

"Considerable interest was also evinced," continued Professor David, "in the geological discoveries of the 1907-9 expedition, especially in the discovery in the antarctic regions of those rare fossils—in the limestones—so well known in South Australia. Large collections of these South Australian fossils, gathered by Mr. Walter Howchin, were placed in the hands of Mr. P. Griffiths Taylor, for description, and recently Mr. Taylor, who is now senior geologist in Capt. Scott's expedition, published a memoir on this subject, issued by the Royal Society of South Australia. The limestones of the antarctic were handed to Mr. Taylor after the discovery of these fossils (Archeocyathine), and he has written an interesting chapter of the geological memoir now in the press on this subject. These fossils are interesting links between the groups of sponges on the one hand, and of the corals on the other. It is of great scientific importance to find that the same varieties of fossils are present in the Cambrian limestones, and the Cambrian limestones of the antarctic, the latter only 300 geological miles distant from the south pole itself. Mr. Taylor will undoubtedly be able to make important additional conclusions on these fossils.

—The Magnetic Pole.—

"In regard to the south magnetic pole, the general results obtained by Dr. Mawson on the occasion when, with Dr. Mackay and myself, he reached and located the magnetic pole, seem to point to the fact that the magnetic pole has moved about 40 miles to the north-west within the last six or seven years. The magneticians in the old country, including Mr. Bernacchi, formerly of Tasmania, who took most of the magnetic observations for the Borchgrevink and Discovery expeditions, consider that it was of great scientific importance.

—Explanation of Antarctic Coastline.—

"At the meeting of the Royal Geographical Society, at which antarctic matters were discussed Sir Lewis Beaumont, formerly Commander-in-chief of the Australian Station, expressed himself warmly in sympathy with the scheme put forward by Dr. Mawson for his Australian expedition. The portion of the new antarctic coastline which Dr. Mawson proposes to explore is the least known of the antarctic regions, and offers great scientific possibilities. It is probable in that part of the coast that the most suitable spot will eventually be found for establishing the meteorological observatory. Any preliminary determinations of this kind will, of course, be left to the opinion of Mr. H. A. Hunt (Federal Meteorologist), who at present is working up for publication the meteorological results of the Shackleton expedition.

—Minerals in the South Polar Regions.—

"In the part of the antarctic which Dr. Mawson proposes to explore there is every prospect of finding a continuation of the great coalfield which was traced at intervals by various members of the Shackleton expedition for a distance of fully 1,000 miles north to south. This coalfield, with the exception of the volcanic rocks of Mount Erebus and its associated volcanoes, belongs to the closest formation at present discovered in the Australian area of the antarctic. Underneath its comparatively horizontally bedded strata are the highly contorted ancient series of crystalline and other rocks, formed by granite, slate, diorite, and so on, traversed by quartz reefs. There is every prospect of minerals, such as gold and tin, being eventually found in this ancient pre-Cambrian formation, which closely resembled in its characteristics, the rocks of Kalgoorlie and Coolgardie. It would be scarcely possible to work alluvial gold economically in the antarctic, on account of the shortness there of the period of thaw. It thaws only about one month, commencing just before Christmas, and ending about the third week in January. During that period immense avalanches descend from the stupendous cliffs facing Ross Sea. Rising to a height of 10,000 to 12,000 feet rivers formed of the thaw water start flowing, and rolling down with them vast quantities of sand and gravel; enormous pieces of rock are then exposed to view free from sand and ice. This, of course, would be the most suitable period for prospecting, but even if alluvial gold were found by this means, in view of the fact that the thaw does not extend downwards for more than about a foot in the older alluvials, it would only be possible to work the freshly borne sediment from the new summer floods; and about a foot below the surface even at the end of the thaw, the old alluvials are still frozen, so that they are almost as hard as concrete. If, however, a good lode or reef carrying gold or tinstone were discovered, there is scarcely any more reason why such a reef could not be systematically worked in the antarctic than a reef worked at Klondyke. Probably the condition of life would be very little severer than at Klondyke, but living would be somewhat more costly. But, after all, this portion of the antarctic is only a fortnight's sail from New Zealand or Tasmania.

—Support for Dr. Mawson's Expedition.—

"Sir Ernest Shackleton," remarked Prof. David, in conclusion, "is cordially supporting Dr. Mawson in his expedition."

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HIGHER EDUCATION.

SOUTH AUSTRALIAN COMMISSION IN SYDNEY.

SYDNEY, March 27.

The royal commission appointed by the South Australian Government to enquire into the question of improving the higher education in the State took evidence to-day.

James Dawson (Chief Inspector of Schools and Acting Director) said there were in New South Wales seven high schools. In the country were district schools, which, in the majority of the cases, were high schools in the making. Fees were not charged at the high schools. Students were supplied with books up to 30/ worth annually. In the case of scholarships the idea was to shape the course of the student to what he was best adapted for. The high schools prepared students to a sufficiently high standard to enable them to enter the University. There were no special inspectors of High Schools in the strict sense of the term. There were gentlemen on the staff who for many years had undertaken the work with their other duties. The average attendance of the five high schools was 786.

To Mr. Coneybeer—During 1910 there were granted to high schools 178 scholarships, and to probationary students now going on to the training college 126. In the district schools there were granted 68 scholarships to probationary students. There was no fixed number provided for in the regulations, and there were altogether 1,114 scholarships current. The total expenditure was last year £1,167,601. In addition the cost of technical education was £77,606, and the total amount granted to the University £23,500. The enrolment of pupils for 1910 was 218,533. The weekly enrolment was 198,120, the average attendance 157,494, and there were 3,078 schools.

To a question whether scholarships were open to private schools, the Chief Inspector said as regarded scholarships tenable at high schools there was no restriction, but they must be held at public schools.

Do you experience any difficulty in getting children to qualify as teachers?—There is no great run of men for the positions, although we have a good number of women applicants.

The ideal director, said Mr. Dawson in answer to a further question, should be cognizant of the education systems of the world. He should have leisure to think out problems of the whole State, and be able, through having the time, to take part in all educational activities of the State. He regretted, however, that in New South Wales the director had a great mass of detail work to attend to, although there was a considerable amount of subdivision of work. He thought also, that it would be a good thing if a conference of Directors of Education from every State met. If South Australia advanced such a proposition he thought this State would readily agree.

The commission rose for the day.

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Mr. George Elton Mayo, B.A., who has been appointed lecturer in logic, psychology, and ethics in the Queensland University, is a graduate of the University of Adelaide. He is a son of Mr. G. G. Mayo, of Franklin street, and a grandson of the late Dr. Mayo. He has had a brilliant scholastic career, having passed in logic, psychology, economics, ethics, and philosophy, all in the first class, in 1907 and 1908. In 1910 Mr. Mayo took the B.A. degree in honours, philosophy (first class), and it will be conferred at a special congregation of the Adelaide University Senate to be held shortly. Last year he gained the David Murray Scholarship, awarded by the faculty of arts, in the division of philosophy, for an essay on "The criterion of social progress; on what it is based and how it may be used in dealing with current problems, and in forecasting the social life of the future." At the University Mr. Mayo, who has been popular among his fellow-students, took a prominent part in the formation of the Arts Association. He is an old St. Peter's Collegian.

HIGHER EDUCATION.

SOUTH AUSTRALIAN COMMISSION. WORK IN SYDNEY.

Sydney, March 27.

Giving evidence to-day before the Royal Commission enquiring into higher education on behalf of the Government of South Australia, Mr. Dawson, Chief Inspector of Schools, said the University did not come close enough to the people. They needed a closer acquaintance to appreciate it. The high schools, he said, ranked very high in the junior and senior examinations, quite as high as any of the private secondary schools. The total cost of the high schools in salaries and allowances for 1909 was £9,761, and for other maintenance expenses, including the cost of scholarships, £5,342. The average daily attendance at the five high schools in 1909 was 786. There were 900 scholars at one high school, 600 at another, and a total of 1,114 scholarships were now current. The total expenditure on education in 1910 was £1,167,601. The cost of technical education was £77,606, and the total amount of grants to the University £23,000. The enrolment of pupils in high schools and primary schools for 1910 was 218,533. The weekly enrolment was 198,120, and the average attendance 157,494. There were 3,078 schools and 3,283 departments.

Mr. Dawson said "leaving certificates" for pupils finishing at high schools was under consideration, but the first examination in connection with them would not take place till the end of this year or next year. The University was to be asked to recognise certificates as evidence of fitness to attend the University. The certificate would mean the death of "cramming," because it would mean that the student had faithfully studied throughout a four years' course.

The Chairman quoted figures comparing the expenditure per head of some of the Australasian States. South Australia, he said, spent 8/6 a head a year, made up of 7/8 on primary education, 1d. on secondary, 5d. on technical, and 4d. on University. Victoria spent 12/4, 11/7 on primary education, 1d. on secondary, 4d. on technical, and 4d. on University. New South Wales spent 12/10, of which 11/11 went in primary education, 2d. in secondary, 7d. in technical, and 2d. in University. New Zealand spent 18/, 14/6 in primary, 1/4 in secondary, 1/4 in technical, and 10d. in University.

In the afternoon the Commissioners inspected the University.