

No. 3. With the adapting of Colonial timber, the industry can supply the demands of the Colony and the adjacent islands.

No. 4. Average wages, £65 per week.

No. 5. The importation of common vehicles from Sydney is about four times as much as that manufactured here. Should the above suggestions be carried out by the Government, we have no hesitation in saying that we should employ four times the amount of hands we are now doing.

It might not be out of place to say we are erecting expensive steam machinery for sawing, bending, &c., and in a few weeks shall be enabled to take all timber from the log, and, with the use of some ten or twelve machines, shall be enabled to compete with the Australian market in plain vehicles.

We have devoted special attention to wheel machinery, as we have never found better woods for wheel purposes than our own native woods.

Machines specially ordered for this branch are yet to arrive, which may be some two months. All other machines are now being fixed.

We have, &c.,

COUSINS, ATKIN, & Co.

The Chairman of Joint Committee on Colonial Industries.

### No. 16.

Geological Survey Office, Wellington, 12th August, 1870.

SIR,—

I have the honor to inform you that the specimens of adipocere submitted by you for examination prove to be ammoniacal soap in different states of purity. The particular sample marked adipocere wax consists of fatty acids combined with ammonia, but part of the ammonia has been driven off and replaced by hydrogen through the action of hot water or steam. By this process the whole of the ammonia might be removed, and the product would be nearly pure stearine, like that used in Price's patent candles. The adipocere in this as in all other cases appears to have been formed from the fatty matters intermixed with the muscular tissue in which there is an excess of nitrogenous element to form the ammonia.

I have, &c.,

JAMES HECTOR.

The Chairman of Joint Committee on Colonial Industries.

### No. 17.

Colonial Secretary's Office, Wellington, 2nd August, 1870.

SIR,—

I have the honor to transmit the enclosed letters from Dr. Hector, of the numbers and dates noted in the margin, for the consideration of the Colonial Industries Committee, in connection with the development of the resources of the Colony, and to state that I have no doubt, if Dr. Hector were examined on this subject, his evidence would be valuable in showing how practical effect could be given to this proposal, so as to benefit the whole Colony and stimulate scientific education.

No. 15, 26th May, 1870.

No. 16, 26th July, 1870.

I have, &c.,

W. GISBORNE.

The Chairman of the Industries Committee, Wellington.

### Enclosure No. 1.

New Zealand Institute, Wellington, 26th May, 1870.

SIR,—

Having at a meeting of the Board of Governors of the New Zealand Institute, held on the 20th instant, mentioned that it is the desire of Government to see the Institute assume a more direct educational character in connection with various departments of physical and natural science, I am directed by the Board to state that they highly approve of the suggestion, and that if they receive from Government an indication of the nature of the course of instruction desired, and of the extent to which the Government will be prepared to appropriate funds towards it, they will give the subject the most careful consideration, with the view of reporting upon the best means of carrying it into practical effect.

I have, &c.,

JAMES HECTOR.

The Hon. the Colonial Secretary.

MINUTE by the Hon. Mr. VOGEL.

THE Government are decidedly of opinion that it is desirable that direct educational advantages should be offered, in connection with the Institute, in the geological department. In the first instance, it would be well to commence on a small scale. Fees should be charged for all assays, analyses, and reports made for private individuals. The Institute, from the knowledge and experience possessed by its members, should be in a better position to propound a plan to be adopted than the Government, and the Government will be willing to give favourable consideration to proposals having for their object the initiation of a system of scientific education.

It would be desirable, in order to ultimate extension, that the system of instruction should be so determined that teachers could acquire it and impart it in its rudimentary stage in the public schools throughout the Colony. The pupils displaying aptitude should then be able to acquire advanced information.

JULIUS VOGEL.

### Enclosure No. 2.

New Zealand Institute, Wellington, 26th July, 1870.

SIR,—

I have the honor to inform you that I placed before the Board of Governors, at their meeting