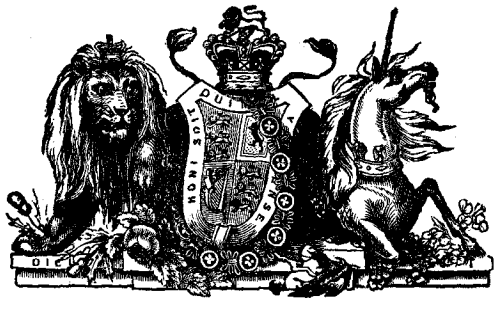

THE

HAWKE'S BAY GOVERNMENT GAZETTE,

(PUBLISHED BY AUTHORITY.)

☞ All public Notifications which appear in this Gazette, with any Official Signature thereunto annexed, are to be considered as Official Communications made to those persons to whom they relate, and are to be obeyed accordingly.

DONALD M'LEAN,
Superintendent.

VOL. V. SATURDAY, OCTOBER 15, 1864. No. 25.

PROCLAMATION.

By His Honor DONALD M'LEAN, Esq., Superintendent of the Province of Hawke's Bay, in the Islands of New Zealand.

WHEREAS by an Act of the Provincial Council of Wellington, Session 3, No. 8, intituled "An Act to amend and consolidate the Law relating to Cattle Trespass and Impounding," it is enacted that the Superintendent may from time to time by proclamation declare any Pounds to be, or cease to be, Public Pounds within the meaning of the said Act, and may from time to time in like manner appoint keepers of such Pounds.

Now, therefore, I, Donald M'Lean, Superintendent of the Province of Hawke's Bay, do hereby proclaim Mr. Reynolds' Stockyard, Havelock, Mr. Goodwin's Stockyard, Waipukurau, and Mr. Cowper's Stockyard, Wallingford, to be Public Pounds within the meaning of the abovementioned Act, and that

Mr. THOMAS REYNOLDS

shall be Pound-keeper at Havelock;

Mr. W. GOODWIN

shall be Pound-keeper at Waipukurau; and

Mr. THOMAS COWPER

shall be Pound-keeper at Wallingford.

Dated this 12th day of October, in the year of our Lord One thousand eight hundred and sixty-four.

DONALD M'LEAN,
Superintendent.

NEW ZEALAND INDUSTRIAL EXHIBITION.

Superintendent's Office,
Napier, October 13, 1864.

THE following Papers, &c., having reference to the New Zealand Industrial Exhibition, 1865, are published for general information.

DONALD M'LEAN,
Superintendent.

Offices of the Royal Commission,
Dunedin, Otago, N.Z., Sept. 3, 1864.

SIR,—I have the honor by direction of the Commissioners to enclose for general information the accompanying abstract of an Official Report of the amount of Hotel and Lodging House accommodation Dunedin now affords, and which the Commissioners have been favored with through the courtesy of the Commissioner of Police. This return only includes the *ordinary* provision for travellers, but other and very ample accommodation would be provided, if required. I may also state that it is promised that the charges mentioned will be adhered to; though the Commissioners of course cannot bind Hotel-keepers or others to do so, there is sufficient security in the competition which is sure to follow on any very large demand, that the Hotel-keepers, &c., will not deviate from the present understanding.

The Commissioners will have a registry

kept of all Hotels and Boarding Houses for the convenience of visitors.

You will oblige by making this as generally known as possible for the information of intending exhibitors and visitors in your Province.

I have also the pleasure of enclosing a copy of an agreement signed by the agents of all the principal Steam Ship Companies trading to this port, by which you will perceive that their vessels will very liberally convey goods and visitors to and from the Exhibition at one freight and one fare for the double journey.

I have the honor to be,
Sir,
Your most obedt. servant,
ALFRED ECCLES,
Honorary Secretary.

John Wilkinson, Esq.,
Chairman Local Committee,
Hawke's Bay, Napier.

ABSTRACT of RETURN of HOTELS and BOARDING HOUSES in DUNEDIN, showing the ACCOMMODATION and the CHARGES which will be adhered to.

		Accommodation.	Charges. Breakfast.	Dinner.	Tea.	Board and Lodging, at per week.
	HOTELS.		s. d. s. d.	s. d. s. d.	s. d. s. d.	£ s. d. £ s. d.
16	First-class	625	2 6 to 4 0	2 6 to 5 0	2 0 to 4 0	2 0 0 to 4 4 0
11	Second-class	310	2 0 to 3 0	2 0 to 3 6	2 0 to 3 0	1 10 0 to 2 10 0
55	Third-class	1021	1 0 to 2 6	1 0 to 3 0	1 0 to 2 6	1 5 0 to 2 5 0
	Total Hotel accommodation	1956				
	BOARDING HOUSES.					
5	First-Class	87	1 6 to 2 0	2 0 to 2 6	1 6 to 2 0	1 12 0 to 3 10 0
10	Second-class	190	1 6 to 2 0	1 6 to 2 0	1 6 to 2 0	1 5 0 to 2 10 0
28	Third-class	360	1 0 to 2 0	1 0 to 2 0	1 0 to 2 0	1 2 0 to 1 15 0
	Total Boarding-house accommodation	637				

(Copy.)

To the Commissioners for the New Zealand Industrial Exhibition, Dunedin.

Dunedin, 4th July, 1864.

WE, the undersigned, as Agents, hereby agree to take passengers and goods for the New Zealand Industrial Exhibition at one fare and one freight for the double journey.

Passengers' tickets not transferable.

The amount of such fare or freight to be paid in advance at the Port of shipment.

(Signed) For the I.C.R.M.S.P. Co. :
Geo. S. Broadrick & Co.,
Agents.
Royse, Mudie, & Co.,
Agents.
Melbourne, Adelaide, & New Zealand S.S. Co.:
R. B. Martin & Co.,
Agents.
Tasmanian Steam Nav. Co.:
Lloyd, Taggart, & Co.,
Agents.
N. Z. S. N. Co. (Limited) :
John Jones & Co.

Offices of the Royal Commission,
Dunedin, Otago, N.Z., Sept. 13, 1864.

SIR,—I have the honor by direction of the Commissioners to draw the especial attention of your Honor to the printed paper No. 12, copy of which is enclosed herewith.

This paper relates to the very important experiments to be made on the strength of materials under the superintendence of the Asssociate Committee of Consulting Engineers, in continuation of those made at the Paris Exhibition 1855 on Colonial woods by Capt. Fowke, R.E. As these experiments must result in affording very valuable because exact information as to the timbers, building stones &c. used in New Zealand, the Commissioners trust that the Local Committees throughout the Colony, with whom rest the responsibility of the due representation of the Provinces, will spare no effort to have their respective provincial materials properly represented and reported on.

The Commissioners, in view of the large *public works* which must at no distant date be undertaken throughout the colony, have devoted considerable funds to the carrying out of these experiments, and the Associate Committee by whom they are kindly undertaken comprises the whole of the leading Engineers of the Province.

The Commissioners therefore trust that your Honor will kindly bring this matter under the notice of your Government, with a view to their actively aiding this important undertaking by supply of materials &c.

You will also perceive that the Commissioners have requested that Wool should be exhibited in fleeces, whole or

stapled. Flour in bags of from 100 to 200 lbs.

I have the honor to be,
Sir,
Your most obedt. servant,
ALFRED ECCLES,
Honorary Secretary.

His Honor the Superintendent,
Hawke's Bay.

NEW ZEALAND EXHIBITION, 1865.

THE following amended and further instructions have been drawn up for the information of Local Committees and Exhibitors, and it is particularly requested that when possible they may be strictly adhered to.

Experiments on the Strength of Materials, &c.

The original intention of the Commissioners was to follow up the train of experiments instituted by Capt. Fowke, R.E., on various samples of colonial timbers in the Paris Exhibition of 1855. These experiments were from necessity made on very short scantlings, and the samples experimented upon were supported at each end. The results obtained were most satisfactory so far as the ultimate strength of the samples was concerned, but the form of the specimens and the manner in which they were supported rendered the measure of elasticity not quite so satisfactory, that property being better ascertained from more slender samples fixed at one end only. No trials were made at Paris of the tensile strength of timber in the direction of the fibre, and no trials appear ever to have been made on the tensile strength transverse to fibre, and yet it appears that both these sets of experiments would give very useful practical information. It has consequently been considered by the Associate Committee of Consulting Engineers that the experiments on timbers should be extended to embrace the following subjects :—

The Paris Experiments.
1. Ultimate transverse strength
2. Elasticity (imperfectly)
3. Crushing strain in line of fibre
4. Crushing strain transverse to fibre

Prop. new series of Experiments.
5. Elasticity, more delicately
6. Tensile strain in line of fibre
7. Tensile strain transverse to fibre

In order that these experiments may give satisfactory results, it is desirable that each should be repeated at least three times to eliminate the effect of accidental flaws, &c.; the number and sizes of the samples required for this purpose are given below, all scantlings being given a little full to allow the samples to be finally dressed accurately to size shortly before they are to be experimented upon.

As bearing on the question of the durability of different timbers in various works of construction, samples which have been a known length of time exposed in trying situations, whether as piles in marine works, exposed to the action of the boring worms, as piles in fresh water, or as house piles, or fence posts, &c., both in dry and marshy soils, whether sound or partially destroyed, would be very valuable. In cases where different varieties of timber have been employed in the same work, and have consequently been equally exposed in precisely similar circumstances, samples of each kind should, if possible, be furnished, as affording incontestible evidence of their comparative durability.

In the case of lime and cement stones, the Associate Committee propose to submit the various samples to certain practical tests, the results of which, when tabulated, will give, if not more information than the chemical analysis, yet information in a more practical form, and one which will probably be more generally understood.

With this view it is desirable that a sufficient quantity of each sample be forwarded, as explained below.

Building Stones.

It is desirable that three cubes of not less than eight inches of all building stones should be exhibited, each cube showing the various kinds of workmanship of which the stone is capable, and which are generally put on the stone; one side, when practicable, being polished.

Sufficiently large samples of all lime and cement stones should be sent to admit of a portion being burned and slacked, and practically experimented upon. It is desirable that enough should be furnished to allow at least a quarter bushel of slacked lime being prepared in each case.

With each stone the Commissioners desire to be furnished with the following information :

1. Name of the country or colony, and province or district, and quarry from which the stone was obtained.
2. The aboriginal and local name.
3. A short description of the formation in which the stone occurs; its abundance or scarcity; the nature of the country; its proximity to the coast or harbour, navigable river, railway, road, or other facility for transport; the purposes for which it is applied in the country, and the estimation in which it is held for strength and facility of working; its durability under various circumstances of exposure, &c.; the names of any public or other buildings in which it has been used, and for what purpose, their date of erection, and the present condition of the stone therein; the cost in the colony or country per foot cube at the quarry, and on board ship at the nearest available port; the size of which it is most easily, and the extreme size at

which it can be, obtained. In the case of roofing slate, the usual sizes prepared, and whether sawn for other purposes.

The Commissioners will supply the following information where it appears to them desirable:—

1. The specific gravity.
2. Analysis.
3. Disintegration when treated with a solution of Glauber's salt.
4. Its capacity for absorbing water.
5. Its weight per foot cube.
6. Its crushing weight.

In the case of limes and cement the following further information, will, so far as possible, be furnished for each sample:—

7. Observations upon its slacking.
8. Observations upon its setting in air, in fresh and in salt water.
9. The force required to crush a cube a given period after being worked up into mortar.
10. Measure of expansion or contraction (if any) in setting.

Woods of Construction.

For the purpose of Exhibition, it is desirable, in the article of timber, that the specimens in all cases should be converted into plank or scantling of such a size as to show its mercantile value. Longitudinal and transverse sections should be cut, and if possible they should be four inches thick, and cut so as to show the "sap" and bark on both edges. Moreover, since there is great uncertainty as to the origin of much colonial timber, it will be very desirable that each kind should be accompanied by a few twigs showing its leaves and flowers, as well as fruit, when procurable. If the leaves and flowers are pressed between sheets of paper enclosed in boards, they will furnish the evidence required.

It is also desirable that, as far as possible, the following particulars should be supplied to the Commissioners with each specimen of wood:—

1. Name of the country, or colony and province, or district, from which the wood was sent.
2. The botanical name, natural order, aboriginal name, and local name.
3. A short description of the tree, its abundance or scarcity in the district, colony, or country; the nature of the land on which it grows, whether swampy, hilly, or otherwise; its proximity to the coast, or a harbour, or navigable river, railway, road, or other facility for transport; the purposes for which the wood is applied in the country, and the estimation in which it is held for strength and durability under various circumstances, as exposure to atmospheric influences, immersion (partial or otherwise) in salt, brackish, or fresh water, underground, &c, ; its capabilities for polish as a furniture wood, &c.; its cost in the colony or country per foot cube, and the diameter and height of trees, as an index of the size of timber obtainable.

For the purpose of testing in a satisfactory manner, it is very desirable that not less than three repetitions of the same experiment should be made on each sample, so that a fair average result may be obtained, consequently it is recommended that the following scantlings should be furnished:—

Three samples, each $2\frac{1}{4}$ inches square, and 14 to 16 inches long.
Three samples, each $1\frac{1}{4}$ inches square and 18 to 20 inches long
Three samples, each 5 inches diameter or square, and 10 inches long
Three samples, *cut across the grain*, each $3\frac{1}{2}$ inches square, and 6 to 8 inches long; *or a sufficiently large block may be furnished to admit of these samples being cut from it.*

The Commissioners will then supply the following particulars:—

1. Specific gravity
2. Transverse breaking weight
3. Crushing strain in the direction of the fibre
4. Transverse crushing strain
5. Elasticity
6. Tensile strain in direction of fibre
7. Tensile strain transverse to fibre

Dye Woods.

All, but especially New Zealand dye-woods, &c., should be accompanied by a few twigs and leaves, with, if possible, the flower and fruit of the trees or plant, and the same information as requested under Woods of Construction.

Tanning Materials.

All New Zealand or other tanning materials, when of vegetable origin, should be accompanied by a short description of the tree, &c., from which the material is obtained, together with dried specimens of the leaves, flowers, and fruit; the manner in which the material is obtained and used, and its scarcity or abundance; and whether an article of present commerce and to what extent; its price, &c.

Cereals, Grains, Seeds, Flour, Meal, &c.

Each sample to be one imperial peck
Flour—Bags containing 100 to 200 lbs. should be sent

Skins and Leather.

State the materials used in tanning or otherwise preparing it, and the animal whence the skin was obtained; the principal qualities and uses of the particular leather; price.

Wool.

It is desirable that wool should be exhibited, if possible, in whole fleeces, and the following information supplied:—

By whom shewn—as owner or breeder—
Breed of Animal—
Age—
Sex—

Where bred—
By whom—
If imported—date of importation—
Whence from—
Age when imported—
Date of this shearing—
Date of previous shearing—
When washed, and how, previous to this shearing—
If ever diseased—
When dipped, and materials used for dipping—
Weight of fleece—
Length of staple—
If stapled—varieties of wool into which it is classed, with their respective weights
Price—average realised for previous clips of same flock—
Where sold and how—

Furs.

Of what animal; dressed or undressed; if dressed, mode of dressing it; uses and price.

Feathers and Birdskins, &c.

Of what bird; dressed or undressed; if dressed, mode of dressing; uses, and price.

Raw Silk.

Produced by worm of what moth? where? what the food of the worm? average number of cocoons to the pound; price per lb.; whether produced for commercial purposes.

Machinery, Implements, Tools, Models &c.

It is especially desirable that the following kinds of Machinery should be well represented:—

1. Machinery and machines, tools, &c., for the felling, breaking up, and convertiug timber and drawing stumps.
2. Machinery, &c., for getting, sawing and working, or breaking stone.
3. Brick and tile machines, and for making pottery.
4. Agricultural and horticultural machines, and tools used in reclaiming and cultivating land, including those for sowiug, gatherng, stacking or housing, and renderiug crops marketable.
5. Machines, &c., used for dairy purposes.
6. Machines for the conversion of animal, vegetable, and mineral substances for the food of man and animals.
7. Machines not previously mentioned for converting animal, vegetable, and mineral substances for the purposes of manufactures, and not for food; especially for utilising flax and other fibres.
8. Machines used in the construction of buildings or in the removal of wooden buildings entire.
9. Cranes, hydraulic lifts, and other machines for lifting and moving heavy weights.
10. Machinery and machines used for locomotive purposes by land or water.
11. Domestic machines for preparing food, making clothing &c.
12. Sanitary machines.
13. Models of the foregoing, or roads. rail or tram-roads, and bridges; models of ships, steamboats and steam-bridges; houses, farm and other buildings; mines and mining machinery, &c.

[Printed Paper No. 12, published by direction of the Commissioners of the New Zealand Exhibition, 1865.]

REPORT OF DR. HECTOR

TO THE ROYAL COMMISSIONERS OF THE NEW ZEALAND EXHIBITION.

Dunedin, July, 27 1864.

SIR,—I beg to submit, for the information of the Royal Commissioners, the following account of the arrangements for the forthcoming Exhibition, that have been made in the Northern Provinces.

Although necessarily imperfect, owing to the short space of time employed in my recent tour, the account will, I trust, enable the Commissioners to judge how far the Exhibition may be expected to indicate the value of the internal resources of the Colony, and its advancement in the arts of civilised life.

The Province of Marlborough, which was the first I visited, is of small extent, and as yet its resources are only very partially known and hardly at all developed. It embraces the fine pastoral district of the Wairau Valley, from which there is a considerable export of wool. The Northern part of the Province is mountainous, and covered with forest, but there are several fine valleys communicating with the beautiful inlets which indent the southern shore of Cook's Straits, that afford a large area of excellent arable land.

The fine quality of the timber in this district, and the great facilities which the deep water Sounds afford for shipment and the establishment of small detached settlements, will lead to an extensive timber trade.

In addition, the recent discovery of gold diggings in the ranges that separate the Sounds from the Wairau Plains, cannot fail to give an impetus to the province, and as there is level communication from the head both of Queen Charlotte Sound and Pelorus Sound with the interior, these inlets, which are excellent natural harbours, will always form the outlets, so that Picton and Havelock will become towns of considerable importance.

Already, it is contemplated to facilitate the communication by means of a tramway between Picton and the Wairau Plains.

At Picton I met His Honor the Superintendent, and several of the influential settlers, and urged upon them strongly the advantages which would result to the Province from their participating cordially in the forthcoming Exhibition. I heard from His Honor that he had appointed a local Committee for the purpose, but as the Chairman resided in Blenheim, in the Wairau Plains, I was unable with the limited time at my disposal, to consult with him on the subject of the resources of the Province. I, however, obtained a promise that active measures would be at once adopted to secure a fair exhibition, consisting chiefly of varieties of timber, and woods, provincial maps, native implements, and manufactures. Samples of gold and other minerals will also be exhibited, but the total quantity of space required can hardly be expected to be large in the present state of the development of the Province.

I was only able to spend one day at Picton, and from thence proceeded to Havelock, which at the time of my visit consisted merely of a few dozen tents, grouped in the usual manner of the townships that spring up in connection with diggings.

From Havelock I proceeded overland to Nelson, spending a couple of days in branching off to the south, in order to visit the Wakamarina Valley,

where some thousand diggers are at work. This valley, which has an extent equal to that of the Cardrona, in the Province of Otago, has proved moderately auriferous. The geological formation is similar to that towards the head of the Wakatipu Lake, which, though well prospected, has never attracted a large number of miners. Gold undoubtedly exists in considerable quantities, but from its patchy distribution, the diggings will in many cases cause temporary disappointment.

As far as I can judge, the same formation extends to the southward and is continuous with the Buller Goldfields, and from the fact that the gold has been procured at several points on the west coast of Canterbury, I have no doubt that this auriferous belt, which is in an upper or newer formation than that of our great goldfields, will be yet traced continuously through the Middle Island; and from specimens and sections I afterwards saw at Wellington and at Coromandel, I am inclined to think that it will be found throughout the length of the North Island also. If this formation expands so as to occupy and form the floor of a large and elevated plateau, towards the source of the Thames Valley, there may be yet discovered extensive alluvial diggings in the North Island, without which no large body of miners can be induced to work steadily.

Following up the beautiful valley of the Pelorus River, I entered the Province of Nelson, crossing the Mongatapu Hill, which is the representative of the real "back bone" or axis of elevation of the whole island. It consists of serpentine and allied rocks, identical with those which I had previously observed to occur on the west coast of Otago. The famous Dun-Mountain, which has given rise to so many speculations, is situated on the axis, and lies a few miles to the south of the "Bridle track," by which the mountains is crossed.

The labor expended on this track, and the engineering skill and enterprise displayed in the bridges, which have been constructed across small difficult but romantic gorges, speak highly for the enterprising spirit of the Nelson colonists. The Mongatapu is 2800 feet in height, but the care with which the line of road has been chosen renders the ascent extremely gentle, at least from the east. That to the west is necessarily more abrupt. I allude to this "Bridle Road," as in the cuttings, which have been made in the alternations of slates, serpentine, and trap rocks, one of the most interesting geological sections that I have seen in New Zealand, occurs. There are many spots also where a practical miner would be inclined to turn aside and search for valuable metal ores with some hope of success.

Descending the picturesque valley of the Matai River towards Nelson, the track is for a considerable distance cut into solid limestone rock of the finest quality, alternating with slabs that would be invaluable as paving stones. The same formations are also intersected by the Dun Mountain Railway, so that their production can be conveyed to the shipping for a very small expense. When, through the kindness of the managers of the Dun Mountain Company, I had an opportunity of visiting their mines, I found that they had a kiln for burning lime, on the spot where it is quarried, and at an altitude of 2000 feet, where there was abundance of fuel, so that from the facilities for transport and shipment which they possess, I have no doubt they could derive a fair income.

At Nelson, I found that His Honor the Superintendent, and the members of the Local Committee, took a cordial interest in the success of the Exhibition, and were prepared to do anything in their power to insure the proper representation of the extensive mineral resources of that Province, and which, so far as is at present known, are probably greater (with the single exception of gold) than those of any other Province in New Zealand.

It has, therefore, the greatest possible interest in being properly represented in the New Zealand Exhibition; and, if the labors of the Local Committee succeed in attracting public attention to the mineral riches of the Province, they cannot fail to hasten the developement of the Nelson Province, as well as benefiting the whole Colony.

The Local Committee, aided by the Government, are therefore preparing to illustrate by specimens, plans, sections, and sketches, the valuable deposit of coal which exists on the West Coast of the Province, the copper, chrome, iron, gold, plumbago, lead, and other ores, marbles of various tints, splendid rock and mineral specimens from the Dun Mountain, coal from Massacre Bay, limestones, flag, and building stones, roofing slates, and many sources of future prosperity to the Colony.

There is also expected to be a fair show of the woods of the Province; but here, as in all other parts of New Zealand, a fear was expressed that there was not sufficient time to permit of a complete selection, as the collection of good specimens of all the various timbers in the forest could only be effected, without enormous expense, by taking advantage of favorable opportunities as they occurred.

The illustrating of the mining and engineering works executed, or proposed to be executed, in the Province, will form a most interesting feature in the Exhibition. A large map, of 300 superficial feet, placed on rollers for reference, is, I believe, to be exhibited, also many plans of districts, harbors, roads, bridges (some of which will be also illustrated by models). The Dun Mountain Company are to give illustrations of the very interesting work, which they executed in the construction of a tramway for the purpose of bringing down the ore from the mines, which are elevated 2800 feet above the sea, to the shipping port. The small cost and perfect efficiency of the line are well worth the attention of the other Provinces in New Zealand. They will also exhibit some dyes manufactured from the chrome ore. Lastly, there will be a good show of works of art, and especially of pictures illustrative of the romantic scenery of the Nelson Province, by amateurs and professional artists.

From the agricultural district of the Wairau Plains there will be a good exhibition of woods and grain, and if the Local Committee are able to carry out the arrangements they have planned, there is every reason to expect that this important Province will be well represented.

In passing from Nelson to Auckland by the West Coast, I was able to spend a few hours in Taranaki. As this beautiful Province is at present reduced to the area of a few miles, where there is only a scattered garrison town virtually in a state of siege, it cannot be expected to take much part in the Exhibition. His Honor the Superintendent has, however, promised that at least there will be samples of the iron sand, which occurs so abundantly on the coast, accompanied, if possible, by a case of articles manufactured from it. There was nothing else which he could suggest as a probable article for exhibition.

At Auckland I was glad to find that although much had not been effected beyond the issuing of advertisements and circulars by the Committee, yet it was intended to enter into the matter with spirit. A New Zealand Exhibition would be truly incomplete if the natural products of the oldest and most highly favored Province were not well represented. His Excellency the Governor takes a warm interest in the matter, and intends to be a very considerable exhibitor of Maori manufactures and curiosities, rare and interesting works connected with the aborigines; and if the Commissioners think it advisable he would be glad to exhibit a selection from a collection of curious MSS. which he is forming.

His Honor the Superintendent of Auckland is fully impressed with the importance which the success or failure of the Exhibition will have upon the development of New Zealand, and is anxious that Auckland should be well represented. In addition to the Auckland Local Committee he has appointed sub-committees in various parts of the Province, and he intends to superintend the collection and exhibition of products from those districts in which he feels a lively interest.

The Secretary of the Auckland Local Com-

mittee assured me that after the experience we have had of the last two Exhibitions in London, he does not anticipate any difficulty in stirring up exhibitors to transmit articles in time. The chairman, Mr. Heaphy, however, pointed out that at the present time the presence of a large body of troops had diverted all trade more or less from the usual channels, and that so much work was being done under contracts that there would be great difficulty in inducing exhibitors to come forward. He further stated that there are fewer facilities for communicating and forwarding collections, &c., from the more remote though undisturbed districts, as the coasting vessels are nearly all engaged, directly or indirectly, in the Commissariat service, while the native disturbances completely close some of the most interesting districts of the Province.

On the whole, therefore, I am inclined to think that a very considerable expenditure and energetic action on the part of the local authorities will alone enable Auckland to take that prominent position in the Exhibition which is her due.

The mineral wealth of some parts of the Province is well ascertained. The copper mines at Kawau and Barrier Island were at one time worked to some extent, and though now abandoned, they could be easily represented in the Exhibition by suitable specimens and plans of the workings. Through the attention of the Government, I was enabled to pay a visit to Coromandel, and to examine the auriferous district there. Although belonging to a very different class of diggings as regards extent from those we are accustomed to in Otago, they have yet proved highly remunerative to some of the parties which have worked them steadily, and especially where they have avoided launching into the reckless prospecting schemes which appear to have been too frequently adopted, and which, I have no doubt by the want of success, have caused the real value of the auriferous lands to be much underrated.

Gold was first discovered in the year 1852, but it was not till ten years afterwards that it was worked in earnest. The formation does not resemble anything in the south of New Zealand, but is analagous to the Grass Valley district in California, and Wood's Point in Australia. The superficial drifts are here almost wholly wanting, and in a very short time the small quantity of alluvial gold that was to be found in the bed of the stream was washed out. It is a most delightful district, bordering on a land-locked harbour, where, owing to the facilities for procuring food, if gold were plentiful, a digger's life would be luxurious. During the first rush of population to this place several townships were laid out, and the land was readily bought. Now, however, the white population is only 300 persons, of whom 81 held miners' rights during the past half-year. The native adult population numbers 340.

Excluding the yield from alluvial diggings, the quantity of gold which has been extracted from the reefs during the last two years amounts to 8422 ozs., but of this 7800 ozs. have been obtained by two companies alone. One of these, known as No. 5, has now divided among the shareholders the sum of £11,050 sterling without having ever made any call; the expenses of working and management, amounting to £3000, has been invariably paid by the yield.

The same auriferous rocks that occur in the neighbourhood of Coromandel, extend for an unknown distance in a southerly direction; but the present native disturbances have hitherto prevented the examination of the country.

A sub-committee has been appointed at Coromandel, and I strongly urged that they should endeavour if possible to have the mineral specimens and characteristic rocks of this very interesting district exhibited, so that the mining population in the south might have an opportunity of comparing and being familiar with their appearances; also, that plans and sections of the different mines should be prepared and exhibited. The Coromandel district, in common with a great part of the Province of Auckland, abounds in timber trees of large size, and of the most varied and useful qualities. The proper exhibition of these will, however, require a very considerable expenditure, as, from circumstances I have already alluded to, the mills, when in operation, are greatly engaged in contract work, and would grudge sparing the necessary time and labour. The Auckland cabinet makers have long been famous for their excellent and artistic workmanship, and a great display of inlaid and fancy furniture may therefore be expected. Several machines for the cleaning of the native flax have also been invented in Auckland, and if the local committee can only induce the different inventors of machines for this purpose to exhibit and compare the different points of each, I have no doubt it will be the first step towards the discovery of a method by which this valuable but refractory raw material can be turned to account.

The brown coals of various parts of the Province of Auckland have now been extensively used, and it will be most instructive to have samples of them exhibited, in order to compare the quality with those of our own abundant deposits, which I fear are rather too much underrated.

Freestones, marbles, limestones, cements, and a variety of clays, are also known to exist in various parts of the Province of Auckland, all of which the Local Committees will recognise as fit articles for contribution.

The subjects of the representation of the state of the surveys, &c., by the exhibition of maps and plans, was suggested, but the land system appears so complicated, and the results of the General Government surveys so confused with those proper to the Provincial Government, while, owing to the pressure on account of the war, the departments are so overworked at present that no special maps can probably be prepared. Some excellent unpublished maps are, however, in the possession of the Government, the exhibition of which would be a very great boon indeed.

From Auckland I proceeded to Hawke's Bay, where the short time at my disposal only permitted of my remaining a few hours. The character of the Province, controlled by similarity of climate, approaches more to that of the Southern Provinces that any other part of the North Island. There, owing to the prevalence of bush and low scrub, the settler is required to expend a greater amount of labour and capital before he can obtain a profitable return.

Being essentially a pastoral country, its resources have not yet been sufficiently explored, and although it is well known that in the mountainous country towards the interior there are indications of mineral wealth, it can hardly be expected that these will be represented in the first New Zealand Exhibition; while the districts along the coast consists of newer tertiary strata, which can afford but little of economic value.

His Honor the Superintendent having appointed a very efficient Local Committee, and being himself anxious that the Province shall be worthily represented, I believe that no effort will be spared to effect the object. The principal exhibits will be of wools from a variety of breeds of sheep, as this important subject has, I understand, received more attention than is general in other parts of New Zealand.

Collections of rocks and of the fossil remains which are very abundantly imbedded in the tertiary strata, specimens of the woods of the interior, illustrative maps, and plans of the country, along with sketches and photographs, will constitute the principal exhibits of this Province, and probably a fine display of articles of native manufacture.

In Wellington, his Honor the Superintendent has appointed an influential Local Committee, and as great interest is taken there in the success of the Exhibition, the Commissioners may feel assured that the resources of the Province will be well represented. It embraces the pastoral district of the Wairarapa Valley and the Coast ranges, and the fertile and hilly grounds in the neighbourhood of Port Nicholson, and the extensive and wooded plains of which Wanganui is the centre. This indicates that the principal exhibits will be of wool, timber, and agricultural products. A valuable collection of articles from

the New Zealand Society will also be send—maps, plans of proposed harbour improvements, lighthouses, and other engineering works, water-color and other sketches illustrating New Zealand scenery, and articles of native manufacture and curiosities. The exhibition of a New Zealand built steam engine will probably be a unique and most interesting contribution from this province.

The Province of Canterbury is now preparing rapidly for the Exhibition, and if fairly represented, will I believe, contribute evidence of greater enterprise and advancement than any other Province in New Zealand. It has the great merit of possessing the first locomotive railway, and the illustration of the works connected with that great engineering enterprise will form one of the most sterling features in the Exhibition. It is proposed to exhibit, for instance, an immense section of the tunnel that is in the course of construction, with specimens of the rocks for every few feet that have been passed through.

The geological strata, and mineral resources of the Province, are to be fully illustrated by most elaborate maps, sections, and collections both of scientific and economic interest. Maps and plans showing the system of survey, and land sales, proposed railway, road and telegraphic routes; topographical features of the country; harbor improvements, architectural designs for public buildings, are to be furnished; also specimens of lithography, and engraving.

It is to be hoped that the muster of wools will be sufficient to show the important position occupied by the Province in this respect, and to enable the flockowners to compare the produce from different parts of their own Province, with those of the rest of New Zealand. Works of art, articles of home manufacture—such as cabinet work, saddlery, &c.—may also be looked for.

In recapitulating the foregoing remarks, we may show that from.

MARLBOROUGH may be expected—
- Gold, wools, timbers, and cabinet woods.

NELSON—
- Ores and metals—gold, platinum, and osmidium, copper, lead, iron, chrome, plumbago, minerals in great variefy.
- Useful and ornamental building materials
- Marbles, serpentines, freestones, limestones, and cements, flagstones and slates.
- Coals of several qualities and associated rocks and fossils—geological specimens.
- Timber and ornamental woods
- Flax, and machinery for its preparation.
- Grain, malt, and hops.
- Wools, and woollen manufactures
- Survey maps and plans—topographical and geological.
- Mining plant.
- Engineering works, plans, and models
- Fine arts.

TARANAKI—
- Iron sand ore, and articles made therefrom; maps showing the original progress of the settlement, and the injury done by the Native War.

AUCKLAND—
- Timber of great variety.
- Ores, gold, and copper.
- Building stones, limestones, and marbles.
- Volcanic rocks.
- Sulphur.
- Kauri gum.
- Coals.
- Fossils, and geological specimens.
- Maps, plans, &c.
- Cabinet work.
- Manufactures and imported articles of interest.
- Maori articles.

HAWKE'S BAY—
- Wools.
- Specimens of woods.
- Fossils and objects of natural history.
- Maps, plans.
- Fine arts.
- Agricultural products
- Maori articles.

WELLINGTON—
- Timber, ornamental woods.
- Wool.
- Agricultural products.
- Machinery.
- Geological and natural history specimens.
- Plans and maps, topographical and geological.
- Engineering, plans and models.
- Works of art.
- Maori articles.

CANTERBURY—
- Wools.
- Engineering works. plans, sections and models.
- Railway plant, tunnel, bridges, &c.
- Geological specimens, maps, plans and sections.
- Topographical maps.
- Agricultural produce.
- Manufactures, saddlery, cabinet work, &c.
- Lithography.
- Works of art.

Many of the articles sent will be sufficiently sheltered in light sheds, such as the heavier spars of timber, building materials, &c., so that probably one half of the above space will be sufficient accommodation to provide within the main building.

The result of my tour leads me to believe that the Commissioners may feel satisfied that the various local authorities, and their committees, of the Provinces I visited, are now taking practical steps for a proper exhibition of their resources. Still the Commissioners must not overlook the fact that it is only recently that anything has been done, and that therefore simply owing to the short time before the date fixed for the opening, it will be quite impossible, with the most zealous endeavors on the part of the Committees, to insure anything like a complete display even of raw materials.

This will be especially the case with respect to timbers and woods of construction, and it would be very much to be deplored if, through hastening selection and preparation of the samples sent for trial, an underrated estimate of their value were to be published by the Engineers, as a result of the tests which they applied. I hardly therefore expect that the Exhibition can possibly realise the original conception of a complete display of the natural resources of the Colony, but as a first attempt there is every reason to expect that it will prove successful, and suggestive of the proper direction for future developement.

In no Province was it suggested that the time of opening shall be delayed, but this may perhaps be due to my stating emphatically that such a course had not been contemplated by the Commissioners.

The great difficulty that the various Committees seem to have had to contend with, was ascertaining what there was to be exhibited in their Province, and as their inquiries have invariably led to the discovery of many resources previously overlooked, this of itself forms a strong argument for the necessity of having a New Zealand Exhibition. Various suggestions are offered in the different Provinces respecting subjects most of which have already been brought before the Commissioners for their consideration.

The principal of these are that early information shall be transmitted to the various Provinces of the arrangements which were to be made for lowering the steamboat fares, and providing accommodation for visitors. This is a most important point, and the success of the Exhibition, and the interest taken in it by the other Provinces, will be mainly dependent on the facilities afforded to enable persons to visit Dunedin without a great pecuniary sacrifice.

It was also suggested by practical nurserymen, when they learnt that live plants would be excluded, that a Horticultural Exhibition shall be held, if possible, at the same time with the other. As horticulture is carried on extensively in the Northern Provinces, this province would be an immense gainer by such an arrangement.

In Christchurch a very valuable suggestion

was made—that a society should be organised somewhat on the model of the British Association, for the advancement of science, for the purpose of securing communication, and promoting discussion on subjects of general and scientific interest, and that the first meeting should be held in Dunedin during the time that the Exhibition was open.

I stated that I hardly considered that it would be fair to ask the Commissioners to undertake the organisation of such a society; but that I had no doubt that if such a society were to apply to the Commissioners for assistance in making the arrangements for holding the meetings, they might rely on their co-operation.

In conversation with his Excellency the Governor, I gathered that he expected to open the Exhibition in person, and that he looked forward with great pleasure to the prospect of visiting the Southern Provinces. I would therefore suggest that the Commissioners, as soon as they can look forward with some degree of certainty to the opening of the Exhibition, should communicate with his Excellency on the subject.

With regard to the Guarantee Agreement, from the inquiries I made, I have no doubt that after a statement of the financial prospects of the Commissioners has been made public, and it has been explained that the nature of the guarantee is a means of relieving the Commissioners personally from the effect of any unforeseen contingency, and for the purpose of anticipating the funds to be derived from receipts, &c; and further, as a means of securing the assent of the General Assembly to the liquidation of any debt that may be incurred by assuring it of a practical interest taken by the public in the enterprise, there will be then no difficulty in obtaining signatures to it from all the different Provinces.

With regard to the subject of the essays, which are referred to me, I have now communicated personally with the different writers whose names are proposed, and can report that the matter is progressing most satisfactorily. The original intention of having several essays to illustrate the history of New Zealand was found impracticable, so that I was glad to avail myself of the offer of Mr. F. Dillon Bell to treat the whole subject in a condensed form in one essay. On the subject of the "Native Races" we may expect a most interesting essay from Dr. Shortland, the present Chief Native Commissioner, and author of several works on the subject.

The subject of the meteorology is still vacant, as Dr. Knight's time is too fully occupied to allow of his undertaking it. He has, however, promised to provide all the information which he possesses to whoever undertakes the task.

The most important subject of the analysis of the vital statistics of New Zealand has been undertaken by Mr. Hocken, and the gold mining statistics by Mr. Pyke. The geology and mineralogy will be dealt with in three essays by Mr. Couts Crawford, Dr. Haast, and myself; but to avoid confusion of colors and nomenclature, I propose, with these gentlemen's consent, to combine the information in one small scale geological map of the whole of New Zealand, to be referred to as the joint work of the three authors. A short account of the copper and other mines in New Zealand will be contributed by Mr. T. R. Hackett. Mr. Ludlam, of Wellington, has undertaken to write an account of his experiments in horticulture, to give his experience of what introduced plants thrive best, and to suggest what shall be introduced for gardens, &c.

The essays will be written in such a manner as to shew the state of our knowledge on these various subjects, so as to serve as an introduction and guide to the Juries' Reports. The whole will form a volume of from 500 to 800 pages, and if the funds will admit of it, several of the authors are desirous of illustrating the essays freely with woodcuts or lithographs. The time I have suggested for the transmission of the MSS. is the end of October, but the required plans, sections, and maps, and many of the proposed illustrative sketches are to be put into the hands of workmen without delay.

In conclusion, it gives me much pleasure to record my thanks for the extreme courtesy and hospitality with which I was everywhere received, and to acknowledge with thanks the great assistance which I derived from the advice and documents which were placed at my disposal from the office.

I have, &c., &c.,

JAMES HECTOR, M.D.

Alfred Eccles, Esq.
Hon. Secretary.

Printed under the authority of the Government of the Province of Hawke's Bay, by JAMES WOOD, Printer for the time being to such Government.