

## No. 20.

Mr. D. PETRIE, M.A., to the SECRETARY, Education Board of Otago.

SIR,—

Education Office, Dunedin, 6th May, 1885.

I beg to submit for the consideration of the Board the accounts recently published in "Nature," of the peripatetic system of teaching science, as carried out by the Birmingham School Board.

An elaborate programme of lessons in elementary science is prescribed for the public schools of New Zealand, but in this district, at all events, there has been very little success in carrying out the programme. Where attempts have been made to teach it in whole or in part the classes have shown little interest in the subject, and have but rarely gained a satisfactory knowledge of the principles taught. The failure to carry out this portion of the school work is due in part to the indifference of the teachers, but chiefly to their want of training in manipulation and in good methods of teaching the subject, and the absence of apparatus suitable for giving experimental demonstrations.

As the teaching of the elements of science in the scientific spirit to the more advanced pupils in the public schools is a matter of great importance, I would respectfully suggest that the Board should follow the example of the Birmingham School Board, and make provision for the teaching of science on the peripatetic system in the schools of the city and of the immediate suburbs.

There is every reason to believe that the system would be as productive of good results here as in England. Were a qualified science lecturer, or rather teacher, appointed on this footing, the teachers and pupil-teachers in and around Dunedin would gradually get accustomed to his method of teaching the subjects, and, if they moved to other districts (as many of them would), they would be able to give a certain amount of instruction in science on the same lines. In this way what at first sight appears a boon to Dunedin only would ere long be largely shared by the country districts also.

In "Nature," vol. 30, page 24, particulars are given of the cost of the scheme carried out in Birmingham :—

A central laboratory cost	...	...	...	...	£700
Apparatus	...	...	...	...	300
					£1,000
The total first cost was					
The annual working expenses were as follows :—					
Salaries of demonstrator and assistant	...	...	...	...	£400
Chemicals and apparatus...	...	...	...	...	50
Expense of moving apparatus about	...	...	...	...	50
					£500
Total of year's working expenses					

It is likely that the first cost, as well as the annual working expenses, would be somewhat greater here than in Birmingham, but the difference would not be great. An annual outlay of £600 would, I think, keep the establishment in working order. To my colleagues and myself it appears that the advantages to be secured by the carrying-out of science lessons on the proposed system would form a very excellent return for the money expended. I shall be happy to furnish the Board with a fuller account of the system should it be desired.

I have, &c.,

D. PETRIE,

Inspector.

The Secretary, Otago Board of Education.

## No. 21.

## TECHNICAL INSTRUCTION ON THE CONTINENT.

[TRANSLATION.]

## THE INSTRUCTION OF BOYS IN MANUAL WORK.

Report presented to the Minister of Public Instruction by M. H.—N. Van Kalken, Professor at the Brussels Normal School.

FOR some years past serious efforts have been made in certain European countries to bring practical instruction in manual work into connection with the instruction of the primary school. The desired object is not to prepare the child for a definite trade, as is done in certain schools specially intended to train good artisans, but merely to make instruction in manual labour an effective means of exercising the hand so as to render it more capable of serving man, and also of compelling the child to see well and to observe well—a matter of the first importance in the culture of the intellectual faculties in general.

This instruction, then, has the incontestable utility of being based entirely on the personal observation and work of the child.

Need we be astonished if, in our days when so many important reforms in education are being made, the introduction of manual work into the primary schools is placed in the order of the day, and if in many countries intelligent men are seen actively occupying themselves with the question of how this introduction may best be brought about?

In Sweden and in Finland this instruction is already considered as forming an integral part of primary education; in different parts of Germany schools of manual work for boys have been erected; in France this instruction is the subject of serious attention; in Holland it is imparted to 1,600 pupils in thirty-seven different communes; in Belgium, although not yet actually in existence, it is accepted in principle, since the general order for primary normal schools includes, amongst