

Remarkable Suspended Animation.

"We had thus a most remarkable instance of suspended animation. The rotifers, when frozen in, secrete a kind of varnish with which they close up the pores of the thin husk, with which their small bodies are surrounded. The remainder of the body within this shell then shrinks and appears to have been completely desiccated, like a piece of jerked beef. After seeing this restoration to life there seems no reason for fixing the limit of suspended animation at three years. It is quite possible that some of the small animals we saw come to life may have been frozen in at a temperature of about 32 deg. Fahr. for a period of 20 years.

Disappearance of the Glaciers.

"Many other subjects are to be treated in the 'Memoirs.' There is conclusive evidence to show that the whole of the vast sheet of ice and snow known as the great ice barrier, extending 500 miles from east to west, and about an equal distance from north to south, has dwindled away to such an extent that the surface is fully 1,000 ft. lower than it was at the time of the maximum glaciation. Huge belts of granite boulders are left stranded, like the flotsam and jetsam of a high tide, round the flanks of Mount Erebus at a height of from 1,000 ft. to 1,100 ft. above sea level.

Origin of the Aurora Australis.

"An interesting point that is being elaborated by Dr. Mawson is the exact nature and mode of origin of the Aurora Australis. There is no doubt that this is one of the most wonderful, weird, and beautiful of terrestrial phenomena. He will also contribute notes on the south magnetic pole, with evidence, which his observations prove, as to the distance which the pole has moved since its position was calculated theoretically by Captain Scott eight years ago. The meteorological data obtained are now being worked up by Mr. H. A. Hunt, the Federal Meteorologist in Melbourne, with a view to its being published at an early date."

Advertiser, June 6th 1910

Professor T. W. E. David, B.A., F.R.S., of the Sydney University, arrived in Adelaide by the Melbourne express on Tuesday morning, and this evening at the Victoria Hall he will deliver a lecture, illustrated with lantern slides, on "The British Antarctic Expedition of 1907-9," which was led by Sir Ernest Shackleton. The funds are to be devoted entirely towards meeting the cost of the publication of the "Memoirs of the Shackleton Expedition." At the railway-station to meet him were Mr. W. B. Wilkinson (president of the South Australian branch of the Royal Geographical Society), Mr. T. S. Reed (the secretary of the society), Messrs. E. H. Bakewell, and A. M. Simpson (members of the council), and Mr. W. Howchin (representing the Adelaide University). During his stay in Adelaide Professor David will be the guest of Mr. Howchin. The professor, who was a member of the party, will describe in his lecture the start from Lyttelton on January 1, 1908, the storms in the "Roaring Forties," the Antarctic gales, winter quarters established at the foot of Mount Erebus, life in winter quarters, spring sledging, the dash for the Pole, escape from crevasses, the desperate straits of the party on the return journey, adventures adrift on a floe, the rescue of the party by the Nimrod, and the scientific results. Professor David leaves to-morrow for Broken Hill, where he will lecture on Monday. He will return on the following Thursday in order to get back to Sydney by the time the University vacation is over.

THE NEXT ANTARCTIC EXPEDITION.

PROFESSOR DAVID PREDICTS SUCCESS.

A NEW TYPE OF MOTOR SLEDGE.

In an interview on Tuesday Professor David, of the Sydney University, who is at present in Adelaide, said that Captain Scott, who was to lead the British Antarctic expedition to be dispatched this year, was making use of every possible means of locomotion in order to carry his party to the south geographical pole. "He will rely," said the professor, "not only on Manchurian ponies and dogs as means of transport, but on a very much improved type of motor sledge. These sledges have been designed and tested by Mr. Bernard Day, who was mechanical engineer in charge of the motor car in the Shackleton expedition, which returned last year. We found that our motor car would not work satisfactorily in the deep snow-drifts, as with its weight the wheels sank deeply into the drifting snow, and the car became hopelessly bogged. Now, Mr. Day, having practical experience in those regions, has designed motor sledges instead of motor cars. These are held up on broad and long runners, so that they will glide over the soft snow easily without sinking down. The motor, of course, will be driven by petrol, and the propelling apparatus is of the nature of an endless belt on either side of the sledge, with a number of cross-bars arranged something like the receptacles on a bucket-dredger. Thus when the engine is started the sledge will 'bucket' itself along, each bar on the belt getting a firm grip in the snow. The sledge will crawl along steadily and surely like a caterpillar, but without the arching of its back. In our motor car we travelled as fast as 15 miles an hour, but the sledges will not travel more than 10 miles an hour, and probably they will go about five miles an hour in places. It is expected that by means of these motor sledges that Captain Scott will be able rapidly to transport from what may be termed the head of the navigation of the Antarctic, at the foot of Mount Erebus, large supplies of stores and equipment over the 300 miles south across the great ice barrier to the foot of the great glacier discovered by Shackleton, and known as Beardmore glacier. Dr. Wilson, who accompanied Captain Scott and Lieutenant Shackleton on the expedition eight years ago, will go with Captain Scott on this trip as chief of the scientific staff. He will also have Mr. Griffith Taylor and Mr. Allan Thomson, a Rhodes scholar of four years ago from New Zealand, who is now working at my laboratory in Sydney. Mr. Thomson is a very able geologist, and he will go as second man. Another member of the party will be Mr. Simpson, of Calcutta, a particularly able meteorologist and physicist. He will have charge of the department of atmospherical electricity and meteorology generally. To sum up, Captain Scott will have an extremely able scientific staff.

"Yes, I think Captain Scott will reach the Pole this time. I feel that very strongly. If he can get large supplies and provisions to the foot of the big glacier he will have about 120 miles to go up the glacier, and if he gets up that without accident he will have a straight run of about 300 miles to the Pole. This last stage of 300 miles begins at an altitude of 8,000 ft., and probably goes up to 11,000 ft. at the Pole."

NORMANVILLE, June 1.—A meeting was held in the Christ Church school-room, Yankalilla, on Monday evening, for the purpose of forming a University extension centre in that township. Mr. Hodge (the Registrar of the University of Adelaide) attended, and explained the objects of the meeting. A committee, consisting of the following ladies and gentlemen, was formed:—Revs. H. J. Lovibond and G. W. Johnston, Dr. Young, Messrs. Chris Giles and G. F. Powell, and Mesdames Giles and R. C. Graham. Mr. R. Bierwirth was elected President, and Mr. R. C. Graham appointed Secretary. After the business of the meeting had been thoroughly gone into, Mr. Hodge de-

livered a delightful lecture on "Pickwicks," which was greatly enjoyed by the audience.

Register, June 2nd

SOUTH POLAR QUEST.

LECTURE BY PROFESSOR DAVID.

A large audience at the Victoria Hall on Wednesday evening listened with keen interest to Professor David, of Sydney, while he related the story of the Shackleton antarctic expedition, of which he was one of the geologists.

The lecturer was introduced by Mr. W. B. Wilkinson (President of the Royal Geographical Society), who said they were all glad that His late Majesty had conferred the honour of knighthood on Lieut. Shackleton. (Applause.) His famous expedition was never spoken of without a remembrance of the great and important part taken by Professor David, of Sydney, and Dr. Douglas Mawson, of the Adelaide University. (Applause.) Two of the most successful events of the brilliant expedition had been performed by parties led by Professor David—the ascent of Mount Erebus and the discovery of the south magnetic pole. (Applause.) Those would ever cause his name to rank in the front list of workers in the realm of research who had added lustre to the British Empire. It was recognised by the world's leading scientists and geographers that the results of the two events mentioned had given the world scientific data the value of which was inestimable.

Professor David, by means of a large screen and a powerful lantern, exhibited a series of limelight views covering the experiences of the exploring party from the time it left Lyttelton on January 1, 1908, to the thrilling scene when those members who had returned from the discovery of the south magnetic pole were rescued from their perilous position on the coast, and Dr. Douglas Mawson, of Adelaide, was almost lost through falling into a crevasse close to the tent just as the steamship Nimrod came to their relief.

—Excellent Pictures.

One of the beautiful pictures shown was that of the snowbergs, which differ from icebergs in being composed of snow encrusted with a thin covering of ice, and also in their specific gravity, as only half their bulk is submerged, against two-thirds in the case of icebergs. The photograph of the Nimrod, a fine picture, taken in the antarctic midnight month of February, with an exposure of 1-75th sec., showed the wonderful activity of the light in the pure atmosphere of the icy south. The beautiful phenomena of the ice-foot, where the sea has washed the lower portion of the snowcap from the base of the cliffs, formed the subject of two fine slides, the second of which depicted the footlike formation of close-set stalactites, which Sir Ernest Shackleton said suggested that the hall-room floor had suddenly collapsed. The ascent of Mount Erebus (13,000 ft.) by Professor David's party, after previous explorers had only gained 2,000 ft., was illustrated by splendid views of the crater wall (900 ft. deep) and the frozen vapour cloud over the mouth of one of the fumaroles. Practically the whole life and experiences of the party was limned in the lantern presentations of their experiences, and the excellence of the pictures from the standpoint of composition, showed many of them to have been the work of an artist in photography.