

tion of the air within the region of a cyclone was frequently illustrated by a figure in the form of a spiral waterspout. The statement that "Australia is the chief wheat-producing country in the world," which is often repeated in examination papers, is not correct. There are at least ten countries that produce more wheat in the aggregate than Australia. Bad spelling, not simply of uncommon words, but of words of everyday speech, is a marked feature in some of the papers. The following are examples:—Anjouan kings, glergy, audinary pilot, a tracked of land, swamm (for swam), he done it, Joan of Arc was a pheasant girl, interduced, Spainiards, dreamt, much. The question on the reign of Henry II. was on the whole fairly well treated; but in many cases the answers only covered part of the ground. One candidate wrote that the Petition of Right was drawn up "to dispel (sic) Henry's French favourites from the country." There was the usual confusion between the Reformation and the Restoration, and such sentences as this were common:—"Luther came to England and preached a new kind of religion." Luther's part in the Reformation is almost generally misunderstood. There was also a want of precise and accurate knowledge about the abolition of negro slavery; some thought the slaves were employed on farms in England, others omitted to mention England's part, and referred only to the American Civil War.

—Fables About Kitchener.— Junior candidates have still much to learn in regard to the best way of presenting their knowledge. Many answers revealed a lamentable lack of knowledge of the situation of places. Lord Kitchener, for instance, was drowned on his way to Russia off the Falkland Islands, in a sea fight on the Dogger Bank, in the Black Sea, and he was torpedoed off the Azores! One candidate was sadly confused when he wrote that Henry VII. was the descendant of both the second and the fifth sons of Edward III., and by his marriage with Elizabeth of York was the descendant of both Yorkists and Lancastrians. The question on the Commonwealth and Protectorate was on the whole well answered. There was some misunderstanding among the weaker candidates of the term Protectorate. One ingenious guesser connected it with the fiscal policy, "which made it extremely hard for the working man to buy food for his family." The weaker candidates found great difficulty in dealing with the Test Act; many confused it with the Petition of Right, and only a few mentioned anything of its history after the reign of Charles II. This kind of statement was common:—"No Roman Catholic could hold office unless they belonged to the Church of England!" In asking candidates to write on Kitchener of Khartoum it was hoped that they would have been able to include references to the recent war. For the most part the examiner was not disappointed, but frequently howlers of a serious nature appeared. In one case Lord Kitchener was confused with Gen. Gordon, and was said to have been murdered in Khartoum in 1885, but was still allowed to take part in the flesh, in the events of 1916! It is remarkable how ignorant many of the candidates are of the geography of their own State (the examiners remark). This is a common defect that shows itself from year to year. Thus, no exact knowledge was indicated as to the situation and relative sizes of the principal lakes of South Australia, or the respective conditions that gave rise to the different classes of lakes. It was commonly stated that Lake Eyre and other lakes of Central Australia were the residues of the salt water left by the retreating sea; that the marginal lakes of the south-east were the pools of sea water that were left in hollows when the land rose above sea level, and that the Blue Lake occupied the crater of the extinct volcano, each of which explanation is contrary to the statements in the text book. How is it that nine candidates out of 10 write "Glasgow" instead of Glasgow? This has gone on for years, and shows no sign of dying out.

—"Modern" Lapses.— Senior Examination.—In the essay on "Modern history begins with the Tudors" there was much vague writing; the examples given were often far from flattering to modern times, e.g. "Elizabeth's flirtations were very modern," "who but a modern king would think of divorce or having six wives in succession," "Henry's methods of raising money were barbarous but very modern." Why will not candidates write more simply? It would have been so much better to say that Wolsey was the last ecclesiastical statesman with the possible exception of Laud, instead of writing, "From the Tudor period far out in the sea of time but one mitred head is visible and that is Laud, but he is alone, out of place and out of date." The irony was probably unintentional on the part of a candidate who wrote that Somerset "put down the revolt with an armed force of German missionaries." Another wrote of the struggle in England between King and Parliament that "the cause of the war was whether you lived north or south of a line drawn from Manchester to London."

Req. 23. 1. 20.

'VARSITY SOLDIERS' TRAINING.
MELBOURNE, January 22.
An amendment of the Repatriation Act has been gazetted to provide for State Boards advancing to returned soldiers who undergo University training the necessary sums for fees in respect of the granting of diplomas. The advances are to be in the form of loans, and applicants for them must have completed a university course or some other professional course, without having obtained assistance of a similar nature from any State Board.

Req. 14. 2. 20

MEDICAL RESEARCH.
A Proposed Laboratory.

The limited resources of the Adelaide University have hitherto rendered impossible the development of research in the laboratories to the extent which is considered essential in modern institutions of higher education. This defect reacts seriously upon the welfare of the students attending the institution; for it means that they have little opportunity of witnessing or participating in the growth and progress of the branches of science in which they are specialising, and they are handicapped in comparison with students of other institutions who have gained confidence and experience by actual employment of their knowledge in research. The community also suffers by lack of the facts of value to themselves and to mankind which such research might reveal. A movement is on foot to remedy this situation, so far as medical research is concerned, by subscribing money to endow a research laboratory. A committee, consisting of Sir Lancelot Stirling (Chairman), Messrs. J. Barker, T. E. Barr Smith, and H. W. Crompton, Drs. Lendon and H. S. Newland, and Professor T. Brailsford Robertson, has been appointed to organize the project, and a substantial measure of support has already been promised, although the funds available are still insufficient to furnish the income which will be required.

—A Generous Offer.— Professor Robertson, who has recently returned to Adelaide after 14 years in the United States and Canada, has offered his services as director of the proposed laboratory without salary. All that will be necessary to supply, therefore, will be the space to work in, and money to buy materials and equipment and to pay assistants to make and repair apparatus, and do the more mechanical part of the work under the direction of those engaged in research. It is estimated that these items of expenditure will total about £1,200 a year, corresponding to a capital endowment of £22,000. It is proposed at first to limit the researches undertaken by the laboratory to the investigation of various forms of human and animal growth, especially the growth of cancer, upon which Professor Robertson has been engaged in investigation for a number of years. Later on it is hoped to enlarge the scope of investigation to include a greater variety of problems. In order to permit this, it is proposed that the laboratory shall employ a part of its equipment to manufacture certain drugs prepared from animal tissues, such as thyroid extract, suprarenal extract, and others which are widely used by the medical profession, and are at present imported from Europe and America; while the animal glands from which they are prepared are merely converted here into fertilizer. The laboratory would manufacture and sell this article to the medical profession, just as the State Pathological Laboratory at the Adelaide Hospital manufactures and sells vaccines to the profession. The proceeds from the sale of these products would be used entirely to add to the equipment of the laboratory and enlarge the scope of its researches. The medical profession and the public would receive the benefit of cheaper and fresher products, made up, if desired, in accordance with the physicians' own formula. It is hoped by the committee that appeal to the public will awaken widespread interest in this project. Persons desiring to contribute to the endowment may forward their subscription to the hon. treasurer, Mr. John Barker (Barker Brothers, Currie street).

Ad. 1. 3. 20.

The Council of the University of Adelaide has granted Miss Nora Thomas 12 months' leave of absence, and Miss Sylvia Whittington has been appointed her locum tenens as teacher of violin at the Elder Conservatorium during 1920.

Adv. 1. 3. 20

£1,000 FOR THE UNIVERSITY.
The finance committee reported to the council of the Adelaide University, at its meeting on Friday, that a donation of £1,000 to the building fund had been received from the Chancellor (Sir George Murray). The council expressed its gratitude for the gift, which is the first donation to a new fund to be called the University building fund.

Req. 15. 3. 20.

—Strong Determination!— Mr. Melrose, in responding, said:—"I thank the Minister of Agriculture for the kindly way he has proposed the toast. Truly, misfortune has stood in our path for a long time, but there has been a strong determination throughout to keep the flag flying despite the effects of war, pestilence, drought, and coal shortages. A month ago the maritime strike threatened to seriously affect this show,



MR. R. T. MELROSE
President of the Royal Agricultural Society.

and we had a very discouraging letter from the railway officials respecting the probability of a curtailed train service, but our show arrangements were well advanced, and another abandonment was unthinkable to us, and here we are with record entries for an autumn show, and with special trains as well. (Applause). This is the third time I have had the honour of presiding at these functions. When I first acted in this capacity as a deputy for the president my embarrassment (which was very real) was softened somewhat by the feeling that due allowances would be made for an initial effort. To-day I am more embarrassed by the feeling that you have a right to expect something more from me, and when I look back at the abandonment of two consecutive shows, and confront the members who have paid their subscriptions, I feel I have a hard row to hoe. (Laughter.) However, no apology should be needed for affairs which were beyond our control. Influenza took possession of these premises, and that settled the matter. I think we are really entitled to sympathy

rather than blame, and I want to say that although the abandonment of a show is necessarily disappointing to subscribers, remember it is doubly so to exhibitors who have spent money and time in preparing their exhibits, and perhaps still more disheartening to those zealous committeemen who for months applied their energies in drawing all the threads of organization into one fabric in their desire to make a success of a show that had to be dropped, and then set to work and do the same thing for another one without any guarantee against abandonment. Speaking generally, I think the public and subscribers recognised this, and they generously accepted the position with good grace, and I trust that they will rally round their society with a determination to carry on with renewed efforts despite any unfavourable conditions that may present themselves. (Applause).

—Importance of Shows.— "It is not sufficiently recognized how important shows are as a medium for advancement in every branch of industry. Our stupendous war burdens will, perhaps, make us better realize the national necessities. Anyway, it now rests with the Australian people to encourage more production and higher efficiency, not only in rural industries, but in every direction possible, and one of the means to that end is the adoption of most up-to-date methods, and these exhibitions not only encourage that, but they create a spirit of emulation that makes for progress. (Applause). Looking at the educational aspect, shows cannot, of course, take the place of the higher educational institutions, but they can back them up. The public are attracted by an exhibition, and they not only see there what the agriculturist and the studmasters are doing, but learn

what mechanical ingenuity, and to some extent what the laboratories are doing. It is said that there is no country in the world where more wealth is wasted than in Australia, and where there is such a big field for research work. (Applause.) Australian industrialism is beginning to appreciate the value of the University laboratory, and doubtless will in time more readily assist them. The farmer, too, is realizing what science is doing to advance agriculture, the first convincing factors being artificial manures, promoting profitable agriculture on lands hitherto regarded as unfitted for cereals. The farmer, the vigneron, and orchardist, all know now something of the uses of the products and by-products of mines to them for soil fertilization, just as the Wallaroo miners and smelters at Port Pirie are able to appreciate what the laboratory has done for them. (Applause.) A chemist in Melbourne experimenting with the use of acid and oil in the separation of zinc resulted in £12,000,000 worth of metals being extracted from the then supposed valueless Broken Hill tailings. The Great Cobar Mine sent its copper to Germany for refining, until a Sydney chemist examined it, and found that it contained gold which had never been paid for, and this discovery added many years to the life of that mine. Further, when a chemist in the laboratory poured sulphuric acid on phosphatic rock he produced a plant feeder that poured millions of sovereigns into the pockets of the farmers. (Applause.)

—A Generous Offer.— "Our farmers were, I think, the first Australians to profit by the discovery—a discovery that cost them nothing, and I would appeal to them to follow up their progressiveness by helping to establish a research laboratory in connection with our University. My wheat farming is on a

very small scale, but I would be willing to start a farmers' list with £100, for the purpose I have indicated. (Applause.) One thing that prompts this suggestion at the moment is that scientific investigation has discovered that animal products of very high value to humanity are being thrown away at our Australian slaughter-houses. In our ignorance we have been wasting an important primary product, and we have been bringing from Germany, at great cost, the same article in another form. Thus is a national asset lost because the value has been unknown to us for lack of means of demonstrating its uses, and as a consequence we are importing what we should be exporting. (Applause.) The fact that out of the total Australian exports of £75,000,000 (pre-war figures), £60,000,000 of which were primary products and £13,000,000 metal, less than £2,000,000 was in the form of manufactured goods shows the scope for Australian enterprise in manufactures. (Applause.) It all points to an increasing need for these exhibitions of appliances of manufacture. As a retiring President, I ask the Government to look into friendly eyes on this society, and recognize that shows are essential in our country's progress, and therefore merit generous treatment. The Minister will find my successor at least as persistent as I have been in worrying the Government for money, and I hope much more successfully. I don't say this in any spirit of complaint, because the Government is standing to its contract, but we have also to stand by our guns. (Applause.) Our new Governor (Sir Archibald Weigall) is a great agricultural enthusiast, and doubtless he will have a stimulating influence on scientific agriculture here, and that is what is badly wanted, so we are lucky again, just as we