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the ball in its first skip. This was so far never been up to the height from which the first projection was made, and the difference is more marked as the first height is increased. In order to get a better knowledge of the behavior of the ball and water with relation to each other. I was anxious to get a photograph of the event. This is one of those cases, however, where the camera with its shutter does not give! a record of what takes place, because the changes that are occurring are too rapid' for even the fastest shutter. Moreover, the method of using a flashlight with an open lens is of no use except with a flash of very short duration. This last is the method adopted by me, and the illumination used is that of a small electric spark! -not the ordinary spark, but that obtained from the Leyden jar-and the durationof this spark, as measured, is less than 1-300,000th of a second. The first pictures obtained were shadow pictures, the method being to hang the naked sensitive plate vertically above the water surface, with its edge about half an inch below the water, and to fix the illuminating spark opposite to it, and then fire the ball in between, so that the splash made by the ball was thrown in shadow on the plate. The best results obtained, however, have been with the camera, using a very fast lens; and after getting a good series of these, in which the ball can be seen first touching the water and finally leaving it, with about 10 intermediate pictures. I sent a paper on my work to Professor Bragg, professor of physics at the Leeds University, who, after reading it, sent it on to Professor A. M. Worthington, the specialist on splashes and drops. Professor Worthington has taken so much interest in the works and photographs sent by me that he has commented very fully, sending five foolscap sheets of comments. Professor Worthington writes, pronouncing the methods used as good, and showing great resourcefulness on the part of the author. He says, also, that great skill and ability have been shown in getting the results obtained. He has advised the author to continue with the photographs in the hope of picking up still more detail of the form of the water immediately in front of the ball. The water frills up round the ball immediately it touches, and as the ball goes on its path, ploughing along the surface, two side splashes are raised well above the level of the water, and one central splash of a much greater height rises over the forepart of the ball. The 12 photographs show the behaviour of these splashes as the ball proceeds on its way, the interval that elapses from the first picture to the last being about 5-1,000th of a seond. These photos, are the only ones up to the present that have been taken of the ricochet. As soon as I have amended the paper in accordance with Professor Worthington's comments, I intend to send it to England for publication. Professor Bragg will have the handling of the paper when it reaches there. I intend to continue my experiments as opportunity offers."

COME RECKLESS ARITHMETIC.

The examiner who corrected the arithmetic paper of the candidates at the last primary examination in connection with the Adelaide University, remarks:- "A lamentable lack of commonsense was displayed by far too many candidates who, obtaining by some slip answers palpably absurd, gave them up without comment. The cost of rails quoted for a mile of tram track ranged from 2/8 to £238,000,000. The profit to be made on a small land speculation was variously estimated at figures up to minety-eight thousand million pounds. For putting a tiled dado round a fairsized room, one candidate suggested that less than two tiles would suffice, another wanted fifty million. More extraordinary still, many candidates reckoned in Question 6 that an ordinary workman should be able to save £5 a week or more out of his carnings, one suggesting £1,900, while further it was frequently deemed that the man would work 168 hours a week at normal wages and eleven hours at overtime rates in addition. Surely commonsense should suggest that such answers needed revision. The gentleman who had the task of marking the papers of the candidates at the junior examination has a similar complaint. He writes:-"It is perhaps well to call attention once again to the palpable absurdity of many answers given. Naturally many slips must creep into the work of candidates, and some are bound to pass unnoticed. But others result in such extraordinary ligures that one cannot help wondering whether the candidates are not merely endeavoring to follow arithmetical rules that they have learnt by rote without in the least comprehending what they are doing. For example, the annual income derivable from investing £9,000 was given as £400,000; the profit on retailing a few tons of sugar as £19,000; and the selling price to gain 10 per cee+ of shares bought at 15/ odd, from 1/ to £17! Even the stress of the examination room can hardly excuse answers such as these!"

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PERTH UNIVERSITY SENATE .:

PERTH, February 13.

Executive Council has approved the appointment of the following as members of the first Senate of the Western Australian University:—The Minister of Education (Mr. Walker), the Minister of Lands (Mr. Bath), Sir Winthrop Hackett, Mr J. W. Kirwan, M.L.C., Mr. F. Wilson, M.L.A., Mr. Andrews, Mr. N. Keenan, Dr. Saw, Dr. J. W. Smith, Mr. A. Sandover, Sir Walter James, Mr. G. M. Roberts, Mr. W. C. Grasht, Mr. F. W. Burrows, Mr. W. Somerville, Mr. J. S. Battye, Dr. Gertrude Mead, and Mrs. M. L. Moss,

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THE SPENCE SCHOLARSHIP.

Megister, Feb. 8th, 1912.

A preliminary meeting of the Catherine Helen Spence Scholarship Committee was held at the University on Wednesday afternoon. There were present the Director of Education (Mr. A. Williams), who presided, Mrs. A. H. Young (who was appointed hon, secretary), Professor Mitchell, and Mr. W. J. Sowden. The scholarship is open to the women of South Australia (between the age of 20 and 35 years), and 15 applications were received. The successful candidate may occupy the first two years in the Adelaide University in a -eneral course of study, including compulsory subjects, such as economics, ethics, and others embraced in a social science course, and the remaining two years, or the whole tenure of the scholarship, may be spent in Epyland, America, and on the Continent investigating the treatment of social pro-The committee considered the qualifications of the applicants, and a further meeting will be held shortly, at which a final decision will be made.

THE UNIVERSITY.

The Registrar of the Adelaide University (Mr. C. R. Hodge) stated on Thursday that the Conservatorium of Music would resume duty on Monday, February 26, and apparently there would be a large increase in the number of students. Arrangements had been completed for Madam Georgina Dalmar-Hall and Mrs. Reginald Quesnel to join the teaching staff, and these appointments appeared popular. The University term would not begin until March 12, and it was hoped that the intervening six weeks would enable the contractors for the building extensions to at least finish the large leccure room. At the present time the University was hard pressed for room, and the delay in completing the additional accommodation required had been a serious disadvantage to the institution.

The Verran Government resigned office at 4.30 on Friday afternoon, and the Leader of the Opposition (Hon. A. H. Peake) was sent for by His Excellency to form a new Administration. He accepted the commission, and at 8 o'clock at night submitted the names of the new Ministers, who will be sworn in at noon to-day. They are as follows:—

Hon. A. H. Peake-Premier, Treasurer, and Minister of Education.

Hon. R. Butler-Commissioner of Public Works, Minister of Mines and Marine. Hon. J. G. Bice-Chief Secretary.

Mr. H. Homburg-Attorney-General and Minister of Industry.

Mr. F. W. Young-Commissioner of Crown Lands and Immigration.

Hon. T. Pascoe, M.L.C.-Minister of Agriculture and Irrigation.

It is known that the Hon. L. O'Loughlin will be Speaker, Mr. Rudall Chairman of Committees, and Mr. Ritchie Government Whip.

Adventiser, Leb. 17/12

PARLIAMENT AND THE UNIVERSITY COUNCIL.

The defeat of Mr. Senior in the Assembly district of Victoria and Albert caused the point to be raised in certain circles what will now be the position in regard to the Parliamentary representation on the University Council. The Adelaide University Act of last session made provision for the State Parliament to have five nominees on the University Council. The representatives appointed were: - House of Assembly, Hon, F. W. Coneybeer (Minister of Education), Mr. S. B. Rudall, and Mr. W. Senior; Legislative Council, Sir Lancelot Stirling and the Hon. J. J. Duncan. The Act stipulates, "As soon as practicable after the passing of this Act the first five members shall be appointed, and at the beginning of each Parliament after the prosent Parliament, five members shall be appointed in manner aforesaid." That means that the five representatives of Parfiament appointed last session will retire as soon as five are appointed by the new Parliament. Mr. Concybeer received the appointment probably because he was Minister of Education, and it is possible that the Minister of Education in the new Ministry will be one of the Parhamentary representatives on the University Council. Mr. Sentor, not having been returned to Parliament, will drop out. There is a section of the Act which seems to complicate the position, as section 6 reads:-"In case any member appointed under this Act ceases to be a member of the House of Parliament which appointed him, otherwise than by the expiration of dissolution of Parliament, he shall thereupon cease to be a member of the Connes! of the University." That section, in fact, only safeguards the position of nominees of an expired or dissolved Parliament until a new Parliament has been elected. The members of the council appointed by Parliament last year will continue to act. therefore, until the new Parliament elects its representatives. It may be that the new Government will consider an immediate election advisable, or the malter may stand over until Parliament meets for the second session and the real work of the year in the winter.

Register 2/12.

At a meeting on Tuesday night of the committee formed to distribute the citizens funds raised to perpetuate the memory of the late Miss C. H. Spence, it was mentioned that 12 applications had been received for the Spince Scholarships. Two ceived for the Spince Scholarships. Two were informal. The Director of Education were informal. The Director of Education were all on a high intellectual plane. He was astonished at the range of work which had been accomplished by the candidates.