SCHOOL OF MINES AND INDUSTRIES.

INAUGURATION BY THE GOVERNOR.

The movers in the cause of technical education - a subject which has sprung into prominence in South Australia only during the last two years - had the gratification on Saturday, June 8, of attending the inauguration of an institution which is to be devoted to the spreading of practical information in the sciences and handicrafts that bear particularly on the development of the resources of South Australia. The opening ceremony of the School of Mines and Industries was performed by His Excellency the Governor, in the presence of a very large and representative gathering, at the Eastern Annexe of the Exhibition Building. Some time ago the Government were induced to purchase this annexe, and to permit of its being devoted to the uses of the School of Mines as lecture-rooms, and for a Technological Museum, and also for the display of the many curious and valuable exhibits which have come into the possession of the Chamber of Manufactures. The northern floor of the annexe has been shut off for offices and lecture-rooms, but the remaining space on Saturday was as far as available occupied by chairs to accommodate an audience of between 2,000 and 3,000 persons, who, at the invitation of the Council of the School of Mines, came to witness the imposing opening ceremony. On entering the main doo the first object that meets the eye is the terracotta structure which Messrs. Shearing of Hindmarsh, erected for the Exhibition. To the right the upper floor is largely covered with trophies and cases belonging to the

The Forestry Department have the attractive trophy that was shown during the Exhibition, and the Government have also on view the large many-sided stand containing pictures of South Australian fruits. One large case is filled with a handsome collection of specimens of the minerals of the world, presented by Messrs. F. H. Faulding & Co., another contains metallic minerals obtained in the colony; salts, alkalis, alkaline earths, silicates, nonmetallic elements, rocks, specimens of lime-stone and shells from different geological strata, granites, &c., occupy other cases. Then there are specimens of galena, copper, and carbonic acid, chlorine, pitch from the seashore at the Great Australian Bight, azurite, sulphur, and iron, &c., carefully arranged. One box contains some remarkably pretty specimens of iron pyrites embedded in gypsum, which have come from the Alma Mine, Waukaringa. Another has some very perfect corals which were brought from the Northern Territory. There are also on view quantities of cotton in different stages of manufacture, numerous products grown in the interior and in the Northern Territory, and a large variety of curious weapons and instruments used by the aborigines. The Museum, however, is by no means perfect, for there are many cases yet unoccupied. On the western side of the main entrance the upper floor is devoted to the Chamber of Manufactures, whose extensive display of

curious and useful mechanical contrivances

has long been a source of pride to the

Technological Museum.

Chamber. On the second floor, to the west, there are many of the large mineral trophies from the Northern Territory and other parts of South Australia, which were shown in the Natural Products Court of the Exhibition.

Before the time of beginning the proceedings on Saturday the annexe was crowded, and at 3 o'clock, when their Excellencies the Governor and the Countess of Kintore arrived, the Police Band played the National Anthem. The Government party were received by Dr. Cockburn, M.P., and the other members of the Council of the school, and were escorted to a reserved space a little to the west of the

a reserved space a little to the west of the terracotta structure just above the second floor. Accompanying their Excellencies on the platform were the Chief Justice (Hon. S. J. Way), Sir H. Ayers, M.L.C., Bishop Kennion, Sir J. W. Downer, the Premier (Hon. T. Playford), the Attorney-General (Hon. C. C. Kingston), the Minister of Education (Hon J. C. F. Johnson), the Speaker of the House of Assembly (Hon. J. C. Bray), the Mayor of Adelaide (Mr. J. Shaw), and numerous members of the Legislature. The proceedings were under the presidency of Dr. Cockburn, M.P., Chairman of the school. The CHAIRMAN said that the institution was essentially a practical one, and they endeavoured to inculcate the value of work as

compared with words. Nevertheless the Council had desired him before he requested His Excellency to declare the premises open to the public to address to them a few words on the history of the School, and the nature and objects of the work, and its method of teaching. The age had witnessed no more popular and universal cry than that of technical education. The Government of the day was in the height of fashion when three years ago, it appointed a Board to enquire into the subject, and the members of that Board were the Hon. Dr. Campbell, Messrs. Basedow, M.P., Rees, M.P., Scherk, M.P., Bonython, Adamson, Conigrave, Professor Rennie, and himself, and the Board being exceedingly anxious to do that thoroughly went to the very root of the matter by enquiring in the first place whether the curriculum of the primary schools of the colony afforded the best possible preparation for the life-work of the pupils. That was really the meaning of technical education, Such work as would fit its students for the work of real life. (Hear, hear.) The advocates of technical education maintained that it was possible while imparting that useful education to teach also that discipline of the mind which was one of the highest objects of education. They maintained that it was just as possible to discipline the mind while teaching useful things as it was while teaching indifferent, useless, or hurtful subjects. (Hear, hear.) If he might be allowed to digress for one moment, they were also prepared to maintain that that useful education would minister to the needs of the highest culture. The Board very soon came to a decision that it was possible to add something to the curriculum of the public schools, and thereby increase their efficiency in preparing for subsequent technical education, and for the future and real work of life. They very soon came to the conclusion that it was desirable to include as a subject in the ordinary schools, drawing, science, and manual training. In that respect their opinions had been confirmed by subsequent enquiries in all parts of the world. There were many technica'

of a more advanced character. (Hear, hear.) However, the fees were the only matter of exclusiveness that pertained to the institu-It was in every respect a popular institution. There was no entrance examination, no barriers to those who wished to come to learn. The only matriculation required was that the student desired to acquire knowledge. For those who wished to enter for the diploma elementary classes were formed, so that they would not have to go elsewhere to obtain the knowledge that was necessary to enable them to pursue their advanced studies. The object of technical education was to afford adequate equipment for the life-work of every student. Especially the school took up the subject of mining because they recognised that the mining industry was for South Australia the high road to prosperity. They were also anxious to unite in the institution both theory and practice in the same individual, to teach all students to work both with head and hands. They wanted to form men of action in all senses of the word, men able to put to practical account such information as they possessed. They all knew that the men of action reaped the prizes of life. (Hear, hear.) With regard to the methods of teaching, the leading maxim in the school was that things which had to be learned were best learned by doing them. They thoroughly agreed with Lord Bacon that the abstract and higher sciences should be made to minister to the sciences which were of more useful application in real life, and they endeavoured to teach mathematics as much as possible in a concrete They taught all the mathematics they could by the aid of the two-foot rule." The other day they required a plan of the premises. No expert was not called in to make the plan, but the students were set to work with their two-foot rules, and they made complete, and some of them very exact plans. Those who in time to come had to survey would survey better if they had such practical teaching. Now, as to the prospects of the classes. They had already exceeded the most sanguine anticipations. When some two months ago they had to start the classes in connection with the University he expected about half a dozen students, but as a matter of fact the number came to twenty, and students were still enrolling day by day. With regard to the evening classes the numbers were still more promising, and a promising lot of lads they had-lads who were not afraid to work hard during the day, and to study at night in order to fit themselves as far as possible to develop the country. Altogether the number of students did not fall far short of 100, and before the end of the year, when the trade technical classes began, the number would reach many hundreds. (Cheers.) They must bear in mind what a Technical School could not do. They did not profess to be able to turn out complete engineers or complete tradesmen. However high their studies might be carried in the Technical School, it was necessary before they could take their part in the hard competition of life that they must have some knowledge that would enable them to conduct their work on business principles. The school, therefore, did not propose to grant diplomas as soon as the students finished ordinary curriculum, but arrangements would be made so that the students in mines or factories might work six months or so, and at the end of that

students - (cheers) - and the members of the Council were exceedingly gratified to welcome among them the Chancellor of the University, who at great personal inconvenience had made a point of attending that day in order to express his sympathy with that most popular movement. (Cheers.) They would notice on looking at the pros-pectus that the students were divided into two classes - regular and occasional students. The regular students were those who were engaged in a systematic course of engineering work, such a course as would fit them for mining, hydraulic, or mechanical engineering. They would notice that there were two classes of regular students, those who attended entirely during the day, and paid 5 guineas a term, and those who attended during the evening, and paid the small amount of 2 guineas per term. The latter provision had been made because they were anxious in every way to assist those who desired to learn, and they recognised that there might be in the community many individuals who, although they could not devote the whole day to their studies, still were willing to work hard in order to acquire information valuable to themselves and the country. (Cheers.) To apprentices and improvers under the age of twenty a still further reduction was made. They had the privilege of attending the regular evening classes for a fee of one guinea per term. The regular students worked for a diploma, and their aim was to make that diploma the hall mark of a high degree of scientific and practical education, which would enable the student to go to any part of the world with a valuable testimonial. The occasional students were those who were unable to engage in a complete course of engineering study, but who wished to perfect themselves in some special department of technical education. While providing for those wants on the part of one class of the community, they in these days of women's rights had been careful to make provision also for female classes. Not only were ladies admitted to classes in the ordinary curriculum, but there were special classes for cookery and domestic economy especially designed to meet the requirements of their fair friends. Although the school was situated in Adelaide they had a large amount of support from the country districts, and large numbers of letters and telegrams had been received by the Secretary expressing regret on the part of gentlemen living in the country that they were unable to be present, and expressing the fullest sympathy with the work in which they were engaged. They had obtained concessions from the Railway Commissioners in the shape of a reduction of fares of students travelling to the school, and they were prepared to send into the country, where a sufficient number of students could be enrolled, instructors who were able to such matters as were likely to meet the requirements of the districts. They would have liked to have charged no fees at all—that was the only point upon which the school differed somewhat from the report of the Board on Technical Education. Their report recommended that no fees should be charged to those anxious and able to improve themselves by the education imparted; but he regretted that they felt it impossible until primary education was free to make entirely free education

of a more advanced character. (Hear, hear.) However, the fees were the only matter of exclusiveness that pertained to the institu-It was in every respect a popular institution. There was no entrance examination, no barriers to those who wished to come to learn. The only matriculation required was that the student desired to acquire knowledge. For those who wished to enter for the diploma elementary classes were formed, so that they would not have to go elsewhere to obtain the knowledge that was necessary to enable them to pursue their advanced studies. The object of technical education was to afford adequate equipment for the life-work of every student. Especially the school took up the subject of mining because they recognised that the mining industry was for South Australia the high road to prosperity. They were also anxious to unite in the institution both theory and practice in the same individual, to teach all students to work both with head and hands. They wanted to form men of action in all senses of the word, men able to put to practical account such information as they possessed. They all knew that the men of action reaped the prizes of life. (Hear, hear.) With regard to the methods of teaching, the leading maxim in the school was that things which had to be learned were best learned by doing them. They thoroughly agreed with Lord Bacon that the abstract and higher sciences should be made to minister to the sciences which were of more useful application in real life, and they endeavoured to teach mathematics as much as possible in a concrete They taught all the mathematics they could by the aid of the two-foot rule." The other day they required a plan of the premises. No expert was not called in to make the plan, but the students were set to work with their two-foot rules, and they made complete, and some of them very exact plans. Those who in time to come had to survey would survey better if they had such practical teaching. Now, as to the prospects of the classes. They had already exceeded the most sanguine anticipations. When some two months ago they had to start the classes in connection with the University he expected about half a dozen students, but as a matter of fact the number came to twenty, and students were still enrolling day by day. With regard to the evening classes the numbers were still more promising, and a promising lot of lads they had-lads who were not afraid to work hard during the day, and to study at night in order to fit themselves as far as possible to develop the country. Altogether the number of students did not fall far short of 100, and before the end of the year, when the trade technical classes began, the number would reach many hundreds. (Cheers.) They must bear in mind what a Technical School could not do. They did not profess to be able to turn out complete engineers or complete tradesmen. However high their studies might be carried in the Technical School, it was necessary before they could take their part in the hard competition of life that they must have some knowledge that would enable them to conduct their work on business principles. The school, therefore, did not propose to grant diplomas as soon as the students finished ordinary curriculum, but arrangements would be made so that the students in mines or factories might work six months or so, and at the end of that

time they would be able to undertake such duties as might be expected by their employers, or to start in work for themselves with every prospect of success. (Cheers.) There was no need to dwell much longer on the advantages of the institution. Among men there was a diversity of gifts. In ordinary education those diversities had no opportunity of manifesting themselves, but owing to the multifarious work that was carried on in the school they could find out where the talent of each student lay. They found that some were excellent draftsmen, some had an aptitude for science, and some had great skill in handicraft. Every opportunity was given to the student to find his real talent, so that he might choose that walk of life for which he was best fitted by nature. The result of that would be that the students would find many charms in a vocation properly chosen, which were absent when a lad went into a trade or profession simply because an opportunity offered, whether he had a chance of proving hig fitness for the work or not. The life they wanted was one in carrying out which they had facilities which made it a pleasure, no matter how hard it might be. "The labour we delight in physics pain." There was no need to dwell on the advantages of the school to the country at large. It would send forth into the country a number of students endowed with seeing eyes and skilful hands, that would develop-how much they could hardly dream of-the resources of the country. He could imagine no means more likely to ensure the growth, prosperity, and advancement of a young country than by providing for the people such modes of education as would furnish them with the best equipment for the necessities of real life, and the Board felt confident that in this school and other similar institutions such seeds of useful knowledge would be sown that would at no remote period yield an abundant harvest of national and individual prosperity. He had the honour to request His Excellency to declare the premises open to the public. (Prolonged applause.) His Excellency, who was received with

cheers, said :- Mr. Chairman, ladies and gentlemen-I rise to obey with great happinnes the request of Dr. Cockburn that I should declare the premises of this school open. cannot help thinking that the successful establishment and inauguration of this school must be a source of great and legitimate pride of those interested in the success and furtherance of technical education in this colony. I congratulate them warmly upon the success they have attained. Ladies and gentlemen, I think the subject of how best to secure the expansion and perfection of industries is a subject than which no other is more prominent in the minds of the thinking men and women of to-day. I am glad to know that the British Parliament-a Parliament bound by precedent and tied up by redtape-is awakening to the position, and is this session taking the question of technical education into serious consideration. If you ask me what are the aims of those who are pressing forward this cause, I should state them to be a desire to develop and increase the general dexterity of the hand and eye among the young, a development which may be specially useful to those who are likely to earn their

than through general education. The aim is to bring about a wider knowledge of the sciences which underlie these industrial arts. These are aims that every one who has the interests of his country heart should do his best to support and further. Lord Hartington has stated the case recently by putting it that it is the possibility of increasing the prosperity of the country materially by means of technical education. That is exactly what this school is established to forward. I am sure that South Australia with its small population but incalcuable undeveloped resources will be the first to return a practical affirmative to Lord Hartington's proposition. This school will confer lasting benefits upon those who attend its classes, and, consequently, upon the land that gave them birth. Taking, as I do, an earnest interest in this great subject, I have very great pleasure in declaring the premises of this School of Mines open for the purposes to which they are devoted. (Cheers.) The band here played the "Song of Australia." The MINISTER of EDUCATION said that at no time since he had been a member of the Government had his attendance at a public gathering afforded him more pleasurable feelings than on that occasion. The scheme

of education in this colony comprised three

agencies. First we had our primary schools,

and of these he thought their Excellencies

livelihood through the industrial arts rather

would be able to form a favourable impression from what they saw on the previous day. (Hear, hear.) The work of our primary schools had been considered to be that of laying a groundwork or a foundation for the rising generation upon which an educational superstructure reaching to the highest attainments could be afterwards reared. (Hear, hear.) And the people of South Australia had considered that the State, so far as the primary schools were concerned, should insist that each child should either pass a certain age in endeavouring to acquire the standard, or should pass a very reasonable standard in a common, plain English education. It had not been considered desirable so far that education of any kind should be free, and he confessed that he was one of those who did not think it necessary in a community such as ours. (Hear, hear, and dissent.) Some of our parents had succeeded and taken a pride in giving their children the best education in their power without calling upon the State to assist them, and he was of opinion that the majority of South Australian parents to-day would say they would rather educate their children at their own expense than at the expense of the State. (Hear, hear.) But the State recognised that there were certain parents who were not able to give their children the advantages of education, and very properly the State saw that the children should not be deprived of those advantages. (Cheers.) Then we had our collegiate schools, which were private schools, and beyond that we had our University. In those institutions the main object was specially to educate the intellectual The State recognised its duty faculties. towards the University and subsdized it in a liberal manner. (Hear, hear.) But then we wanted something more in the way of prac-

tical education, and consequently we had

established such institutions as that which

was being so successfully inaugurated that day, and the Roseworthy Agricultural College. The school now being opened might very fairly be called a Technological University. (Hear, hear.) While he took a great amount of pride in the establishment of the institution during his term of office, seeing that it was one of the things that induced him to go into Parliamentary life, he must acknow-ledge that the real work had been done by Dr. Cockburn and his confrères, to whom South Australia present and future should be grateful. (Cheers.) It was intended there to teach to the lads and lasses the scientific rules which underlay all handicrafts and industrial pursuits. In the subject of mining he had taken a very vital interest for at least half of his life, and knowing the possibilities that lay before the future of Australia as a mining country, we could hardly go too far in encouraging that form of industry. We had here gold, silver, tin, copper, zinc, lead, iron, antimony, bismuth, nickel, and various other metals. We had also diamonds, rubies-(laughter)-pearls, emeralds, amethysts, opals, and topaz. The pearls were about our shores, and needed scientific skill in finding them, and precious stones could be got in the Northern Territory. We had also coal, petroleum shale, and he hoped petroleum, asbestos, and other valuable minerals. Up to 1887 the amount of gold raised in the Australian Colonies amounted in value to no less a sum than £327,000,000 sterling. Up to that date the value of the silver raised was given at about £1,000,000, the silver being mostly obtained from the ore which was treated for gold. But the discovery of the magnificent mines at Broken Hill had added immensely to the output of silver since then. In South Australia up to 1887 the value of the copper raised was £19,000,000 sterling. These figures were enough to convince us that we could not do too much to encourage a systematic and thorough knowledge of mining in all its branches. (Cheers.) In the past both geology and mineralogy were sciences which were comparatively in their infancy. More and more we found that it required special scientific knowledge to enable us to win the metals from their ores and from their matrixes, and that this would be far more a matter for the scientist and the chemist than for the rough-and-ready methods of the past. Seeing that we had lost so much valuable time and capital in prospecting wrongly for metals, it was quite time there was a more systematic way of appointing those who were to do the responsible work of mining for us. He referred to the Managers, engineers, and officers of mines. A man could not become a captain of a little steamer on the Murray nor act as an engineer of a steamer without undergoing an examination and obtaining a certificate; and why should we go on as we had been doing, entrusting the lives of hundreds of men and thousands of pounds of capital in our mining industry to utterly ignorant men, or, at all events, to men who had picked up their information simply by their own intelligence and long experience? (Hear, hear.) He hoped that shortly the Schools of Mines and Industries in Australia would be affiliated, and that no man would be allowed to take the position of Manager or responsible officer of mines without having a certificate from one or other of these schools, such certificate to be acknowledged in all the colonies, (Cheers.) mron did not intend to traval

The CHIEF JUSTICE did not intend to travel over the ground which was so well occupied by the Chairman, the Governor, and the Minister of Education. He was glad of the opportunity of congratulating Dr. Cockburn and the members of the Council of the School of Mines and Industries on the completion of the labours which had occupied them for the last two years, and he congratulated them on the inauguration of the school under such favourable circumstances. It was impossible to look round on that distinguished assemblage, to see a member of Her Majesty's Opposition in the chair and present members of the Government, and to witness political opponents working together for a common object without realizing that none were for the party, but all were for the State. (Cheers.) He thanked Dr. Cockburn for his generous reference to the assistance which the University, Public Library, and Art Gallery had been enabled to give to the objects of the School of Mines and Industries. All would agree with him that the School of Mines had done, and was doing wisely and economically in availing itself of existing appliances for technical education. It would have been impossible for the School of Mines and Industries to have obtained better or more enthusiastic teachers in the respective sub jects than Professors Rennie, Tate, and Bragg. They would agree it was fortunate for the accomplishment of the object of the School of Mines that they had at the head of the School of Design a gentleman so well qualified, so enthusiastic, with such wonderful organizing power, and such force character as Mr. Gill, It had a matter of great pleasure to the authorities of the University that the attendance at their classrooms had been increased by seventythree additional students from the School of Mines. Fifty of those students were also working under Mr. Gill's direction in the School of Design. The feeling of the University Council and of the members of the University and Board of Governors of the Art Gallery and Public Library was that it was their duty to further the objects of the School of Mines, and they would like to do something more than it had been their privilege to do, and in that respect they would be backed up by public opinion in South Australia. There was one practical suggestion which he wished to make to the Minister of Education. That was that the success of the work of the School of Mines, and particularly of that branch of it which was under the direction of the Director of Technical Education, depended upon the building being equal and ready for the occupation of students of drawing. At present that work went on in two buildings and on four separate floors, and both students and teachers were put to very great inconvenience, besides being unable to do their work satisfactorily, and it had been necessary to close the list of the classes. It was impossible that the School of Mines could expand in that direction unless that part of the structure to which he had referred was at once made ready for occupation by the School of Design. (Hear, hear.) Therefore, on behalf of that representative assembly, he ventured to press the Minister of Education to move his colleagues to immediate action in that matter. There was one other matter he would like to refer to in the way of criticism,

same circumstances or put to very great inconvenience, for want of a larger Examination Hall. It was also necessary for that institution that there should be a hall sufficiently large for holding commemorations and other demonstrations of a public character. He was sure also that the School of Mines would soon find it necessary to have a larger building for the accommodation of friends when the public were invited than the hall in which they were assembled. He ventured to suggest that that noble hall which was erected in commemoration of Her Majesty's jubilee and the jubilee of the colony might soon be devoted to a nobler object than the science of skating. (Cheers.) Perhaps Her Majesty's Ministry and Opposition would take the hint, and they would shortly have that great hall devoted to educational purposes. (Cheers.) He expressed the hope that the School of Mines and Industries might flourish, that it might be successful, and one of the great factors in the progress of South Australia. (Cheers.) Mr. A. ADAMSON (the President of the Chamber of Manufactures), in moving a vote of thanks to the Governor, said the Chamber, which was now nearly twenty years old, had laboured long for the establishment of a School of Mines, and he rejoiced that their aims had at last been achieved. He hoped that the Council would receive every assistance in carrying out what was to them a labour of love. (Cheers.) Mr. CHARLESTON (President of the Trades and Labour Council) seconded. He said they hailed with unspeakable delight the great march of scientific progress, a sign of which was the School of Mines and Industries opened that day. It was a confirmation of the growing conviction that theoretical and

or venture to offer as a suggestion. The

University had been inconvenienced, and the

School of Mines would very shortly be in the

the growing conviction that theoretical and practical knowledge must be taught conjointly and in a systematic way. The fallacy of discrepancy between theory and practice established by the learned Greeks, and continued by the mediæval schoolmen, had long been defunct. Yet its influence was still felt and often vaguely expressed. As practical workmen they needed acquaintance and intercourse with men of science. They discovered the laws that governed forces; the men applied them practically and demonstrated their truth or error. Thus they mutually assisted each other. (Cheers.) By a definite understanding of the laws of Nature they were

each other. (Cheers.) By a definite understanding of the laws of Nature they were enabled to call her assistance to their aid, and by so doing relieve themselves of the drudgery of incessant manual toil to meet their daily physical wants. (Hear, hear.) By applying the forces of Nature's laws to production they were able to produce more rapidly and efficiently, and consequently were (or at least should be) enabled to shorten the hours of manual, physical toil, and devote more time to the study of things most congenial to their taste and desire. The real advantages of higher education were only just beginning to dawn upon the great struggling masses of producers. But the light was penetrating the darkness of ignorance and prejudice, and by the aid of such schools as that knowledge and a desire for knowledge were bound to disseminate, and with knowledge came power

and a greater fraternal sympathy and bond of union. The great gulf between ignorance and intelligence had always kept mankind apart, intelligence reigning supreme, while ignorance grovelled in the dust at her feet, living only to do her bidding. (Hear, hear.) As knowledge became general mankind were drawn closer together, and as they must sow in order to reap, they recognised labour as an essential part in the great realm of production and consumption, and therefore honour to all honest labour. (Hear, hear.) Trades of handicraft barred not the way to success and fame, for men would be judged by their mental and moral worth, and kindred souls in the studies of the various sciences would mingle together and forget baser tinctions that created caste and made classes in the past. (Cheers.) They hoped, through the instrumentality of schools such as that, to see their workshops filled with men having a clear and definite understanding of the laws and principles governing their trade, so that they must readily be able to compute the strength or stability of a structure or the efficiency of a machine, and be able to suggest improvements if the experienced eye detected faults in design or workmanship. Then men would not be like dumb, driven cattle, but noble, self-respecting, and worthy their Maker. The attainment of knowledge begot a desire to know more, and led man away from the debasing influence of idleness. (Cheers.) On behalf of the great body of wage-earners he thanked the gentlemen constituting the Board of Control over the School of Mines and Industries for reducing the fees of admission to within the reach of the great body of toilers most needing such institutions, and he sincerely trusted they would prove the wisdom of its promoters by a large number of wage-earners availing themselves of its great advantages by constant attendance and close application to study. Those tarthest behind must apply themselves with double energy, for if they lagged they hindered others; else they would have to be content to hear the Professor's words without comprehending their meaning, and consequently would grow disheartened and finally give up. He urged parents to strive to engraft upon their children's minds the necessity for higher education, and a culti-

The resolution was carried.

His Excellency, in responding, said it was entirely unnecessary to thank Lady Kintore and himself for attending so important a ceremony. To credit them with feeling the greatest interest in the success of the School of Mines was only their due. (Cheers.)

Cheers were given for His Excellency, for

vation of the thinking faculties, so that they

might present themselves fit students for the

science classes. (Cheers).

Lady Kintore, and for Dr. Cockburn.

The immense gathering then dispersed, a large proportion betaking themselves to the grounds, where the Police Band, under Bandmaster Howlett, rendered an excellent selection of music. Many persons remained in the building for a considerable time inspecting the interesting collection of exhibits belonging to the Chamber of Manufactures and the Technological Museum.