to the Concord's boat. The tragedy had occurred only twenty yards off-shore. Four of the men were from the Concord, and the other two were from the shore gang employed by Campbell and Co. About two months later one mutilated body was washed ashore, but the other men were not seen again.

On 22nd March 1812 Captain Siddons sailed in the Campbell Macquarie and on 10th June his vessel ran ashore on Macquarie Island. She soon went to pieces, but the crew of 12 Europeans and 30 Lascars all got ashore safely. The stores were lost, together with 2000 prime skins, 36 tons of salt and 118 tons of coal. The men were relieved on 11th October by the Perseverance, but in the meantime four of the Lascars had died. Another death also occurred in this period, the man being Thomas McGovern, who had been a seaman on the Mary and Sally. It seems that the Perseverance did not relieve all
the men, as the *Elizabeth and Mary* left Sydney on 7th November to pick up sealing gangs and the rigging of the *Campbell Macquarie*. There was evidently some difficulty in recruiting seamen for trips to Macquarie Island at this time, as shortly before the ship sailed the following advertisement appeared in the local papers:

"Mr. Joseph Underwood hereby gives notice that the schooner *Elizabeth and Mary* will sail for Macquarie Island for the relief of the gangs there stationed at the end of the present week, and that he will be responsible for the payment of any person’s debts who may proceed thereon, provided they shall be brought in to him before the vessel sails."

Following on the loss of the *Campbell Macquarie* the sealing and oiling trade flagged to a considerable extent. On 10th April 1814 the *Mary and Sally* returned with 80 tons of sea-elephant oil obtained during the period of three months at the island. The *Betsy* left Sydney on 28th December 1814 and on 13th February 1815 she landed a gang of sealers on Macquarie Island. She then left for the Auckland Islands and later proceeded to New Zealand, where she was lost, mainly due to the death of many of her crew from scurvy. Meanwhile her owners were becoming anxious about her non-return to Sydney, and on 26th March 1816 they sent the *Elizabeth and Mary* on a search expedition to Macquarie Island, Campbell Island and the Auckland Islands. She returned on 28th May with all the gang left by the *Betsy*, and also brought home a gang left by another vessel. These latter were in a pitiful state, as they had been out of supplies since October of the previous year, except for such items as the *Betsy*’s gang had been able to give them. The following statement appeared in the *Sydney Gazette* in 1815:

"Between 3 and 4 years ago Macquarie Island was discovered to abound in seals, and above 100,000 skins
35. (Top) Chapel Rock
36. (Bottom) North-West Cape and Column Rocks
37. In Base Camp at Carnley Harbour. *From left to right*—George Easton, Allan W. Eden, “Tubby” Wenham and Bob Pollard
were procured there in the season. The case, however, is now very different, as the whole number collected there by several gangs this season does not exceed 5000 or 6000. The decrease of the amphibious brood may be very naturally accounted for from the practice adhered to of killing promiscuously all the seals that offer, of which the female seal furnish the great proportion. The pups or young seal were also indiscriminately slaughtered, so that the means of increase were totally annihilated unless from the solitary few which escaped the vigilance of the hunters, and which would require to enjoy a length of undisturbed security and repose before their numbers were sufficiently recruited to afford a complete allurement to renew hostility. These causes were sufficient to counteract the prospect of benefiting from a fitting out for seal for many years to come, but it might have been looked forward to as an advantageous scene of adventure at a future period. This prospect is however totally obliterated by the ravages committed on the younger seal by the innumerable wild dogs bred from those unthinkingly left on the island by the first gangs employed upon it. The birds which were formerly numerous, and were found capable of subsisting a number of men without any other provision, have also disappeared from the same same cause. Their nests, which were mostly in inaccessible situations, have been despoiled of their young, and the older birds themselves surprised and devoured by these canine rovers, which as they multiply must every day diminish the value of one of the most productive places our sealers were ever stationed at."

During the next five years the *Elizabeth and Mary*, owned by Joseph Underwood and commanded by Captain Beveridge, was almost the only vessel engaged in the trade. The ship was also engaged in whaling.

On 31st October 1815 there was a severe earthquake at Macquarie Island. Rocks were dislodged and men thrown to
the ground. The huts were wrecked and most of the provisions spoiled, but the men had subsequently to make the best of them in their damaged state. One gang of sealers was working in a rookery at the time, and their exit was blocked by a fall of rock. Luckily a second shock removed the blockage and they were able to escape. Their route home took them alongside steep cliffs, and it was a hazardous trip with rocks still tumbling down. One man who had been left at the camp was found lying under a heap of stone. He was in great pain, but was not fatally injured. During the following night ten more shocks occurred, and the men were frantic with fear, as after each shock loosened rocks came thundering down the hillsides. There were further shocks intermittently until 5th May 1816, and it is reported that many of the sealers were afraid that the island might disappear under the sea.

About 1820 there was a slight revival of the sealing trade, consequent on some natural increase in the seals during the previous years. The trade was now based mainly on Hobart, and the Regalia and the Robert Quayle were the vessels employed. Their masters reported that sea-elephant oil would be available in almost unlimited quantities to industrious gangs.

In 1820 Admiral Bellinghausen of Russia visited Macquarie Island. He arrived there on 17th November and was met by a boatload of oil-men who were not at all pleased to find that he had not come to relieve them. Bellinghausen wished to obtain water, and stood off the oiling station overnight. Next day he landed and inspected the station. The head man lived in a hut 20 feet by 10 feet lined with sea-elephant skin and covered with grass. At one end of the hut was a fireplace where sea-elephant blubber was kept continually burning. The lamp also was fuelled with molten fat. The bed was near the fire, and provisions were stored at the other end of the hut. Since the only window had a sea-elephant bladder instead of glass the hut was very dark. The head man had been on the island for six years. He said that seals were now too scarce to attract sealing gangs,
and the only trade was in sea-elephant oil. The sea-elephant was killed, the fat stripped off, and put into kettles heated by burning fat. The melted fat was then poured into casks. There were two gangs on the island, one of seventeen men and the other of thirteen. The men were very short of provisions, and were living chiefly on sea-birds, the flippers of young sea-elephants, birds’ eggs and “Macquarie Island cabbage” (Stilbocarpa polaris). The men cooked the cabbage into a kind of soup.

In 1822 Captain Douglass of the Mariner visited Macquarie Island and described his visit in the following words:

“As to the island, it is the most wretched place of involuntary and slavish exile that can possibly be conceived; nothing could warrant any civilized creature living on such a spot, were it not the certainty of industry being handsomely rewarded. Thus far therefore, the poor sealer, who bids farewell, probably for years, to the comforts of civilized life, enjoys the expectation of earning an adequate recompense for all his weary toil. As to the men employed in the gangs, they appear to be the very refuse of the human species, so abandoned and lost to every sense of moral duty. Overseers are necessarily appointed by the merchants and captains of vessels to superintend the various gangs, but their authority is too often contemned, and hence arises the failure of many a well-projected and expensive speculation. The overseer is clothed with no other authority than that of mere command, compliance with which is quite optional to those under him. We are happy, however, to bear testimony to one fact, that the native youths of the colony still maintain their character for industry and exemplary attention to their employers’ interests. Some few of these young men are on this island, and their increasing industry, combined with their alacrity always to obey, greatly engaged our attention.”

Gangs of men remained on Macquarie Island throughout
the year to produce the sea-elephant oil. Men belonging to two or three employers were frequently living there at one time, and keenly contested battles have occasionally raged for the dominion of half a mile of coastline. The combatants with their long beards and greasy seal-skin clothing looked like demons as they sallied forth with brandished clubs. Another visitor stated that their wretched stone-walled and grass-roofed hovels were indescribably dingy and dismal, and sent forth a most disagreeable odour.

In 1823 the Caroline entered the trade and made several voyages until on the morning of 17th March 1825 an incredibly violent storm blew up without any warning, and the vessel was driven ashore. No lives were lost, but the crew were unable to save anything from the wreck. Later on some cargo was washed ashore. Captain Taylor and his crew were forced to remain on the island until 30th August when the brig Wellington arrived. The Caroline was not insured, and her owners had sent the brig Cypris to search for her, but the castaways had already been relieved when the Cypris arrived at Macquarie Island. Following this the owners of the Caroline decided to try to dispose of what had been saved of the vessel, and advertised an auction sale of the goods as they lay at the island. The goods included one long-boat, quite new, but cut in two and lengthened to a 30 feet keel. This is taken to be an indication that Captain Taylor had abandoned hope of relief and was intending to make the boat sufficiently seaworthy for a long voyage.

The auction sale realized £37 10s., the purchaser being Joseph Underwood, who soon afterwards dispatched the Wellington to pick up his property.

The rookeries of fur-seals were now becoming more plentiful and from 1826 onwards more frequent voyages were made to Macquarie Island. In 1828 the Elizabeth and Mary had a bad passage and lost her boats and bulwarks. The sealing boom soon ended though, and in 1829 only one ship visited the island. This was the Faith, and she brought back two gangs of
men who had been there for thirty months, and who reported an almost complete absence of both seals and sea-elephants. The cook on the island was so excited by the arrival of the ship that he collapsed and died.

At the end of 1834 the brig Bee tried to revive the languishing trade. She landed a gang at the island and returned in the following year to find that practically no oil or skins had been obtained.

In 1838 the whaling brig Lord Nelson was wrecked at the northern end of the island, and her crew were marooned there for two years.

This wreck was followed in 1851 by that of the Countess of Minto on the east coast north of the Nuggets. There were no casualties.

The next victim was the Eagle, which was wrecked at Eagle Bay on the west coast in the sixties. The number of survivors is indefinite, but it included one woman who died on the island. The survivors were rescued about two years later.

The last wreck of this series occurred in 1877 when the schooner Benleugh was lost. She was a vessel of 66 tons, and was driven ashore in an easterly gale.

On 22nd December 1890 the steamship Kakanui left Dunedin for Macquarie Island. Her departure was the outcome of public demand for the relief of ten men who were living on the island and who were believed to be short of provisions. This gang included seven men, two boys and a woman. They were employed by Mr. Hatch of Invercargill, and had been on the island since April. Mr. Hatch was exploiting the oil industry and was boiling down both sea-elephants and penguins.

The gang had been landed from the Awarua with six months' provisions, but at the expiry of the six months Mr. Hatch refused to send a relief ship, as he alleged that provisions had been left on the island by earlier gangs. This contention had been disputed by a member of the crew of the Awarua. Since the Tasmanian Government did not appear likely to take any
action the New Zealand Government decided to send the 
Kakanui, a small steamer of 83 tons. She was commanded by 
Captain Best and had a crew of ten men. Arriving at Macquarie 
Island on 2nd January 1891, she sailed again next day with 
eight of Mr. Hatch's gang. The remaining two, Mr. and Mrs. 
Mellish, elected to remain on the island. The Kakanui was never 
heard of again.

The New Zealand Government vessel Hinemoa left on a 
search expedition to the island. There Mr. Mellish told Captain 
Fairchild that two days after the Kakanui had left a terrible 
westerly gale swept the island. Casks of oil were blown along the 
beach and a hut was destroyed. It appeared that the storm 
was too much for the little ship. Ironically enough it was 
proved that Mr. Hatch was correct, and ample provisions 
were available at the camp. There was plenty of rice, flour and 
biscuits, and also penguin eggs. The Hinemoa then visited the 
Auckland Islands and the Snares Islands, and later made an 
intensive search of both these groups as well as Campbell 
Island.

In April 1891 the loss of the Kakanui was the subject of a 
magisterial inquiry. In the course of his evidence Mr. Hatch 
outlined the arrangements made for the relief of his gang. After 
landing them from the Awarua he had sold the vessel, and 
intended to send the Gratitude to relieve them. This ship was first 
dispatched to Sydney to have her hatchway altered, and she 
arrived back just after the Kakanui had left. He did not believe 
there could be any shortage of food. Furthermore he consid-
ered the Kakanui to be an unsuitable type of ship with too small 
a draught. He thought her deck cargo of coal was too big, and 
he would have preferred a sailing vessel himself.

He went on to say that in February he himself went to 
Macquarie Island in the Gratitude, and he found on the island 
three casks of biscuit, three-quarters of a cask of flour, and 
plenty of peas, rice and oatmeal.

Various other witnesses testified that the stores on the 
island were unfit for human consumption. The meat was so
bad that it made the men sick, and the biscuit was green with mould.

Mr. Mellish stated that many items of stores had become exhausted, including tea, sugar, coffee and meat. Also the available casks had been filled with oil, and the men were discontented through lack of work. They were short of clothing and boots, and when the Kakanui arrived they embarked immediately. Captain Best had told him that he had travelled under sail most of the way down, and Mellish noted that the ship was very deep in the water—just over the Plimsoll mark in fact. She sailed into a rough north-easterly sea. The wind dropped later and shifted to the west, when for sixteen hours it blew a living gale. He thought the Kakanui would be about one hundred to one hundred and fifty miles off the island when the storm broke.

The Kakanui had been chartered for £150. She had a carrying capacity of 65 tons in the hold and 12 tons in the bunkers. A deck cargo of 63½ tons of coal was loaded, this being her requirements for seventeen days of steaming. Her two masts carried fore and aft sails, and she had plenty of spare canvas.

The general conclusion appeared to be that the ship had probably been pooped and her fires extinguished. The vessel was known to have a tendency to ship a following sea.

The Kakanui tragedy did not discourage Mr. Hatch from continuing operations at Macquarie Island, and he usually sent the Gratitude down three times a year, in December, February and March. The boiling down of sea-elephants had been almost entirely discontinued, and his gang was concentrating on Royal penguins. These birds are quite big, and are very numerous. They leave the island in June and return in October. Their nest is built of stones, and generally three eggs are laid, although it is commonly believed that the first one is discarded. The season for fat birds lasted for only six weeks, and during that period the gang at the Nuggets was kept very busy.
The oil works at Lusitania Bay had now been abandoned, but the enormous heap of offal gave testimony to the number of penguins that had been slaughtered. Lusitania Bay is a King penguin area, this species being the largest of the penguin family to be found on the island. The King penguin does not build a nest, it just lays its single egg anywhere in the rookery, and often in water. The egg is then tucked by the feet into a fold in the lower part of the abdomen.

In 1894 the Gratitude was forced by very bad weather to leave the island before all the cargo had been loaded, and on the homeward voyage a heavy sea carried away two boats and the galley. The cook and a boy were in the galley at the time with one of the deck hands, and all three were lost.

Finally in 1898 the Gratitude met her doom. She was struck by a heavy storm while at anchor, and after weathering it successfully for three days she became badly damaged and had to be beached. She soon broke up, but her crew and cargo were saved. The crew were stranded on the island for three months before being picked up by the New Zealand Government vessel Tutanekei.

On 23rd May 1899 the Annie Hill anchored at the Nuggets, and found that one of the shore gang, Richard Hands, was sick and had been unable to work for some time. The captain decided to leave him in the comparative comfort of the shore quarters until he had finished loading the cargo. Meanwhile the rest of the shore gang came aboard and the ship proceeded to Lusitania Bay for cargo. Whilst there a storm blew up and the vessel had to put to sea. Although she regained the island four days later a further storm immediately blew her so far off the land that any thought of returning had to be abandoned. As a result the sick man was left with only the company of his dogs until such time as the Annie Hill was able to make a second trip to the island.

In 1900 William Belcher wrote from Macquarie Island to a Dunedin newspaper complaining about the infrequency of the
shipping. He alleged that the shore gang had become dependent on the Government ship *Hinemoa* for provisions. He also considered that what stores were sent by Mr. Hatch should first be examined by a Government official as to quantity and quality. Belcher, who had spent four years on the island, also mentioned that no medical supplies existed.

This letter was followed by an editorial which expressed sympathy with the plight of the oiling gang. It was pointed out, however, that action by the New Zealand Government was not possible while Macquarie Island remained under the control of Tasmania.

The publicity provoked a reply from Mr. Hatch. He explained that the shipping was regular except when unforeseen circumstances arose such as at the time of the *Kakanui* disaster. Also on one other occasion the brig *Carin* had been dismasted off the island and had been unable to land her stores. He mentioned that all the visits of the *Hinemoa* had been arranged and paid for by himself. Also he had liberated rabbits and wekas especially to provide fresh food. He had personally visited the island on several occasions and had once lived there for five months, eating and working with the men. He considered their conditions were no worse than could reasonably be expected in such a location.

Mr. Hatch appears to have dropped temporarily out of the Macquarie Island picture shortly after this, and a syndicate from Port Chalmers purchased the schooner *Enterprise* with a view to carrying on the penguin oil industry. The schooner left Port Chalmers on 30th August 1903, and reached the island on 16th September. She was blown off the land immediately and did not regain the island till the 25th, when a shore gang was landed with stores. On 5th October the vessel shifted to the south end of the island, where a new boat was lost before the wind again drove her out to sea. After regaining Lusitania Bay on the 9th a further gale prevented any contact with the shore gang and she had to put to sea once more. The ship was now very short of water, and snow had to be collected
off the deck to replenish the supply. It was decided to make for the Auckland Islands, and after a spell of nine days in this group the Enterprise returned to Macquarie Island on 13th November. Shortly afterwards she left for New Zealand.

The shore gang proceeded to repair the huts and the digesters, and in due course commenced the production of oil. By January the provisions started to run out. All the meat and vegetables were exhausted, and the men had to smoke tea-leaves as a substitute for tobacco. Charles Anderson fell sick, and to relieve the shortage of accommodation three men left to live in another camp. On 6th April Anderson died, the cause of death being given as dropsy. He was buried at Nugget Point, in a grave covered with shingle, white stones and shells. A wooden cross was erected to his memory.

In 1908 Mr. Hatch reappeared on the scene, when he dispatched the Jessie Nicol with a gang of ten men. The camps he proposed to use were at the Nuggets, where Royal penguins were boiled down, and at the north end of the island, which was the site of the sea-elephant oil works. Mr. Hatch preferred the Royal penguins, as the King penguins produced too much refuse. This refuse would be a valuable fertilizer but there was no way of using it. On this occasion the gang erected another digester, making a total of four with a capacity of 2770 birds per day. The men worked in two shifts of twelve hours each, and the digesters were always going. Only the mature birds were killed, these weighing twelve to fifteen pounds each.

The penguins were usually available in two seasons of about twenty-one days each. The men were paid according to the amount of oil produced, and therefore did not benefit from the interval between seasons. The gang that went down in the Jessie Nicol expected to earn £45 each, this being based on an estimated yield of 150 tons of oil. In actual fact the production amounted to only 56 tons, and the average cheque was only about £15. The head man used to receive 6s. 6d. per ton of oil, the engineers 6s., and the other men 5s. 6d.

A detailed account written by one of the men who went
south in the *Jessie Nicol* gives an excellent impression of the living and working conditions.

After fifteen weary days cooped up in a wretched little schooner of 90 tons, which jumped and rolled in a manner undreamed of by steamer passengers, they sighted the island, a precipitous mountain piercing a stormy sky. All those who were not too sick quickly assembled out of the evil-smelling forecastle to feast their eyes on the longed-for sight.

The forecastle was just high enough to enable an ordinary man to walk upright. It was 11 or 12 feet wide at one end, tapering to 3 feet at the other, and was about 11 feet long. In this space 12 men had to live and sleep, and when the small hatch was closed to keep out the water the atmosphere became most oppressive. The small slush lamp found great difficulty in fulfilling its mission of providing some light in this gloomy hole. There were no portholes. Four bunks were built on each side and four at the end. It was too wet to go on deck and there was nowhere else to go. The walls glistened with the water which found its way from the deck above, and there was a general air of humid discomfort.

Further aft a still smaller cabin accommodated the captain and four other men. Of the 17 souls aboard the ship 7 constituted the crew, the other 10 being passengers bound for Macquarie Island.

After sailing a few miles down the coast the skipper dropped the anchor about a mile offshore. They were on the leeward side of the island, but a tremendous surf thundering on the beach precluded any possibility of landing. A little above high-water mark they could see the remains of the *Gratitude*, and a short distance from the wreck were two small huts and a galvanized iron shed.

Seven days elapsed before landing was possible. On the fifth night the wind changed suddenly and the ship began to jerk savagely at her anchors. The skipper was loath to put to sea, as contrary winds might easily prevent him from making the land again, and he was getting short of water. On the other
hand the anchors were dragging, and there was a danger of the ship joining the *Gratitude* on the rocks. However, after an anxious couple of hours the crew was just preparing to slip the cables when the wind shifted back to a more favourable quarter. The passengers lay in their bunks listening to the wind shrieking through the rigging and wondering if they would ever see New Zealand again.

The following Sunday broke bright and clear, with only a moderate sea, and at 5 a.m. a start was made on unloading. Four of the men were put ashore, two remained aboard to help the crew, while the remaining four manned the boat. They had aboard a large digester and boiler, the digester weighing nearly five tons. The first job was to make these water-tight so that they could be floated through the surf. After an hour's work the digester was winched clear of the deck and the engineers started to plug the openings. This had just been completed when some of the steadying tackle carried away, and the digester started to swing across the ship like a gigantic pendulum. One of the men narrowly escaped being crushed, and the mast which carried the whole weight bent like a bow with every roll of the ship. Fortunately it held until another tackle was rigged, and eventually the digester was safely lowered into the water. After towing it to the beach the next job was to get it up above high-water mark. This was accomplished with a block and tackle, and after fourteen hours' continuous work the job was completed.

But this was only an introduction to Macquarie Island. Next day the men were roused at daybreak and worked continuously till after midnight. They found that the larger of the two huts was divided into two rooms. One contained eight bunks, while the other was used as a kitchen. The other hut contained three bunks and a unique stove consisting of about twenty pieces of old iron tied together with wire. Periodically this stove would fall to pieces. Both of the huts were over-run with big rats. They seemed inclined to dispute possession the first night, and the men did not relish having rats nibbling at
their feet and heads during the night. At first, too, the rats would not run away, but just moved out of reach and stood watching. The beds were made of two sacks sewn together and partly filled with chaff. These were thrown into the bunks, and the weary men would throw themselves on top, fully clothed, with a rug to cover them. Sometimes the rats would get into the bags, and when a man lay down they would start to squeal. The man would then have to open the bag and tip out the contents, which would be shoveled back after the rat had escaped.

All the coal used in the boilers was brought in barrels, which were floated ashore in rafts. These barrels weighed about five hundredweight, and immediately they touched the beach the waves would begin to bury them with sand. Unless they were moved quickly they soon became almost immovable. Four men were detailed to roll the barrels to a safe place. One man was sick, and another injured almost immediately. He was heaving at a barrel when a great wave came in and rolled all the barrels together. The unfortunate man happened to get his leg badly crushed between two of them, and he limped for four months afterwards. That left only two able-bodied men on the job. They struggled on all day, working up to the waist in icy-cold water, with only two brief intervals to have a drink of tea and to eat a ship’s biscuit. Just as it was getting too dark to see clearly they discerned the boat leaving the ship with something in tow. To their dismay it proved to be the boiler. They had already worked like demons for seventeen hours without a proper meal, and had just secured the last of the coal barrels.

However there was no option. They waded into the surf and helped to drag the boat up. The boiler had taken in a certain amount of water, which made it a good deal heavier; but the men eventually got ropes round it. One of them was nearly swept out to sea by the backwash, and the boiler itself was rapidly sinking in the sand. It was now pitch dark, and the hurricane lantern refused to stay alight. The tackle was fixed
to a rock and after a hard struggle the boiler was moved enough to get some timber under it. Once this was accomplished the job was more straightforward, and after three hours’ work they had it in a secure position.

That finished the second day. Luckily the cook had come ashore with the boat, bringing some food, so all hands made a meal of salt meat, potatoes and cold duff. After supper the men wrung out their wet clothes and hung them in front of the fire. It was nearly 3 a.m. when they got to bed, and day was just breaking. Nobody worried about rats that night.

Next day was wet, but as the sea was still moderate the rest of the coal and some provisions were rafted ashore. It was desperately important to get the casks of provisions landed, as there was always the likelihood of the ship being forced to put to sea at a moment’s notice. The men would be in a serious plight indeed if they were stranded without food supplies.

On one trip when the boat was towing thirty barrels of coal the combined effect of the wind and the current forced her to drift well to the south, where she beached a full mile and a half away from the camp. That meant a good deal to the men, as they not only had to get the coal out of the surf, but had to roll the casks along the beach to the camp. This was extremely hard work, as a man’s own weight was enough to cause his boots to sink out of sight in the loose gravel of the beach, and the job took a full day.

The sea was much rougher when the last raft came in and the surf was thundering in 20 feet high. The men had a most unenviable task in the water. There was a good chance of being carried out to sea, but a better chance of being killed by the barrels of coal, which were being tossed about like eggshells in the breakers. The boat’s crew was unable to land; in fact it was not until four days later that they got ashore.

Having got the last of the cargo ashore a start was made on sorting things out. All the casks looked alike, irrespective of whether they contained coal or food. One barrel was found to contain flour, oatmeal and rice. Sufficient sea-water had got
into it to burst the paper bags so the three commodities were well mixed. Another cask contained sugar, salt and other items which had similarly got mixed, and were also partially spoiled by the salt water. The cask containing salt meat had broken adrift from the raft and was lost, but the men still had to pay for it.

An inspection was then made of the boiling-down works, where the engineers were preparing the plant. This place was called "The Hall of Smells", and it was usual to fill one's pipe before entering. Two very ancient-looking boilers, with flakes of rust peeling off them, and one of them without a water-gauge, stood at one end of the shed. Behind them were three digesters. In another corner were three tanks for cooling the oil, but one of them was eaten through by rust. One of the boilers had been leaking so badly during the previous season that it used to put the fire out, and it was to be replaced by the one brought down by the *Jessie Nicol*.

The next ten days were spent in erecting the plant. First it was necessary to clear a track from the beach to the shed, and then the new digester was dragged up by means of a block and tackle. It was 11 feet long and 6 feet in diameter, so the roof and sides of the shed had to be removed to get it in. Timber from the wreck of the *Gratitude* was used for a foundation, and in due course both the digester and the boiler were erected.

On 9th January 1909 the first of the fat penguins came ashore. A barricade of barrels and staves was set up, leaving a small opening, behind which a man was stationed with a club. The first man to try this job nearly killed himself instead of the penguin. He swung the club, missed the penguin, and broke the club on a rock. This caused him to overbalance into the creek, where he cut his face open on a sharp stone.

After the birds had been clubbed other men would carry them up to the shed and pile them in heaps. Then one man would stand on top of the digester while another would throw the birds up to him. It took nearly 300 birds to fill the four
digesters. Since the supply of coal was limited the engineers had instructions to burn as many penguins in the boilers as possible. The birds burn well for about half a minute, but then they tend to deaden the fire, so that they could be only used with discretion. When handling penguins in such great numbers the men could hardly be expected to verify that every bird was dead before it was tossed into the digester. So long as the penguins did not peck they were judged ready for boiling. After being boiled for twelve hours the oil rises to the top of the digester, the steam is shut off, and the outlet cocks opened. The oil then runs into the cooling tanks. The bottom door of the digester is then opened, and the remains of the birds raked out. In theory the refuse is supposed to go down the stream to the sea, but actually most of it remains on the banks, where it causes a bad smell.

Work was continuous, one shift being from midnight to mid-day, and the other from mid-day to midnight. At this time of year the sun would rise at 3 a.m. and set at 11:15 p.m., so there was practically no real darkness. The poor condition of the plant made the job of the engineers a particularly hazardous one. One night the lower door of a digester blew loose with a loud report. There was forty pounds steam pressure inside, and a jet of boiling oil and steam hissed out, narrowly missing one of the men. The jet roared for two hours after the steam was shut off.

After the first penguin season was finished the gang had a few days' spell before the next season began in March. The provisions were already running low. The sugar was finished, and the mixture of flour, oatmeal and rice was nearly exhausted. The cook had been making this into some kind of bread. The potatoes were unusable, and the only thing that was in plentiful supply was ship's biscuit. There was also an ample supply of a kind of pickles that nobody would eat, and plenty of tea which nobody wanted without sugar and milk.

A number of small earthquakes were experienced, but little notice was taken of them until a very severe shock occurred
one day when the men were eating their breakfast. The shock threw most of them to the ground, and was accompanied by a loud rumbling noise.

In view of the food shortage and the non-appearance of the schooner an attempt was then made to find food on the island. The gang had been told there were plenty of rabbits, but they were unable even to see one. One of the gang managed to catch a few fish, but they were only a few inches long. Shortage of ammunition prevented them from killing sea-elephants to obtain the tongues.

On one of these foraging expeditions some of the gang travelled to the sea-elephant-oil works at the north end of the island. This plant was used mainly in the winter months, and the men were not interested in the attractions of trudging through snow laden with bags of blubber, dripping with blood which fills the boots and saturates the clothing.

Two men attempted to walk to the south end of the island, but they did not succeed. They were away for three days, and one of them nearly lost his life in a bog. Two others were lost for two days in a dense fog without provisions of any kind.

When the second penguin season started the gang was unable to produce oil, as the schooner had not returned with a fresh supply of coal. Three of the men were sick, and some of the others were discussing the possibility of reaching the Auckland Islands in the boat. They knew of the provision depots maintained there by the New Zealand Government. However, before a decision was reached the schooner was sighted. The boat was hastily launched and a supply of provisions brought ashore. It was fortunate that this could be done, as the ship was blown off the island next morning, and she did not reappear for a week. When she returned the supply of coal was rafted ashore, but the penguins were already starting to leave the island. Only 56 tons of oil had been produced. The 330 barrels of oil were towed out to the schooner, and the gang was ready to leave; 20 barrels of water were also taken aboard. The only
supply of water was the creek up which millions of penguins had walked. It was the colour of weak tea and full of feathers.

One man named McKibben decided to remain on Macquarie Island during the winter to get some oil on his own account. He was left what stores could be spared, and later he was given a further supply by the Nimrod. Another gang of oilers was also landed for Mr. Hatch.

The trip to New Zealand was a very rough one which occupied fourteen days. During the voyage the second mate died, and was buried at sea.

On arriving home the men received their pay. The price of the provisions, including those unfit for consumption, was first deducted, after which some of the men had nothing to draw, while the others got only a few shillings. The men were paid 5s. 6d. per ton for the oil, but they were not told the cost price of the provisions. Perhaps it wasn’t for nothing that they arrived home on the 1st of April.

Following upon the death at sea of the second mate of the Jessie Nicol Mr. Hatch was unable to find a new mate, and he had to arrange for the Hinemoa to call at Macquarie Island in July. All the gang returned with her, but the captain refused to wait while the 600 casks of oil were loaded. This considerably annoyed Mr. Hatch.

The gang had been very short of provisions and had lived largely on the produce of the island—the hearts and tongues of sea-elephants, wekas, penguins, and Macquarie Island cabbage. Their clothes and boots also wore out, but they made trousers out of blankets and boots out of sea-elephant hide. Even McKibben had had more than enough of the place and was glad to get back to civilization.

At this stage Mr. Hatch publicly announced his intention of basing his activities on Hobart. From time to time there had been suggestions that Macquarie Island might be handed over to New Zealand administration, mainly with a view to obtaining more effective control over seal poaching during the close season. The proposal was first made about 1897.
However, Mr. Hatch was first confronted with another problem, as on 12th December 1910 the *Jessie Nicol* was wrecked on the island. She had just landed a new gang when a violent north-easter blew up so suddenly that she was unable to get away. She was not insured, as Lloyds refused cover on a sailing vessel working in those waters. The ship *Ida M. Clark* reported the wreck and offered to take the castaways to Campbell Island. They had plenty of food, however, so they elected to stay at Macquarie Island until relieved by Mr. Hatch. The relief vessel was the *Huanui*. She was chartered by Mr. Hatch, who decided to travel to the island with her.

The gang reported that the *Jessie Nicol* had arrived in bad weather, but had landed the shore gang without mishap. When the north-easter blew up she tried to beat out to sea, but was unsuccessful and was forced to anchor close inshore. Her anchors would not hold, and she dragged until her rudder was smashed on a rock. At that stage the second mate and three seamen came ashore, but the captain, the first mate and the cook refused to leave the schooner. Later the cook tried unsuccessfully to swim ashore, and he had great difficulty in regaining the ship. Immediately afterwards a huge sea struck the *Jessie Nicol* and she capsized. Captain Holmes was seen to be struck by a water tank, and the cook was washed overboard. The mate climbed into the rigging, where he held on for about fifteen minutes before he too was washed away. The captain's body came ashore soon afterwards, and a fortnight later the mate was found. It was a month before the remains of the cook were washed ashore. The official inquiry revealed that the wreck was due solely to the hazardous nature of the landing place, and the certificate of the second mate was returned to him.

The island claimed another victim on 14th November 1911, when the schooner *Clyde* became a total wreck. All hands were saved and returned to Hobart on the *Toroa*. The *Clyde* had been purchased by Mr. Hatch to replace the *Jessie Nicol*, and the wreck occurred on her first visit to Macquarie Island.
The Toroa had arrived at the island on 12th December 1911, having been chartered to take a scientific party that was associated with the Australasian Antarctic Expedition led by Dr. Mawson. The party consisted of five men led by a meteorologist named Ainsworth. The other members included a geologist, a biologist, a radio operator and an engineer.

Mr. Hatch now arranged for his oiling station to be serviced by the Rachel Cohen, and it was also arranged that she should carry supplies for the scientific party. It had been intended that the scientists would be relieved by Mawson's ship Aurora early in 1913, and accordingly when the Rachel Cohen visited the island in January 1913 she carried only oiling station supplies. However, the Aurora failed to pick up the scientific party, and in July the Rachel Cohen was chartered to take supplies to them. Unfortunately she encountered extremely bad weather, had most of her sails carried away, and was driven to Stewart Island. At the request of the Antarctic Expedition the Tutanekei was dispatched to Macquarie Island in August. Mr. Hatch, who had been on the Rachel Cohen, travelled as a passenger on the Tutanekei.

The oiling gang numbered ten men, and upon the arrival of the ship they aired their usual grievances about the poor food supply, the non-arrival of the Rachel Cohen, and the poor financial returns. They had obtained only 41 tons of penguin oil and 6 tons of elephant oil, which would bring them an average return of about £13 10s. After deducting the value of the stores supplied to them it seemed likely that the men would finish their contract with a debit balance. Mr. Hatch was not sympathetic, as he pointed out that the poor season would mean a heavy financial loss to him.

The visitors on the Tutanekei took the opportunity to inspect the oiling stations, and they were particularly impressed by the difficulties associated with the boiling-down of sea-elephants. Although a big sea-elephant would yield three-quarters of a ton of oil, they could appreciate the labour involved in carrying the sacks of blubber to the digesters. The beaches were
strewn with sea-elephant skeletons, but there was no indication of the species being exterminated.

A hazard of the penguin oil industry was also mentioned. The platform used by the man throwing the birds into the digester became slippery, and one member of the gang had the misfortune to overbalance and fall into the steaming digester. He was rescued in a badly scalded condition.

Mr. Hatch had a wide knowledge of the island, and he took pleasure in discussing his theories with the scientific party. One of these provided an explanation for the quantities of gravel usually found in the stomachs of sea-elephants. Various reasons have been given to explain this, but Mr. Hatch averred that the real reason was that the sea-elephant swallowed the gravel to increase its weight so that it could descend to greater depths when seeking its food. He also affirmed that when the adult penguins drive their young ones into the sea for the first time they eject oil on the water to make it smoother. He said that although the oil from one bird would be insignificant it had to be realized that probably thousands of penguins would be ejecting oil simultaneously.

The Tutaneikaï brought back with her seven of the disillusioned oiling gang, but it was not until the end of 1915 that the scientific party was relieved.

Mr. Hatch had, in the meantime, shifted his refinery to Hobart, and was still using the Rachel Cohen to service the island. He had now equipped the vessel with auxiliary engines, and the station functioned without particular incident in the following years.

In a lecture to the South Australian Royal Society in 1919 Sir Douglas Mawson made a strong plea for restrictions to be imposed on the slaughter of penguins at Macquarie Island. He considered that in view of the cost of maintaining the station the actual profit must be very small, and could not justify the killing of these handsome birds. He understood that Mr. Hatch paid the Tasmanian Government only £40 a year for the lease of the island, and in fact he believed that for many years the
annual rental was only £20. Since Australia and New Zealand were really trustees of the bird and animal life of the southern islands it seemed to him that the leasing of Macquarie Island was not justifiable.

Dr. Mawson's appeal did not go unnoticed, and in 1920 Macquarie Island was declared a sanctuary.
The Islands Today

The war-time occupation of the sub-Antarctic islands demonstrated their potential value to the world’s meteorological service. They provide the only sites between New Zealand and Australia and the Antarctic Continent itself. Although it would undoubtedly be desirable to have as many weather stations as possible in the Southern Ocean, economic conditions naturally have a bearing on the matter, and it has been decided to occupy only two islands for this purpose. At Campbell Island the old coast-watching station has been developed into a permanent meteorological station under New Zealand control, while Australia maintains a similar station on Macquarie Island.

The station at Campbell Island was serviced as required by the Ramui until 1948, but in 1949 the Royal New Zealand Navy took over this duty, using Loch class frigates.

Although Campbell Island is primarily a weather station, the duties of the personnel have been expanded to include ionosphere work and Aurora observations. When weather conditions are satisfactory Campbell Island is particularly well suited for the latter work. Apparently the weather has not improved much since my visit to those latitudes, as in 1950 Campbell Island reported only 10 hours’ sunshine in 3 months.

In 1951 an attempt was made to pick up a sick man by flying-boat. A Catalina of the Royal New Zealand Air Force flew down, but although the island was seen on the radar
screen the harbour was completely blotted out by rain squalls and low cloud. The aircraft returned to New Zealand and on the following day made a second attempt. This time the weather was clearer, but the turbulence over the island made it impossible for the flying-boat to alight. In fact one member of the crew suffered two broken ribs while the aircraft was over the island, and an anchor in the bow smashed a wooden catwalk and very nearly penetrated the hull. Following this abortive effort the Navy came to the rescue, and brought the sick man home.

The mutton supply is still being maintained, and in a census carried out in 1949, 986 sheep were counted. It was estimated that the total number would be around 1500. A supply of garden soil has also been taken to the island, and careful tending enables the men to produce a precious supply of fresh vegetables. Another innovation has been the introduction of poultry, which produce quite a satisfactory supply of fresh eggs. Their food is heavily dosed with vitamin extracts to compensate for the lack of sunshine and fresh green food.

In 1952 the servicing of the station was taken over by chartered vessels, the first being the 410-ton freighter Holmburn. The Holmburn's visit was noteworthy in that on this occasion a Post Office was opened on the island, providing a radio-telephone link with the civilized world.

The Macquarie Island weather station is a post-war development, and is normally serviced by sea from Australia. It has, however, been found possible to make emergency trips to the island by aircraft. In August 1948 an amphibious Catalina successfully alighted on the sea to land an engineer required as a replacement for a man who had been drowned. The topography of Macquarie Island would not induce the violent turbulence that is experienced at Campbell Island and also at the Auckland Islands.

The Macquarie Island station is larger than that at Campbell Island, and numbers about nine men. The camp is reported to be comfortable, well heated and well provisioned.
An attempt has been made to grow vegetables at the camp, and although some plants grow well for a start, the foliage soon succumbs to the blast of salt-laden winds. At this station also the men are encouraged to take an interest in the wild life existing on the island. A census in 1949 revealed that there were 48,000 sea-elephants on its shores, while the penguins were countless.

On occasion the Macquarie Island station has been serviced from New Zealand. In 1949 the frigate *Tutira* made the round trip to Campbell Island and Macquarie Island with stores and mail. By coincidence she arrived in calm weather, so had no difficulty in landing stores except for that induced by the prolific kelp beds. Again in 1954 the 527-ton coaster *Holmlea* made a special trip from New Zealand to relieve a sick man on Macquarie Island. She also had an uneventful trip, but her four-hour stay at the island was rendered unpleasant by a heavy easterly swell and cold wet weather.

The Auckland Islands have not seen any of this post-war activity. Apparently they are surplus to requirements from a meteorological point of view, and there would be no other useful object to be achieved by maintaining a station on them. They were visited by the *Holmlea* in 1954 on her return from Macquarie Island, the cemetery at Erebus Cove was tidied up and the nameboards on the graves repainted. But apart from this they have been untouched, and are left in the undisputed possession of the wild life which is their true inheritance.
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