

A CALIFORNIAN SCIENTIST

Dr. Florence Hill

STUDENT LIFE IN AMERICA

dian, and portion of the Southern Oceans, a partial eclipse will be visible, varying from an instantaneous grazing eclipse to total as one approaches the central line.

Throughout the whole of South Australia the partial eclipse will be visible, lasting just over two hours, and in the extreme far north in a sector running diagonally between Alice Springs and Charlotte Waters to Cordillo Downs, the total phase will be visible for about four minutes at mid-eclipse. In the South-East the amount of obscuration of the sun's disc will be about seven-tenths, and this will increase as one approaches the total zone. With respect to the commencement of eclipse (2.25 p.m.), places on the far West Coast will experience this about 15 minutes be-



Dr. R. K. Young.
 Dominion Observatory, British Columbia.

fore Adelaide, and the Eastern and South-Eastern districts from 3 to 5 minutes after Adelaide. The end of the eclipse will take place about 6 minutes before Adelaide on West Coast, and at about the same time as Adelaide in the east and south-east.

ASTRONOMERS BUSY.
 Perth, September 18.

Professor Ross reports:—On Saturday afternoon rehearsals of the eclipse programme were commenced with thirteen cameras. They were undertaken at that early date as the actual eclipse work with these cameras begins to-morrow night. In order that the scale of eclipse photographs may be determined, it is necessary to have on the photographic plate the picture of a group of stars taken during the night. This will be done on Tuesday evening if the sky is clear, otherwise on Wednesday. The rehearsals with other instruments commenced this morning, and in the afternoon the first full rehearsals were held with all the instruments working simultaneously for eclipse observations.

The personnel of the Lick expedition will be augmented by the addition of six naval men, who will assist with changing the photographic plates, the calling of the time, &c.

Dr. Campbell was delighted to receive on Saturday evening the following telegram from the Prime Minister (Mr. Hughes).—"Best wishes for a fine day and successful observations."

Interviewed this morning Dr. Campbell stated that the preparations for eclipse day were practically complete. Despite the difficulties of transport to Wallal, everything had been landed and erected without a single breakage, and on no previous occasion had he looked forward to eclipse day with such freedom from anxiety about the weather. The Wallal weather had conformed to the excellent reports of those who had recommended that observing site. Clouds had been almost entirely absent throughout the past three weeks. A sea fog, which appeared at nightfall after days of prolonged sea breezes, might cause a little difficulty in securing an evening exposure for "Einstein" investigations, but he did not regard the difficulty as serious.

Dr. Trumpler, of the Lick Observatory, who took comparison photographs in Tahiti last June, expressed himself greatly pleased with the observing conditions at Wallal. The visibility and steadiness of the air were at least as good as at Tahiti, where his plates recorded stars fainter than anticipated.

Professor Chant, of the Toronto University, also gave the opinion that Wallal appeared to be all that could be desired for eclipse work from astronomical and meteorological standpoints.

There arrived in Adelaide last Saturday an American medical woman, Dr. Florence Hill, who is a graduate of the University of California, and has had a distinguished career in laboratory work. She has come to Adelaide to engage in biochemical research work with Professor Brailsford Robertson at the Adelaide University, and intends to remain here for two years.

Born in California, she obtained medical degrees in America, subsequently pursuing her researches in Germany and other parts of Europe. She received an appointment to the Welcome Laboratory for research in tropical diseases for 1916, a coveted position for which appointments are made five years ahead, but as the laboratory was closed on account of the war in that particular year she devoted her energies to research work in America.

WOMEN OF AMERICA.

American women who come to Australia are always regarded with curiosity, just as, no doubt, an Australian is in America; yet women are the same the world over. It is in the expression of their femininity—or want of it—that nationality is apparent. The voice is strange, the customs are slightly different, and the point of view is not quite the same, but sooner or later a link is established that bridges all differences. Such is the case with Dr. Florence Hill.

She received a representative of the "Mail" this week with true Southern courtesy. There is nothing of the scientist in her appearance. To meet her she is just a woman with a delightful sense of humour—soft of voice and quiet in manner. She is accompanied by her two daughters, one of whom is an undergraduate of the University of California, and will pursue her studies at the Adelaide University, and one son, a boy of fourteen. Dr. Agnes Walker, a well-known

Californian bacteriologist, has also travelled with Dr. Hill from America, but will be in Australia for only a short period before proceeding to China and Japan.

WOMEN GRADUATES.

"To graduate in the United States," said Dr. Florence Hill, "girls go up through grades at the primary school, grammar school, high school, and then on to the University. A certain percentage of marks at the final examination of the high school gives entree to the University, but otherwise a standard examination must be passed. There are private schools also where a girl may pass through all grades to the University. In the eastern States the universities supported by endowments, such as Harvard, Princeton, and Yale, have the greatest prestige, but in the West the State universities rank highest.

"At the University of California, where I graduated, there are 30,000 students. For the first two years the Southern Californian students do not attend at the campus—the university proper—but at a branch in south California, about 400 miles away. During these two years there are always a number of students combed out, and the remainder continue their studies at the campus.

"Until a few years ago the university was practically free, but owing to the large number of students and the enormous expenditure it was found necessary to charge a fee, and it is now about 100 dollars a term for an outsider and 25 dollars for a native of the State. In California all classes pass through the University. To obtain a position in any intellectual calling a woman must have a degree in the United States—not so a man. At the employment bureaus I have been told that employers prefer men without University degrees. The boy who goes straight to business from school has more practical knowledge and is content to work up,

whereas the average graduate expects to go straight to the head office. It is this feeling that is, no doubt, making for greater utility in the Universities of the United States.

"In California nowadays we have education but no culture, and though the graduates may be better fitted to make their way afterwards, there is an absence of culture that I do not like. The University of California is governed by the students on the honour system. There is no supervision in regard to their private lives or their studies. They live as they please. The students have every chance of learning life during their course—oh, dear! yes. Too much so.

"It takes four years to graduate, and then from three to four years to obtain a medical, legal, or scientific degree. I was at the University for seven years, but now it takes up to eight or nine years to obtain a medical degree.

THE GROWING GIRL.

"Yes! In the United States great care is taken of the health of the growing girl. For instance, at the schools and colleges every girl must pass a physical test before indulging in any of the athletic sports or games, and she is subject to examination at any time during her training. Those who are unfit for games are put under corrective physical exercise, while those who are unable to take any physical exercise at all are prohibited from studying or playing beyond so many hours a day.

THE MEDICAL PROFESSION.

"The majority of medical and professional women continue to practise their profession after marriage. In fact, I do not know of one medical graduate who is not now in practice. The majority are general practitioners, but their patients are chiefly women and children. I don't think they do as well as men. No! I am sure they don't.

"One of the great obstacles to medicine in the United States at present is Christian Science—and as it is a religion it is all the harder to combat. There are regular Christian Science practitioners who cure people by absent treatment. When they find their patients are about to die they call in a regular medical man or woman and obtain their death certificate. Some of the heads of the Government are among their followers, and they are very well organised. The trouble is we are not organised sufficiently. The only other sects properly organised are the Roman Catholics and the Jews.

"Before the war an effort was made by the medical profession to show the number of deaths resulting from Christian Science, but the war upset all that, and they have never organised properly since. The Christian Science religion has made tremendous strides in the United States in the last few years, and they are now building magnificent churches. The old-established churches seemed to lose their hold during the war."

Dr. Hill believes in a woman always remaining womanly, whatever her profession may be, and she is astonished at the number of women who profess to be intellectual, attend lectures on all subjects, go into ecstasies over new religions, new philosophies, and odds and ends of ideas which are utterly futile when sifted and analysed. She is essentially feminine herself, but has gathered knowledge from the four corners of the earth with the excellent judgment of a scientific mind.



DR. FLORENCE HILL.

WITHDRAWAL OF HIGH SCHOOL REGULATIONS.

Almost immediately after the Legislative Council met on Tuesday the Chief Secretary rose and said, "I desire to inform the Council, through you, Mr. President, that the Government are withdrawing the education regulations." These are the regulations governing the future establishment of high schools. The Government stipulated that in future any community which desired such an institution must provide £1,000 and five acres of land. The regulations met with strong opposition, both inside and outside Parliament, and recently, at the instance of the Hon. W. G. Duncan, a motion was carried in the Legislative Council that the regulations be disallowed.