

magnetic hut, less than 200 yards distant. It was necessary for them to crawl on their hands and knees. These figures eclipse the records of any other part of the world, and have earned for Adelie Land the title of "The hell hole of the wind." Mind, these relate to the wind at the actual base. On the plateau above the wind is always greater. The keynote of scientific results is undoubtedly the velocity of the wind, though much other striking scientific work was achieved. Add to the terrible wind a temperature which descended to minus 29 deg. Fahr., and it will be realised that the expedition from sunny Australia endured a full measure of hardship. Yet some people had characterised it as a glorified picnic. Of the Mawson party more will be said later.

#### A Perilous Journey.

The party, consisting of Bage, Webb, and Hurley, returned three days before the Aurora arrived, and had as an objective to reach the magnetic pole from the north so as to complete the observations taken by Dr. Mawson during the Shackleton expedition. They actually arrived within 50 miles of the pole before an insufficiency of food compelled them to retreat. Bage merely gave a cryptic idea of the trials from the severe weather and the hunger pangs endured. Hurley let drop, however, a few words about missing the depots, and tightenings of the waist-belts, which furnished an idea of the tribulations they experienced. It was subsequently learned that but for Hurley's resolute action in abandoning the search for the lost depot and proceeding foodless to the next, the whole party would have met with disaster. Madigan, Dr. Maclean, and Correll were detailed to survey eastward from the main base, and traversed 50 miles and made some interesting geographical discoveries. Most of the return journey was made on sea. Ice was reported for 300 miles eastward. There was no possible place for a ship to land a party, as the icecliffs were unscalable. The food supplies were augmented by seals and penguins. Most of the country traversed was terribly crevassed. Once the party failed to locate the depot and spent two days foodless in their sleeping bags, till the weather moderated, but otherwise suffered little, except in regard to cracked lips. The leader, Madigan, highly praised young Correll, whose face was tanned by the wind and exposure, so that he presented the appearance of an Eskimo. Another sledging team, comprising Stillwell, Hodgeman, and Close, made traverses for seventeen miles of the coast line and provided a detailed coast map. After the serious accident at Adelaide to the aeroplane built by Vickers, Maxim, & Co., it was decided to have a motor sledge, and the work accomplished by it in the spring indicated that it was admirably adapted for a smooth surface, but unsuitable for the conditions at the main base.

#### 300 Miles on Foot.

A party, consisting of Bickerton, Dr. Whether, and Hodgeman, were instructed to proceed southward with a motor as far as possible, and return along the west coast. The motor, towing two ordinary sledges, flew up 17 deg. of slope at the rear of the camp at the rate of nearly 40 miles an hour. The engine was incapacitated 13 miles out, and the party continued the journey on foot. They covered over 300 miles, and returned on January 18. Subsequently the party retrieved the motor, which slid from Five Mile Camp at a great pace. The total sledging at the main base, excluding Dr. Mawson's party, was 2,100 miles, mostly in unprecedentedly bad conditions. Have you experienced a typhoon at Hongkong, a tornado on the Queensland coast, and a two-gun gale off the Horn? When you have hatched those three together and transported them to the refrigerator, where they would be frozen stiff and solid, then set them going simultaneously, then, and only then, can you imagine a week-long storm which the Aurora now experienced in Commonwealth Bay. The thermometer was down to 19 deg. Fahr. The waves rose high, their edges blown into spume, covering the whole vista with a curtain of translucent white, which gave place only to sea smoke—that mysterious brown vapor which only ap-

pears when the wind's velocity has exceeded 60 miles an hour, and which almost obscured the white-capped Mackellar Islands protecting the mouth of the boat harbor. Perhaps it was no disadvantage that we had already lost all the anchors, as it is doubtful whether any ordinary cable would hold even the little Aurora against such a strain. Sometimes when the engines were doing their level best—75 revolutions—the wake of the ship was passing the bows at a great pace, and the waves and spray coming aboard frozen solid until the deck was like a skating rink, and the running gear stiff and hard as cast iron, each rope being the core of a long icicle. The foremast head with stalactite and stalagmites, feet in length, looked like the Temple of Bial in the famous Jenolan Caves, and the gene-

ral appearance of the ship reminded one of Ballantyne's word picture of the spectre ship in the Arctic. Except for the officer on watch and the men at the wheel, not a soul was visible on deck. It was a peculiar economy having provided the messroom with a piano, but no stove. After the storm it took us three days' hard work to dig 50 tons of ice off the fore-castle head. Dr. Mawson had stated definitely in the letter he left behind that he would return from Sledging on January 13. When that date had passed without any appearance of the commander no particular anxiety was felt. His party were very strong, the commander, Dr. Mertz, and Lieutenant Ninnis all being of splendid physique. The Swiss was the only one under 6 ft., but he possessed great muscular development, which was the admiration of the camp. He had been an officer in the Swiss army, and a champion ski runner of Switzerland, so a knowledge of ice work must be accounted to his advantage. Dr. Mawson was acknowledged to be a most capable and cautious leader, having made ice travelling a study. Lieutenant Ninnis stands 6 ft. 3 in., and, though only 22 years, is a powerful man. The party also had the enormous advantage of 18 Greenland dogs to haul their sledges. Dr. Mertz and Lieutenant Ninnis had had charge of the dogs ever since they were placed on the Aurora in the London docks. Three men can easily haul a sledge and load of 800 lb. over a good surface. Experience has shown that three dogs are equal to one man, so the party had an abundance of haulage power. True, they had over 600 miles to traverse, but at the worst they would have dog-flesh to eat. Indeed, Dr. Mawson calculated the ration on a basis of returning to camp with only three out of the 18 dogs.

#### An Anxious Time.

We had hoped the Aurora would have been able to proceed on January 20 to relieve Wild's party, located on the ice barrier 1,600 miles westward of the sea route, though only 1,133 miles as the crow flies. As we feared the ice barrier might become detached from the land our anxiety to rescue them before the sea froze over may be imagined. It still required a great deal to inspire these men with pessimistic thoughts, so deep and implicit was their faith in their leader. Had not Mawson passed unscathed through great dangers in New Hebrides and also gone down almost to the valley of death when struggling back from the Magnetic Pole during the Shackleton expedition? If any man could find escape from a tight corner, that man was Mawson. Eventually doubt loomed more distinctly. Precautionary measures had to be adopted. Sledge parties were sent out searching, and the Aurora cruised 60 miles along the eastern coast. A kite was flown, and detonators were fired at frequent intervals, and the ice cliffs were narrowly scrutinised. The theory obtained that Dr. Mawson might run for the coast to replenish his larder of seals and penguins. The ice cliffs were so precipitous, however, that he would find it impossible to descend to the water's edge. The returning ship was kept nine days, owing to a hurricane, and compelled to do the mulberry bush trick round Commonwealth Bay owing to having lost all her anchors. Communication with the shore was impossible.

#### A Keen Disappointment.

All the members of the shore party were anxious to leave this "hell-hole of wind," but courage was indicated by them unanimously agreeing to remain behind another year to search for Dr. Mawson while the ship proceeded to the rescue of Wild's party. It was finally decided that only six men should be left behind. Cecil Madigan, the South Australian Rhodes scholar, was appointed leader, his comrades being R. Page (Melbourne), A. N. H. Bickerton (London), Hodgeman (Adelaide), McLean (Sydney), and S. Jefferies (wireless). Not a murmur was raised by them, though they felt keenly the disappointment of being kept in their ice prison for another year. Madigan had doubts whether his scholarship will be kept open another year. No man was more admirably fitted to be a leader. All were physically strong and hardened by long sledging, and provided with plenty of food and coal from the ship.

#### A Bolt from the Blue.

The relief party steamed out of Commonwealth Bay with sad hearts on February 8. Our position was now more precarious than that of the shore party. It is customary to victual exploring ships for two years, but the shortage of funds induced me to provide only one year's victuals for the crew, relying upon securing the surplus stores of the main base to feed the members taken on board. Circumstances had necessitated landing some of the ship's stores at the main base for the relief party, so I knew if the ship was caught in the ice we would stand a big chance of starving. We had left the main base eight hours, congratulating ourselves on the splendid

progress, when a bolt shot from the blue. We were standing in the lee of the funnel, the only warm spot on deck, when we noticed the mate helping to pull the wheel round. To our consternation the ship was turned again towards the main base. It transpired that a wireless message had been received from the main base, reading—"Returned main base safely. Ninnis and Mertz dead. Return and pick up shore party immediately.—Signed Mawson." The effect of the message on the light-hearted voyagers was striking, many had previously feared that the whole party had met with disaster, but hope lived. Now that they definitely knew that two of their comrades were dead gloom spread over the vessel. The action of Mawson in recalling the ship when he and the shore party were in complete safety, and endangering the lives on the ship and at Wild's base, will probably be criticized, but Dr. Mawson is such a thoughtful leader that I am confident he will provide a satisfactory explanation. The circumstances justified Captain Davis in questioning whether he should obey, but the instructions were explicit, and gave no discretionary power. The Aurora returned to Commonwealth Bay next morning, but a strong hurricane prevented communication between the land and the ship. A flagged message, "send instructions," was observed by the shore party, but no attempt was made to reply either by wireless or flags. The same evening the hurricane increased with such intensity that the Aurora, anchorless, could not keep her ground.

#### Back to Australia.

Captain Davis called us together in the messroom, and explained the situation regarding Wild's base. He said the delay was jeopardising their lives. A glance at the captain showed that the responsibility weighed heavily on him. He looked positively haggard; all sympathised with him, knowing the terrible strain he endured. They unanimously supported his decision to start immediately for Wild's base, leaving Dr. Mawson and the relief party to be brought back next year. If ever blame is laid at the captain's door for deserting the main base every member will stand shoulder to shoulder with him. True, earlier that day volunteers were forthcoming to row the whale-boat to the shore, but the captain refused to allow the men to risk their lives. There was little doubt, even in the minds of the volunteers, that the boat would have been swamped by the high seas. The captain left us in the saloon discussing the situation. In a few minutes we heard the engine telegraph ring "Full speed ahead." We rushed on deck, and saw the helm pointed once more towards the open sea. Telescopes were levelled at the camp, but we could discern no movement. The flag announcing Mawson's return was still flying on the wireless mast. There is every reason to believe that the ship's departure was unobserved. We pictured their dismay on discovering next day that they were condemned to another year's imprisonment in this windy, icy waste. There was nothing in the nature of a sudden panic about the decision to desert Dr. Mawson. The only reason was, we believed, that Wild's party would perish and had every reason to believe that the brief season of summer calms was over for another year. That night Dr. Mawson attempted to communicate by wireless with the Aurora, but we were 200 miles distant and the signals were indistinct. All that could be deciphered were the words, "Please wait—cable—Ninnis and Mertz—" and the word "crevasse" repeated several times. We understood this to mean that before complying with the news contracts we should cable to the relatives of Ninnis

and Mertz, stating that they had been killed. This is another instance of Dr. Mawson's thoughtfulness.

#### At Wild's Base.

Anxious to reach Wild's base quickly Captain Davis pushed the Aurora at full speed, engines and sail, even at night through the iceberg region.

[The closing portions of the above message had not come to hand when we went to press, but a private message has been received in Adelaide, stating that the party at the second base (Wild's) are on the Aurora, and are all well. They include Messrs. Alexander, Kennedy, Cowell, and Moyes, of Adelaide.]