

method of expressing 'gun-mounting'), immediately stepped into the breach and with a mixed company of R.M. sailors, stokers and artisans set about the job of putting 6-inch gun No. 1641 on its feet.

"Work was commenced at 0700 on Thursday, 31st December, necessary stores being landed at Port Stanley and taken out by lorry to the gun-site, the working parties landing at a pier at the head of the harbour and walking about $1\frac{1}{2}$ miles to the scene of operations.

"By the end of the 2nd day the gun, mounting and baulk platforms had been moved by the R.M. close up to the emplacement, by means of rigging 'gyns' and lifting the components on to rollers and then hauling them across by manpower.

"In the meanwhile inspection of the emplacement, which was saucer-shaped with a concrete base, showed it to be 1 foot too deep, thereby masking the gun-muzzle by the surrounding bank on several important bearings. On the 3rd day, therefore, the necessary stores having been obtained, the R.M. and stokers (as if to the manner born) set to mixing and laying concrete and by evening had raised the concrete base the necessary height in a most professional manner.

"Sunday was employed by the R.M. quarrying and carting stone to fill up the saucer to the new height so as to form a level platform round the gun when mounted. At the same time another party was busy in the dockyard cutting some 16×16 baulks into suitable lengths for forming an improvised roadway from the lip of the saucer to the centre of the emplacement down which the gun and sled and various components could be dragged at the appropriate level for mounting. These were then towed to the head of the harbour by ship's boats and thence dragged up the hill to the gun-site by lorries.

"On Monday, therefore, all was ready to commence the actual mounting. The large timber baulk platforms were dragged into position on the concrete base, bottom and top plates with the long holding-down bolts put in place. The packing ring was manhandled into position and the holding-down nuts screwed up, binding the whole together. Due to

the rough measurements of the concrete base this raised the bottom baulk off the concrete base and special liquid cement 'grouting' had to be run in underneath it to hold it firm. It was at this period that we heard the first murmurs from the 'Cement Workers Union,' who objected to non-union men being employed on skilled labour.

"Next the pedestal was dragged across on a special small sled, a light 'gyn' rigged over the packing ring and the pedestal lowered into place and bolted down. The sled then went back for the 'Y' bracket, which was lowered into position, the elevating and training arms secured with some difficulty and training gear assembled.

"The cradle was a beast to get into position for mounting as it needed the light 'gyn' to lift it on to the sled and was then somewhat top-heavy for sliding down the improvised roadway; however, all was well and by the end of the day was all ready for mounting the next morning.

"First thing Tuesday the light 'gyn' was again rigged over the mounting and the cradle lifted into position and secured. The mounting was then trained on to the bearing to receive the gun and the improvised roadway moved ready for the gun. The gun on its sled was then run on to the roadway until the sled was up against the cradle, but a brain-wave on somebody's part saved an enormous amount of labour, for by cutting off the front part of the gun-sled we were able to run the gun still farther forward until the muzzle was inside the cradle without having to use the 'gyns.' A large 'gyn' was then rigged over the breech end so as to lift the gun and draw the sled clear, but in this manoeuvre success was not immediate as one of the 'gyn' feet persisted in sinking into the soft peat as soon as the weight was taken. Time was getting late and the position was left until next day.

"Wednesday dawned full of hope, as if all went well the task could be completed by evening. The obstreperous foot was lifted and well packed up with stones and once more the weight was taken, this time with success, the gun being lifted, sled run back clear and gun lowered on to rollers on the improvised roadway. A large 'hauling-in' tackle was rigged from

the muzzle to a picket bedded in the opposite bank and the gun hauled into the cradle, being controlled by swinging lifts on the breech and muzzle 'gyns.' Many heartfelt sighs were heard as this operation was completed and the breech-ring met the cradle with a good and hearty wallop. The O.A.s then finished off assembling the mounting and there was No. 1641 at last apparently firmly secured in her new home. More loose rocks were then used to fill up the saucer to the level of the mounting, the top being concreted over to bind the whole together and make a smooth surface for working the gun.

"*Ajax* was supposed to test the gun by firing, but due to a slight oversight about the requisite ammunition this was not possible and we wish *Exeter* all the best in such affairs in 1937-8.

"The work had been strenuous and the weather not always pleasant, in fact the Falkland Island wind and rain is of the most piercing and cold variety imaginable, but it was a healthy occupation and a welcome change from normal ship's routine. Everybody's thanks went out to 'cookie' for his excellent hot meals and who also helped to enliven the proceedings by setting the hut on fire.

"Though moving heavy weights (gun 7 tons) with improvised gear, accidents were notable for their absence and much mirth was caused by Marine Higgs, at the top of the big 'gyn' when the feet started to slip outwards, who endeavoured to maintain his position in space by climbing upwards on nothing and failing miserably in the attempt as the expression on his face only too well portrayed.

"No. 1641 now has a small engraved plate on it bearing the following inscription:

MOUNTED BY H.M.S. *AJAX* JANUARY 1937. R.I.P.

Which same it probably will until *Exeter* disturbs its rest by endeavouring to fire it, when they just don't know what will happen and we haven't told them.

"As a matter of interest the whole operation took 8 days, whilst the actual mounting only took 23 hours, which, considering the primitive gear at our disposal, transport diffi-

culties, etc., was no so bad. In conclusion the whole party would like to express their thanks for the whole-hearted co-operation of the local authorities which made our task so much easier and comfortable."

While on the subject of defence of the islands, it is of interest to note that living in Port Stanley to-day is a lady who was instrumental in warning the British Squadron of the approach of enemy forces in December 1914. This was a Mrs. Creamer, or Mrs. Felton as she was in those days, and it appears that while at a farm at Port Fitzroy she sent out some of her servants to look to sea for the expected German Squadron. They arrived back breathless with news that there were three colliers close inshore. Mrs. Felton immediately phoned Port Stanley of this fact—a simple evolution which had momentous consequences.

Thus on 8th December 1914 began one of the most memorable battles of the war, when Admiral Sturdee defeated Graf Von Spee. This day (Battle Day) is now celebrated yearly as a Public Holiday.

There is a theory to-day that instead of man being descended from the animals, animals have degenerated from men and that they are in many cases caricatures of men. Even in the ship you can draw conclusions—take the sea elephant, for instance, whom is he imitating?

If other animals resemble various types of human being, the penguin might be said to be "taking off" mankind. In the way they stand, with their arms akimbo looking coy, and in their foolish waddle, penguins invariably get applause. They are natural comedians—playing for most of their lives to a natural audience, and indeed at Rabbit Cove, where many of us spent an afternoon, they seemed very worried by our approach on a visit of "courtesy and friendship."

The Penguin Colony lives about 200 yards from the sea and entirely in the open. We visited them in the nesting season, and while there were many unhatched eggs there were a greater number of fluffy balls of new-born penguins jealously guarded by their parents.

We were assured that the removal of a couple of males would make no difference to the colony (another point of resemblance to our human society), and so the ship became the richer for two penguins. For several days "X" Gun Deck was the home of "Lousie" and "Joint," nicknamed after the expression commonly used by one of the officers to describe most places and incidents of our cruise and who had a gait not unlike that of a penguin.

The cost of providing ten pounds of fish per day was not accepted as a joke by the Commander, and it was with but little sorrow that we learnt that "Lousie" had disappeared as we approached South Georgia in a gale and "Joint" was accordingly given his freedom on arrival; overcome with shock when the Governor's salute was fired, a cold bath was prescribed as a remedy, and he was hurled into the sea, where he soon recovered his composure and made off.

It is customary for one of the cruisers of the South American Station to give a children's party somewhere about Christmas-time. In Malta, many months previously, we had bought some £25 worth of toys, etc., in anticipation of this yearly event so much appreciated by the children of the Falklands.

Wednesday, 6th January, was the day chosen and the preparation made by the ship's company left no doubt as to their determination to give the kiddies a good afternoon's fun and enjoyment. Roundabouts, see-saws, swings and aunt-sally, electrical side-shows and many other amusements were produced, but the prime attractions were the shute erected from the bridge wings to the H.A. Gun Deck, and the Pirate's Cave in the Blacksmith's shop. Tea was served on several of the mess-decks and both recreation spaces, and as two hundred tired but happy children went over the side each received a present.

On Friday, 8th January, shortly before leaving for South Georgia with the Governor of the Falkland Islands on board, our seaplane failed to return to the ship at the time expected. On taking off it had been discovered that the radio did not work, but pilots don't care and it had been decided to carry on with the exercise anyway.

Away went the plane into the grey and we heard and saw no more of it for several hours. It was due back before 11 a.m. and at lunch-time there was still no trace of it. By 1.30 everyone was getting great credit for doing their jobs just a bit quicker than usual (such as boiling up the boilers), the Governor was embarking in record speed and there was still no news of our errant aviators.

Suddenly a dramatic message was received over the telephone by the radio station ashore—to say that the machine had made a forced landing in Berkeley Sound, and shortly after 1.40 Lieutenant Dalyell-Stead appeared on board, having walked for four hours in his flying kit.

We put to sea with weather conditions getting steadily worse. Drizzle turned into driving rain, grey skies darkened—and at about 1.50 we sighted the float-plane, a silver speck against the forbidding coastline, and guarded by a hungry and bedraggled Telegraphist Chandler who had nevertheless maintained his high spirits and seemed little the worse for wear. The machine was recovered without mishap—great credit being due to almost everyone—and the ship set off for South Georgia.

CHAPTER XXIII
ANTARCTIC ADVENTURES

SOUTH GEORGIA

FEW people know the location of this island containing 1,000 square miles. A large school of thought places it somewhere near the Bahamas, South of Georgia, full of black men and under the American flag. This is an error. South Georgia is a British Dependency, peopled mainly by Norwegians, about 790 miles south-east of the Falkland Islands. In fact, looking at a map of South America as a Navigator would, you might say that South Georgia is to the right and way down at the bottom of the sheet. If you were a layman, of course, you would immediately know that this Dependency lies in Latitude $54\frac{1}{2}$ South and in Longitudes 36-38 West.

At Grytviken snow falls on an average 124 days per annum, and this village or cluster of houses, like Reykjavik in Iceland, suggests very vividly that it is the last place on earth. The houses look so tiny against the snow-covered mountains, the twilight seems abnormally long and man becomes a mere atom in such immensities of snow.

In the little bay at Grytviken was a blue iceberg—almost the only touch of colour which the eye could pick out. I have never before seen such a rare and transparent blue—as though the sun were gleaming through sapphires—yet by the end of our stay it had melted into nothing. As there is no way of preserving iceberg blue, just as there is no way of canning a sunset, it is likely to remain one of the few rewards given to those whose fate it is to live in these regions.

We visited South Georgia at the height of summer, when



GRYTVIKEN

days were long and an occasional glimpse of the sun is seen—but the rigors of an Antarctic winter can be easily imagined. The handful of officials, whose only occupation is to keep the British flag strung up with red tape, are often unable to leave their houses for days. Their diet consists of canned food and whale meat and there is nothing—nothing whatever to do.

In the summer, however, they can play tennis. Yes, tennis at the end of the world! And this was perhaps the strangest sight of all, to find a concrete tennis court in good condition while high up above towered a mountain whose summit was so lofty that it was never seen for the clouds.

Across the bay lies the oldest whaling factory in South Georgia. It is a black spludge against the white snow. Tall blackened chimneys and the clatter of workshops, a couple of whalers waiting to put out to sea and the unforgettable stench of whale coming to the boil make up the picture. Such is Grytviken.

The Whale is such a useful fish
To turn into a tasty dish,
The skillful menu-writer, though,
Always describes it "filet de veau."

Indeed whale meat, once separated from the smell, is good tender eating and later on deceived more than one wardroom guest. Most of us, however, who had turned out at 6.30 in Grytviken to see a whale disposed of, found more sustenance in good corned beef . . . until we visited the Frigorífico at Buenos Aires and saw corned beef being made, after which there was a tendency to vegetarianism. Indeed, those with delicate stomachs are advised never to inquire too deeply into the origin of their food.

In South Georgia the best day's sport was a reindeer shoot arranged for the Governor. For this purpose the British Whaling Station in Leith Harbour (about 20 miles away) lent us a "catcher" and the Norwegian Manager, Mr. Hansen, himself conducted proceedings. It was a day of real holiday and the bag was four reindeer—though the Governor accounted for none of these, having the bad luck never to sight

a deer closer than half a mile away. Indeed, those whose task, on the face of it, was the most thankless, got the best day's sport. I refer to the beaters.

Two or three hundred head of deer were seen during the day and the herd was successfully stampeded down the valley into the guns of the main party but nevertheless escaped to one side. Some of us who stalked them found ourselves attacked by huge skua birds, which flew at us and would have pecked at our eyes had we remained still. Two of these birds also attacked those who were dragging back the reindeer carcasses and were extraordinarily persistent. Had there been more than two, there might have been casualties. Here, indeed, was nature in the raw.

Visits were also paid to the famous Nordenskald Glacier, which looked like a troubled sea of ice, and had a breadth of about 2 miles. Risking a cold-storage doom, we clambered about it and felt the eeriness of standing on ice and hearing running water far beneath us—realizing all the time that the imperceptible but relentless movement of this ice river might cause a crack to open at our feet and precipitate us headlong into the depths of the glacier.

This expanse of snow awes you with its immensity, makes you realize what an almost supernatural feat was accomplished by Shackleton when, having landed on the wrong side of the island, he crossed South Georgia and succeeded in reaching Leith Harbour. This journey has never been made before or since.

South Georgia was also to see Shackleton's death. In 1922, on his way to the South Pole, he died suddenly in the *Quest*, and now lies buried in a simple little cemetery next to Norwegian flensers and under the dominance of those snow-capped mountains that he loved so much.

On landing the Governor made it one of his first duties to place a wreath on the grave.

And so, after a few days at the end of the world, we left Grytviken and with mixed thoughts and feelings turned our attention to Buenos Aires, having learnt that the loneliness of this, England's southernmost possession in permanent occu-

pation, must be seen to be appreciated. Steamers call regularly—twice a year, this service being augmented spasmodically during the whaling season by the Company's ships from Norway, England and Argentina. During the season a cinema (silent) is run at the whaling company's station and wireless is at a discount as the high surrounding mountains render reception difficult.

There can be little doubt that our visit was a very welcome diversion to the local residents. We had brought their Governor to see them and we were the first British warship to visit the island since H.M.S. *Despatch* in 1928.

WHALING IN SOUTH GEORGIA

South Georgia has the distinction of being the most important whaling centre in the South, and it is quite impossible to visit it without taking an interest in the industry which is carried on there. Although thousands of pounds' worth of whale oil are produced in South Georgia every year, it is perhaps an exaggeration to say that the industry is carried on in South Georgia, since its most important feature—the catching of the whales—must, of course, be done on the high seas. The whales are hunted in "catchers"—small steamboats about twice the size of a North Sea drifter. Not more than 130 feet long and having a nett tonnage of about 250, these boats are fitted with 1,500-horse-power engines which give them a maximum speed of about 15 knots. A catcher costs £2,500 or more to build and after three years' service is considered rather old. Each shore factory has its own boats, and under the international system which now controls Antarctic whaling, each of the factories operating in South Georgia is allowed to employ six catchers.

The captain of the catcher, who is also the gunner, usually has a crew which includes a mate, four deck-hands, a chief engineer, three or four stokers and a cook—about a dozen all told. One of the crew must be qualified to operate the wireless with which the catcher is invariably fitted. The

boats only operate during the summer months—i.e. from November to April—but during that time the work on board is continuous as well as strenuous. The catcher usually sails about 1 a.m., so that by daylight she is some distance from the island. Then she remains at sea for one, two or three days, depending on her success in finding the whales, returning as a rule late at night. A couple of hours in which to re-fuel and away she goes again after further quarry. Both captain and crew, in addition to their wages, receive a bonus on every whale caught, and everyone is consequently keen to be off to sea again. Although small and liable to be tossed about badly, the catchers are very seaworthy and only in the most severe weather are they to be found in the shelter of the harbour.

It is entirely a matter for the captain to decide as to what course the catcher should steer on putting to sea. Sometimes the whales are relatively close inshore, whilst at other times they are only to be found after a trip of over a hundred miles. No systematic movement of whales appears to occur (except when they go North in the winter to breed), and it is impossible to predict at any time where they are most likely to be plentiful. Sooner or later, however, a "blow" is sighted as a whale comes to the surface for air, and then the hunt begins in earnest.

The captain manoeuvres his catcher to follow the whale, being guided by the blow, which he sees perhaps every minute, and by degrees the distance between whale and catcher is reduced until the whale's huge bulk can be seen below the surface of the water. The captain now steps down from the bridge to take up his position by the harpoon gun, which is carried on the raised fo'c'sle in a swivel mounting. From there he directs the helmsman and with remarkable skill brings the catcher to within thirty yards of the whale. The whale has probably quite as much speed as the catcher and could almost certainly out-distance the latter if it came to a straight race with a frightened or angered whale. The catcher therefore has to be handled carefully and a good deal of experience is necessary before the captain is able to anticipate when the

whale is going to turn and what direction he is likely to take.

The whale has no gills like the ordinary fishes and has to come up to the surface periodically to inhale air through his nose. It is then that the well-known blow appears. As the whale dives after inhalation his back arches up and breaks surface, and it is at that instant that the gunner fires the harpoon, aiming to hit the whale in the region of the heart, which is "amidships." The gunners, almost without exception, are Norwegians, who are very skilled at the job. The shot never misses a whale and only rarely does it strike in the wrong place.

The harpoon is a murderous-looking weapon, four or five feet long, made of steel, with an explosive head and with four heavy barbs which open out when a strain comes on the harpoon line, thus preventing the harpoon from pulling out of the whale's flesh. The weight of the harpoon complete is 180 pounds. The shock of firing touches off a time-fuse in the head and it explodes four or five seconds after leaving the gun, killing the whale outright, provided that the shot has been a good one and hit in a vital spot. The base of the harpoon is attached to fifty fathoms of $4\frac{1}{2}$ -inch hemp of super quality, the strongest obtainable. Five hundred fathoms of 7-inch hemp are stowed under the fo'c'sle, being brought up, passed with three or four turns over the grooved drums of a heavy fo'c'sle winch, through a leading block at the foot of the mast, over a block suspended on heavy shock-absorbing springs high up the foremast, and through a second block at the foot of the mast. It is then spliced to the free end of the smaller hemp which is coiled down beside the gun.

When hit, the whale sounds—i.e. dives to an enormous depth—and three or four hundred fathoms of line may be paid out before the whale is finally checked by the heavy drag of the winch brakes. Even when hauling in is begun the whale may still be very much alive, and coming back to the surface it will begin to tow the catcher, sometimes at quite a high speed. A whale has been known to tow a catcher against the resistance of the boat's engines going full astern. In such a case it will

probably be necessary to haul in the line until the whale is near enough to be killed by a second harpoon. The whale, when dead, is hauled up close under the bows and pierced with a hollow spear connected to an air-compressor, through which the carcass is blown up to ensure that it will float. Formerly a number of carcasses were lost through their sinking. Meanwhile, the greater portion of the tail is cut off and notches are cut into the stump of tail to show which of the catchers has made the kill. This in itself is a rather hazardous job, as the final struggle of a dying whale can produce a flick of the tail which might seriously injure a man. The whales are usually towed alongside the catcher by a line secured to the tail, but quite often the first two or three whales are left with a flag-buoy attached whilst the boat goes off after another catch. The carcasses are then collected up as the catcher returns to harbour.

It has already been mentioned that the crews are paid a bonus on the results of their work. The captain of a catcher, being also the gunner, is by far the most important man on board, and his total earnings rarely fall below £1,000 for the season. Food is provided, so his expenses are slight and he may well be considered to have a lucrative calling. In the war years, when oils were at a premium, the gunners received incredibly high pay, several of them earning over £5,000 in a season of four months.

The comparatively recent introduction of efficient factory ships in which the whale can be reduced to oil, etc., immediately after being caught, has resulted in an increase of pelagic whaling. The factory ship needs no near-by base from which to operate, and she is thus able to eliminate the time and trouble of taking her catch back to the station as well as avoiding payment of the taxes which are levied on the export of whale oil from the shore stations. But no factory ships are operated from South Georgia and all the whales taken by the local catchers are dealt with in the shore factories.

Whaling was first established in the island in 1911, the first factory to be opened being the one at Grytviken. This place therefore became the administrative headquarters of South

Georgia and continues to be such. There is only a small number of resident officials, the most important of whom are the Magistrate and the Chief Customs Officer. Other factories were opened within a short time at Husvick, Stromness, Leith Harbour, and Prince Olaf Harbour, but only two are working this season (1936-7)—the Grytviken factory, operated by "Compañía Argentina de Pesca," and Leith Harbour, run by Salvesen & Co., a British firm. It is hoped that the remaining factories may be opened again in the future and a small maintenance staff is kept in each one to prevent the buildings and equipment from going completely to rack and ruin.

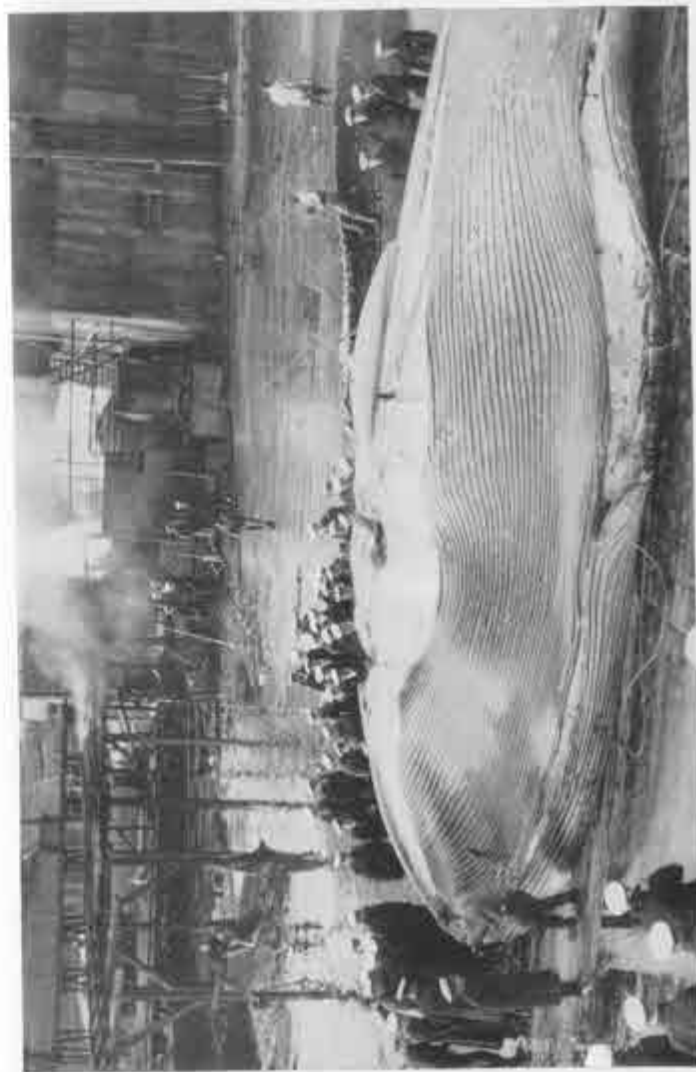
There are several types of whale, but the whales taken by the catchers may be classified into two main groups: (a) the "baleen" or whalebone whales, including the blue whale, fin whale and humpback; (b) the sperm whale. Sperm whales require separate treatment in the factories, but since they are less common than the baleen whales we will consider the latter first.

The whale is hauled up from the water, by a wire rope attached to what remains of the tail, on to the "flensing board," a wooden floor, in the open air, about forty yards square, which slopes gently down to the water's edge. Whilst in use the board is continually washed down with running water. The flensing board is surrounded on three sides by buildings which house the digesters in which oil is extracted from the whale, and close to these buildings are a number of winches—worked either by steam or by electricity—the use of which will be noted in a moment. On this floor are the flensers—say eight or ten men—each armed with a flensing knife. The blade, about a foot long, is in the form of a quadrant with a razor edge on the outside. One end is fixed in a stout wooden handle two or three feet long. As the whale is hauled up on to the board, lying on its side, a flenser stands at either side of it near the water's edge and cuts through the blubber along the whole length of the whale. The length, by the way, may be fifty, sixty, or even up to ninety feet, and the weight of a whale in tons is roughly equal to its length in feet.

The whole of the whale now lies on the flensing board with the blubber (i.e. an outer layer of fat about eight inches thick) slit down the back and along the belly. A wire rope from one of the winches is attached to the blubber on the whale's head and the blubber is then ripped in a single piece off the upper side of the whale. A wire from another winch now turns the whale over and the blubber is ripped from its other side. The blubber is then sliced into smaller pieces and fed into a machine which cuts it up into shreds, in which form it is put into the digesters. The flesh, which has also been torn off the whale in huge longitudinal strips, is cut up and thrown into another set of digesters, whilst the bones, including the huge jaws, are hauled away up a sloping platform to be put into a third set. Yet another lot of digesters deal with the entrails, etc. A whale, of course, is a warm-blooded mammal and gallons of blood flow down the flensing board into the sea—so much, in fact, that a great patch of sea is literally crimson with blood. One would barely imagine that the sea could be so red. All the while hosts of sea-birds hover noisily over the factory and swoop daringly to peck at the flesh and the offal.

The smell is terrific!

As the whale is being cut up and disposed of, a process which takes fifteen minutes or so, the interior of the huge mouth is exposed and this, in the baleen whale, is the most interesting feature of its anatomy. Neither jaw has teeth but around the upper jaw is a fringe of baleen. This baleen—the whalebone of commerce—consists of thin black plates, roughly triangular in shape, which grow from the palate, the inner and lower edges of the plates being split into a sort of fringe which is used in the manufacture of whalebone hair-brushes. There are scores, probably hundreds, of these plates in the mouth, and they act as a strainer when the whale is feeding. Baleen whales live on a very tiny fish rather like a small shrimp. The whale closes its mouth over perhaps a ton of water that is teeming with this food. It then raises the tongue and so expels the water between the baleen plates but



WHALE FACTORY

the tiny fish are retained and swallowed. The throat of a baleen whale is remarkably narrow. It is, in fact, barely the size of a man's arm. Before the jaw-bones are disposed of the baleen is cut out and, after cleaning and drying, it is cut into strips and shipped as whalebone.

To return to the digesters—these consist of vertical steel cylinders in which the blubber, flesh, etc., is treated with steam under a pressure of sixty pounds per square inch so as to extract the oil. The blubber, of course, yields most oil and the bones least, but after the oil has been extracted the remaining solids, or "guano," are still of use. The oil is freed from water in separators not unlike the cream separators used in a dairy and is then put into barrels to await shipment. The guano still contains some 15 per cent of whale oil, but this is extracted with petrol and the guano is then bagged to be sold as artificial manure or as meat meal, a common constituent of dog biscuit and of cattle foods. Most of the whale oil goes to make margarine and soaps, but during the war it was used as a raw material in the manufacture of explosives. Incidentally, the "choice cuts" of the whale's flesh are occasionally put aside for eating. Whale steak is usually cooked with onions and is indistinguishable in taste from the best veal.

For purposes of comparison the blue whale may be taken as the standard. Its yield is roughly equivalent to that of two fin whales or of four humpbacks and amounts on the average to 90 barrels (15 tons) of whale oil and 90 bags (9 tons) of guano per whale. With the price of whale oil at £20 per ton and that of guano at £8 per ton, the average value of a standard whale is thus about £375. The season's catch in South Georgia is of the order of three to four thousand whales of all kinds, having a total value of about half a million sterling. The taxes levied on the industry by the Government amount to about 2 per cent of this figure.

The sperm whale differs from the baleen whales in that it has teeth and has ribs. The treatment of this whale is much the same, but sperm oil has very different properties from other whale oil and it has to be kept separate. It was formerly very

much more valuable than ordinary whale oil, but is not so at present. The sperm whale, having teeth in lieu of baleen, yields no whalebone, and the teeth, which, curiously, are only to be found in the lower jaw, are of no commercial value although prized as souvenirs by visitors to the whaling stations. In the stomach of the sperm whale a hard concretion is occasionally found which consists of ambergris—a substance used in perfumery.

Quite half the employees in South Georgia are Norwegian. The rest include British, Argentines and others. Their work during the season is hard and the climate in which they live is rather severe, but how many of us would not be willing to sacrifice a little in the way of comfort in return for an occupation in which we could earn a good year's salary in a season of five or six months?

DRAMA IN THE FAR SOUTH

Four minutes before midnight on the 16th of January 1937 *Ajax* became a focal point for world interest. A million invisible searchlights played on us from the great cities of the world. A thousand weary editors memorized the name *Ajax* as they reached for their midnight phones. The "eyes and ears of the world"—all those whose business it is to "present the world to the world"—waited expectantly by cable and radio and stood by to flush a waterfall of words over front pages and microphones, over kingdoms, republics and continents.

And what was it that evening papers in San Francisco, late editions of daily papers in London and noon editions in Cape Town so eagerly expected? And on what were lynx-eyed men in New York, men with calculating eyes at the British Admiralty and slit-eyed men in Tokio concentrating? What made them scribble *Ajax* on their notebooks between Franco and Mussolini and sandwich *Discovery* between Hitler and Eden.

As Floyd Gibbons would have cabled—the attention of the entire world was focused on a dark warship, rolling in the

swell with icy waves lapping up against her almost motionless hull; the intelligence of the globe watched a cruiser, her speed reduced during darkness to avoid icebergs and navigating slowly from South Georgia to the Falkland Islands with His Excellency the Governor on board. This cruiser suddenly slewed round to port and her new course was approximately south-west instead of north-west. Why? At dawn the next day speed was increased to 27 knots. Down went the hull as we began to foam through the water and up went our eyebrows. Why? The story was as follows:

Ten days previously the Royal Research Ship *Discovery II* had landed a party of men on the north shores of Esther Harbour on King George Island, the most northerly of the South Shetland group. This party had provisions for a week, a tent, a motor-boat and a pram. They were to survey the coast and *Discovery* was to call back in a week and pick them up. At the end of seven days, *Discovery* was prevented by fog and fierce gales from approaching the shore. She was delayed another two days before weather conditions moderated sufficiently to enable her to send in a boat to the base camp. It was then that *Discovery* flashed into the news—for the tent was found deserted, most of the food was still untouched and the last entry in the log has been made a week ago.

Gales swept down again and *Discovery* was forced out to sea, meanwhile telling the world of her plight and asking the Governor of the Falkland Islands for whatever assistance he could render. At 2356 on 16th January the Commander-in-Chief, America and West Indies Station—at that time somewhere up in Brazil—sent us the following signal:

"IMPORTANT. PROCEED TO *DISCOVERY* WITH DESPATCH SUBJECT TO SAFE NAVIGATION AND RENDER WHAT ASSISTANCE YOU CAN IN FINDING SURVEY PARTY. REPORT PROGRESS."

All next day till dark we tore south at 27 knots—slackening only when visibility dropped to such an extent that some of us

remembered the *Titanic's* fate and wondered whether the *Tropical Flyer's* trip down to the South Pole might not end in disaster.

Morning of the 18th grew greyly up to nine o'clock. We were very far south. Icebergs dappled a hard grey sea. We rolled despairingly—watched over by Arctic terns and albatrosses. Yet the gale had gone. Far away ahead the South Shetlands could be seen—and speed was soon dropped. 27 knots over uncharted seas was courting catastrophe. The *Discovery* was sighted—a speck of grey against the greater grey of the mainland—and soon we had anchored close to her.

The sea was too rough to hoist out the motor-boat and the port sea-boat was therefore lowered and sent over for the Captain of *Discovery*, whose own boats might be seen making for the shore. The Captain of the *Discovery*, as befits a man who deals with the Antarctic, was laconic and wasted no time. We delivered him back to his ship and then pushed off along to the right, closing Ridley Island and sending in a cutter to search.

Meanwhile we had opportunity of observing the curious weather which never for two minutes stayed the same. At times a watery horizontal sun would be felt and this emphasized the peculiarity of the Antarctic scene, for all light comes from the side, the sun never rising more than a few degrees above the horizon. Then, as you were pondering this point, you would suddenly feel a cold damp wind against the cheek and mist swirled down on you like a smoke-screen.

Attention moved elsewhere. While our very nautical Sub. was busy surveying rows of black and white stones and discovering them a little later to be penguins, the sailing schooner *Penola* approached us. This antique and penniless boat is manned by a handful of Naval Officers and University Undergraduates and knew nothing of the *Discovery's* plight as their radio had broken down. Giving a demonstration of how it is possible to handle even an old boot of a boat with consummate art, Lieutenant Ryder, the Captain, manoeuvred the *Penola* alongside the ship and inquired whether we needed assistance. This seemed so ironical to the

Governor that he laughed, but to most of us it seemed rather a courteous gesture. A little farther along the ship he received a letter. Considering the swell running at the time, this was no small feat, seeing that *Penola* carried away none of our paintwork.

After a fruitless search the cutter returned to the ship and we went round to the other side of the island. Here we spent a vile afternoon slowly sweeping from the sea, and rolling through alternate rain and snow squalls.

Suddenly at 7 o'clock the whole ship twitched with a most dramatic message. It ran as follows :

“RUSH ON!! CAPTAIN SAYS HE CAN SEE 6 MEN ON THE ICE AND WANTS YOU TO STAND BY MEN. OUR POSITION ALMOST THE SAME AS THIS MORNING'S ANCHORAGE. WILL YOU GET REPLY NOW? CAPTAIN SAYS NOT SURE—THINKS IT IS THEM ”

—followed five minutes later by :

“CAPTAIN SAYS CERTAIN OF THEM NOW AND EXPECTS MEDICAL ASSISTANCE URGENT.”

Round we went, speed jumped to 20 knots and at about 8.20 in an evening that was surprisingly and beautifully calm we anchored close to *Discovery*, just where we had been in the morning. The Surgeon-Commander and Sick Berth Petty Officer Saunders boarded the cutter and were pulled across to *Discovery*. Attention then concentrated on the rescue party, which was sailing and pulling off with presumably a boat-load of corpses.

On arrival back in the *Discovery* medical assistance was found to be surprisingly unnecessary. Indeed half the missing party had pulled off in the “pram” and once on board the other half immediately rushed across the ship and took photographs of *Ajax* against a setting sun. This lack of damages shows to what conditions the human body can become accustomed. Apparently their story was as follows :

Very soon after being landed, the party (consisting of Lieutenant Walker, Doctors Strong and Ommanney, Engineer Gourlay, Boatswain's Mate Mathieson and A.B. Dobson) had set out in their motor-boat, presumably to visit points from which bearings could be taken. The motor-boat broke down and the party spent three days or so in the useless boat attempting to repair the engine. (Such a bald statement conveys little of the hardships they must have undergone—a temperature little above freezing-point, a heavy swell if nothing worse, little shelter for eating and sleeping, no opportunity to stretch the limbs and probably the stench of the engine to upturn stomachs already weary from lack of food.) Eventually abandoning the engine, the boat was anchored off-shore and the party landed in the pram, only to have the motor-boat sunk shortly after by a gale. Food ran short and they were forced to subsist for days on the flesh of seals and penguins which they killed with ordinary penknives and had to eat raw. Their chief complaint was, however, lack of sleep, as the cold prevented sleep in the open and each man took turns of an hour and a half during the short summer nights under the upturned pram. Where exactly the party was driven ashore is not known, but it must have been a considerable way from the base for them to have occupied at least five days in making their way back, probably hindered by squalls and blinding snow. The pram must have been used as a sledge, the towing of which would call for dogged endurance. It can only be assumed that Antarctic surveyors are of special construction.

From short conversation with the survivors the Surgeon-Commander gathered that their most inspiring moment had been early that morning when, through a temporary rift in the fog, they had seen *Ajax* rushing up at high speed with all hands at rescue stations. . . .

Thus ended our Antarctic adventure. Jubilantly we signalled to the Commander-in-Chief the successful result of the search. Congratulations, however, were confined to a terse order to proceed forthwith to the Falkland Islands at 20 knots. Having been warmly thanked by the Captain of



THE LOST PARTY RETURNING

the *Discovery*, who had mingled rejoicings with a naïve request for 20 gallons of petrol, we turned our backs on the Antarctic and at 10 p.m. set our course north for the Falklands, for Buenos Aires and for the Equator.