

(No. 136.)



1885.

PARLIAMENT OF TASMANIA.

TECHNICAL EDUCATION:

LETTER FROM GOVERNMENT ANALYST.

Presented to both Houses of Parliament by His Excellency's Command.



Government Laboratory, Hobart, 15th October, 1885.

SIR,

REFERRING to our conversation of yesterday, and to my former letters on the same subject, I have the honor to point out more fully than I have hitherto done some of the uses to which the Institution advocated by me would sooner or later lend itself, in addition to the making of more suitable provision for the increasingly responsible work of the present Laboratory; and to express my opinion that it will be matter for deep regret if the vote for the proposed building, and its consequent commencement, be put off for another year, thus deferring its possible completion for about three years from the present time.

Addressing the Iron and Steel Institute on the subject of "Technical Education," the late Dr. Siemens said, in 1877:—"It is not many years since practical knowledge was regarded as the one thing requisite in an iron-smelter, whilst theoretical knowledge of the chemical and mechanical principles involved in the operations was viewed with considerable suspicion." And later, in the same address:—"Let technical schools confine themselves to teaching those natural sciences which bear upon practice, but let practice itself be taught in the workshop and the metallurgical establishment." (For this Colony, might be also added, in the mine and in the fields.)

It is precisely such instruction as that indicated above which I propose should be provided, accompanied by experimental demonstrations in lecture-room and laboratory to the fullest practicable extent; the specimens, models, and diagrams, &c. to be available for exhibition in connection with the present Museum, the latter supplying any assistance in its power.

The classes from which students may be expected are the more advanced scholars in the various schools for both sexes, especially those preparing for the A.A., Matriculation, and other examinations; others seeking to become surveyors, mine managers, farmers, builders, prospectors, users of steam power, &c.; while, if any extended system of elementary technical instruction be adopted, many of the public school teachers will doubtless require some preliminary training.

Apart from its general uses the building would be available, as already proposed, for meetings of the Royal Society, to which might be added popular evening lectures on scientific subjects, with, perhaps, special attention to much neglected "Hygiene;" also lectures to working men, &c.

The value of the study of the physical sciences as a means of mental training and culture is immense, and can scarcely be over-estimated; but, apart from this, there is no doubt that the proposed School of Mines or of Science must eventually pay the Colony in many ways too numerous to be detailed, but among which may be indicated improved yields from agricultural crops, with more careful provision against exhaustion of soil; and, in mining, better general returns, owing to the adoption of better methods, and the occurrence of fewer mistakes, with diminished risk of valuable mineral deposits being overlooked by the increased number of trained observers.

Trusting that I have sufficiently demonstrated the importance of providing funds during the present Session for at least the commencement of the proposed work, and that the exigencies of the revenue, relieved to some extent by the lapse of certain proposed votes, will not necessitate its total extinction,

I have the honor to be,
Sir,

Your obedient Servant,

W. F. WARD, *Assoc. R.S.M. London,*
Government Analyst.

The Honorable the Chief Secretary.