

THE exceedingly large attendance at the formal opening of the School of Mines and Industries on Saturday is an indication of the great interest felt by the public in the institution. The proceedings were in every way successful, and even enthusiastic. Some little time has elapsed since the school began its operations, and the opening of its career is full of encouragement for the future. Already a considerable number of students are availing themselves of the advantages it offers. The council has displayed much organising ability in preparing for the work of the school, and the hearty appreciation of its efforts which has been already shown is a well earned reward for successful labor under difficulties by no means trifling. To get such an institution into fair working order is not an easy task. Fortunately for the council the Government has been ready to afford all reasonable facilities for carrying on its operations, while the University has also been induced to extend to the new institution not merely its sympathy but its practical assistance. The help so secured, as well as the generous support accorded by the Chamber of Manufactures, has enabled the school to begin its career under highly favorable conditions. It is fairly well housed, though it cannot be long before additional accommodation will be necessary; its programme of studies has been carefully and judiciously prepared, so that a diploma of the school will be of genuine value as the proof of a liberal and thorough technical education; its staff of teachers, for competency in the subjects in which they undertake to instruct the students, cannot be excelled, if indeed equalled, by that of any similar institution in the colonies; and, last though not least, the scale of fees has been arranged upon such a basis that a technical training may be obtained by those who desire it on undoubtedly easy terms. With all these advantages in its favor, it must be admitted that there is ground for the expectation that the institution will become both popular and useful. The speeches at Saturday's demonstration were naturally of a congratulatory description, and by those who recognise what an important gap is filled by the school in the educational agencies hitherto existing in the colony, there was a praiseworthy desire to acknowledge the service which has been rendered in supplying it. The School of Mines and Industries, though the immediate result of the action of the Technical Education Board, is one of those institutions for which a place has been prepared by the gradual and steady advance in public opinion, in educating which many have had a share. No account of the history of technical education in the colony would be complete which omitted to notice the practical labors of the Chamber of Manufactures, a body that interested itself in the question years ago, and as far as its means would permit made provision for an acknowledged public want. In the political arena Mr. Rowland Rees has worked for years to obtain legislative action on the subject, and his important services in this connection cannot fairly be overlooked. Dr. Cockburn on Saturday received credit for all that he has done, and no one will grudge the praise which the energetic chairman of the council has merited, both in that capacity and in his former position as Minister of Education. It is to be hoped, and there is no reason why the hope should not be gratified, that the sanguine anticipations indulged in by the speakers at Saturday's demonstration will be realised. One of the most attractive and also important aspects of the work of the school is that which relates to the mining industry. None of our industries needs science more. Without knowledge the prospector works at a serious disadvantage, which, except where a lucky accident favors him, is fatal to success; but knowledge is even more essential in the extraction of metals from their ores, for nature encloses much of her mineral wealth in bonds which only science can unloose. The establishment of a School of Mines at a time when mining in South Australia is entering on a new development must be regarded as peculiarly opportune, and it is not too much to expect that the influence

of the institution will tend to prevent a repetition of many of the errors which, while directly attributable to ignorance, have in the past caused such disappointment, and to such a serious extent have discouraged mining enterprise. Work of this kind, to be done at all, must be undertaken by the State, and if well done it benefits the community as a whole. The necessity of the School of Mines is rendered apparent by similar consideration to those which led to the establishment of the Agricultural College, and which are also held to justify a new departure in the shape of practical teaching in dairy farming and the organisation of a viticultural department. In every case the object is to encourage industry of the best kind by allying it with knowledge. This policy, especially in a young country which has to make its way against the competition of powerful rivals possessing the advantage of long experience, is one that must approve itself to reasonable minds, and if wisely carried out it is sure to be rewarded with a degree of success far more than sufficient to repay the expenditure it involves.

S.A. "Registered"
19th June 1889.

THE EDUCATION OF WOMEN.

TO THE EDITOR,

Sir—So far as the experience of the Australian Universities goes it has been proved, as their respective Registrars testify, that the women equal the men as students. It is well to check one experience by another. Mr. R. C. Macdonald, of Boston, U.S., has published an article in *Education*, an American journal, of repute, which, from an American experience proves that women students on the average quite equal, even if they have not some little superiority to the men students. Mr. Macdonald uses the instance of the Grammar and of the High Schools at Brookline, Massachusetts. He uses these instances because they are schools of first-rate repute, and because the High School of Brookline has been very successful in preparing its pupils for graduating at Harvard University.

It must be specially noted by the Australian reader that at the above schools boys and girls attend and are educated together in the same classes simultaneously. The sexes are intermingled as they are in the home and as they are in the three Australian Universities. Girls and boys receive the same teaching in the same subjects and submit to the same examinations. Mr. Macdonald takes the statistics of eight years, and includes an analysis of the individual and class work of 1,184 boys and 1,079 girls, and remarks that the statistics of the daily and all other work in these schools are so well kept that they are of peculiar value. He says it would be difficult to find a system which would more thoroughly sift out and analyze a pupil's work. Taking 100 as the standard for the eight years the following results were found:—At the Grammar School the boys made an average (in itself a good average) of 79.5; the girls an average of 80.5. Thus the girls maintained an average superiority for eight years of $\frac{1}{2}$ per cent. In the High School the average of the 312 boys was 77 per cent.; of the 298 girls, 80.9. Here in the higher range of study the girls beat the boys by $3\frac{1}{2}$ per cent. in a period of eight years. Suppose we turn to the honours list, then the superiority of the girls becomes more marked, for while 37.6 per cent. of the boys took honours, 43.8 of the girls took honours at the Grammar School. In the High School 10 per cent. more honours were won by the woman students than the men. Moreover, the smartest girls are more numerous than the smartest boys, and there were five girls ahead of all the boys. The absolutely top scholar for the eight years was a girl, being two marks above the very highest boy. In all the classes of the schools there was but one in which for a time the boys excelled the girls. Mr. Macdonald pursues an opposite comparison, and shows that the dullest girls were not so dull as the dullest boys. He concludes by saying "when we consider the immense advantages given to the male, the opportunities which have been showered on him, and him alone, for centuries, when we consider all this, contrasting the histories of the sexes, we can but be astonished at the facility with which the female surpasses her brother in the acquirement of knowledge." What vast wrong has been done to women and injury to society in the past by depriving them of the higher education. Women need the vote that they may have fair play.

I am, Sir, &c.

J. C. KIRBY.