

Advertiser, Dec. 1/12

THE UNIVERSITY OF ADELAIDE.

EXAMINATION RESULTS.

Examination for the Honors Degree of Master of Arts.
 Mathematics.
 Passed.—Ellis, Frank, B.A., B.Sc.
 Examination for the Honors Degree of Bachelor of Arts.
 Mathematics.
 Passed.—First Class—Sanders, Harold William.
 Ordinary Examination for the Degree of Bachelor of Music.
 Pass List (in alphabetical order).
 First Year.—First class—None. Second class—Atwell, Ada Ethel; Cole, Louie Chapman.
 Third class—Baird, Estelle; Buston, Ernest Edward; Coumbe, Burtie Harold.
 Second Year.
 First Class—None.
 Second Class—Dunn, John Milhard; Willmore, Elsie Victoria.
 Third Year.
 First and Second Classes—None.
 Third Class—Griffiths, George Townsend.

Advertiser, Dec. 9/12

THE MAWSON EXPEDITION.

WIRELESS NEWS FROM THE ICE.

THE PARTY ALL WELL.

(By Conrad Eitel, Secretary of the Mawson Expedition.)

The voice of a deaf man crying out of the darkness. Such is the position of the Mawson wireless station on the shores of the Antarctic Continent to-day. Dr. Mawson's messages have been heard both at Macquarie Island and at Hobart, but at the end of all his messages comes the monotonous "We have caught no signals as yet." Dr. Mawson does not even know that his messages are being received. There is every reason to believe he thinks that so far the messages he has been sending out day after day have merely agitated the ether waves for a few hundred miles and then subsided—like bullets that are spent before reaching their mark. Yet not a day passes but the attempt to span the distance is renewed.

As it is, the signals from Dr. Mawson's base in Adelie Land reach Macquarie Island very faintly—like the outermost ripples caused by a stone thrown into the middle of a pond. But at the Macquarie station Dr. Mawson has an operator in Mr. Sawyer, who "lives in his wireless." With him his work is his hobby. I have not met a wireless man who has not discovered and patented the use of some particular metaliferous stone as a detector. But there is no doubt that Mr. Sawyer's detector by "picking up" these messages has demonstrated its value. I have sought the opinion of experts as to the reason why we should be able to hear Dr. Mawson's messages and he should not be able to hear those that we dispatch. The instruments and plant throughout are identical. The Macquarie Island installation has proved its efficiency over a distance of 4,000 miles, and why is it then that Dr. Mawson cannot receive our messages over a distance of less than 1,000 miles? It sounds so much like one of those demonstrations in Eadid which ends up with the letters "Q.E.F." But there is this difference. It may sound absurd—it may be illogical—but it's there—and that little hitch in the wireless scheme is fraught with deep moment.

Everyone must admire the enterprise in the young Australian explorer that caused him to take the wizard-like wireless into the heart of the frozen zone, and thus link up civilization with the mysteries on the rim of creation. He has succeeded so far that he can send us tidings of his party. But he is thirsting for certain information and we are vainly shouting it to him, for our voices will not encompass the distance. We are like the Peri at the gates of Paradise calling to those within—and they cannot hear us. The operator at Macquarie Island is weary with the monotony of thundering southwards one message that is most urgent that Dr. Mawson should receive—the information as to where the second base is located. It will be remembered that Dr. Mawson was left at the main base under the impression that the second party would be landed on the ice about 500 or 600 miles to the westward. The Aurora, however, was unable to find a landing-place there, and the second base is actually 1,183 miles due west. It was an

important part of Dr. Mawson's plan of operations that these two parties should explore the coastline with dog sledges and rendezvous midway. The possibilities of danger make us hope that in the absence of information as to the location of the second base he will not send out a party with instructions to make a junction with the second base, or that we may be able to warn him before the spring sledging begins that the second base is so much farther to the westward than he anticipates. Besides the urgency of communicating with Dr. Mawson on this account, the question of revenue from wireless news and other considerations fade into significance. Throughout the preparations for the expedition Dr. Mawson did not neglect to eliminate the element of risk wherever possible, and I am confident that he will, under the circumstances, abandon the idea of joining the two parties. In any event the Aurora will take down to Adelie at the end of this month 21 Greenland dogs used by Amundsen, together with sledges and complete relief equipment.

It was on September 27 that Macquarie Island notified me that they were hearing from Adelie Land. "At first," said Mr. Sawyer, "I thought it was some very distant ship trying to play a practical joke, but as I spelt out the faint signals I realised that at last we were hearing from Dr. Mawson's base." At first the messages were shockingly mutilated. Then one came through quite clearly, announcing that "all members are well." The same message continued—"Don't seem able to get through to Macquarie. Terrible winds have prevented sledging so far, but we hope to get out by the end of October." On September 29 Adelie Land sent the following message—"Having a terrible time. We are waiting for calm weather to get some more mast up." Day after day messages were caught, telling of the experiences of the men in that far southern camp throughout a period of gales and blizzards. Drift snow to a depth of 30 ft. all around them. Dogs having to be sheltered inside the hut. Two of the men attacked by frost-bite, though not severely. And so the story goes. Some idea of the conditions under which this party is living is afforded by a message of 144 words caught on October 26:—"We have been much delayed in our work by the drift snows which are coming on again. Gales have raged every day for about six weeks. We are going to put up the third length of mast as soon as the weather moderates. It is a big task getting things up under these conditions. We have not been outside for many days. It is a good thing the aeroplane wings were not brought here, we could not have flown at all up to date, as there is no sea-ice to take off from. Spring sledging. The sewing machines are working full time. Our supply of seal-meat is keeping us all in good health."

And so on. The wireless continues to give little notes of the camp life of these Australians living under the same conditions as Amundsen experienced. There is a strong tone throughout of good cheer and courage, and evidence is afforded of the collection of meteorological notes and other data. A great many messages, each comprising hundreds of words from Dr. Mawson, are in cachet, and one of these was actually picked up by the Government station at Hobart a couple of weeks ago. It only remains for Dr. Mawson to catch the messages from Macquarie Island, and he will have attained complete success. At present, although communication is one-sided, it has served the purpose of allaying fears on the part of relatives of members of the expedition.

Cable from Queen Wilhelmina.

On December 26 the Aurora, taking on board the stores and other supplies which I have collected, will sail from Hobart direct to Adelie Land to pick up Dr. Mawson and his second party. I shall be accompanied on this trip by Mr. Joseph M. N. T. van Waterschoot van der Gracht, who has already had experience of whaling in sub-Antarctic waters, and who is a geologist of high reputation. I had definite instructions in writing to bring no one down on the relief expedition, but so highly was this gentleman recommended by Professor David and Professor Orme Masson, as also by the Governor of Tasmania, who had met him on his travels, that I consider I should exercise discretion on this point. Mr. van der Gracht is a brother of the Government Geologist of Holland and came to Aus-

tralis on the chance of securing permission to join Dr. Mawson, and so complete his scientific investigations in the Antarctic regions. The news of his appointment "as a recognition of early Dutch enterprise in exploration" was cabled to Holland, and, in reply, I received the following cable message from Queen Wilhelmina:—"Her Majesty thanks Dr. Mawson, through you, for appreciated action. She wishes success to Australian Antarctic enterprise."

The Aurora's Discovery.

Meanwhile the Aurora is engaged on a scientific cruise between Macquarie Island and Tasmania, which is likely to establish fame for the expedition. She is dredging and sounding and conducting other oceanographic investigations. A very interesting scientific discovery was made on this trip, which tends to confirm the theory that there was at one time a land connection between Tasmania and the Antarctic continent. When about 20 miles south of Hobart Captain Davis secured soundings, which showed that at a depth of 700 fathoms there is a rocky ridge extending almost due north and south. The importance of this discovery may be gathered from the fact that the present charts show a depth over the whole of this area of from 1,500 to 2,000 fathoms. These soundings will undoubtedly be regarded by the whole scientific world as amongst the most interesting data that have been brought forward in support of the theory of a former extension of land southward from Australia.

It may be pointed out that 700 fathoms (4,200 ft.) represents depth below the sea level, which is very little greater than the height of Mount Wellington (4,000 ft.), above sea level. The striking similarity between the fauna and flora of Tasmania and those of the southern end of South America have led various scientific observers to the theory that there was in earlier ages a land connection between the two, most probably by way of the Antarctic continent, which is now separated by about 1,500 miles of sea from Tasmania, and by a much shorter distance from the southern extremity of Terra del Fuego. An obstacle in the way of this theory, as far as Tasmania's connection with the Antarctic continent is concerned, has been the great depths shown by previous soundings as existing to the south of Tasmania. The soundings obtained by the Aurora indicate, however, that there is a submarine ridge which still rises to within what is, as ocean depths go, a short distance of the surface.

This ridge, running from north to south, would be, approximately in the same line as the ridge covered by but a few fathoms of water across the eastern end of Bass Strait, which connects Tasmania with Victoria, and is a continuation of the direction of the main line of uplift in eastern Australia. It has been pointed out that the granite rocks of Wilson's Promontory in Victoria and of Flinders and the other islands of Bass Straits crop out in north-eastern Tasmania, and the line is continued far to the south by isolated areas of granite, that of Freycinet Peninsula and Schouten Island, and of the eastern side of Maria Island, with an outlier off the eastern coast of Tasman Peninsula, in the wave-worn rocks of the Hippolytes. It may be that the submarine ridge away to the south is a continuation of the same line. The discovery of this submarine ridge tends to confirm a theory put forward some years ago by Mr. Charles Hedley, of Sydney. From a study of the difference existing between the species of mollusca found and those found to the west of the reconstructed "Bassian Isthmus," he came to the conclusion not only that the land connections between Tasmania and Victoria had not been submerged until very recent times, but that until a comparatively recent period Tasmania extended much farther to the south than is at present the case.