Advertiser 1898.

means let it be fully as high as that of Trinity College or of the Associated Board. What we object to is that the University has not dealt ingly with candidates in departing without dus notice from the published syllabors. The report further stated that "The board cannot consider a supposed conversation with someone whose name is not communicated concerning the theory paper." This is a very convenient way to avoid the difficulty of attempting an answer to the unanswerable, for there is no "supposition" in the matter. I am the teacher to whom Professor Ives made the statement that a knowledge of certain chords was not requisite for the senior theory examination; yet in direct violation of that assertion most of the chords alluded to were included in the recent paper. After the results were published I challenged Professor Ives concerning the equity of this, and though he admitted the conversation he could not attempt to defend his position. I do not write from a sense of personal injury, either in this case or regarding the practical examinations, for-like Mr. Reimann - "During the whole period of my teaching career in Adelaide my pupils have been taught on broad and systematic lines, without any special view to competing at examinations," and therefore they were fully prepared for a much stiffer paper; but I protest, none the less, against any such surprise being sprung on the majority of the candidates. In clause 5, "The board suggests that all documents containing such requests should be couched in moderate language, and should be free from all unworthy imputations," As the tone of the protest is thus taken exception to I prefer to state that I alone am responsible for drawing it up, and that I sought to use the mildest possible language that would at al adequately represent to the council how private teachers regard the situation. In the petition we requested that the conduct of the public examinations might be "entirely out of the hands of any one that can have a personal interest in the results, and quite removed from even a possibility of collusion." Such conditions as those asked for have not existed lately, and certainly our case was not presented in language stronger than the occasion demanded. Our only air is to have these examinations established above the reach of suspicion, and Professor Ives ought not to be second to anyone in this desire, No charge of unfair dealing was made in the document we forwarded to the council, but it was very clearly shown therein that the manner of conducting the late examinations was such as to render partiality abundantly easy. I can only express my amazement that the members of the council are apparently satisfied with such a condition of things. Would any of them consent to occupy a similar position to that which they are so ready to grant to Professor Ives? Would Mr. Chapple, for instance, consent to be the examiner, or one of two examiners, to sit in judgment yearly on the work of St. Peter's College, of Way College, and at the same time on that of his own, the P.A. College, to say nothing of his personal teaching? Or would Mr. Chapple approve of the appointment of the Headmaster of St. Peter's College as one of the examiners in connection with the senior and junior ordinary public examinations? These questions need no answers, but for some occult cause the council will not apply similar reasoning to examinations in music. If the is their final decision I regret it most deaply, and consider that a grave slur rests upon the University. Private teachers of music will be forced, so far as possible, to support Trinity College, London, instead of their own University, and to send up for examination here only those candidates who specially plesire it-a good thing for Trinity College; bet a yearly dead-loss of a very large number of ruineas to the local institution. Although some of my fellowteachers regard me as wonderfully optimistic I have not yet relinguished hope that the point upon which we seek reform will eventually be conceded, and that confidence will be completely restored, to the credit and profit of the University of Adelaide. - I am, &c., ERNEST E. MITCHELL

Woodville, December 27, 1898.

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Register Jan. 3. 1899.

The opening of the Elder Conservatorium of Music, which commenced work on March 7, has naturally drawn a good deal of cutside attention to this city. On the rosults of but one year's work it is imposable to form an opinion as to the future unfuence of the institution, though at present it appears likely that several imporsant moduloutions will have to be effected before the Conservatorium takes its true place in the musical education of the colony. With the birth of the Conservatorium we witnessed the death of the Adelande College of Music, which for nearly fifteen years had exercised a most salutary influence on-local music. As well as the members of the Albani Conpany, the list of visiting artistes for the year includes the names of Madame Sherwin, who gave two series of concerts, being amisted by Messes Renry Stockwell and Deans at the tirst, and Mr. Stockwell and focul talent at the second; and also Mr. Lemmons a Company, which contained Madame Alva, Miss Adela Verne, and Mr. Masters, a company, it will be remembered, which was wretchedly putromed. Miss Verne's name will be associated with some of the finest planeforts-playing yet heard in Adelaide; and it is weethy of note that in the matter of planetictle recitals we have been particularly well supplied during the gast tweeter months, fer, in addition to Man Vermi's efforts, two series were given by Herr Edward Scheri and Miss Elsie

## TECHNICAL EDUCATION.

The age 10t december, 1898.

WORK DONE IN SOUTH AUSTRALIA.

(CONCLUDED.)

SCIENCE, MINES AND INDUSTRIES,

[BY OUR SPECIAL REPORTER]

The institutions which meet the needs of South Australia for technical education in its bearing on industrial pursuits are the School of Mines and Industries and Technological Museum, the School of Design and Technical Art, the Moonta School of Mines. the Gawler School of Mines and the Kapenda School of Mines and Industries. To these should be added the Prince Alfred College.

Unquestionably, the one occupying the pride of place and that looms the biggest in the mind of all South Australians is the School of Mines and Industries, which has its home in the classic locality of Northterrace, where the University, Public Library, Art Gallery and Exhibition Building stand nearly gide by side. The initiatory stages of the founding of the School of Mines and Industries, and the magnificent work it is accomplishing for the masses, are a striking object lesson for us. In the year 1886, yielding to the pressure of a growing public sentiment upon the question, the Government of the day appointed a board "to inquire into and report upon the best means of developing a general system of technical (including agricultural) education in the province." Soon after its appointment, the Government also remitted for the board's consideration the question of the establishment of a school of mines. In June, 1888, the board brought up a report recommending the founding of a School of Mines and Industries. This recommendation was accepted with promptness, and on the 30th November, 1888, the Government gazetted the council of the Institution. This was an honorary and thoroughly representative body of 12 members. Six of them were nominated by the Government, the remaining six being elected by the University, the Trades and Labor Council, the Chamber of Manufacturers and the Board of Governors of the Public Library, Museum and Art Gallery. The Government granted the council a sum of £2600, and handed over to it a portion of the Exhibition Building. Classes were very soon formed, and on the Sth June, 1889, his Excellency the Governor opened the school in the presence of some 3000 spectators. In 1892 the Government Assay department was placed under the control of the council, and in December of that year Parliament passed an act to incorporate the school. This came into force in February following, and under it all appointments to the council are made by the Governor. The council still remained an honorary body, and the former members were appointed on it with the exception of Sir Charles Todd, who declined reappointment. Sir Langdon Bonython, who had been chairman from July, 1889, was continued in the position.

As indicated by its name, the School of Mines and Industries undertakes the teaching of two cognate branches of education, the need for the general study of which has only forced itself into prominence in Anglo-Saxon countries of very recent years. The science side of the school provides classes for instruction in applied mechanics, assaying, chemistry, geology, metallurgy, engineering, electric engineering, drawing, geometry, mineralogy, mathematics, machine designing and construction, physics, statics, dynamics, bydrostatics, mining and surveying. On the industrial side of the school are classes for teaching carpentry, fitting and turning, pattern making, plumbing and gasfitting, bookbinding, wool sorting, cookery

and dress making.

By partitioning off the floor of the western wing from the main hall of the Exhibition Building the council secured a spacious, well lighted room for the technological and mineralogical museum; while, by means of a stairway from the museum, access is given to a perfect labyrinth of class rooms in the basement of the building. The science classes are all located under the museum, so as to be as free as possible from the disturbing noise caused by public gatherings in the main hall, the whole being lit with gas generated by the engines used to drive the ma-

On the occasion of our first visit the scene that met the eye was one of unusual brightness and activity. The class rooms were alive with busy workers and a number of onlookers. The president (Sir Langdon Bonythen) had invited the Education Congress, then in session, to come and inspect the school that evening, and was showing his guests over the building, and explaining to them the characteristics of the technical and industrial processes and work being carried on by the students under trained masters. On two subsequent occasions, however-one in the day time, the other in the eveningwe had opportunities of more closely looking into the details of the methods adopted by the learned professors, technologists and industrialists whose energies are here concentrated in developing that splendid ideal of a national school of science and industrial art conceived by its founders, and upon the earrying out of which the president and his honored colleagues so ungrudgingly sacrifice a large part of their leisure.

From conversations with the courteous registrar of the school, we gathered that the policy of the council has been to bring the school into as close a relationship as can be with other educational institutions, in order to avoid unnecessary waste of public expenditure. The same spirit has been manifested by the university and the school of design and art. The latter not only gives instruction to its own students in various technical subjects, but undertakes the teaching of these subjects for the school of mines and industries. At the end of last year the university council entered into an arrangement with the school of mines and industries, under which the students of the university course in mining, engineering and metallurgy are to study assaying and quantitative analysis at the school. In future, therefore, the diplomas of the university granted in those subjects will contain a statement to the following purport:-"This diploma is Issued in conjunction with the South Australian School of Mines and Industries, and entitles the holder to the fellowship of that institution in mining, engineering and metallurgy." Some of the school students take a portion of their course at the university.

This mutual desire to co-ordinate the work of the institutions mentioned whenever practicable is a good augury for technical education. Nor should the principle be lost sight of in any schemes that the Government here may formulate for reopening the Teachers' Training Institute, and for enlarging the scope of the Working Men's College.

The success of the council's administration and the growing popularity of this institution are phenomenal. In the opening year, 1889, the attendance of students was 450; in 1890 it fell to 341; but in 1891 it rose to 468; in 1802 to 620; in 1803 to 660; in 1804 to 688; in 1805 it fell to 670; but rose in 1806 to 805; in the year 1807 to 957; while in 1898 it has already risen to 1037. It is very gratifying to know that this progression has been characterised by evenuess in the two sides of the school. The industrial department has not advanced at the expense of the scientific. Both have steadlly advanced, with perhaps a little balance in favor of the science classes.

Ten classes receive instruction in the day time, and 16 at night. Several of the classes assemble four and five times a week, and most of them oftener than once. The character of the classes held and the number of students entered for the third term of 1897

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The wide range of occupations in which those seeking to improve their minds, and increase their skill as workmen, are engaged is a very gratifying feature of the institution, and bears witness to the good influence being exerted over the community.

Too much cannot be said in praise of the munificence of the South Australian Government to this great and useful institution. From the date of its foundation, in 1889, to the 30th November, 1898, the council received no less than 130,906 7s. 1d. in Par-Hamentary votes. The fees charged to the students during the same period amounted only to £9634 11s. 10d.

The Moonta School of Mines-situated in one of the most important copper mining centres of the colony-was opened in the year 1890, "for young men who desired to increase their knowledge in the arts and sciences of special importance to miners and others similarly engaged. Glancing at the number of students enrolled each year since it started, this school also has made steady advance. In the year 1891 the number of students enrolled was 47; in 1892 the enrolment rose to 109; in 1893 to 120; in 1894 it fell to 87; but in 1895 it rose to 97.6; in 1896 to 100; in 1897 to 139; and this year (1808) the number of students has increased to 277. The branches of study followed, and

e	number of students in each are:	
	Mathematics	70
	Shorthand	75
	Mechanical drawing	14
	Freehand drawing	12
	Elementary chemistry	10
	Practical chemistry	7 2
	Advanced chemistry	2
	Mine surveying and levelling-	
	First year atudenta	8 5 6
	Second year students	0
	Third year students	_
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During the past four years 184 certificates have been gained by the students. Generally speaking, the examiners are those of the University of Adelaide, The Government grant to the school is 1400 a year. The amount received in 1897 from students' fees was 106 13s. 9d. This year it is larger.

The Gawler School of Mines, which is situated in an engineering district, was established in the year 1803. There are 14 classes, and this year the students enrolled number 117. The Government grant is £200