

WORK AT WALLAL.

Preparing for the Eclipse.

Aborigines' Crude Notions.

WALLAL, August 31.

The eclipse observation party arrived at Broome on Monday afternoon, and immediately began to tranship its paraphernalia to the schooner Gwendoline. This work was completed in the early hours of Tuesday morning, and the schooner set sail at daybreak in tow of the Governor Musgrave, which took the lady members of the party on board. The ships anchored off Wallal early this morning, and unloading was started at once. Owing to the low tides it was impossible to beach the schooner, as had been intended, and unloading had to be carried out by means of a whaleboat. The weather, fortunately, was ideal. A light easterly breeze at the beginning of operations fell away to almost a calm by noon. Forty to fifty aborigines were employed in getting the cases from the boats through the surf on to the sandy beach, and three donkey teams removed the cargo inland to the camp site near the telegraph station, the teams consisting of eight to 25 donkeys each. Owing to the careful preparations which had been made by the naval party under Lieut.-Commander Quick, the work proceeded with order and swiftness. As the cargo measures about 70 tons, and includes delicate scientific instruments, the utmost care has to be taken in handling the cases, and it will be at least another day before the whole is discharged. Dr. Campbell (Director of the Lick Observatory, U.S.A.) landed in the first boat with Commander Quick. He has chosen a very convenient site for the main camp near the Government well, where the instruments can be placed amid trees about 17 ft. high, the shade of which will protect them from excessive variation of temperature. Mr. and Mrs. Evershed (from India) joined the party at Broome, and will camp with the American, Canadian, and English party. The Western Australian party will camp at Wallal Downs Station, three miles from the main camp. The aborigines are greatly interested in the forthcoming eclipse, which they consider is being caused by the eclipse party. One native asserted that the astronomers would put up a big stick with a bag on the end to clear the ashes out of the sun.

"NOT A PICNIC PLACE."

WALLAL, August 31.

The unloading of the schooner Gwendoline was continued during part of the night and throughout to-day. As only one motorboat and one whaleboat are available, the work is progressing slowly, and the donkey teams take a considerable time to bring heavy loads along the mile and a quarter of sandy track from the beach to the observing site. There is considerable surf on the beach, and all cargo has had to be carried ashore through it from the boats. The camp is rapidly taking form, and the Lick Observatory, Canadian, English, and Indian parties have got the various positions on their respective grounds marked out. The chief work to-day has been in connection with the cameras for the Einstein theory investigations. Sites for these have been cleared, and holes have been dug out for the concrete piers. The maximum shade temperatures to-day was over 90 deg. It was intensely hot in the sun, but the work went on without intermission. It is expected that all the cargo will be discharged in the next 12 hours, and brought to the camp site to-morrow. The camp is anything but a picnic place at present. The ground is a loose grey sand, and with the clearing operations and the passage of the donkey teams, air is filled with powdery dust, which finds its way into the food and everything else. The ladies of the party are making themselves extremely useful in unpacking cases, measuring positions for the various instruments, and assisting the naval cooks. The Western Australian party is moving out to its camp near the aerial landing ground at Wallal Downs, but some difficulty has been experienced in landing their heavier cases.

THE CORDILLO DOWNS PARTY.

BROKEN HILL, August 31.

Professor Woolnough and party, who proposed to visit Cordillo Downs Station to observe the solar eclipse on September 21, and then proceed to the Salt Lake areas in northern South Australia for the purpose of studying the natural deposits of rock salt in situ, left Broken Hill to-day. They are travelling in a motor car and motor truck, and carry many experimental appliances to overcome difficulties which may arise during the journey. The expedition is a private one, and until he has proved the efficacy of the appliances he carries, Professor Woolnough is reluctant to make anything public in reference to them.

Advertiser 2-9-22

WAITING FOR THE ECLIPSE.

THE ASTRONOMERS AT WALLAL.

Wallal, September 1.

The unloading of the schooner which brought the eclipse party was completed early this morning, the last part of the work being delayed by the heavy surf on the beach. One or two packages got wet while being carried ashore from the whaleboats, but fortunately all the cases which would have suffered severely by immersion in salt water were brought to land perfectly dry. The donkey teams are still transporting cargo from the beach to the camp, and this will probably be finished to-night. Constable Dewar, who joined the expedition at Broome, has given valuable assistance in securing a good muster of aborigines to carry water and rock for the concrete piers. The camp presented an animated appearance last night when the whole party sat down to supper at a long row of tables down the central street of the camp. Today dining marquees and work tents have been erected, and some parties have got the wooden bases of their chief instruments put together. The weather is uniformly fine, and there has never been any sign of mist or cloud.

Dr. Campbell expresses himself well satisfied with the progress made, and now that the cases have been distributed to their respective owners, the work should be still more rapid. Nothing further of importance is likely to happen for a few days.

X Advertiser 2-9-22

Dr. Florence Hill, who is coming to the Adelaide University to study bio-chemical research for two years, arrived in Sydney from the University of California yesterday. She has a wide knowledge of poison gases, and invented a process for treating lewisite, which she declares to be the most deadly man-killer invented. It was ready for use just as the war ended.

Advertiser 4.9.22

Professors J. B. Cleland and T. Osborne, accompanied by Mr. Adamson, Lecturer on Botany, Manchester University, England, who have been on a scientific trip to Ooldea, East-West Railway, arrived in the port by the express (writes our Port Augusta correspondent), and were met and entertained by Dr. Gorrie. The doctor motored the visitors to Quorn and Wilmington. The visitors state that their investigations at Ooldea were successful, and that much useful data was obtained.

Register 5.9.22

Mr. Eric Millhouse, of the Crown Law Office, who has held the office of Crown Prosecutor for a few years, following upon his engagement in an acting capacity, has now been granted the right of private practice. He will thus be taken off the permanent list of salaried officers of the Crown Law Office, and be paid fees for his work for the Government. A similar course was followed in the case of his predecessor, Mr. H. A. Shierlaw.

Advertiser 5.9.22

THE SOLAR ECLIPSE.

PARTY AT WALLAL.

According to Dr. W. W. Campbell, who is in charge of the party of scientists now at Wallal to view the solar eclipse on September 21, it will occur 30 seconds earlier than is predicted in the Nautical Almanac. Such is the information contained in a letter received by Mr. A. C. Finsdale, managing director of United Theatres and Films, from Mr. E. Brandon Cremer, one of the company's official cinematographers with the party. "I am sending this letter by aerial mail," he writes, "the first mail of its kind, by the way, which ever left from this part of the continent. In the course of a long talk by Dr. Campbell on the conditions likely to prevail at Wallal during the eclipse, he predicted that it would occur some 30 seconds earlier than the time set down in the Nautical Almanac. The eclipse will be divided into four phases, and it will be the contact of the second and third which will be most easily observed. The brilliancy of the sky is hard to estimate, he says, as so many things enter into the calculations, such as clouds, moisture, water vapor, &c. At the same time the sky should be considerably darker at Wallal than at Christmas Island owing to the position of the former being almost in the centre of the ecliptic track, while the latter is 40 miles off the centre line. The 15-ft. camera used for photographing the corona will have a 4 in. aperture and an equivalent focus of 15 ft. The photo will

be used 30, which is the longest made in the United States, and an exposure of 1 minute 52 seconds will be given. The camera used to test the Einstein theory will consist of two pairs of cameras, making four in all, with two lenses of 5-in. aperture and a 15-ft. focus. They were made by Hastings, of the United States. The plates are 4 in. by 17 x 17 in. square, giving a field degree of 5 1/2 deg. in diameter and 10 1/2 deg. photographic magnitude. The second pair of lenses will be quadruplet, with 4 in. aperture by 60 in. focus, and the plates will be 17 x 17 in. square, giving a field of 20 deg. in diameter."

A Warning Issued.

A valuable brochure containing scientific and practical information for the guidance of amateur astronomers in connection with the eclipse of the sun on September 21 has been issued under the authority of the Minister for Home and Territories, by Mr. H. A. Hunt (Commonwealth Meteorologist, Melbourne). It contains a historical record of facts relating to the grandest of all celestial phenomena since B.C. 3102 the year of the first recorded total eclipse of the sun in the Brahmin Surya Siddhanta, mentioning that in B.C. 2159 there was a partial eclipse, for the failure to predict which Hi and Ho, the Chinese Astronomers Royal, lost their lives. The first total eclipse recorded in Britain was A.D. 538, and the next will be in 1927, the duration being only 0.7 of a minute. This will be the third visible there since 1140, the others being 1715 and 1724. The next total eclipse in Australia will take place in 1976. The brochure contains notes on the programmes of observations to be made by the Wallal, Cordillo Downs, Goondiwindi, Coongoola, and Stanthorpe expeditions, information in regard to the use of ordinary and telescopic cameras, and to the data obtainable during total solar eclipses. The publication is prefaced with the following advice in bold type:—"Warning! Protect your eyes. Serious and permanent injury to the sight may be incurred by continued staring at the sun during the partial eclipse, even with the unaided eye if it is insufficiently protected. Much more probable are ill-effects if optical instruments such as binoculars or telescopes are used. Very dark green or neutral tinted glass is suitable, or glass heavily smoked over a lamp or candle. For naked eye observations a dense portion of a photographic negative is sometimes suitable, but for use with optical instruments it is advisable to have the proper solar eye-piece material, or black glasses, such as is used by electricians as a protection against the glare from arc lamps. If the only glass obtainable is not sufficiently dark, it is an advantage to attach a larger piece of it to the objective instead of the eyepiece of the instrument. During the total eclipse no protection is needed and detail is better seen without. Provision should therefore be made to have the dark glass readily removable." As the total eclipse will not be visible in South Australia, except in the far north, at points corresponding with about 100 miles beyond Oodnadatta, the warning to protect the eyes will apply to people in this State during the whole passage of the phenomenon. In further advice on the matter it is stated that reddish tints are unsuitable for eclipse observations, and there is a recommendation that glass colored green be used in conjunction with telescopes, opera glasses, or the naked eye for observing the progress of the partial phase. Neutral tints come next in value.

Register 5.9.22

ELDER CONSERVATORIUM.

STUDENTS' ENSEMBLE CLASSES.

The thirteenth concert of the 1922 session, which was given in the Elder Hall on Monday evening, was a chamber music programme by students of the ensemble classes, under the direction of Messrs. Gerald Walean and Harold Parsons. The rendering of the writings of great composers in this manner before an audience has a special value for students—and the popularizing of concerted music will go far to strengthen the hold of music upon the life of the community. It should also bring to light much fine material in the shape of musical talent, which might otherwise have remained undiscovered, even by the possessors. This concert gave striking evidence of the keenness and enthusiasm of the students, and their rendering of really difficult music, the works of some of the greatest composers, was distinctly good. The sincerity, and comprehension of the message of the music evinced by the young musicians was specially gratifying. The programme opened with the first movement of the "Trio in C major" (Haydn), pleasingly played by Miss Irene Martin, Miss Mary Cochill, and Master Melville Williams. In

Beethoven's "Trio in B flat" (first movement), Miss Muriel Prince was at the piano, Miss Helen Magarey was violinist, and Miss Alice Cummins' cellist. "Two fantastic pieces" (Schumann) was given by Misses Joan Renou and Aila Zeven. Miss Ariel Shearer and Mrs. T. H. Wyles played the first movement of the "Sonata in A for piano and violin" by Faure, with a nice feeling for rhythm. Misses Mary Meegan, Gwen Moss, and Alice Cummins won well-deserved applause for their rendering of the minuet and trio from Beethoven's "Trio in C Minor." In the "Finale" from the same composition, Miss Ruth Naylor took the piano part. This, too, was a distinctly happy effort. Misses Alice Meegan and Doreen Stoneman, A.M.U.A., played the first movement from the "Sonata in A minor" by Schumann. There was decision and well-defined rhythm, as well as expression, in the rendering of the first movement of Mendelssohn's "Trio in D minor," by Misses Doris Kentish, Lillian Pether, and Alice Cummins. The andante, from the same work, was played by Messrs. Val Robertson, Mervyn Williams, and Melville Williams in a way which won hearty applause. The character of the andante from "Trio in B flat" by Fesca, was particularly well brought out by the playing of Misses Constance McGrath, and Annie Oliver, and Mr. John Meegan. Mr. Clement Rolland's mellow voice and clear enunciation gave special value to his expressive rendering of two songs by M. V. White—"When the swallows homeward fly," and "Let us forget." Misses Ellen Brindal and Helen Magarey gave a spirited presentation of the Finale of Grieg's characteristic "Sonata in G for piano and violin." The programme was concluded with the Scherzo from Schubert's Quintet, by Misses Marjorie Adamson and Gwen Moss, and Messrs. Mervyn Williams and Eric Gibbs, assisted by Mr. Harold Parsons, Mus. Bac., who took the bass violin.

Sir Samuel McCaughey Bequest. Register 6.9.22

A.I.F. CANTEENS FUNDS TRUST.

Among large war funds, the A.I.F. Canteens Funds Trust is unique, in having received, with the exception of £779 from the Victoria League, no financial contribution from either the Government, the public, or any private source. Trading profits of canteens conducted by military authorities, with the balances at credit of certain regimental funds at demobilization, comprised the main part of the sum of £628,498 received by the trustees for disbursement. Grants are made only to seriously disabled soldiers and needy dependants of dead soldiers; and altogether 44,690 claims have been dealt with. The weekly distribution amounts to about £700. These and other facts are set forth in the second annual report, which has just come to hand, and which shows a satisfactory year's work. The most interesting part of the document, however, is that relating to the Sir Samuel McCaughey bequest. Trustees of the A.I.F. Canteens Funds Trust have been made administrators of the generous gift of £255,163, to be applied to the education of the children of dead or permanently incapacitated soldiers; and their report outlines a splendid and inspiring scheme. Assistance is intended to cover the various grades of technical instruction from the junior technical schools to the senior technical schools, the State agricultural colleges, and, when required, on to the university. Grants cover, where necessary, university, college, or school fees, tools, materials, equipment allowance, travelling allowance, textbooks, and stationery. The trustees are even prepared to give facilities for exceptionally brilliant students to continue their studies abroad. Boys are particularly encouraged to seek training in agriculture—although the trustees note, by-the-way, that there are comparatively few applications for this—and in skilled trades rather than office work. Girls, unless they have good education and special aptitude, are advised to take courses in dressmaking, millinery, and tailoring, in preference to office work; but there is no restriction to these forms of technical training. Deaf and dumb, blind, or mentally deficient boys and girls are not neglected, as the trustees recognise that the widowed mother of such afflicted children are specially burdened. In view of these splendid opportunities, it is curious to note that the trustees have found it necessary to offer additional inducements for applicants to engage in trade training and to complete the required course. Sympathy with a hard-pressed war widow needing help as soon as possible from the boy leaving school, may assist one to understand one reason for lack of applications; but, apart from this, parents need only to recognise the value of technical training as a means to a successful, useful career, to grasp for their children such magnificent opportunities as are offered by this patriotic and fine-spirited bequest.