

FRIDAY, 5TH AUGUST, 1870.

George Didsbury, Esq., Government Printer, in attendance, and examined.

164. *The Chairman.*] Have you any experience with reference to the manufacture of paper?—No.165. Can you give the Committee any information with reference to the manufacture of paper in the Colonies?—I believe printing paper is manufactured in Melbourne, and is used by the Melbourne *Argus*. I believe also that an attempt was made in Auckland some years ago to manufacture wrapping paper, but it was not successful.

166. Do you know the reason why that attempt failed?—I believe the principal reason was the want of proper raw material.

167. Do you know of any attempts having been made to manufacture brown paper in any of the other Colonies?—I am not aware of any attempts having been made to manufacture brown paper in any of the Colonies.

Mr. Didsbury, at the request of the Chairman, stated that he would endeavour to supply some information on the subject on a future occasion.

MONDAY, 8TH AUGUST, 1870.

James Hector, Esq., M.D., F.R.S., in attendance, and examined.

168. *The Chairman.*] A correspondence has been remitted to the Committee, which took place between yourself and the Government, respecting the formation of classes, with the view of promoting technical education. The Committee are anxious to ascertain whether you can make any practical suggestions with a view to the establishment of such classes, having particular reference to the peculiar circumstances of the Colony, arising from Provincial organization, and likewise to the amount of pecuniary means likely to be appropriated to such purpose?—I should state that the proposal was made from the Government, and submitted for the opinion of the Governors of the New Zealand Institute. The practical suggestions which they offered are embodied in the correspondence referred to only in a general way. As I understand the proposal of the Government, it was not intended that these lectures should be directly in connection with the Institute, but rather with the Geological Survey Department; the object being, not to impart a general knowledge of science to a large number of students, but to give practical instruction in several branches of science to a few students, in such a manner that they could afterwards employ that knowledge, either for the purpose of teaching others, or as a practical avocation. I am of opinion that, with very slight alterations, the present establishment at the Museum might be rendered sufficient to supply all the requirements for such a course for a considerable time to come. The chief expense of such an establishment is, of course, the salaries of the scientific officers who are competent to conduct such a course; but if the officers who are otherwise employed in the Geological Survey, and other scientific work in the Colony, devoted a portion of their time to such a purpose, very little extra expense would be incurred. I do not think that there would be a sufficient number of students to give employment to a staff specially appointed for such a purpose.

169. At what expense could the building be altered so as to give sufficient accommodation for the number of students likely to attend?—I think probably from twelve to fifteen would be the number who would be likely to avail themselves of the practical course for a time, and the laboratory could be so altered as to accommodate that number at an expense of about £350. A lecture room would be required in addition, and as probably a much larger number of persons would attend the general course of lectures than the few who would take the practical, a room of considerable size would be required. At present lectures are delivered in the Maori house, which is very badly adapted for the purpose. The plan of the Museum building contemplates the construction of a two-storeyed front, and of another wing similar to that at present at the north end. I think if the front were built, it would supply all the space that would be required for some time to come, and allow all the collections to be so arranged as to be more available for instruction than they are at present. The expense of the front, as originally contracted for, was £1,100, but of course the Maori house could be used in the meantime, if such expense could not be borne at present. The apparatus required for such a course of lectures would be divided into two classes. For the general course, the apparatus would cost, at a minimum, about £150. For the practical course, the supply of chemicals and other articles that would require to be kept in hand would cost about £250; but it is usual for students to pay for what they actually consume in a practical course of chemistry—the value of what each student uses in a course amounting to about five guineas.

170. What period of the year would you propose to hold these lectures, and over what length of time would the course extend?—At first about three months would be as much time as could be spared by the Geological Department, with due regard to the other duties of the Department; and the best season would be in the months of July, August, and September.

171. The question of the creation of scholarships has been raised in this correspondence: have you turned over that subject in your mind, and are you prepared to offer any recommendations to the Committee upon it?—That is the only method by which the benefit of such a course could be extended to other parts of the Colony. I think a scholarship of the amount of £30 would be sufficient to cover all expenses; and if ten such scholarships were established, I think that would be quite sufficient for the present. These scholarships should be the gift of the local authorities in each Province.

172. Do you think it would be practicable to connect the system of technical lectures with the creation of the Chair of Chemistry and Natural Science at the Otago University?—A Professor giving a general course in science would certainly not be able to undertake the conduct of the practical course in the different branches of science without an additional staff; and the question is, whether such an additional staff would find full employment for their time without having scientific work to perform. The Schools of Mines on the Continent and in England are directly connected with the Geological Survey on this account; but the practical instruction in science given at Jermyn Street does not in any way interfere with the general course of scientific instruction at the various Universities. I do not think a student can profitably devote his attention at the same time to what is termed a University course and also to a practical course in science, or in any other business.