

Advertiser, June 1st, 1910.

To the Editor.

Sir—Regarding the strike of teachers I desire emphatically to protest against unfair tactics. The "strike" was decided upon by a body of individuals. While the students were in the city the authorities declined to make a statement to the press. This, however, is forthcoming as soon as the students leave the college on vacation and are unable to act as a body. This is presumably with a view to overcoming concerted action. Such methods are distinctly unfair. The statement of the Director of Education is by no means accurate, and generally a desire to evade the point at issue seems evident. The second stated reason is not correct, as a number of students concerned are at the University for one year only, consequently a degree is to them practically impossible. In the reasons supplied by the Director no mention is made of the culminating point, i.e., the teaching on day of examination. The student is often required to give five lessons in a morning which need a good deal of preparation. This at any time is a severe strain, particularly on the lady teachers, but the strain is greatly intensified when teaching under observation of a superior, as is the case, and tends to unnerve. It is urged that a concession should not be granted, because it would be unfair to those assistants who, because of teaching duties, must be examined at night. This, again, shows a desire to evade because the present students' examinations are compulsory and those of outside students are not. The results of the first night seriously affect the students' position, while with the latter, except that their status might be improved by success, no dire consequences attend failure. Regarding students who were at one time rejected it is stated that no practical work was then required. Surely then if 17 students were unable to reach the required standard without practical work it follows that the additional burden is a handicap. The two hours' respite which is mentioned is inadequate in the circumstances. It is further suggested that the department is a philanthropic institution. But since the students are paid scarcely enough to sustain themselves decorously, and they repay by lengthy service enforced by bonds, the munificence is mythical. I object strongly to the autocratic action in requiring a declaration that in future the orders of the supreme will be carried out to the letter. Analysed, it means that, no matter how unfairly the students may be treated, he or she is compelled to promise that no objection will be made, or in default will resign his or her position. It seems intolerable that no means of redress should be open to an intelligent and earnest body of young people who may be the victims of unjust treatment. This outbreak of feeling seems to be only an outward expression of the discontent which prevails throughout the whole system. A royal commission should be appointed to enquire into the administration of our so-called advanced system of education.

I am, Sir, &c., FAIRPLAY.

To the Editor.

Sir—In a leader in The Register last Friday it is stated:—"Both sides of the dispute between the Director of Education and the University Training College students have been fully stated, and it is clear that the latter were not asked to perform an impossible or an unreasonable task." While the statements may be clear on both sides, have they been fairly and truly stated? The students say "No," and the Director is openly accused of inaccuracies. Again, it is said, "It is a mistake to provide a University course except to those who have first undergone training in practical teaching, and given proof of special ability and promise." The students had taught two years in the public schools, and had also attended another two years at the Training College. Surely those four years under the eyes of the inspectors ought to have been sufficient to have given proof (or otherwise) of special ability and promise. I have been under the impression that it was in consequence of such proof as to "special ability," "promise," having been demonstrated during those years that they were recommended to the University. It is said that "Mr. Peake is bound to uphold the authority of the department, and the Minister cannot well recede." Mr. Williams is not the department, and if his report to the Minister was materially incorrect or misleading as has been stated, then Mr. Peake is morally bound to "recede" and consider, too, because he was not at the time cognizant of all the facts. In the meantime I advise the students to be true to one another, and act unitedly, for they have the sympathy of all who understand their case and are not prejudiced. They must not submit to the fine of £1 as is demanded, but refuse to accept anything less than the full allowance authorized by the Government for maintenance. Many I know can ill afford such a heavy penalty, as a few, when they found their pay stopped, had to borrow money from friends in order to get home during vacation, while others had to remain in town.

I am, Sir, &c., SYMPATHY.

### TEACHERS' GRIEVANCES.

To the Editor.

Sir—It is a great satisfaction to me to notice that the teachers are at last waking up. I wish them every success. But may I ask why teachers who formerly belonged to this department and left to better themselves in other States should be brought back and given high places in our service? Surely the teachers who have served our State faithfully all the time should be the first ones appointed to any good vacancies as they occur. There is no doubt of their capability to fill them. We have some of the best teachers in the Commonwealth. Should not every effort be made to keep them here?—I am, &c.,

FAIRPLAY.

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## IN ANTARCTICA

### THE SHACKLETON EXPEDITION.

#### SCIENTIFIC RESULTS.

Professor David, B.A., F.R.S., of the Sydney University, has taken the opportunity afforded by the vacation to visit Adelaide and Broken Hill, where he will deliver lectures to raise funds for the publication of the "Scientific Memoirs of the Shackleton Expedition." A representative of "The Advertiser" on Tuesday, in an interview, gleaned some interesting particulars of the scientific results of that expedition, of which the professor was a member. From time to time much has been published in these columns concerning the terrible privations endured by Sir Ernest Shackleton and his brave companions in their sojourn in the far southern regions, and the interviewer's object was to obtain from the professor some remarks as to the scientific side of the question and the British expedition to be led by Captain R. F. Scott, with whom Sir Ernest Shackleton was associated in his Antarctic explorations eight years ago.

#### Discovery of Coal.

"From a scientific and economic point of view," said the professor, "one of the most interesting discoveries was the finding by the party who went farthest south of seven seams of coal in a great sandstone range, within 300 geographical miles of the South Pole. These seams of coal were seen by Mr. Frank Wilde, of Shackleton's party, outcropping under a high cliff face. They varied in thickness from about 1 to 7 ft. Only small pieces of coal were brought back, and one of these has been analysed by the Geological Survey of the Department of Mines in Sydney, and has proved to be coal of a workable quality, containing—Ash, 10 per cent.; moisture, 4 per cent.; volatile hydro-carbon (gas-producing ingredients), about 35 per cent. The remainder was fixed carbon. If, therefore, the thicker seams, stated by Mr. Wilde to be from 3 ft. to 7 ft. deep, contain coal throughout of uniform quality with the sample brought back, they should be workable, and might prove of some use to expeditions travelling far south. As Captain Scott, who is leading the important scientific expedition to the Antarctic this year, intends following the route discovered by Sir Ernest Shackleton, he will, if all goes well, be passing close to the coal seams, and no doubt one special object of his scientific investigations will be the further examination of them and of the underlying limestones.

#### The Limestone Formations.

"Captain Scott will be taking with him on this portion of his trip Mr. T. Griffith Taylor, who has just published an important monograph on the remarkable fossil formations which build up so much of the limestones of South Australia—such as those at Ardrossan, the Blinman, and Wirralpa. These curious fossils are intermediate in form between the sponges and the corals, and are known as the archæocyathinae. It is thought to be quite possible that the limestones of Antarctica, which underlie the coal measures, may be of the same age as the Cambrian limestones of this State, so that Mr. Taylor's South Australian experience should prove useful in elucidating this interesting question.

#### Extent of the Coal Seams.

"These coal measures are of vast extent in the Antarctic, as proved by the areas traversed by the party going farthest south during the 1907-9 expedition, and the party which visited the magnetic pole. The sandstone containing the seams was shown to trend for a distance of about 1,100 miles north to where Mr. Wilde discovered the coal seams.

#### Interesting Piece of Fossil Wood.

"As regards the geological age of the coal seams, it may be mentioned that a small piece of fossil wood, found embedded in sandstone, was brought back by Sir Ernest Shackleton on his sledge on his return from his famous dash for the Pole. Although on this return journey the party were at death's door from sickness and starvation, and had abandoned much of their clothing and some of their scientific instruments, they clung to the last to their geological specimens, one of which was this piece of fossil wood. It is a piece of a fossil pine tree, and evidently a forest of pine flourished close to the South Pole when the coal seams were in process of formation. This shows that there has been a vast change in the climate since this coal measure epoch."

#### Economic Value of the Coal.

Questioned as to the economic value of these coal deposits, Professor David said—"As regards the possibility of making any economic use of the coal in the near future, the only likelihood of such an event taking place would be in the case of a discovery of gold or some other valuable metallic deposit, which might convert that part of the Antarctic regions into a second Klondyke. The explorations by Dr. Douglas Mawson show, as far as they go, that the geological formations of those regions are very favorable to the occurrence of gold, as they comprise granites, diorites, slates, limestones, and various rocks, including quartz reefs, which are usually associated with deposits of gold and tin.

#### Prospecting to be Done.

"Captain Scott's expedition proposes to do some prospecting of the sands and gra-

vels of the Great Coast Range, which form the western side of the Ross Sea. This great range rises to a height of from 10,000 to 13,000 ft. above sea level, and during the summer time its steep sides of rock are completely bare of snow. As for a month from Christmas time the surface of the snow and ice thaws rapidly, there would be an abundance of fresh flowing water for washing out gold in a prospector's dish. In view of the fact that the sands and gravels there only thaw for a depth of from 1 to 2 ft. for about a month each year, it could not be expected that even if gold were discovered it could be worked in alluvial deposits remuneratively, but there is no reason whatever why a good reef of gold or tin could not be mined profitably and under conditions of reasonable comfort to those employed. After all, the climate of this part of the Antarctic, near the sea level, is not much more rigorous than that at Klondyke.

#### The Biological Results.

"The first of the 'Scientific Memoirs of Shackleton's Expedition' will include the first instalment of the biological results of the expedition. This portion is now being published in London, and it deals chiefly with the pond life of the Antarctic. We found close to our winter quarters, at the foot of Mount Erebus, that there were a number of small glacial lakes. These were frozen mostly from top to bottom, and even during the period of thaw only the surface layer of ice, from 5 to 6 ft. in thickness, actually thawed. In one of the lakes we sunk a shaft to a depth of 15 ft., until we reached the bottom of the lake. The ice next to the lake bottom had probably not been thawed for many years. We took chips of this to our hut, and as the small fragments thawed we could see, with the aid of a microscope, small water animals, such as rotifers and water bears, come to life within a few minutes, and in a minute or two longer they began to breakfast off the fragments of dry fungus which had been embedded in the ice.