

Register 21st Aug. 07.

Advertiser 21st Aug. 07.

Advertiser 22nd Aug. 07.

LOW TEMPERATURES.

UNIVERSITY EXTENSION LECTURE.

On Tuesday evening Professor Rennie, M.A., D.Sc., concluded his two lectures dealing with low temperatures. The Prince of Wales Theatre at the University was crowded with an interested audience, which gave frequent expression to its appreciation of scientific discoveries and experiments.

Professor Rennie briefly recapitulated his statements of the first lecture, in which early efforts at reduction of temperatures were dealt with. Continuing, the lecturer explained the methods of measuring temperatures so low that ordinary mercurial thermometers, or even alcohol thermometers, became useless because of the freezing of the liquids contained in them. One method depended upon the fact that the resistance of a wire and the passage of a current of electricity decreased as the temperature fell, and the other upon the use of a helium thermometer, by which the contraction of the gas helium was measured. He then went on to describe the methods and apparatus used by Pictet in 1877 for the liquefaction of oxygen. In the same year Cailletet made use of a new principle, which was fruitful of results. He first compressed oxygen and other gases, then cooled them to an exceedingly low temperature and allowed them to expand suddenly against atmospheric pressure. The result was a great lowering of temperature. To clearly describe such early methods the lecturer was aided by lantern pictures of the apparatus adopted for the experiments. By the application of the principle indicated Wroblewski and Olszewski, two Polish chemists, succeeded in liquefying all gases except hydrogen. In 1895 the first patents were taken out for the liquefaction of air by the application of yet another principle, namely, by allowing a gas to expand under such conditions that it did no external work, but performed internal work, by the separation of its molecules from one another. Under those conditions the gas cooled slightly, and the apparatus was so constructed that the effect was made cumulative. The result was that, starting with a modern apparatus at ordinary temperature, in about 20 minutes' time liquid air would begin to flow. By using liquid air to cool with as a start, and by applying the same principle, hydrogen could be liquefied. Thus all gases except helium had been liquefied, and with the same exception all had been solidified by the cold produced by their own evaporation.

The lecture concluded with a number of highly interesting experiments with liquid air. Among them were the freezing of alcohol, ether, and mercury, the solidification of bromine vapour and carbon dioxide, the blazing of a piece of charred wood in liquid oxygen, and turning india-rubber and zinc into brittle pieces. The lecturer, who was heartily applauded for his clear and succinct statements, and for the success of his experiments, expressed his thanks to various members of the University staff for their assistance, and the gratitude of the University authorities to Mr. T. Barr Smith, owing to whose generosity the costly apparatus for the liquefaction of air had been obtained.

LIQUID AIR.

LECTURE BY PROFESSOR RENNIE.

Professor Rennie delivered the second of his extension lectures at the University on Tuesday evening, in the presence of a large audience, taking for his subject "The liquefaction of air." The lecturer first explained the method of measuring temperatures so low that the ordinary mercurial thermometer, or even alcohol thermometers became useless because of the freezing of the liquids contained in them. He then proceeded to describe the methods and apparatus used by Pictet in 1877 for the liquefaction of oxygen. In the same year Cailletet made use of a new principle, which was fruitful of results. He first conquered oxygen and other gases; then cooled them to a very low temperature, and allowed them to expand suddenly against atmospheric pressure, the result being a great lowering of temperature. By the application of this principle Wroblewski and Olszewski, two Polish chemists, succeeded in liquefying all gases except hydrogen. In 1895 the first patents were taken out for the liquefaction of air by the application of yet another principle, namely, by allowing a gas to expand under such conditions that it did no external work, but did internal work by the separation of its molecules from one another. Under these conditions the gas cooled slightly, and the apparatus was so constructed that the effect was made cumulative. The result was that starting with a modern apparatus at ordinary temperature, liquid air began to flow in about 20 minutes time. By using liquid air to cool with as a start, and applying the same principles hydrogen could be liquefied. Thus all gases except helium had been liquefied, and with the same exception all solidified by the cold produced by their own evaporation. The lecture concluded with a number of interesting experiments with liquid air, such as the freezing of ether and alcohol, the solidification of bromine vapor, and carbon dioxide, and the burning of a piece of wood in liquid oxygen.

PETERSBURG, August 20.—The local University centre has been fortunate in securing the services of Professor Darnley Naylor for a course of extension lectures. The first lecture was delivered by Professor Naylor yesterday evening in the Town Hall before a good audience. The subject of the lecture was "A day in Rome in the year 100 A.D." Mr. G. W. Halcombe (the chairman of the University centre committee) presided.

Advertiser Register Aug. 22nd 07.

Advertiser 22nd Aug. 07.

THE MUSIC TRADE AND THE CONSERVATORIUM.

The members of the music trade, who made complaints regarding alleged trafficking in music and musical instruments by members of the Conservatorium staff, strongly resent the suggestions contained in the report, which was supplied by the University authorities, and appeared in "The Advertiser" on Wednesday regarding the investigations by a committee of the University council concerning the allegations made by the trade. They say the report implies that there was no truth in the charges they made, and therefore that they were not justified in making them. Three members of the trade were discussing the subject with a reporter of "The Advertiser" on Wednesday afternoon, and one of them, as representing the interested tradesmen, said:—"In reference to the charges made by the music trade, it is impossible to get the purchasers of the instruments to appear as witnesses and give evidence. It is absurd to say only two instruments have been sold. The trade know that a far greater number have been sold. The authorities have only to ask their pupils where they purchased their violins. This would solve the matter at once." Obviously the complainants are in an exceedingly awkward position, because the students and ex-students or their parents, who had supplied the information on which the complaints were based, declined to be mixed up in the matter, and consequently would not allow their names to be mentioned. The tradesmen have, however, been assured that "the practice will not be permitted in the future," which they regard as an admission that it has prevailed in the past, and therefore that the tradesmen had cause to complain.

THE ELDER CONSERVATORIUM.

To the Editor.

Sir—I shall be obliged if you will permit me to make use of your columns in order to correct certain inaccurate statements of fact with reference to myself which recently appeared in a weekly newspaper. After mentioning me as having accepted fees as adjudicator at musical competitions the paper said that "in respect of the contest at Strathalbyn a fee of £10 10/ had hitherto been paid to the judge, but on the last occasion after complaints had been made Dr. Ennis refused to accept the usual fee." The facts are that I have never acted as adjudicator in musical competitions in South Australia, except in those conducted by the Literary Societies' Union in Adelaide, that I have never acted at Strathalbyn, that I have never accepted a fee for so acting, and that I have never sought to do so. In a later issue I was invited to answer the following questions:—1. Was I not asked to accept the position of adjudicator at the forthcoming competition at Strathalbyn? 2. Was not a fee mentioned in the letter? 3. What was my reply? 4. Did I not say to a certain gentleman, who disapproved of my accepting the fee, I might as well have the cheque as anybody else? My replies are:—1. Two gentlemen wrote to me asking me to act as judge. 2. No fee was mentioned. 3. In my replies I declined to act as judge. 4. No person ever expressed to me any disapproval of my action in the matter, and I never said anything of the kind suggested to any one. It has been further stated in the same paper that "a certain firm of local piano manufacturers assiduously advertises a testimonial given by Dr. Ennis as director of the Conservatorium," and that "for such testimonials it is usual to receive a fee;" and later that "It is a strange fact that, in spite of giving that gushing testimonial to Beale pianos, Dr. Ennis purchased a Steinway for his own private use." The testimonial to Messrs. Beale was given by me without fee in support of Australian enterprise. I considered at the time, and still consider, it was well merited. Before I purchased the Steinway piano I made enquiries and ascertained that Messrs. Beale did not then manufacture horizontal grand pianos.

I am, Sir, &c.,
J. MATTHEW ENNIS.
The University, August 21.

The Critic,
Aug 22nd 07

Advertiser
August 22. 07

THE CRITIC notices that Mr. Frederick Bevan is off for a week to Ballarat to act as adjudicator. It is mid-term at the Elder Conservatorium, but, of course, that is no consideration when a private engagement (with a

fee) is on the scale. Mr. Bevan can not be receiving less than £600 a year from the Conservatorium, or £12 a week, yet he drops his classes and rushes off to Ballarat to augment his income. The University authorities declare that "at present" they cannot

interfere with members of the Conservatorium staff accepting outside engagements. How long will this obtain?

THE CRITIC also notices that in Tuesday's Register appears the statement that Mr. Bevan is proceeding to Port Pirie to act as adjudicator. It is very strange that Dr. Ennis should be threatening THE CRITIC with libel for suggesting that he had at any time contemplated accepting a somewhat similar position.

Another teacher at the Conservatorium has written to us through his solicitors denying that he had received any commission on the sale of the ten Brinsmead pianos to the Conservatorium. We did not mention that gentleman's name in the matter. We note, however, that he makes no reference to the question of adjudicating nor in regard to accepting commission from a local firm on the sale of pianos.

Since our last issue the following facts have been communicated to us. Mr. Jas. Marshall, the well-known draper, purchased a violincello from a

member of the Conservatorium staff for £30. It has since been discovered that this same cello was sold by an Adelaide firm dealing in musical instruments for £4. Fancy a profit of £26 on a £4 instrument! It is only fair to say that the teacher who sold the 'cello to Mr. Marshall is not now a member of the Conservatorium staff, but the fact that such things have occurred in the past

is a great reflection on the management of the institution, and adds to the suspicions in respect to the trading in musical instruments alleged to be practised more recently at the Conservatorium.

Proof of these practises may come from abroad. THE CRITIC sincerely hopes that Mr. Bryceson Trehearne, who will shortly arrive from Europe, is not bringing out a number of pianos. The new tariff would prove a great hardship to him.

THE CRITIC has been congratulated upon its action in throwing the light of criticism upon the working of the Elder Conservatorium. There is no doubt that most of the statements made in our columns are justified, from the fact that Dr. Ennis and Mr. Frederick Bevan have only taken exception to one or two points, and apparently prefer to allow the others to go unrefuted.

THE MUSIC TRADE AND THE CONSERVATORIUM.

The members of the music trade, who made complaints regarding alleged trafficking in music and musical instruments by members of the Conservatorium staff, strongly resent the suggestions contained in the report, which was supplied by the University authorities, and appeared in "The Advertiser" on Wednesday regarding the investigations by a committee of the University council concerning the allegations made by the trade. They say the report implies that there was no truth in the charges they made, and therefore that they were not justified in making them. Three members of the trade were discussing the subject with a reporter of "The Advertiser" on Wednesday afternoon, and one of them, as representing the interested tradesmen, said: - "In reference to the charges made by the music trade, it is impossible to get the purchasers of the instruments to appear as witnesses and give evidence. It is absurd to say only two instruments have been sold. The trade know that a far greater number have been sold. The authorities have only to ask their pupils where they purchased their violins. This would solve the matter at once." Obviously the complainants are in an exceedingly awkward position, because the students and ex-students or their parents, who had supplied the information on which the complaints were based, declined to be mixed up in the matter, and consequently would not allow their names to be mentioned. The tradesmen have, however, been assured that "the practice will not be permitted in the future," which they regard as an admission that it has prevailed in the past, and therefore that the tradesmen had cause to complain.

Advertiser
22/8/07

ADVICE FROM AMERICA.

Mr. Robert G. Leavett, of the Ames Botanical Laboratory at North Easton, Massachusetts, some time ago wrote to the Premier (Hon. T. Price) calling attention "to the importance of botanical investigation as a proper object of Government support." He stated that in America botany was given a place in the universities and colleges quite co-ordinate with other sciences, and added that if the Government would establish botanical education and research in South Australia the results were likely to be such as must persuade statesmen to regard studies of plants as having considerable claim upon the fostering care of any Government which seeks to encourage education for practical purposes. The letter was forwarded through the Education Department to Professor E. C. Stirling, of the Adelaide University, for report. That gentleman, in reply, remarked that Professor Tate once taught botany at the University, but that about the time of his death the subject was dropped off the lists, as it was no longer required for the medical course. Subsequently, however, elementary botany was reinstated for the benefit of students of pharmacy, and Miss E. I. Benham, B.Sc., was appointed tutor. "Though satisfactorily given and quite adequate for its intended purpose this course," Dr. Stirling continues, "is in no way commensurate with the importance of the subject in all its scientific and economic bearings. It is not altogether creditable to us that we should have done so little in South Australia to the settlement of many zoological or botanical problems which are peculiarly our own." He added that even in places like Manila there were institutions in which problems relating to crops and their diseases or to those of stock were scientifically dealt with by highly-trained men, and sometimes successfully solved, to the great financial advantage of their own and other countries. After referring to the lack of funds at present to do all that is desired Professor Stirling concludes his report with these words:—"We can only hope for the day when it will be discovered in Australia, as it has been discovered in Germany, America, and, I regret to say, to a less extent in England, that one of the best assets of a State is a well-endowed university and well-equipped laboratories."