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1914.
NEW ZEALAND.

KAURI-GUM RESERVES IN THE AUCKLAND LAND DISTRICT

(REPORT OF THE COMMISSION APPOINTED TO INSPECT AND CLASSIFY THE).

Presented to both Houses of the General Assembly by Command of His Excellency.

COMMISSION.

Commission to Inspect and Classify Kauri-gum Reserves.

LIVERPOOL, Governor.

To all to whom these presents shall come, and to Reginald Palmer Greville, Esq., F.R.G.S., of Hamilton, Inspector of Surveys; Samuel Stafford, Esq., of Waipu, gum-digger; William Stewart, Esq., of Kawakawa, Chairman of the Bay of Islands County Council; Robert Hebden, Esq., of Waihopo, Secretary of the Gum-diggers' Union; John Matheson McKay, Esq., of Waipu, farmer: Greeting.

WHEREAS it is expedient that the kauri-gum reserves in the Auckland Land District should be inspected and classified:

Now, therefore, I, Arthur William de Brito Savile, Earl of Liverpool, Governor of the Dominion of New Zealand, in exercise of the powers conferred by the Commissions of Inquiry Act, 1908, and of all other powers and authorities enabling me in this behalf, do hereby constitute and appoint you, the said

REGINALD PALMER GREVILLE,
SAMUEL STAFFORD,
WILLIAM STEWART,
ROBERT HEBDEN, and
JOHN MATHESON MCKAY

to be a Commission to inspect and classify the kauri-gum reserves in the Land District of Auckland, and in particular to ascertain—

- (a.) Which reserves contain or yield sufficient gum to justify their retention as kauri-gum reserves.
- (b.) Which reserves are sufficiently exhausted of gum to justify the removal of the reservation and the opening of the land for settlement purposes.

And, with the like advice and consent, I do hereby appoint you the said REGINALD PALMER GREVILLE to be Chairman of the said Commission.

And for the better enabling you the said Commission to carry these presents into effect, you are hereby authorized and empowered to make and conduct any inquiry under these presents, at such times and places as you deem expedient, with power to adjourn from time to time and from place to place as you think fit, and to call before you and examine on oath or otherwise such person or persons as you think capable of affording information in these premises; and you are also empowered to call for and examine all such books, maps, or records as you deem likely to afford you the fullest information on the subject-

matter of the inspection and classification hereby directed to be made. And using all diligence you are required to report to me under your hand within forty days from the date of these presents the result of your inspection and classification, with any recommendations you think fit to make in the premises.

Given under the hand of His Excellency the Right Honourable Arthur William de Brito Savile, Earl of Liverpool, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Member of the Royal Victorian Order, Governor and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies; and issued under the Seal of the said Dominion, at the Government House, at Wellington, this twentieth day of March, in the year of our Lord one thousand nine hundred and fourteen.

H. D. BELL,
For Minister of Lands.

Issued in Executive Council,
J. F. ANDREWS,
Clerk of the Executive Council.

Extending Time of Kauri-gum Reserves Commission.

LIVERPOOL, Governor.

To all to whom these presents shall come, and to Reginald Palmer Greville, Esq., F.R.G.S., of Hamilton, Inspector of Surveys; Samuel Stafford, Esq., of Waipu, gum-digger; William Stewart, Esq., of Kawakawa, Chairman of the Bay of Islands County Council; Robert Hebden, Esq., of Waihopo, Secretary of the Gum-diggers' Union; John Matheson McKay, Esq., of Waipu, farmer: Greeting.

WHEREAS by a Warrant dated the twentieth day of March, one thousand nine hundred and fourteen, and issued under my hand and the public seal of the Dominion, you were appointed a Commission to inspect and classify the kauri-gum reserves in the Land District of Auckland, and you were directed and required to report to me on or before the twenty-ninth day of April then next ensuing the result of your inspection and classification:

And whereas you did not furnish a report within the time specified: And it is therefore expedient to extend the period within which you were required to report, and for that purpose to reappoint the Commission as hereinafter provided:

Now, therefore, I, Arthur William de Brito Savile, Earl of Liverpool, the Governor of the Dominion of New Zealand, in exercise of the powers conferred by the Commissions of Inquiry Act, 1908, and of all other powers and authorities enabling me in that behalf, and acting by and with the advice and consent of the Executive Council of the said Dominion, do hereby extend the period within which you were required to report until the twenty-ninth day of May, one thousand nine hundred and fourteen, and for that purpose do hereby appoint you, the said

REGINALD PALMER GREVILLE,
SAMUEL STAFFORD,
WILLIAM STEWART,
ROBERT HEBDEN, and
JOHN MATHESON MCKAY

to be a Commission for the purposes set forth in the Warrant of the twentieth day of March, one thousand nine hundred and fourteen, which Warrant, except as altered by these presents, shall be deemed to be incorporated herein.

And with the like advice and consent, I do further appoint you, REGINALD PALMER GREVILLE, to be Chairman of the Commission.

Given under the hand of His Excellency the Right Honourable Arthur William de Brito Savile, Earl of Liverpool, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Member of the Royal Victorian Order, Governor and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies; and issued under the Seal of the said Dominion, at the Government House, at Wellington, this fourth day of May, in the year of our Lord one thousand nine hundred and fourteen.

Issued in Executive Council,

J. F. ANDREWS,

Clerk of the Executive Council.

W. F. MASSEY,

Minister of Lands.

Commission.

LIVERPOOL, Governor.

To all to whom these presents shall come, and to Reginald Palmer Greville, Esq., F.R.G.S., of Hamilton, Inspector of Surveys; Samuel Stafford, Esq., of Waipu, gum-digger; William Stewart, Esq., of Kawakawa, Chairman of the Bay of Islands County Council; Robert Hebden, Esq., of Waihopo, Secretary of the Gum-diggers' Union; John Matheson McKay, Esq., of Waipu, farmer: Greeting.

WHEREAS by a Commission bearing date the twentieth day of March, one thousand nine hundred and fourteen, you, the said

REGINALD PALMER GREVILLE,
SAMUEL STAFFORD,
WILLIAM STEWART,
ROBERT HEBDEN, and
JOHN MATHESON MCKAY

were appointed to be a Commission to inspect and classify the kauri-gum reserves in the Land District of Auckland, and you were directed and required to report to me, on or before the twenty-ninth day of April then next ensuing, the result of your inspection and classification:

And whereas you did not furnish a report within the time specified:

And whereas the time within which you were required to report was extended to the twenty-ninth day of May; one thousand nine hundred and fourteen:

And whereas it is expedient that the said period should be further extended as hereinafter provided:

Now, therefore, I, Arthur William de Brito Savile, Earl of Liverpool, the Governor of the Dominion of New Zealand, in exercise of the powers conferred by the Commissions of Inquiry Act, 1908, and of all other powers and authorities enabling me in that behalf, and acting by and with the advice and consent of the Executive Council of the said Dominion, do hereby extend the period within which you are required to report until twenty-seventh day of June, one thousand nine hundred and fourteen. And with the like advice and consent, and in further pursuance of the said power and authority, I hereby confirm the said Commission, except as altered by these presents.

Given under the hand of His Excellency the Right Honourable Arthur William de Brito Savile, Earl of Liverpool, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Member of the Royal Victorian Order, Governor and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies; and issued under the Seal of the said Dominion, at the Government House, at Wellington, this twenty-second day of May, in the year of our Lord one thousand nine hundred and fourteen.

W. F. MASSEY,

Minister of Lands.

Issued in Executive Council,

J. F. ANDREWS,

Clerk of the Executive Council.

Commission.

LIVERPOOL, Governor.

To all to whom these presents shall come, and to Reginald Palmer Greville, Esq., F.R.G.S., of Hamilton, Inspector of Surveys; Samuel Stafford, Esq., of Waipu, gum-digger; William Stewart, Esq., of Kawakawa, Chairman of the Bay of Islands County Council; Robert Hebden, Esq., of Waihopo, Secretary of the Gum-diggers' Union; John Matheson McKay, Esq., of Waipu, farmer: Greeting.

WHEREAS by a Warrant bearing date the twentieth day of March, one thousand nine hundred and fourteen, you, the said

REGINALD PALMER GREVILLE,
SAMUEL STAFFORD,
WILLIAM STEWART,
ROBERT HEBDEN, and
JOHN MATHESON MCKAY

were appointed to be a Commission to inspect and classify the kauri-gum reserves in the Land District of Auckland, and you were directed and required to report to me, on or before the twenty-ninth day of April then next ensuing, the result of your inspection and classification:

And whereas you did not furnish a report within the time specified.

And whereas the time within which you were required to report was extended to the twenty-seventh day of June, one thousand nine hundred and fourteen:

And whereas it is expedient that the said period should be further extended as hereinafter provided:

Now, therefore, I, Arthur William de Brito Savile, Earl of Liverpool, the Governor of the Dominion of New Zealand, in exercise of the powers conferred by the Commissions of Inquiry Act, 1908, and of all other powers and authorities enabling me in that behalf, and acting by and with the advice and consent of the Executive Council of the said Dominion, do hereby extend the period within which you are required to report until the fourth day of July, one thousand nine hundred and fourteen. And with the like advice and consent, and in further pursuance of the said power and authority, I hereby confirm the said Commission, except as altered by these presents.

Given under the hand of His Excellency the Right Honourable Arthur William de Brito Savile, Earl of Liverpool, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Member of the Royal Victorian Order, Governor and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies; and issued under the Seal of the said Dominion, at the Government House, at Wellington, this twenty-ninth day of June, in the year of our Lord one thousand nine hundred and fourteen.

W. F. MASSEY,
Minister of Lands.

Issued in Executive Council,

J. F. ANDREWS,

Clerk of the Executive Council.

REPORT.

To His Excellency the Right Honourable Arthur William de Brito Savile, Earl of Liverpool, Governor and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies.

MAY IT PLEASE YOUR EXCELLENCY,—

We, the Commissioners appointed by Your Excellency on the 20th day of March, 1914, for the purpose of inspecting the kauri-gum reserves in the Land District of Auckland, have now the honour to submit the following report and recommendations for Your Excellency's consideration:—

The members of your Commission assembled in Auckland on the 28th day of March, 1914, and held their first meeting. It was then found that the requirements of the Commission would involve the inspection of 160 kauri-gum reserves, representing a total area of 228,000 acres, scattered over a wide expanse of country extending from Te Kao, near the North Cape, as far south as Katikati, in the Bay of Plenty.

After careful consideration it was deemed advisable to commence the work of the Commission on the most northern area that had to be inspected. Accordingly your Commissioners left Auckland on the 30th of the month for the north, and arrived at Hohoura on the 1st April, and at once proceeded with their inspection and investigations. After a stay of two days at Hohoura and holding a meeting there your Commissioners journeyed on through Waiharera, Waipapakauri, Ahipara, Awanui, and thence steadily southward, working from coast to coast and traversing in turn the nine counties of Mangonui, Whangaroa, Hokianga, Bay of Islands, Whangarei, Otamatea, Rodney, Hobson, Waitemata, and so on, to Auckland City. Subsequently reserves in the Manukau, Coromandel, and Tauranga Counties were visited.

Apart from the considerable distances travelled by brake, coach, train, steamer, and launch, a distance of over two thousand miles was covered on horseback. The fact that many of the reserves were difficult of access and that the season was so far advanced before the work was put in hand added to the difficulty of the task.

Besides the inspection of the various reserves, meetings were held at all the main centres visited. These meetings were almost invariably held at night at places where the Commission had to stay in the course of their journeys. Altogether thirty-three meetings were held, and 189 witnesses were examined. Full details of the evidence taken and of the Commission's itinerary are appended hereto.

THE KAURI-GUM LANDS OF NEW ZEALAND.

The whole of the Northern Peninsula from Tom Bowling's Bay near the North Cape extending southward to a line drawn from the west coast near Kawhia to a point on the east coast near Tauranga has peculiarities quite unique, inasmuch as it is the region which has produced several generations of the majestic and valuable kauri forest. The remnants of the last generation are still to be met with in various localities within the limits mentioned, but these are now within measurable distance of disappearing altogether, with the exception perhaps of a few selected areas that have been wisely set apart for scenic and forest preservation purposes.

Each successive generation of the kauri-tree shed from its branches, trunks, and roots a valuable resin known as kauri-gum. It is somewhat remarkable that over the wide region referred to there are volcanic areas of land, varying in extent, adjoining and often surrounded by gum-bearing lands. It is quite unusual to find kauri-trees growing on the volcanic land or to find any deposits of kauri-gum there. Isolated trees, however, are to be found, and in some cases traces of gum, but on all that large extent of country extending from near

the North Cape to the southern districts of Awanui and Kaitaia, a distance of forty miles as the crow flies, there is no volcanic land, and there has been a succession of kauri forests which were extinct long before the Maori first settled in New Zealand. Evidences of the forest of bygone ages are, however, afforded by the huge trunks of trees, in many cases as sound as the day they had fallen, and their branches and limbs scattered over and under the ground in the utmost confusion. It is amongst this mass of timber and roots of the kauri-trees where the valuable resin known as kauri-gum is found at depths varying from a few inches to 15 ft., and in some instances at very much greater depths.

It is suggested that the present extensive swamp areas in the far North at one time were continuous from coast to coast, but successive sand-drifts, principally from the west coast (the prevailing winds being from west to south-west) have caused sand-ridges to form and divide the swamps into different parts and varying areas.

For thousands of years these vast kauri forests lived and died, and from the dead timber and prolific vegetation these huge gum-bearing swamps, thousands of acres in extent, have been built up generation after generation. The kauri-tree, as is well known to botanists, was slow-growing, and took as long as five hundred years to reach a state of maturity; indeed, it is estimated that there are some living specimens in the kauri forests to-day of the remarkable age of three thousand years.

It is difficult to conceive the immense quantities of kauri-gum which have been deposited in the present extensive swamp areas in bygone ages. Much of the gum, though of an almost imperishable nature, must have decayed, for it has been proved that the kauri peat of which the swamps are composed has absorbed some of the essential oil of the decayed gum.

With regard to the sand-drifts, it should be borne in mind that it is open to question whether the present prevailing winds are the same as those in more remote times. It may be that the sand-drifts have gradually killed the vegetation and sounded the death-note of the kauri forests of each particular period. This drift may not have been general over all the gum-bearing swamps, and this peculiarity of the sand-drifts may be responsible for the kauri-gum being found at greater depths in some parts of the swamps than at others.

These swamp areas, on account of the configuration of the sand-ridges surrounding them, act, so to speak, as reservoirs, and, partly by consolidation and by pressure, fissures are formed which conserve the water, causing springs in different parts of the swamps, but generally on the edges of the swamps, and this probably explains the large amount of water in these swamps even in very dry summers. A typical occurrence in all this class of swamp throughout the gumfields is a bar of sand which is formed near the outlet. This is probably caused by the oxidization of the sand due to the constant flow of water on the sand which drifts into the wet flowing swamp. This oxidized sand forms the bottom of many of the swamps beneath which the lower layers of kauri-gum with other decayed products of the kauri forest are found. It is suggested that at some period in the growth of these forests the vegetation was able to hold its own against the sand-drift and gradually worked its way up the sand-ridges, which would probably explain the fact of kauri-gum being found on the ridges and slopes of the sandhills close to high-water mark.

In a short geological description of the country forming the peninsula extending from Ahipara Bay to the North Cape, Mr. T. F. Cheeseman, F.L.S., says :—

“Much the largest portion of the district is occupied with Recent deposits. These consist of swampy or alluvial deposits, chiefly developed around Rangaunu Harbour and between it and Ahipara, and also occupying a considerable area around Parengarenga Harbour; of ancient sand-dunes, now consolidated and covered with vegetation, and which form the backbone, as it were, of the narrow tract connecting Ahipara with the North Cape Peninsula

proper; and of sand-dunes of much more recent date, still bare of vegetation, and drifting inland with every gale. These recent sand-dunes are heaped up against the older ones, and occupy a considerable portion of the coast-line, especially on the western side, where they form a continuous belt stretching from Ahipara to within a short distance of Cape Maria van Diemen. Both the swampy deposits and the consolidated sandhills contain large quantities of kauri-gum, which for several years has given employment to a considerable number of gum-diggers.

"The arrangement and mode of formation of these Recent deposits show that the northern extremity of New Zealand has been subjected to considerable fluctuations of level since the close of the Tertiary period. Before the formation of the older sand-dunes the greater portion was under water. The high land at the southern side of the entrance to Doubtless Bay was then the North Cape of New Zealand, and from it a shallow sea stretched westwards to Ahipara, and northwards beyond the present North Cape. The hills at Cape Karakara, now constituting the north-west side of Doubtless Bay, probably formed one or two little islands in this sea. Further north Mount Camel stood out as another island, while between Parengarenga and the North Cape quite a little archipelago existed. Still further to the north the Three Kings Islands probably reared their higher peaks above water. This period of depression was followed by elevation, and elevation to such an extent that the land stood much above its present level, and probably extended as far as the Three Kings. Magnificent kauri forests covered most of the country, flourishing where now nothing but swamp and lake exist. Then the land sank to somewhere near its present level, and the first line of sandhills was formed—now consolidated and covered with vegetation. Then, after a considerable pause, and possibly after a still further subsidence, the younger sandhills came into existence, and the country gradually assumed its present aspect."*

A SHORT DESCRIPTION OF THE GUMFIELDS.

The most northern area of gum land in New Zealand is that called Parengarenga, containing about 80,000 acres, a considerable portion of which is under process of development by the Parenga Gumfields Company (Limited). The original owner of Parengarenga was Mr. Samuel Yates, who was one of the first exporters of kauri-gum from New Zealand. This field has always been known as one producing the best-known qualities of both white and brown gum. These good-quality gums are known to have extended nearly twenty miles to the southward to Ngataki, whilst that extensive area from Ngataki and extending to the Rangawahia Peninsula, and comprising Hohoura, Opoe, Rotoroa, Lake Ohia, Puheke, and other gumfields, is remarkable as producing for the most part all the poorer classes of gum.

The Parenga gumfield has no extensive swamp areas, the gum being found on the sandy hillsides and the sandy flats. Within the confines of the flats are small patches of gum-bearing swamps known by the diggers as "basins." The depths at which the gum is found varies from 6 in. to 2 ft. 6 in. on the hillsides and from 2 ft. to 6 ft. in the basins, while in some of the depressions between the hills the best class of white gum and some of the poorer class are found at depths of from 10 ft. to 14 ft.

From the trig. station at Ngataki can be seen that vast expanse of gum-bearing country stretching forty miles to the southward to Ahipara Bay. Over all this large area there is no elevation exceeding 300 ft. above sea-level. Skirting the west coast is a sandy waste varying in width from one to three miles, and further inland are low sandy ridges with a scant covering of vegetation, and between the hills are the large swamp areas which contain the gum-deposits included in the kauri-gum reserves of Hohoura, Opoe, and Rotoroa, comprising an area of over 80,000 acres. It is on these particular fields that the majority of the workers now engaged in the gum-digging industry live and carry on their operations. This is no doubt owing to the increased demand and enhanced value which has prevailed for the poorer grades of gum during recent years.

* "Transactions of the New Zealand Institute," Vol. 29, pp. 336-337.

As we proceed southward through the Mangonui County from near Lake Ohia there is a marked change in the character of the gum-bearing lands. The extensive swampy areas have given place to the shallow clay gum lands, and this characteristic generally prevails as far south as the gum has been found. However, there are in various localities in some of the southern districts considerable areas of gum-bearing swamps; these are chiefly to be found in the Counties of Whangarei, Hobson, Otamatea, and Waitemata.

The shallow clay lands referred to are the winter fields of the gum-digger. On them the gum is found at depths ranging from a few inches to 4 ft. Thousands of acres of the shallow clay gumfields from the tops of the ridges to edges of the gullies have been turned over by the spade of the gum-digger, while in the gullies where the gum lies deeper, deep holes have been sunk of various shapes and sizes.

These shallow clay gum lands are of different classes. There is the white pipeclay land, with sometimes an underlying layer of cement. Such fields produce good white gum in the pipeclay and brown gum in and under the cement. Then there are the stiff red and yellow clay lands, which also carry the best-quality white gum. There is the grayish clay land, usually occupying the flat lands and the lower slopes of the hillsides. Again, there is the sandstone formation of the Kaipara and Northern Wairoa districts, which carries the gum generally under the sandstone slips. This class of country produces the best-quality white gum as well as some of the poorer grades of white.

THE ORIGIN OF THE KAURI-GUM RESERVES.

In the early days of settlement in New Zealand the kauri-gum industry was the mainstay of the pioneer settlers of the North of Auckland district. In those days of isolation the district possessed neither roads nor railways, and communication by sea was irregular and unreliable. Then there were no freezing-works nor dairy factories, and the cream-separator had not been thought of. Under such conditions the kauri-gum proved a good friend to the struggling farmer, and enabled him to support himself and his family until better times should arrive and his farm be able to support him.

Besides the small farmers there were a great many men who followed gum-digging as their regular occupation, and so it was that year after year the output of gum steadily increased until in the year 1891 it had reached 8,388 tons, representing the value of £437,056. Kauri-gum then ranked fifth in value of our total exports, and became recognized as one of the most important staple products of New Zealand.

The gum-digging in those days was carried on over the vast areas of unoccupied Crown and other lands, which were then of little value.

It was about thirty years ago that a small band of immigrants from south-eastern Europe, principally Dalmatians and Croats, arrived in New Zealand and found their way on to the northern gumfields. At first these immigrants were few in number, but, being men accustomed to long hours of labour and frugal habits of living, were soon able to make enough money to enable them to return to their native land comparatively rich men, and thus to spread the fame of the New Zealand gumfields.

Following these pioneers soon a steady stream of the young and vigorous sons of Austria began to flow towards New Zealand, and eventually on to the gumfields, and in the course of a few years it was estimated that there were fully five thousand of these men on the fields. This influx resulted in an over-production of kauri-gum, and a slump in the industry followed, which was very keenly felt by the small settlers and original gum-diggers.

In the year 1898, in order to protect the interests of the pioneer gum-diggers and to some extent to check this influx, the Kauri-gum Industry Act was made law. As a result of the Act an area of over a quarter million acres of Crown land was permanently set apart as kauri-gum reserves. The Act provided that all British subjects and naturalized British subjects should, by the payment of an annual license fee of 5s., be entitled to dig for gum on any kauri-gum reserve or on any unoccupied Crown land, while in the case of

aliens the license fee was fixed at £1 per annum, and the holder of such license was restricted from digging for gum on any Crown land included in any kauri-gum reserve. Subsequently, by the amending Act of 1910, the annual license fee for aliens was increased to £2.

CLASSIFICATION OF THE RESERVES.

From the passing of the Kauri-gum Industry Act, 1898, up to the present time a total area of 276,210 acres has been set apart as kauri-gum reserves. There have been many areas withdrawn from the reservations from time to time for various purposes under the authority of the Land Act, 1892 and 1908. The total withdrawals up to date amounted to 48,849 acres. In addition to this there is an area excluded from the operations of the Kauri-gum Industry Act by the Kaitaia Land Drainage Act, 1913. Of the areas so withdrawn it will be seen by a return supplied by the Commissioner of Crown Lands, Auckland, that 30,424 acres have been selected up to the present, that 610 acres are still open for selection, and that 2,724 acres are now under survey for settlement purposes.

The original reservations seem to have been made in rather a haphazard manner, and your Commissioners found during the course of their inspection large areas of land which never had been gum-bearing included in the reservations. A notable instance of such occurred at Waipapa, north of Ohaeawai, where inspections disclosed areas of 14,000 acres of such land comprised within kauri-gum reserves. In other instances large areas of good bush land were included in the reserves.

With the exception of the one on the Great Barrier Island, every reserve has been carefully inspected by your Commissioners, and they now have to recommend that reservations comprising a total area of 71,164 acres be uplifted. Full details of these areas are given in the schedule and delineated on the various county maps hereto appended.

Several matters of importance incidentally arising during the course of your Commissioners' investigations, materially affecting the kauri-gum reserves and the industry being conducted thereon, are deserving of consideration.

The subjects now to be discussed relate to the past management of the reserves; the future management, development, and settlement of the gum lands; the sand-drift now threatening to submerge large areas of the reserves and other valuable lands; and the kauri-gum industry generally.

NEGLECT OF THE CROWN GUM LANDS IN PAST YEARS.

If there is one outstanding fact that has made itself more and more manifest to your Commissioners during their travels and investigations it is the apparent disregard of the interests of the State which has been displayed in regard to the administration of the gum-bearing lands of the Crown. This remark applies not only to what are known as kauri-gum reserves, but also to the gum-bearing Crown lands.

The total area of the gum-bearing lands, which are all in the Auckland Provincial District, was estimated in 1898 at 814,000 acres. Of this area 435,000 acres were then Crown lands, the balance being represented by privately owned lands and Native lands which had not been adjudicated on by the Native Land Court. Here, then, was an area of Crown lands amounting to nearly half a million acres which was simply left to the gum-digger to use in his own way. He could wander at will over those large areas, dig for gum where he liked, make as many holes as he liked and as deep as he liked, burn the scrub and vegetation, and generally destroy the value of the land for subsequent development, without let or hindrance. Nor do your Commissioners think that there is any blame fairly attachable to the gum-digger. He was simply out to get the gum. He had no security of tenure of any particular area of the land. The only protection he had of his interests was the unwritten law prevailing on the gumfields.

The ultimate effect of such proceeding never seems to have been appreciated by those whose duty it was to watch over the interests of the State, and the steady and sure depreciation of this large area of land has been allowed to go on even to the present day.

Prior to the passing of the Kauri-gum Industry Act, 1898, there was no restriction of any sort on the gum-digger, neither was there any special interest taken in his welfare, nor was there any attempt to exercise any control over the lands affected by his operations. The Act of 1898 provided for the constitution of kauri-gum districts; the setting-apart of kauri-gum reserves; authorized specified local bodies to issue gum-diggers' licenses; and made provision for small residential areas on the gum reserves. In effect the Act practically handed over the administration of the lands to the local bodies.

Since 1898 various amendments have been made of the principal Act, mainly affecting the issue of licenses, but no provision has been made up to the present time, either by Act or regulations, specifying the manner in which gum-digging should be carried on on the Crown lands, nor have any measures been taken to ensure that the land should be dealt with in such a way that it would not be deteriorated for farming purposes after all the gum had been dug out. The effect of such apathy is appalling, and the gumfields of the Crown present to-day a spectacle at once depressing and deplorable. On large areas of the flat lands and swamps holes have been dug to depths ranging from 3 ft. to 15 ft. These holes are of all sizes and shapes, and when it is considered that in some cases there are as many as two hundred of such holes to the acre it will be realized that the land which has been so treated is in its present condition almost if not altogether useless for farming purposes.

The unrestricted digging of holes by the digger which he is under no obligation to fill in does not represent the full measure of the injury done to the lands in consequence of the want of foresight and proper control in the past. The manuka and other vegetation growing on the lands has been fired year after year by the digger, and at all seasons. The consequences have been that great injury to the land has resulted. The effect of the successive fires on the shallow lands has been to destroy the humus and surface soils, while in the case of many peat flats and swamps the fires have gutted them almost to the water-level, and have not only done irreparable injury to the land, but have destroyed gum-deposits of very considerable value. It may be noted here that the well-considered opinion of the gum-digger is that this indiscriminate firing must be stopped, as much in the interests of the gum-digger as of the State.

SOME CONTRASTS IN MANAGEMENT.

He would be a most indifferent private individual who would have allowed his land to be dealt with in such a manner. If the private owner ever did allow his lands to be so injuriously dealt with he has long since acquired wisdom. The State, however, has failed to profit by experience, and the serious injury to the lands is still proceeding.

At Lower Ruakaka, near Waipu, a good illustration is afforded of the difference in management of gum lands by the private individual and by the State. There Mr. D. Bowmar has an area of gum-bearing flat land which he is now proceeding to develop, and this is how he set to work. He first thoroughly drained the land; he next let the gum-digging on a substantial royalty, the conditions of the digging contract being that the digger is required to dig the land "on a face"; or, in cases where the land is not sufficiently rich in gum to warrant such treatment, then and in any such case any holes the digger may make in the course of his operations are to be filled in, and all logs, roots, and stumps met with in the course of the excavations have to be thrown up on the surface of the ground, thus leaving the land in a suitable condition for the succeeding farming operations.

On the kauri-gum reserve adjoining, where the land is in all respects similar to Mr. Bowmar's, there are no restrictions of any sort, and the consequence is that the land has been deeply potholed all over, and so rendered to a very large extent unfit for farming purposes. The result is that on the one hand Mr. Bowmar will derive sufficient revenue from the gum in the land to pay the expenses of development, and the land will be worth not less than £10 an acre, and will be in a suitable state for farming purposes. On the other hand the State has received merely a nominal sum from the gum-digger for his annual license fee, and the land is left an almost useless wilderness.

A more striking contrast is, however, presented near Mangawai. There a Mr. Hogan has land adjoining the Mangawai Kauri-gum Reserve, or what the local diggers call "Coal Hill." A fence divides the properties. On the one side of the fence Mr. Hogan has let the gum-digging on his land at the substantial royalty of £80 sterling an acre. Here again there is the condition that the digging is to be done "on a face"; all timber thrown up on the surface and the land left generally in a fit state for the plough. Through the fence on the Crown reserve the land is a perfect maze of deep holes and trenches of all shapes and sizes, and whichever way one looks there is afforded the same depressing evidence of neglect and indifference; and there can be little doubt that a large area of the Government reserve was as rich in gum as Hogan's land, and lent itself as readily to similar treatment.

The following advertisement, which appeared in the *North of Auckland Times*, affords further evidence of the methods now being followed by private individuals in developing their lands:—

FAMOUS GUMFIELDS.

GUM-DIGGERS are notified that Mr. T. C. Hawkins is opening his land, known as the Wairuhe Block, at TANGOWAHINE, to diggers as from Monday, June 1, 1914.

This rich gumfield, which has been closed for fourteen years, comprises 2,600 acres.

Liberal Terms.

Conditions on application to

T. C. HAWKINS, Tangowahine.

Your Commissioners were fortunate enough to get in evidence the terms on which the digging was being let. It was first provided that the diggers should pay a weekly fee of £1 for the right to dig on the land referred to, and each digger was required to fill in all holes dug by him. This arrangement had not been found to work satisfactorily, and the weekly fee was raised to £1 5s. a week, the owner of the land putting on men to fill in the holes after the gum was taken out.

Instances such as quoted might be multiplied almost indefinitely. It is, however, quite unnecessary to labour the point. The evil touched upon is recognized and appreciated by all persons who have any knowledge or experience of the gumfields. The important question now is, what is the best course for the future? Should the diggers be restricted in any way, and should they be required to fill up the holes they dig?

SUGGESTIONS FOR THE FUTURE

It is a difficult matter to overcome the results of so many years of lack of proper control, and your Commissioners are not inclined to recommend any arbitrary action at this the eleventh hour, but are pleased to be able to say that they can still see a bright side to the picture, and are of the opinion that much can yet be done to repair the mistakes and omissions of past years. There are still large areas of land which can be dealt with in a systematic manner, both with advantage to the digger and profit to the State. The vast areas which have been so devastated can with proper treatment in course of time be brought into profitable use.

It may be safely said that 75 per cent. of the area of the lands affected are of such a flat and undulating nature that (apart from the difficulty of the potholes) they can be easily ploughed. On many of the fields there are undrained swamps claimed by the gum-diggers to be rich in gum. Such areas require special treatment by the State. The method to be adopted should follow closely on the lines of private enterprise. These swamps should first be drained, then tested for their gum-bearing values, and the gum-digging let on a royalty or other practical basis, with the stipulation that the land should be dug "on a face," or in other respects so treated that it will be in a fit condition for farming operations after the gum has been taken out.

Among the swamp areas that might be first dealt with may be mentioned the Motutangi Swamp, of over 2,000 acres, situated between Waiharera and Hohoura; the Coal Hill and Pakiri Swamps, of 600 acres and 500 acres respec-

tively, near Mangawai; the Uretiti Swamp, of 1,000 acres, near Waipu; Gray's swamp, near Akerama; the Tikinui and Te Kuri Swamps, in the Northern Wairoa district; and Marsden Point Swamp, of 2,300 acres. Such lands in their present condition are useless either for gum-digging or settlement purposes.

A PRACTICAL SOLUTION OF THE "UNEMPLOYED" DIFFICULTY.

In fact, your Commissioners are firmly of opinion that the proper development of the gum lands of the Crown under judicious management presents a practicable solution of the "unemployed" difficulty for many years to come, and in coming to such a conclusion are fortified by their personal knowledge and experience as well as by the careful consideration given to the matter during the course of their investigations.

In regard to those large areas of flat land which have been riddled with potholes to such an extent as to make them practically useless in their present condition, special treatment is required.

There are several thousand acres of such lands north of Mangonui, a great portion of which can be gradually reclaimed and eventually brought into profitable occupation. It is suggested that areas of, say, 100 acres of such land should be successively taken in hand and dealt with in a systematic manner. A beginning might be made on some of the large flats in the neighbourhood of Waiharera. Men should be put on to dig the land "on a face," all timber thrown up on the surface, and the land left in a suitable condition for subsequent cultivation and settlement. The digging could either be done by day-labour, with a bonus to the digger on the amount of gum recovered, or let in small contracts, as might be found expedient. In whatever way the work was done it would, under prudent management, prove self-supporting. By dealing with these areas piecemeal it would in no way interfere with the ordinary gum-digger, many of whom would no doubt be glad to take the employment offered by this work of development.

In regard to many of what are called the shallow fields—which are usually on the higher lands—it is generally acknowledged that such lands have in a measure ceased to be very profitable to the gum-digger operating in the old way with the spear and spade. Many of such fields, however, offer special facilities for profitable treatment by the State. Your Commissioners recommend that all such lands should be broken in and improved by the State, and converted into grass lands, before they are disposed of for settlement purposes.

It is suggested that the land should be ploughed deeply, men being put on to follow the plough so as to procure all the gum that is easily obtainable. Before the ploughing is done any small basins or gullies should be drained and dug over "on a face," and all the deep holes filled in. The land should then be allowed to lie fallow for about a year, and then again broken up and the grass-seed sown.

Your Commissioners feel assured that such work would be in a large measure self-supporting, as there would be enough gum saved from the land to pay for a considerable portion of, if not the whole of, the expense incurred. At the same time employment would be provided for a large number of men.

THE SETTLEMENT OF GUM LANDS.

During recent years many areas of the poorest gum lands have been brought into successful cultivation. Several plots have been taken in hand by the Department of Agriculture for the purpose of testing the suitability of the land for farming purposes. Three such plots were near Whangarei, and another in the Albany district, within ten miles of Auckland City. The lands operated upon near Whangarei were at Akerama, Poroti, and Otaika, and comprised a total area of 116 acres. Mr. Speedy, the officer in charge of the work, said in regard to the areas chosen that in each case they represented the fair average quality of the lands in the locality; indeed, in regard to the plot selected at Akerama he said that the Department had chosen probably the poorest piece of land on the kauri-gum reserve in order to show what could be done with land of that character.

Mr. Speedy, in speaking of the results obtained, said that he regarded the experiments as most encouraging, and considered that the Government was quite justified in continuing. In regard to the settlement of such lands, he said it would require a man with considerable capital to take up such lands, and that he thought it was quite warrantable for the State to improve these lands with a view to their future settlement.

Referring to the lands which had been treated in the Albany district, Mr. Rowan speaks in no unqualified terms; he has absolutely no doubt of the success of such operations. He said that the area of the plot at Albany was 6 acres. He first cleared the land of scrub and then ploughed it. This was done late in the winter, and the land was left to fallow for about three months. It was then given a thorough good working-up, and oats were sown, and manured with basic slag, blood and bone, and lime. He had obtained a splendid crop of oats, and the grassing of the land had given most satisfactory results. Thirty-five different varieties of grass were sown, which are given in his evidence. He had arrived at the conclusion that if the gum lands were thoroughly worked they would grow anything. Lucerne grew splendidly. Some of it had been cut six times within the year. The last time the lucerne was cut was in February. Some of the lucerne had been planted last spring and some the year before. He further said that he had not travelled further north than Kaukapakapa, but what they had done at Albany could be done anywhere up north provided the land was thoroughly cultivated.

In addition to the tests that have been made by the Department, many farmers have also been successful in breaking in the gum lands. Among them may be mentioned Messrs. Wyatt, at Towai; Hawkins, near Hikurangi; D. Bowmar, Mangawai; Gillies and J. R. McKenzie, near Wellsford; Becroft, Port Albert; R. Hastie, of Mangawai; and Wilson, of Otaika; and many others.

From their inspection of the areas mentioned and from the valuable testimony given in evidence your Commissioners are firmly convinced that the greater part of the area of the Crown gum lands can eventually be brought into successful cultivation. The work of breaking in such lands is no longer an experiment, but merely a question of the judicious expenditure of so-much money per acre.

The evidence of Mr. Hawkins is worthy of careful consideration as to the methods pursued by him and the results achieved on his land at Marua, where the soil operated upon was the average pipeclay similar to that of the neighbouring gumfields and of the poorest description, and generally from the farming point of view was land of a very uninviting nature to operate upon. The land, after being thoroughly ploughed and fallowed, had two crops of oats taken off it and was then laid down in grass. This was about ten years ago. The first crop of oats was sown in winter and the crop was a good one. The manure used was chiefly bonedust; trial plots of potash and nitrogen did not prove satisfactory. The land lay in stubble with stock grazing thereon during the summer, and then it was again ploughed and another sowing of oats made. The second crop of oats was a poor one, as little or no manure was used and the seed was sown too late. The land was then ploughed for a depth of about 6 in., some of it being subsoiled, and was then laid down in grass. The manures used in this case were chiefly bonedust and basic slag, the grasses sown being *Paspalum dilatatum*, *Agrostis stolonifera*, and *Triodia decumbens*; and recently the land was given a top-dressing of basic slag, and still, after the lapse of ten years, carries a splendid sward of grass.

Mr. D. Bowmar, of Mangawai, has broken in about 300 acres, within the last twelve months, of the poorest gum land with great success. This land is now in grass and turnips and carrying sheep, and when your Commissioners inspected it it certainly had a most encouraging appearance.

Mr. Gillies, who it may be noted is an experienced farmer, formerly of the Waikato, and now residing at Wayby, near Wellsford, stated that he had recently brought under cultivation an area of 30 acres of gum land. He had ploughed the land in the autumn, let it lie fallow for six months, and then had

given it a thorough cultivating. He had put 15 acres of the area straight into grass, 2 acres in turnips (this merely as an experiment), and the remaining 13 acres into oats. The grass had taken very well, and he was quite satisfied with the results. The crop of oats he stated was quite as good as any he had grown in the Waikato district. As to the turnips, he stated he had rarely seen a better crop. He had used 3 cwt. of manure, comprising 1 cwt. of Malden Island guano, 1 cwt. superphosphate, and 1 cwt. blood and bone. The cost of the manure averaged about 17s. 6d. per acre. Referring to the area put into turnips, Mr. Gillies described it as being some of the poorest land in the locality.

Mr. J. R. McKenzie's evidence is also worthy of consideration. In his opinion the proper way to treat the gum lands is to proceed generally on the lines laid down by Mr. Gillies. He expressed himself as being confident that he could break in the land at a cost of £2 per acre. He would also sow turnips when breaking up the land, and felt sure from his experience and that of other farmers in the district that, given a fair average season, a return would be obtained from the turnip crop sufficient to recoup the outlay incurred in breaking the land in.

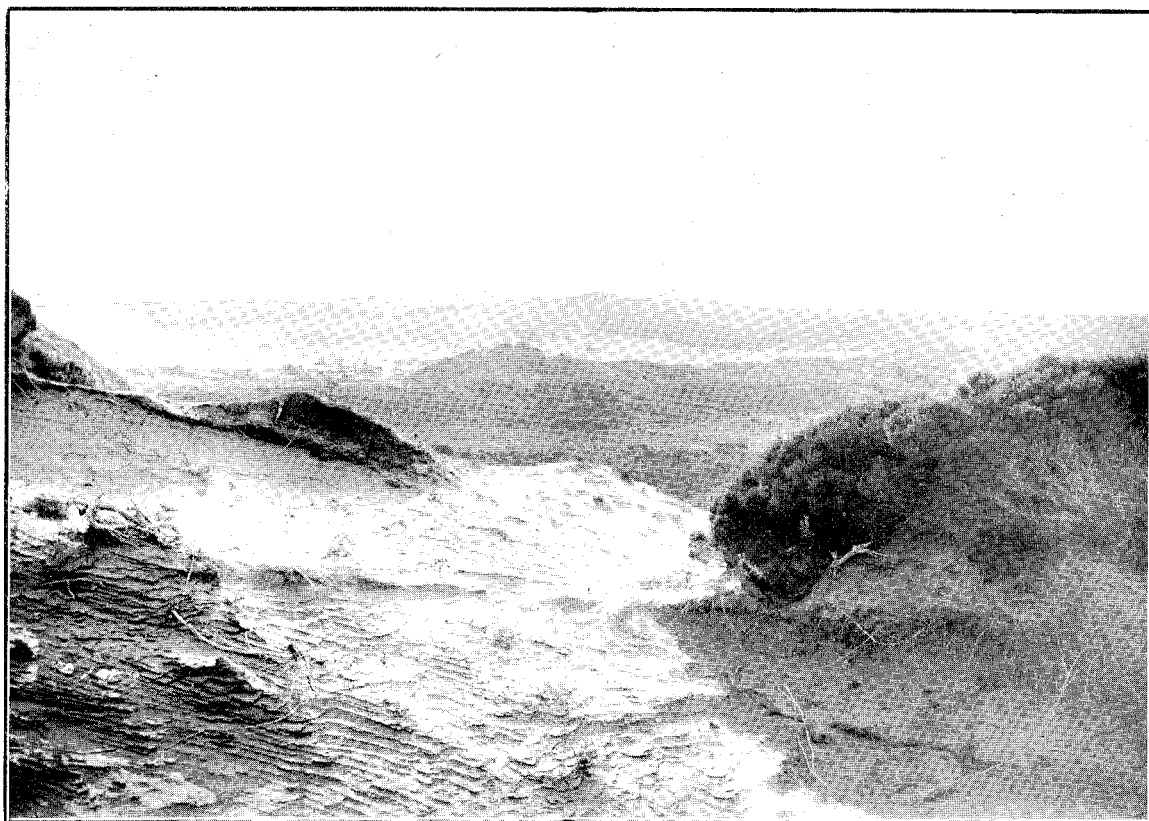
Nor, from a settlement point of view, it is clear there are only two ways of successfully dealing with such lands. The one is to dispose of them to men possessing sufficient capital to develop them; the other is for the State to develop them before they are offered for selection.

It is the latter method which is favoured by your Commissioners. Nor should there be any loss to the State in following such a course, for, apart from the value of the gum which would be recovered from the land during the ploughing operations, and which it is suggested would in many cases pay for the breaking-in process, whatever expenditure was incurred could subsequently be added to the value of the lands before they were disposed of.

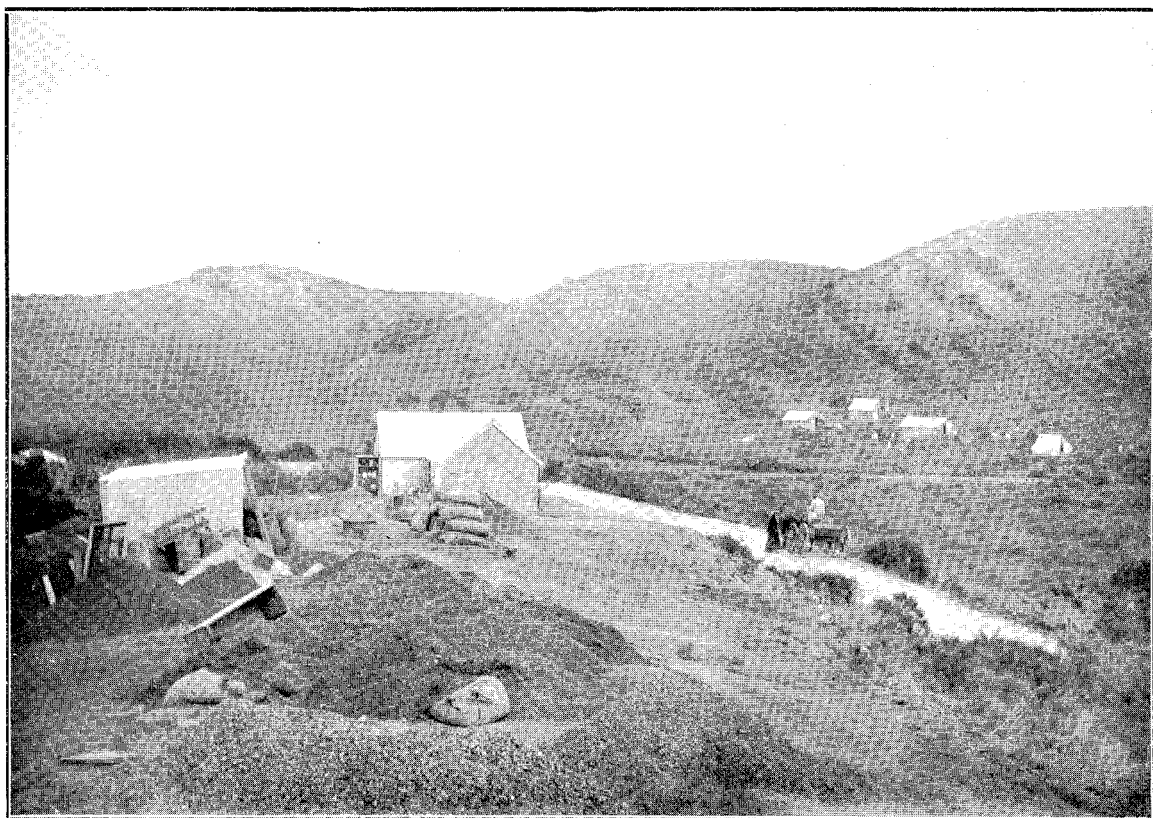
The position from the State's point of view might be expressed thus: Here we have large areas of land which in their present condition are more or less useless for settlement purposes. These lands when improved are capable of being held in small areas. The lands are situated in a district blessed with a genial climate and an abundant rainfall. The supply of Crown lands available for settlement in the ordinary way is nearly exhausted, and the process of buying back lands under the Land for Settlements Act is slow and costly. Then the question clearly suggests itself whether it is not a businesslike proposition to convert these poor lands of the Crown into such a state that they will be made available for successful settlement.

Before the passing of the Kauri-gum Industry Amendment Act, 1910, there had been no attempt by legislation to induce permanent settlement of the gumfields. It is true that the Act of 1898 empowered holders of any ordinary or special licenses under the Act to take up and personally occupy as a residence or business site an area not exceeding 2 acres of unoccupied Crown land not included in any kauri-gum reserve subject to certain prescribed conditions, but it was not until the passing of the Amendment Act, 1910, that anything approaching a reasonable area of such land was made available for persons desirous of making permanent homes on the kauri-gum reserves.

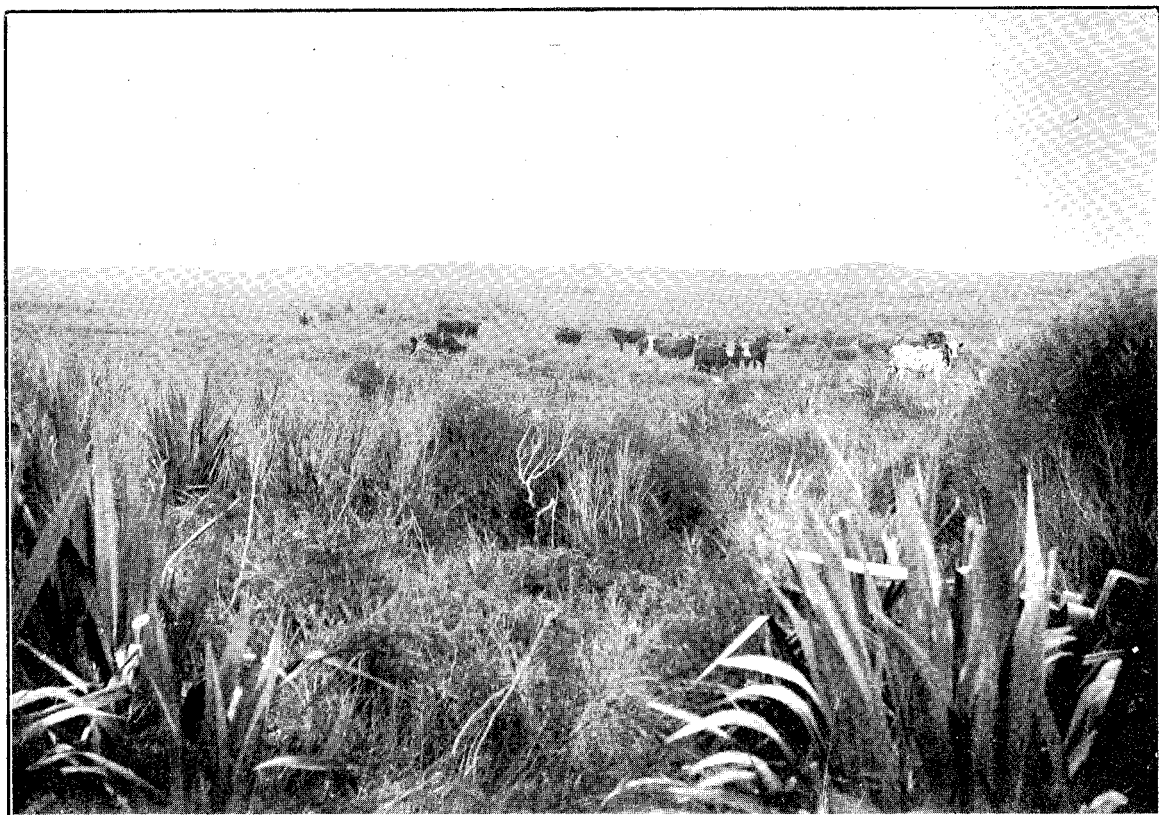
A great advance, however, was made by the Land Act of 1912, section 20, which offered liberal inducement to persons desirous of settling on these lands. Briefly, the provisions of the section are that any person who is not a holder on any tenure in his own right or jointly with any other person or persons of an area exceeding 10 acres of land anywhere in New Zealand may select an area of 25 acres on any kauri-gum reserve or on any Crown land adjoining such reserves which the Governor may set apart for such purpose. The Act further provides that a married man is entitled to select an additional 25 acres for every two children he has under the age of sixteen years dependent upon him. The total area to be selected by any one person is limited by the regulations under the Act to 100 acres. The selector is given the option of taking up the land on a license to occupy with right of purchase, or by way of license to occupy with an agreement to purchase on deferred payments extending over



SAND-DRIFT WEST OF WAIPAPAKAURI.



A GUM-STORE AT SWEETWATER, NEAR WAIPAPAKAURI.
The heaps in front are low grades of kauri-gum.



THE BIG FLAT, OPOE RESERVE, WEST OF WAHARERA.



KAURI-GUM ON THE WAY TO PORT AWANUI.

a period of fifteen years, payable in half-yearly instalments, with the material concession that no rent is payable under such license to occupy in respect of the first five years of such license.

The plain intention of section 20 of this Act of 1912 was to encourage the settlement of the gum lands by the gum-digger and other landless men, for not only do the regulations limit the size of holdings to 100 acres, but they also prevent the exploitation of the gum-digging rights on the holding by restricting the right to dig for gum thereon to the selector and members of his family.

Liberal as are the provisions of section 20, your Commissioners regret to have to report that very little good has resulted from them up to the present. The requirements of the section that the land should be set apart in allotments has in a large measure destroyed the efficacy of the section as a means of rapidly settling such lands. Indeed, it may be said that section 20 simply provides for the settlement of the lands in the ordinary methods, which experience has proved are quite inapplicable to the circumstances prevailing on the kauri-gum reserves. It is suggested that some consideration should be given to those actually residing on the reserves.

It may be pointed out that a large number of gum-diggers are now living on the kauri-gum reserves without any title to the land beyond that which might have been inferred from their license to dig under the Kauri-gum Industry Act, 1908. This Act gave the digger the right to dig for gum on the reserves, but he was expressly restricted from taking up any land on such reserves either as a residence or business site. It was not until the amending Act of 1910 became law that the digger was in a position to select any area whatever on a kauri-gum reserve. It may be noted, however, that some of the residents on the reserves have availed themselves of the provisions of the Act of 1910 and have applied for their residential areas.

While your Commissioners are of opinion that the successful settlement of the gum lands by men possessing little or no capital can only be brought about by a gradual process, following on the lines previously indicated—that is, by the breaking-in of such lands by the State before disposing of them—nevertheless, in order to meet the requirements of any one desirous of taking up the lands in their present undeveloped condition, they recommend that section 20 of the Land Act, 1912, be amended so as to provide that any portion of a kauri-gum reserve may be proclaimed as open for selection as “unsurveyed land,” in lieu of land in allotments as at present stipulated in section 20; provision being made subsequently by regulations that such selections can only be made in accordance with a scheme of subdivision prepared by the Commissioner of Crown Lands, and that some degree of preference be given to men who have continuously resided on such land, say, for a period of six months prior to the date on which the land was proclaimed as being open for selection.

SAND-DRIFT ON THE PENINSULA NORTH OF AHIPARA.

A matter affecting that portion of the narrow peninsula extending northward from Ahipara for fifty miles to a point within about three miles of the North Cape is the rapid advance of the sand-drift, which threatens, if unchecked, to cover the whole of the area indicated. The stretch of country within the limits described comprises an area of 301,000 acres, of which 100,000 acres are Crown lands, represented by areas included in kauri-gum reserves, education reserves, and unoccupied Crown lands. Your Commissioners were much impressed with the seriousness of the position, and at various meetings endeavoured to obtain specific evidence of the rate of progress of the drift. Although the evidence given was not based on any actual measurements taken, and is of a somewhat general character, it, at all events, tends to emphasize the necessity of some immediate action being taken to check the advance of the sand.

At Hohoura, Mr. F. McGrath, a resident of sixteen years, stated the drift had advanced half a mile during his time, and mentioned a particular swamp

that had been entirely covered by the sand. Mr. T. Walsh said that he knew of several swamps that had been obliterated by the sand-drift during his twenty-four years' residence in the district. Mr. P. Shine, who lives at Waiharera, said that he was sure that the sand had encroached a mile during the last sixteen years, and he could point out a place where there used to be a lake (near Kaikino) which was now a sandy waste. Mr. P. Kosovich said the sand was encroaching very fast, and he could point out a place where the sand had advanced over 200 yards since he came to Waiharera, six years previously. Mr. James Steed, of Waiharera, where he had resided for the past twenty-two years, offered to point out the sites of some small lakes which he had shot over a few years ago which were now lost in the sand. Mr. F. J. Hagger, who had lived at Kaimaumu for twelve years, expressed the opinion that the sand-drift would in course of time submerge the whole peninsula. Mr. J. Dragicevich, a farmer residing near Ahipara for the past eight years, said that during that period the sand had encroached on his land from 50 to 100 yards.

Mr. T. S. Houston, J.P., of Ahipara, was also very emphatic on the question, and said that during his residence of twenty-three years at Ahipara he had always regarded the sand-drift as a serious menace to the country, and that it was particularly so to the large area of valuable lands now being dealt with under the Kaitaia Land Drainage Act of 1913. Mr. Houston also expressed the opinion that the adjoining settlers, if advised as to the right method of procedure and supplied with the proper plants, would gladly undertake the work of planting and taking care of the plants.

In that valuable report on the dune areas of New Zealand, presented to Parliament in 1911, Dr. Cockayne says: "A great proportion of the dune areas as they at present exist are in the first place a constant menace to the surrounding lands, and in the second are themselves valueless. Large areas which were firmly fixed by nature when the early settlers arrived are now in a state of great instability, and not only useless in themselves, but daily encroach upon, and so render valueless, the neighbouring fertile ground. The checking of such encroachment is obviously the first aim of dune-reclamation in this country. But the amelioration of the sand areas goes much further than this, and the final goal should be their improvement as a whole through their occupation by a continuous plant covering that shall be of commercial value."

In another part of the report Dr. Cockayne points out that "The conditions governing the plant-life of a dune area are extremely severe, and bring about a state of affairs very similar to that of a desert. But between this latter and the dune there is the important economic difference that the one can be made fertile only by irrigation, whereas the other has a sufficient rainfall, and the sand drifting propensity has alone to be dealt with."

And again, in the introductory remarks of the report he says, "Although certain owners of dune areas are fully aware of the sand-drift evil, and are making brave efforts to overcome it, these are in no few instances misdirected. Others, again, are doing nothing; they recognize the need for action, but have no idea as to the methods to be pursued. Some even hold the most strange or dangerous views, such as that the sand did not originally come from the seashore, or that a belt of shrubs will stop a wandering dune. Even where the best successes have been won there has been only a planting of marram-grass (*Ammophila arenaria*) or tree-lupin (*Lupinus arboreus*), which is at most but a makeshift, except under special circumstances. The final treatment of dunes should assuredly be afforestation, and yet by many this is thought to be impossible, and, except in a few specially favourable localities, nothing of the kind has been attempted."

All through this exhaustive report it is made abundantly clear that the checking and reclamation of these sandy wastes must be carried out in accordance with the best methods of the recognized authorities, and it is suggested that a carefully prepared summary of Dr. Cockayne's recommendations should be issued in small pamphlet form and widely distributed in districts affected by the sand-drift question.

INDEX PLAN

AUCKLAND

SHEET N°2



REFERENCE.

Kauri-gum Reserves as at 20th March, 1914, shown thus

*The numbers indicate the detail maps
for each locality.*

SHEET N°3

REFERENCE.

Kauri-gum Reserves as at 20th March, 1914, shown thus

*The numbers indicate the detail maps
for each locality.*

Your Commissioners are of opinion that the reclamation and subsequent afforestation of the 100,000 acres of sandy waste included in the narrow peninsula and the protection of the balance of the lands from the advancing sand-drift is a matter calling for early and serious consideration.

AFFORESTATION.

One of the areas from which the reservation is recommended to be uplifted is what is known as the Kapiro Reserve, situated quite close to Kerikeri Inlet, Bay of Islands, and contains about 14,000 acres. This area, in the opinion of your Commissioners, is specially adapted for afforestation. The land is nearly all ploughable, and quite close to the deep water of the first-class Bay of Islands harbour.

As to the need of afforestation there is no conflict of opinion, and here it may be interesting to quote a short extract from the report of the Royal Commission on Forestry, which gives concisely the economic aspect of the question:—

“We are fully persuaded, however, that, given cheap land, economical management, and the right kind of trees to plant, afforestation can be made a highly profitable investment for the State, apart from the secondary benefits of having a good supply of timber to meet the public demand and a possible amelioration of climatic conditions. We would recommend that in future, to keep the forestry operations on a sound commercial basis—(1) That the Prisons Department should have a credit note for the value of all work done by prison labour; (2) that $4\frac{1}{2}$ per cent. interest should be debited annually to the cost of the previous year's operations; (3) that the rental value of the land as assessed by the Government Valuation Department, also on a $4\frac{1}{2}$ -per-cent. basis, should be debited to the Forestry Account.

“In considering the expansion of the afforestation operations of the State the length of time that the present timber-supply from the indigenous forests will last must be considered. According to evidence before us, the estimate of 33,060,883,437 superficial feet available in the indigenous forests in 1909 is at best a guess, and no one can truly say whether the amount be too much or too little. Our opinion is that it is not safe to conclude that there will be any supply of moment at the expiration of thirty years from the present time, and that unless more stringent methods are adopted to conserve the supply as far as possible the period may be even shortened. From the above it is clear that sufficient provision must be made for the future if we are not to run the risk of a considerable deficiency in our supply of timber. The countries of the Old World are a striking object-lesson to us in regard to afforestation operations. It may be stated briefly that afforestation has been practised to a considerable extent in all civilized countries, and that where economy of method is closely followed it has proved a financial success. The thickly peopled countries of Europe do not begrudge the necessary areas for the work. Even in densely populated Belgium the forest area is 17·7 per cent. of the total area, or 0·2 acre per inhabitant. In Germany the area under forest is 34,989,675 acres. This forms 25·89 per cent. of the total land area and 0·62 acres *per capita*.”

SUITABILITY OF GUM LANDS FOR FRUITGROWING.

Your Commissioners are quite convinced that large areas of the gum lands are excellently adapted for apple-growing. There seems to be no question that there is a large and unsatisfied demand for apples for export. With some encouragement given to the smaller settlers we feel assured that a large industry can be built up in the course of a few years. As far as the man of small means is concerned, the process must be a gradual one, for he has to live while the fruit-trees are coming into bearing. Such a man, it is suggested, might put in an acre of apples the first year, and then year after year increase the area.

Fruitgrowers who gave evidence before the Commission were agreed that the varieties to grow for export are—Delicious, Dougherty, and American Horn.

THE POPULATION OF THE GUMFIELDS: THE DIGGER AND HIS WORKING OUTFIT.

It is a difficult matter to arrive at a correct estimate of the number of workers employed in gum-digging. Your Commissioners, having given the matter careful consideration, are of opinion that fully six thousand workers were employed gum-digging during the past season. In this estimate no account is taken of the number of men employed in sorting and preparing the gum for export in the various centres, nor of the number employed in the work of transport from the gumfields to the port of shipment. It is a fair assumption that the six thousand workers have at least two thousand dependants on them, making a total of eight thousand souls actually supported by the gum-digging industry.

Here it is interesting to note that the Official Year-book for 1913, on page 599, gives the following information: "As the demand for general labour in New Zealand increases the occupation of gum-digging upon the barren country north of Auckland becomes less attractive, and the number of diggers has greatly declined, until at the present time barely a thousand persons are so employed."

In order to show how absolutely wide of the facts such a statement is it may be pointed out the actual number of licenses issued to diggers working on the Crown gum lands from the 1st January, 1911, to the 31st March, 1912, was 4,391; from the 1st April, 1912, to the 31st March, 1913, was 2,352; and from the 1st April, 1913, to the 31st March, 1914, was 3,538. It is well known in the northern districts that there are a great many diggers on the Crown lands who do not take out any license. So that the number of licenses issued does not give the actual number of diggers on Crown lands alone. In addition to men digging on the Crown lands there are those working on privately owned gum lands, the number of whom it is estimated amounts to about three thousand.

To the casual visitor to the gumfields the everyday work of the gum-digger, and the conditions under which he lives, would seem to offer but few attractions. Nevertheless the gum-digger's life must have its compensations, for there are a great many men now living on the fields who have been engaged in gum-digging all their working lives, whilst many men who from time to time have left to follow other occupations have been unable to resist the call to return to the free and independent life of the gumfields.

A feature of the gumfields is the number of old men supporting or helping to support themselves by gum-digging. Many of them are drawing the old-age pension, but quite a number of them, though old enough to draw the pension, prefer to maintain themselves without any help from the State.

The life on the gumfields certainly seems to appeal to the Maori temperament, and every summer hundreds of men, women, and children camp on the fields and actively engage in the industry.

Here it is hoped that it may not be out of place to give a short account of the gum-digger's methods of work and the tools he uses. The ordinary equipment of the gum-digger comprises a spade, a spear, and a "pikau." The spade is much the same as the common garden spade, but it is of much stronger make and more durable, being made of the best steel. The spear, which is used for finding the gum, is a steel rod from 4 ft. to 16 ft. in length, and gradually tapers to a blunt point. A few inches from the point, and then at intervals of about 2 ft. 6 in. up the spear, are coils of fine wire, covering about three-quarters of an inch of the spear, and neatly and securely put on. The device of the coil of wire was discovered by accident by a digger casually thrusting his spear into an eyelet and then thrusting the spear into the earth in order to get rid of the eyelet, when he was surprised to find the spear penetrated the ground much easier with the eyelet on it than it did without it. The transition from the eyelet to the coil of fine wire was an easy one, and soon every spear was equipped with one. To the top of the spear is affixed an

ordinary spade-handle. The pikau is simply the bag used to carry the gum to the camp. It is made of an ordinary sack cut down, with shoulder-straps attached for carrying it.

The digger when he works in the swamps uses a hook. This is made out of galvanized piping, 1 in. in diameter. At one end of the hook there is attached an ordinary spade-handle; at the other end a steel toe about 1½ in. long is welded on to the spear and forms what is really the hook. Prior to commencing his hooking operations the hooker usually locates the gum by means of his spear. The experienced hooker becomes very expert at his work, and is able to bring up from a great depth pieces of gum the size of a walnut.

The work of digging "on a face" is generally carried out by parties of men, either co-operating or in some one's employ. Under this system the ground is all turned over to the full depth the gum lies, all roots, stumps, and timber of every description being thrown upon the surface, and as the "facing" proceeds the land is left with a fairly even surface. By this method all the gum is recovered from the land, even to the small chips, and the timber recovered is valuable for firewood and fencing purposes (see illustration).

THE IMPORTANCE AND VALUE OF THE KAURI-GUM INDUSTRY.

It would appear to your Commissioners that the importance and value of the kauri-gum industry is not correctly appreciated by the people of New Zealand. Even the most casual glance through the Official Year-book supports such a conclusion. In the Year-book of 1913 only twenty lines are devoted to the kauri-gum industry, which in that year gave employment to six thousand workers, and produced an export to the value of £549,106. The coal-mining industry, which employed 4,328 workers, is given 174 lines. The total value of the kauri-gum exported up to the end of 1912, according to the Year-book, was £16,210,457, while the actual value of coal and coke produced amounted to £19,051,302. And yet in the Year-book of 1912 there are only twelve lines of space given to the kauri-gum industry, while 166 lines are given to the coal industry.

From the following table, which gives the annual value of the export of kauri-gum from the year 1891 to the end of 1913, it will be seen that the average annual value of the gum exported over the period of twenty-three years amounts to £494,126.

RETURN OF KAURI-GUM EXPORTED FROM DOMINION FOR YEARS 1891 TO 1913.

Year.	Quantity.	Value.	Average per Ton.	Total Value of all Exports for Dominion.
	Tons.	£	£ s. d.	£
1891	8,388	437,056	52 2 1	9,400,094
1892	8,705	517,678	59 9 4	
1893	8,317	510,775	61 8 3	
1894	8,338	404,567	48 10 5	
1895	7,425	418,766	56 8 0	
1896	7,126	431,323	60 10 7	9,177,333
1897	6,641	398,010	59 18 8	
1898	9,905	586,767	59 4 9	
1899	11,116	607,919	54 13 9	
1900	10,159	622,293	61 5 0	
1901	7,541	446,114	59 3 0	12,690,460
1902	7,430	450,233	60 12 0	
1903	9,357	631,102	67 9 0	
1904	9,203	501,817	54 10 6	
1905	10,883	561,444	51 12 0	
1906	9,154	522,486	57 1 0	15,503,530
1907	8,708	579,888	66 12 0	
1908	5,531	372,798	67 8 0	
1909	8,249	552,698	67 0 0	
1910	8,693	465,044	53 10 0	
1911	7,587	395,707	52 3 0	
1912	7,908	401,305	50 15 0	21,272,405
1913	8,780	549,106	62 11 0	

It is submitted that the value of the output for 1913—viz., £549,106—is quite an appreciable contribution to the total exports of the Dominion.

The necessity for the proper control and development of the kauri-gum lands, and the general importance of the industry, justifies your Commissioners in concluding that it would be in the best interests of the State to set up a small subdepartment to take charge of the Crown gum lands and the industry generally. Such a department might be made self-supporting by imposing an export duty of, say, £1 per ton on kauri-gum. It is the well-considered opinion of your Commissioners that the imposition of such a duty would not be objected to by the gum-digger, on whom the burden would undoubtedly fall, for he recognizes that a proper system of control of the industry would give an added value to his product quite in excess of the small impost which would be placed on the individual digger.

There is a prevailing opinion among the gum-diggers that if there was a system of grading the gum inaugurated by the State it would be highly beneficial to the workers engaged in the industry. There is, however, a marked difference of opinion as to the effects and practicability of grading existing among gum-buyers, some of whom are decidedly favourable to the proposal, others again unhesitatingly declare that grading is quite impracticable. Your Commissioners are of opinion that there are no difficulties in regard to grading gum that could not be overcome, and that it is not only practicable to grade the gum, but also desirable in the interests of the workers engaged in the industry.

THE WINE-SHOPS ON THE KAURI-GUM RESERVES.

Your Commissioners feel that they would be failing in their duty to the State if they neglected to draw attention to the pernicious effects of the wine-shops established on several of the kauri-gum reserves on the northern gumfields. From Kaitaia northwards everywhere the same tale was told. Reputable residents of the districts affected waited upon your Commissioners at each centre visited. The evidence of one witness, a Justice of the Peace, who is a man of high standing and repute, in referring to this matter said that the wine-shops existing in different parts of the various gumfields should not be allowed to continue in any shape or form, and that they were conducive to great immorality. He further stated that he has known cases where the kauri-gum was bartered for wine. The usual experience was that as soon as a gum-field was opened the wine-shops followed.

In the opinion of your Commissioners the traffic is having a most harmful effect in the districts mentioned, and is doing a great injury to a large number of the Maori people, whole families of whom for many months of the year camp on the fields and engage in gum-digging.

SUMMARY.

Summarized the conclusions and recommendations of your Commissioners are:—

1. That the reservation be uplifted from various kauri-gum reserves as per schedule, of a total area of 71,164 acres.
2. That the Crown gum lands have been mismanaged in the past greatly to their detriment.
3. That better methods of management are essential.
4. That the development of the Crown gum lands under judicious management offers a practicable solution of the "unemployed" difficulty for many years to come.
5. That the settlement of the gum lands by men possessing little or no capital can only be brought about by a gradual process.
6. That the State should break in and develop the gum lands before disposal, and that such a process would be an economic success.
7. That section 20 of the Land Act be amended so as to widen its scope.

8. That the checking of sand-drift on peninsula north of Ahipara, affecting 100,000 acres of Crown lands and 200,000 acres private lands, is a matter for serious consideration.

9. That the afforestation of certain areas should be taken in hand.

10. That the wine-shops on the kauri-gum reserves on the northern gum-fields are having a most pernicious effect.

11. That a Department be set up to take charge of the Crown gum lands and the kauri-gum industry generally, such a Department to be supported by imposing an export duty of £1 a ton on kauri-gum.

Before concluding their labours it is pleasing to be able to state there has been complete unanimity among your Commissioners in regard to the conclusions and recommendations embodied in this report.

In witness whereof we have hereunto set our hands and seals, this third day of July, in the year one thousand nine hundred and fourteen.

R. P. GREVILLE, Chairman.

SAMUEL STAFFORD.

R. HEBDEN.

J. M. MCKAY.

WM. STEWART.

W. J. MUNRO, Secretary.

SCHEDULE OF RESERVES.

County.	Reserve.	Area.	Area recommended to be	
			Retained.	Uplifted.
		Acres.	Acres.	Acres.
Mangonui	Otumaroki	600	..	600
"	Hohoura and Opoe	53,880	48,880	5,000
"	Pukewhau, Puketoetoe	3,780	(approx.)*	(approx.)*
"			2,780	1,000
"			(approx.)*	(approx.)*
"	Rotoroa	700	400	300
"	Rotoroa Extension	15,944	13,582	2,362
"	Tongonge	1,024	..	1,024
"	Tongonge Extension	1,072	..	1,072
"	Awanui	245	..	245
"	Pairatahi	1,530	(907‡)	284
"			(..)	339
"	Parapara	2,200	1,535	665
"	Taipa	800	..	1,830
"	Taipa Extension	1,030	..	153
"	Peria	153	..	..
"	Otaia	1,000	1,000	..
"	Epakauri	1,600	1,600	..
"	Puheke	2,000	2,000	..
"	Otaia No. 2	640	640	..
"	Ahipara	1,200	1,200	..
"	Otaia Extension	500	500	..
"	Otaia No. 3	2,130	2,130	..
"	Puheke Extension	3,510	3,510	..
"	Ohia	5,350	5,350	..
"	Ohia Extension	1,000	1,000	..
"	Hohoura Foreshore No. 1	575	575	..
"	Hohoura Foreshore No. 2	135	135	..
"	Hohoura Foreshore No. 3	1,930	1,930	..
Hokianga	Warawara	800	..	800
"	Omahuta	1,000	..	1,000
"	Punakitere	10,982	4,882	6,100

* Areas to be defined on survey.

† Total (5,287 acres) withdrawn under the provisions of the Kaitaia Land

Drainage Act, 1913.

‡ There is some inconsistency between map area and area originally gazetted.

SCHEDULE OF RESERVES—*continued.*

County.	Reserve.	Area.	Area recommended to be	
			Retained.	Uplifted.
		Acres.	Acres.	Acres.
Hokianga	Mangatoa	1,030	1,030	..
"	Wairau	460	460	..
Whangaroa	Totara Extension	2,100	2,100	..
Bay of Islands	Maungapererua Extension	4,640	640	4,000
"	Pungaere Extension	1,550	780	770
"	Kapiro	13,848	1,900	11,948
"	Hukerenui Extension	1,345	695	650
"	Towai No. 2	375	..	375
"	Parahirahi	600	600	..
"	Hukerenui	800	800	..
"	Te Mata	373	373	..
"	Towai No. 1	814	814	..
"	Te Mata No. 2	870	870	..
"	Maungapererua	1,650	1,650	..
"	Puketotara	400	400	..
"	Rangitane	442	442	..
"	Towai	29	29	..
Bay of Islands and Whangarei	Te Mata	2,855	158	2,697
Whangarei	Opuawhanga	1,900	530	1,370
"	Purua Extension	1,600	300	1,300
"	Purua	721	358	363
"	Purua Extension No. 2	485	..	485
"	Otakairangi	295	..	295
"	Mangakahia Extension	2,380	..	2,380
"	Ruatangata No. 3	668	320	348
"	Ruatangata No. 1	145	..	145
"	Ruatangata No. 4	45	..	45
"	Kaitara No. 2	960	..	960
"	Kaitara	600	..	600
"	Parahaki No. 2	57	..	57
"	Waikare Nos. 4, 5	788	228	560
"	Otaika Extension No. 1	1,716	..	1,716
"	Otaika Extension No. 2	1,866	1,506	360
"	Mangapai	168	..	168
"	Ruakaka No. 1	311	..	311
"	Ruakaka No. 2	970	..	970
"	Waipū	2,240	1,420	820
"	Mangakahia	600	600	..
"	Otaika	600	600	..
"	Ruarangi	500	500	..
"	Pohuenui	190	190	..
"	Waipu No. 2	290	290	..
"	Manaiā	192	192	..
"	Waikare	140	140	..
"	Waikare No. 2	127	127	..
"	Waikare No. 3	58	58	..
"	Taiharuru No. 1	103	103	..
"	Taiharuru No. 2	143	143	..
"	Taiharuru No. 3	120	120	..
"	Parahaki No. 1	413	413	..
"	Ruatangata No. 2	305	305	..
"	Poroti	2,550	2,550	..
"	Mata	312	312	..
"	Marsden	2,338	2,338	..
"	Uretiti	1,870	1,870	..
"	Ruakaka No. 3	249	249	..
"	Otaika Extension No. 3	71	71	..
"	Taiharuru No. 4	89	89	..
"	Taiharuru No. 5	17	17	..
"	Waikare No. 6	56	56	..
"	Waikare No. 7	63	63	..
"	Waikare No. 8	69	69	..
Hobson	Kai Iwi Extension No. 2	1,650	370	1,280
"	Tekuri	8,017	..	8,017

SCHEDULE OF RESERVES—*continued*.

County.	Reserve.	Area.	Area recommended to be	
			Retained.	Uplifted.
		Acres.	Acres.	Acres.
Hobson	Puketapu	438	..	438
"	Tikinui No. 3	267	..	267
"	Kai Iwi	800	800	..
"	Te Kopuru	363	363	..
"	Tatarariki	482	482	..
"	Tikinui	1,000	1,000	..
"	Ka Iwi No. 1	3,200	3,200	..
"	Kairara	1,227	1,227	..
"	Te Kopuru No. 2	130	130	..
"	Tikinui	114	114	..
"	Tatarariki No. 3	232	232	..
"	Tatarariki Extension	636	636	..
"	Te Kopuru No. 3	591	591	..
"	Tatarariki	1,093	1,093	..
"	Te Kopuru No. 4	567	567	..
"	Te Kopuru No. 5	700	700	..
"	Kai Iwi Extension No. 3	137	137	..
"	Tatarariki No. 5	279	..	279
Otamatea	Mareretu Nos. 2, 4, 5, 6	470	..	470
"	Mangawai No. 2	1,390	658	732
"	Mangawai No. 3	667	121	546
"	Hakaru	87	..	87
"	Mangawai No. 5	381	183	198
"	Matakohe	225	225	..
"	Parirau	168	168	..
"	Kaiwaka	850	850	..
"	Molesworth No. 1	95	95	..
"	Molesworth No. 2	132	132	..
"	Hakaru No. 2	126	126	..
"	Hakaru No. 3	630	630	..
"	Mangawai No. 4	700	100	600
Rodney	Pakiri	123	..	123
"	Tauhoa No. 2	617	175	442
"	Tauhoa No. 1	725	725	..
"	Mangawai	2,944	2,944	..
"	Mangawai Extension	740	740	..
"	Arai	820	820	..
"	Wayby	880	880	..
"	Pakiri	343	343	..
"	Snell's Beach	1,400	340	1,060
Waitemata	Waioneke Extension	400	..	400
"	Orewa	560	..	560
"	Wade	61	..	61
"	Okura No. 2	324	..	324
"	Pukeatua	100	..	100
"	Taupaki	880	880	..
"	Waioneke	500	500	..
"	Swanson	660	660	..
"	Swanson Extension	570	570	..
"	Kaukapakapa	109	109	..
"	Rangitopuni	1,900	..	1,900
Tauranga	Katikati	1,800	..	1,800
Manukau	Koheroa	300	..	300
Coromandel	Port Charles	890	890	..
Great Barrier Island	Awana			
Totals .. .. .	.. .. .	226,361	149,910	76,451
Deduct area withdrawn under the Kaitia Land Drainage Act, 1913 .. .. .	.. .. .	..	..	5,287
			149,910	71,164

Total area recommended to be retained, 149,910 acres.

Total area recommended to be uplifted, 71,164 acres.

STANDARD OF REVENUE

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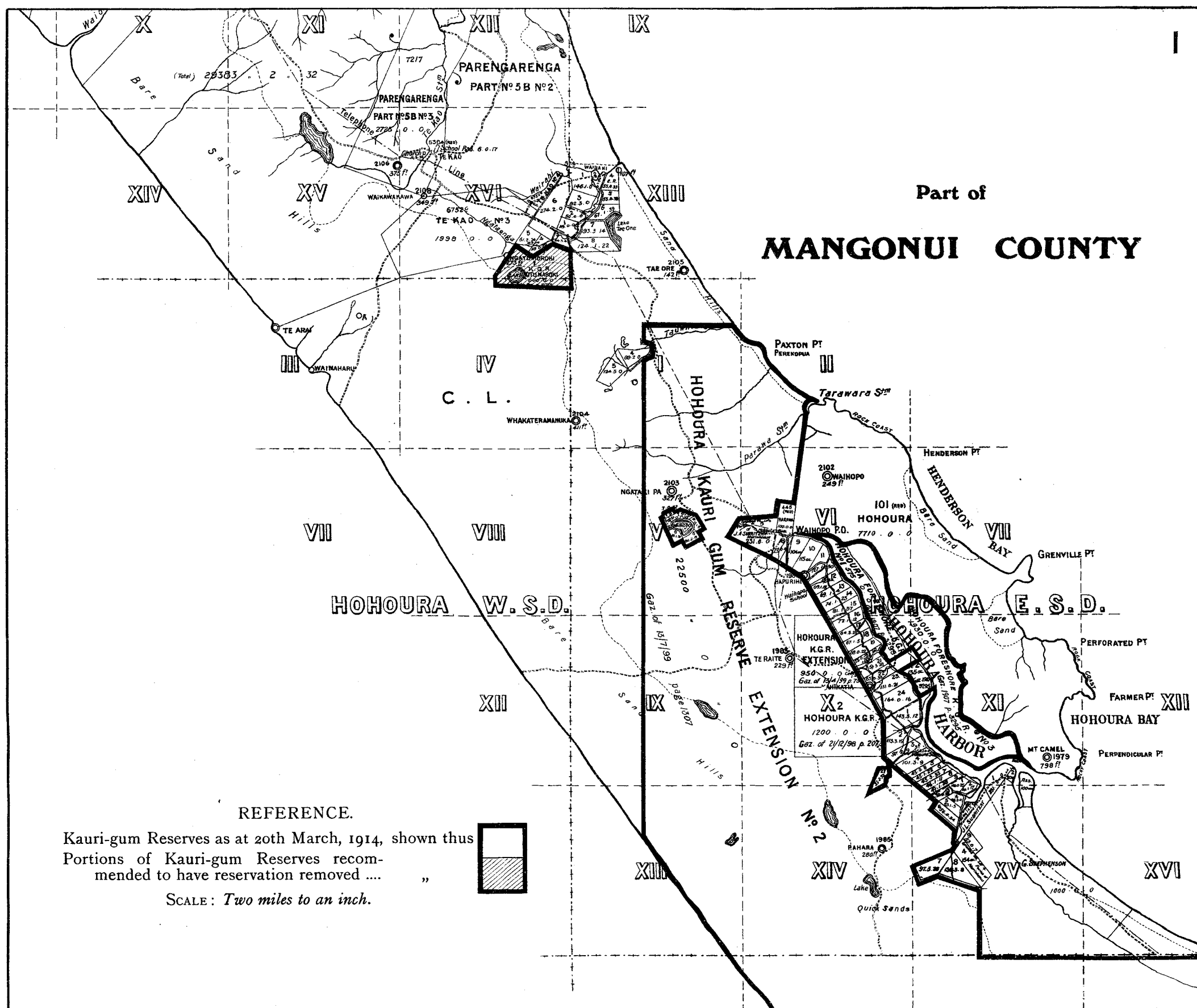
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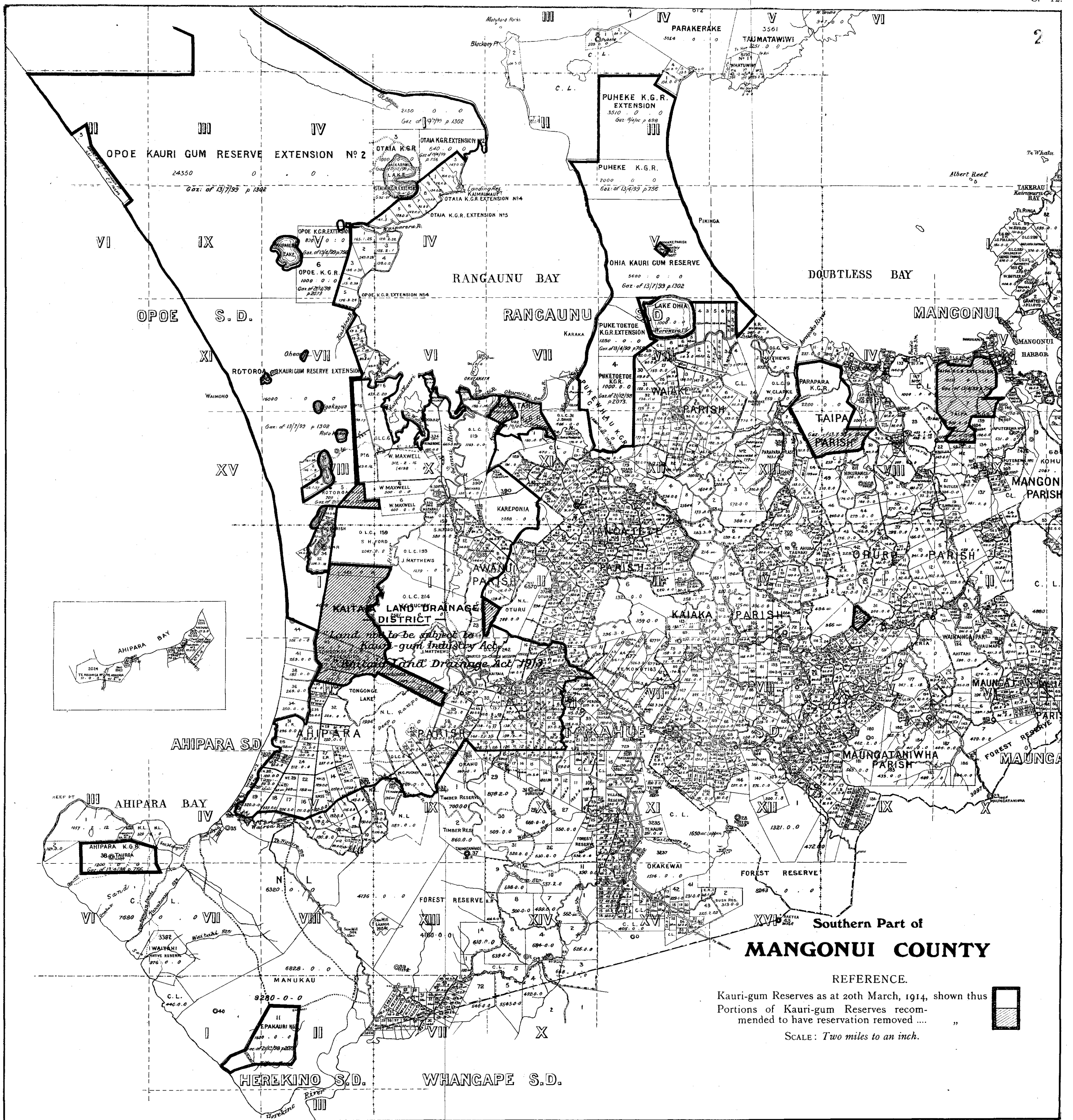
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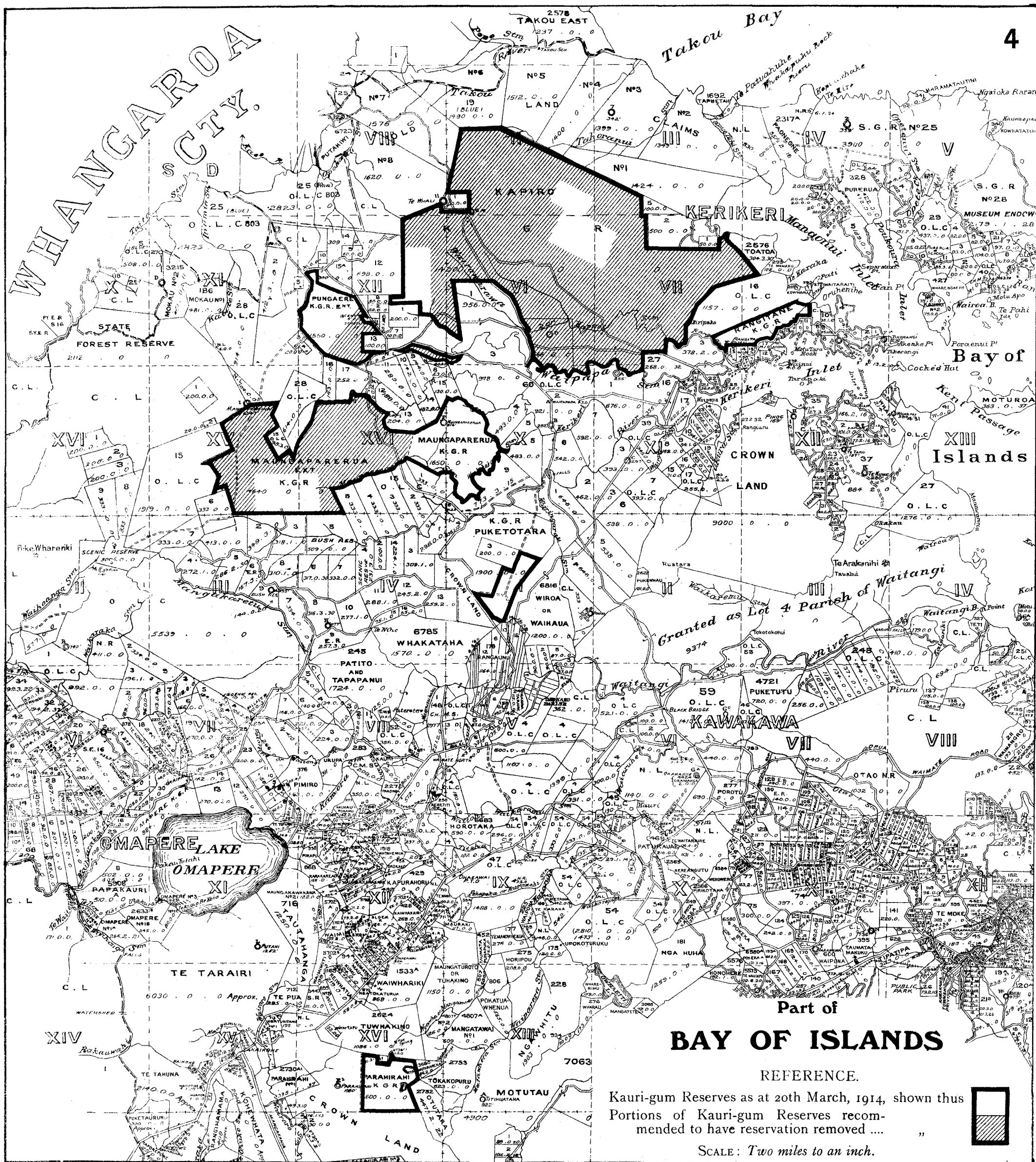
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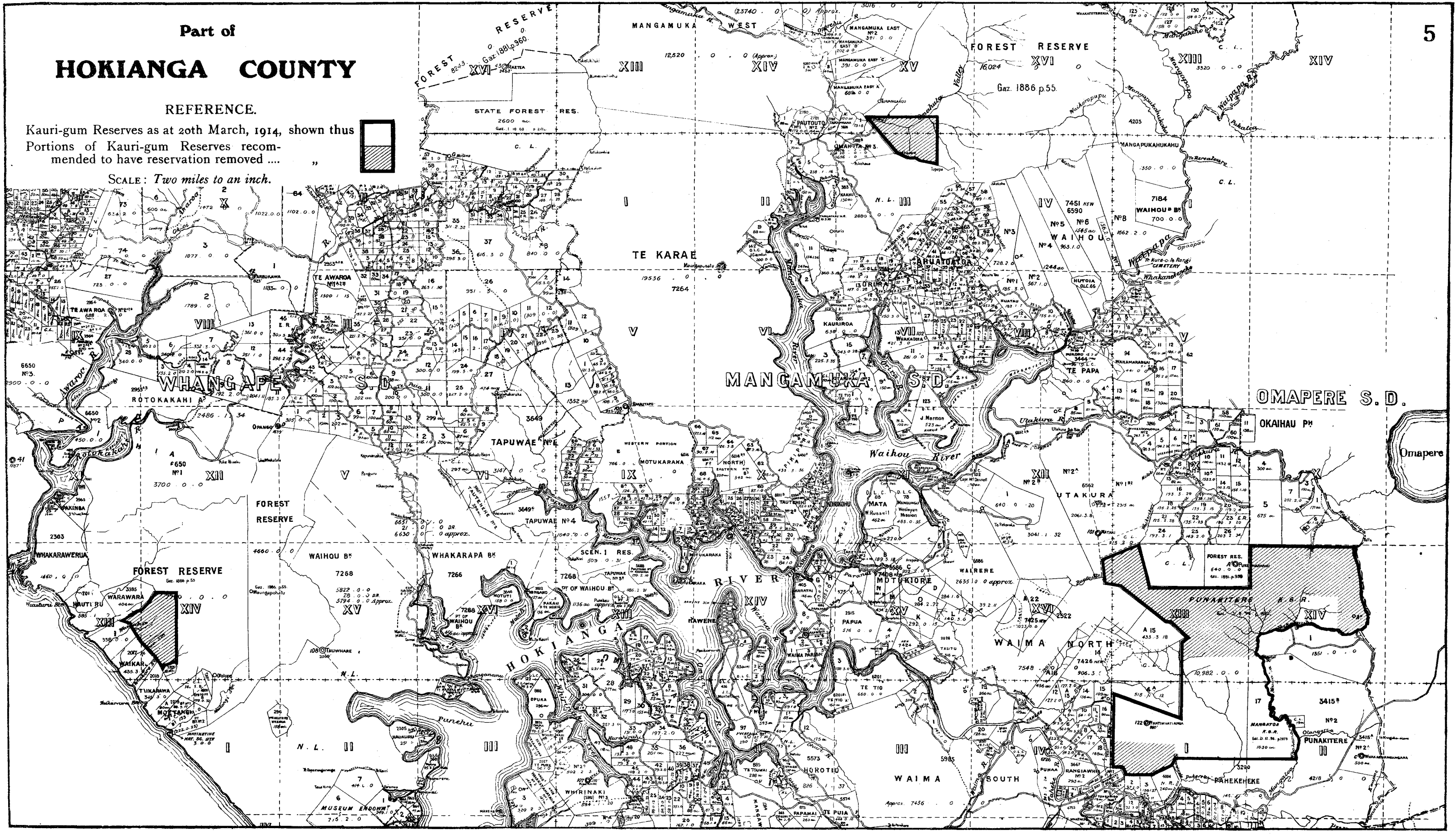
Part of HOKIANGA COUNTY

REFERENCE.

Kauri-gum Reserves as at 20th March, 1914, shown thus
Portions of Kauri-gum Reserves recom-
mended to have reservation removed

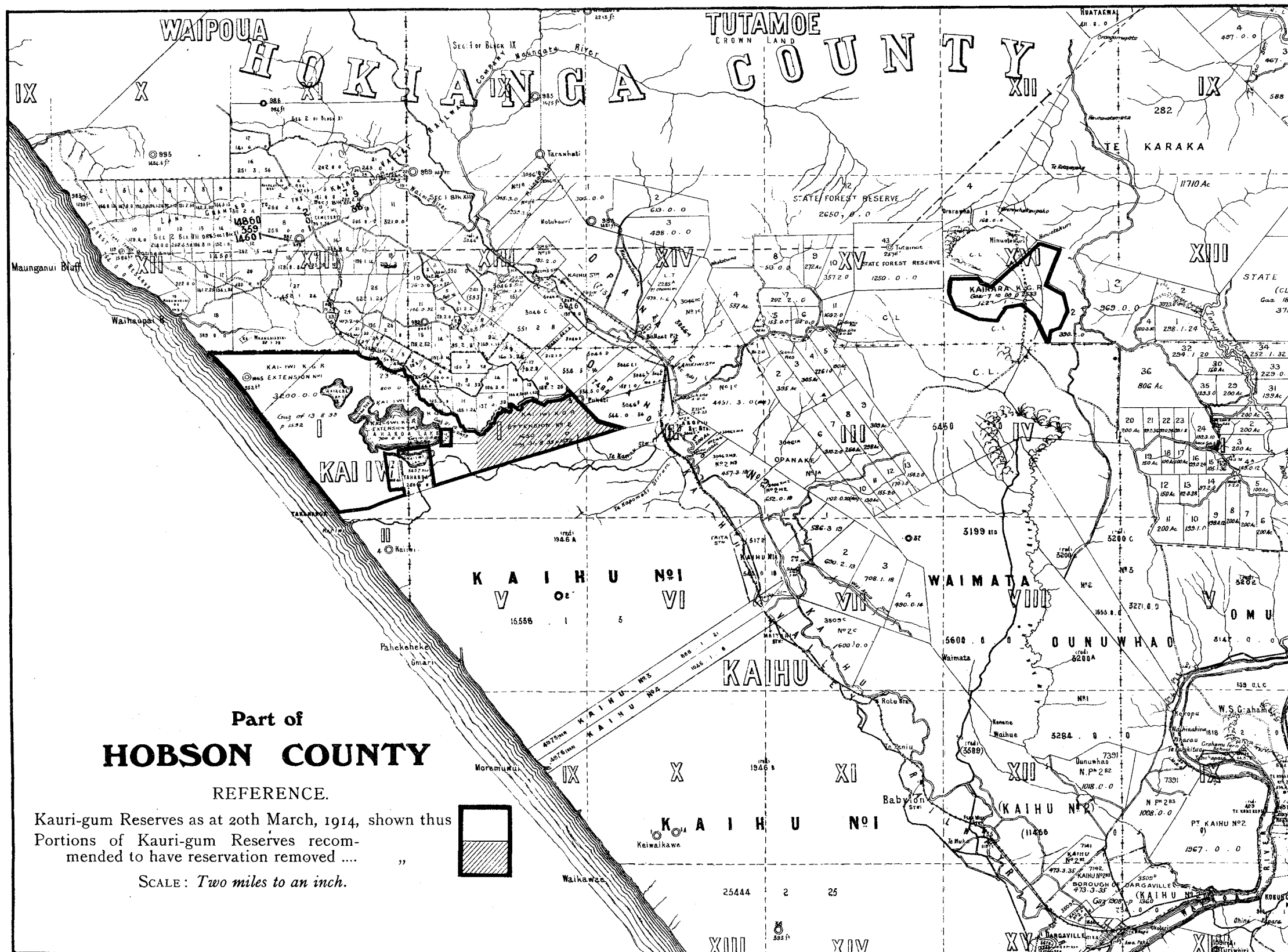


SCALE: Two miles to an inch.









Part of
WHANGAREI COUNTY

MOTATAU

OTAKAIRANGI

WHANGAREI

REFERENCE.

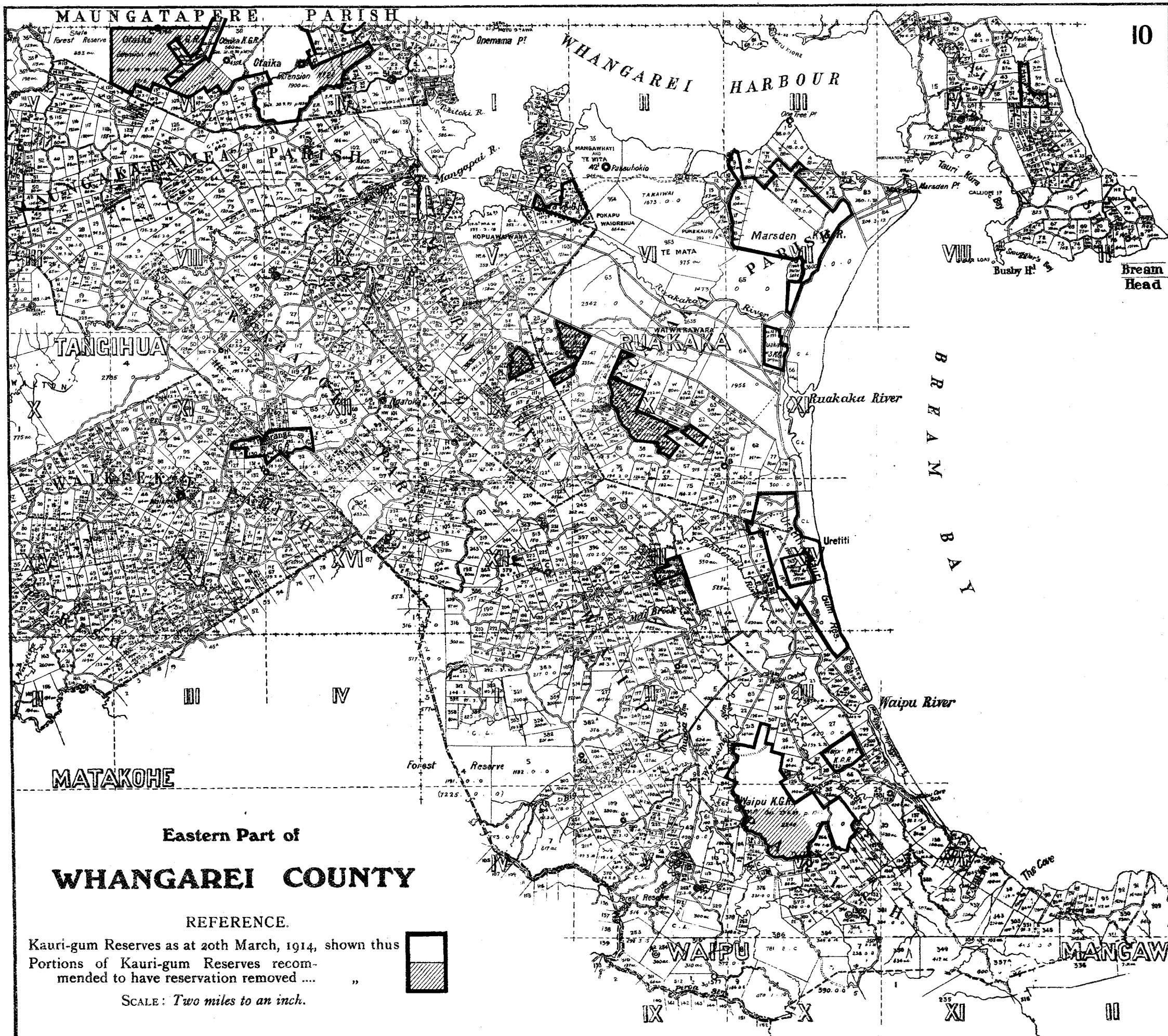
Kauri-gum Reserves as at 20th March, 1914, shown thus

Portions of Kauri-gum Reserves recommended to have reservation removed

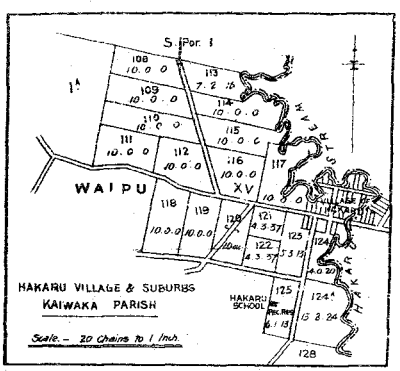
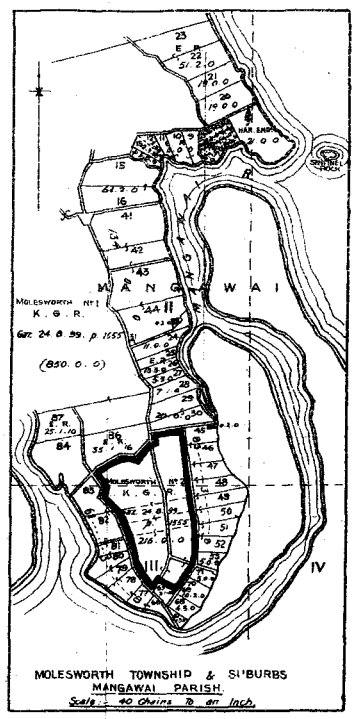
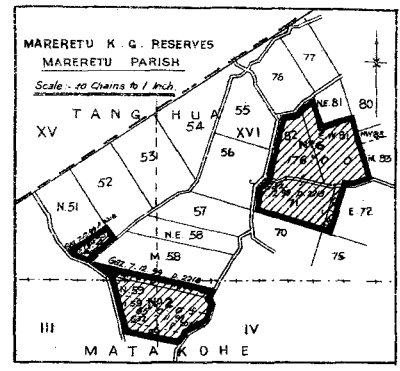
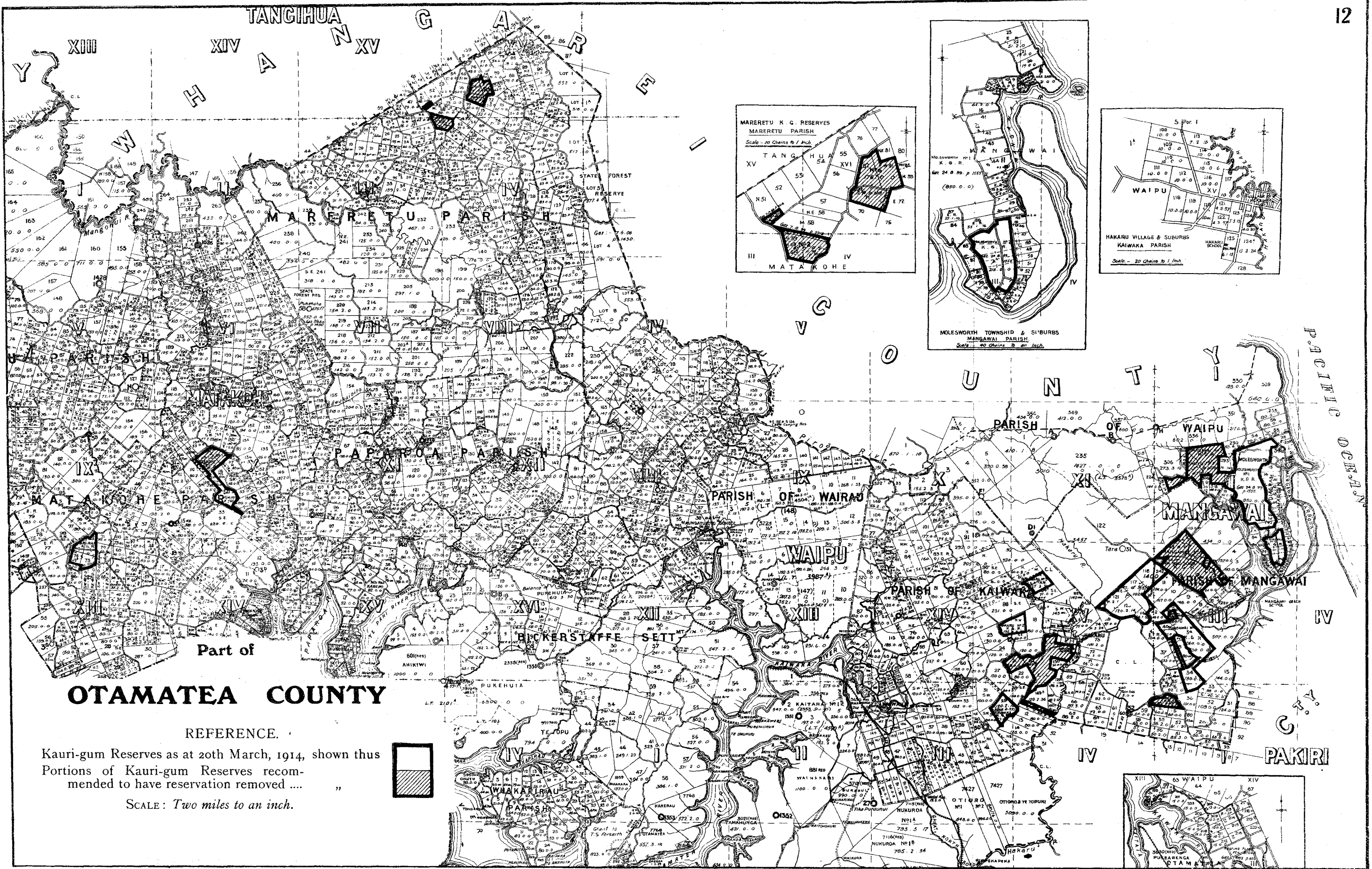
SCALE: Two miles to an inch.

Kauri-gum Reserves as at 20th March, 1914, shown thus

Portions of Kauri-gum Reserves recom-	
mended to have reservation removed	„





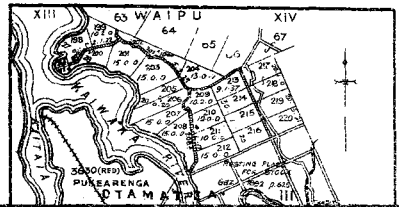
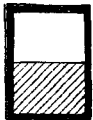


OTAMATEA COUNTY

REFERENCE.

Kauri-gum Reserves as at 20th March, 1914, shown thus
Portions of Kauri-gum Reserves recom-
mended to have reservation removed

SCALE: Two miles to an inch.







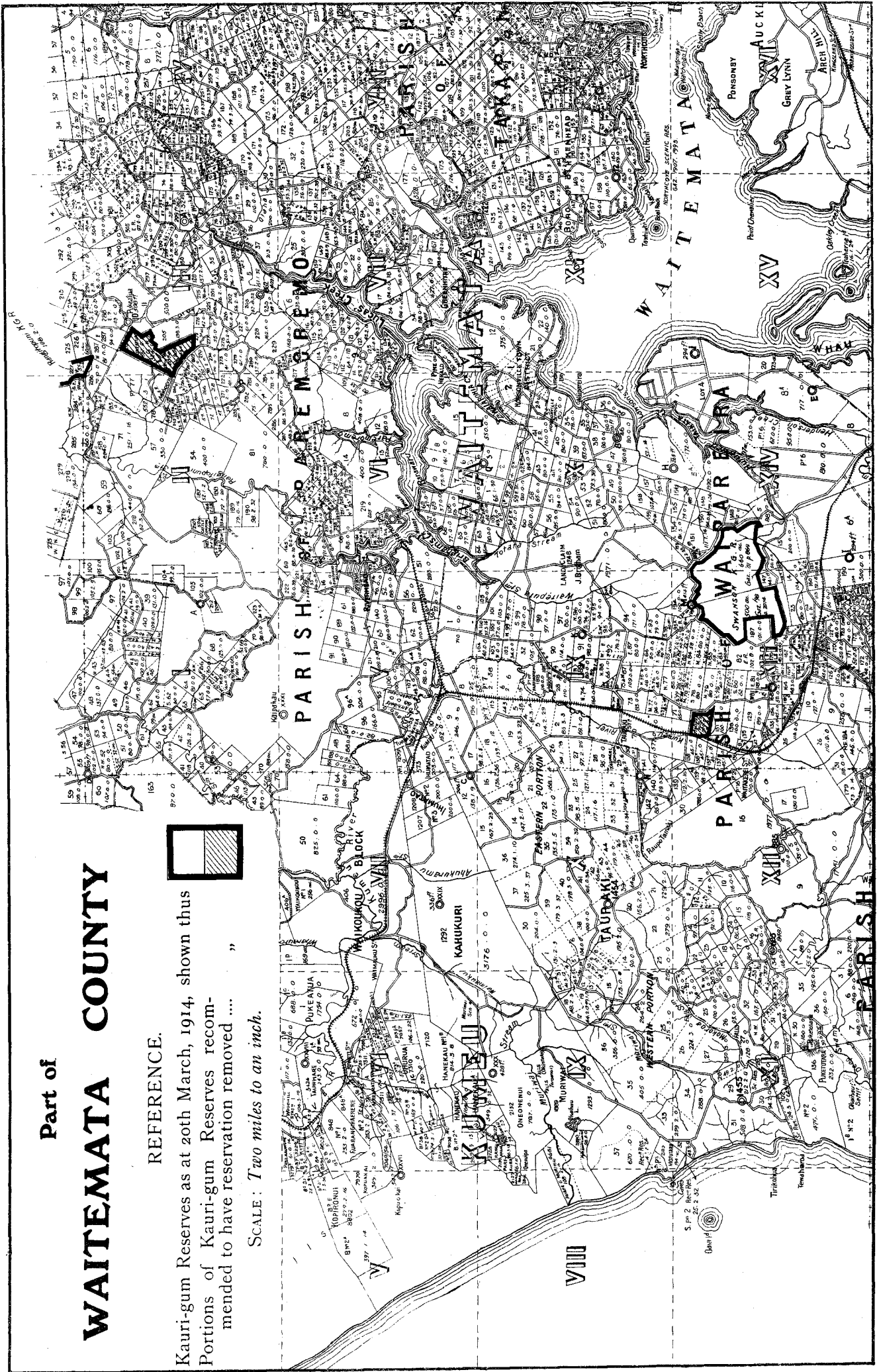
Part of
WAITEMATA COUNTY

REFERENCE.



Kauri-gum Reserves as at 20th March, 1914, shown thus
Portions of Kauri-gum Reserves recom-
mended to have reservation removed ...

SCALE: *Two miles to an inch.*

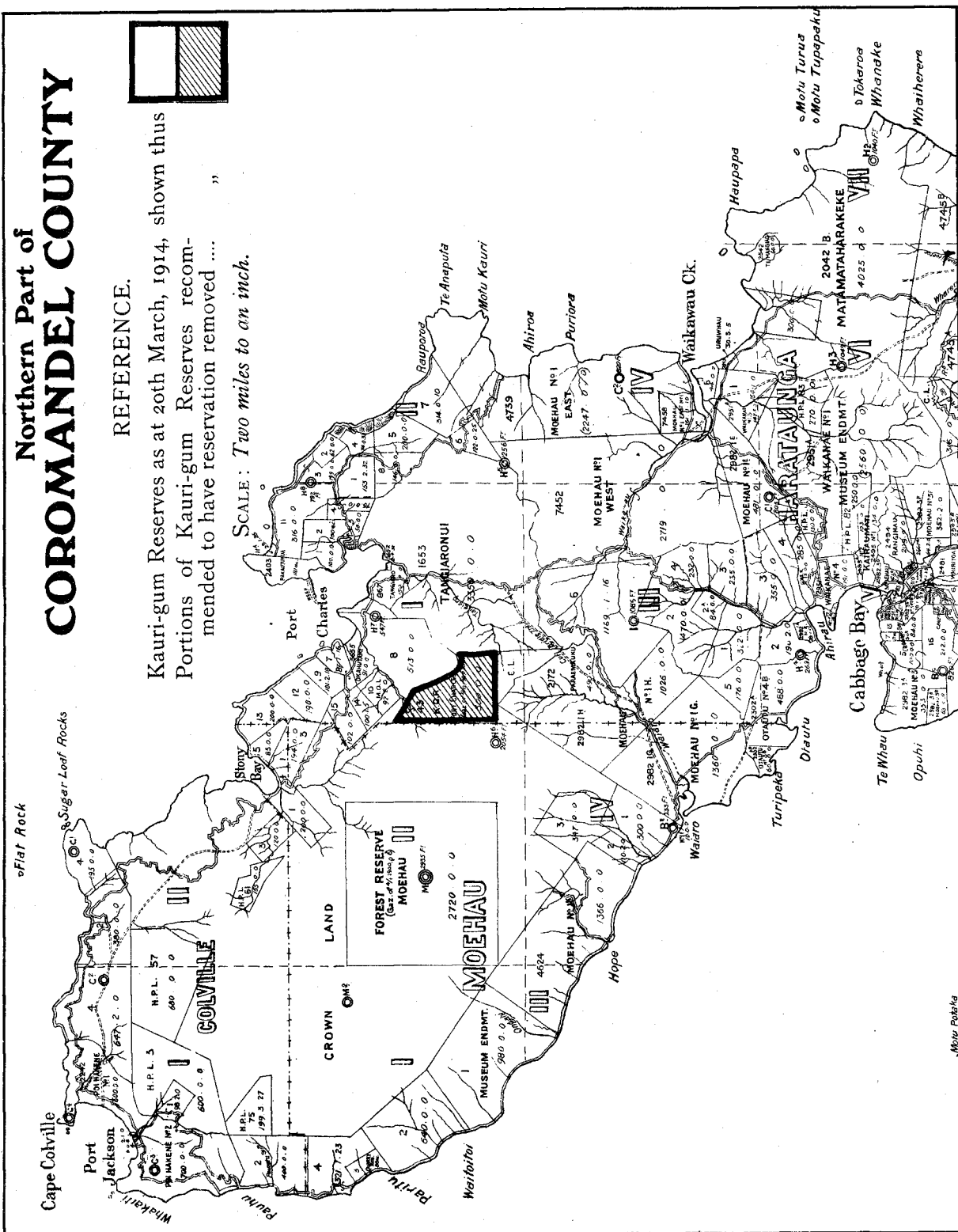
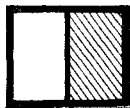


**Northern Part of
COROMANDEL COUNTY**

REFERENCE.

Kauri-gum Reserves as at 20th March, 1914, shown thus

SCALE: Two miles to an inch.







MINUTES OF PROCEEDINGS.

AUCKLAND, SATURDAY, 28TH MARCH, 1914.

THE Royal Commission appointed under the hand of His Excellency the Governor on the 20th March, 1914, assembled at the Minister's Room, Customhouse Buildings, Customs Street, Auckland, on Saturday, the 28th March, 1914, at 10 o'clock a.m.

There were present Mr. R. P. Greville, F.R.G.S. (Chairman), and Messrs. William Stewart (Kawakawa), Samuel Stafford (Waipu), Robert Hebden (Waihopo), John M. McKay (Waipu).

The Chairman announced the appointment by Government of Mr. W. J. Munro, of the Lands Department, as Secretary of the Commission.

The Secretary read the Governor's Warrant constituting the Commission and defining its duties.

On the motion of Mr. Stewart, seconded by Mr. Stafford, the following provisional itinerary of the Commission was agreed on: To commence the inspection and classification of the kauri-gum reserves in the Mangonui County, working from Houhora, thence southwards, traversing the country from west to east, proceeding in turn through Whangaroa County, Hokianga County, Bay of Islands County, Whangarei County, thence from Waipu to Dargaville and Kaihu, thence to Matakoho, Mangawhai, Wellsford, Warkworth, and Helensville.

The Commission then adjourned, to meet at Houhora on arrival of the steamer leaving Auckland on Monday, the 30th instant.

HOUHORA, WEDNESDAY, 1ST APRIL, 1914.

The adjourned meeting of the Commission was held at Houhora on Wednesday, the 1st April, at 11 a.m., all the members being present.

It was decided, on the motion of Mr. Stafford, seconded by Mr. McKay, to submit to the Colonial Analyst at Wellington a sample of kauri-swamp peat soil, with a request to have a chemical analysis made of the sample with a view to ascertaining whether it contains any by-products of economic value, as suggested in Parliamentary Paper C.—16 (1909), being the report of Mr. J. Graham Gow, Trade Representative, on the kauri-gum industry.

It was decided to hear any evidence tendered by diggers and settlers interested on Thursday evening at 7.30 p.m., and to intimate the same publicly.

The Commission then adjourned in order to make a personal inspection of the kauri-gum reserves in the immediate vicinity, the inspection to be continued on Thursday, the 2nd instant, as far north as the Otumaroki Kauri-gum Reserve.

HOUHORA, THURSDAY, 2ND APRIL, 1914.

A further adjourned meeting of the Commission was held at Houhora on Thursday, the 2nd April, at 8 p.m., to hear evidence of diggers and others in regard to the kauri-gum reserves in the district. All members of the Commission were present.

The following witnesses voluntarily offered evidence: Davis Lewis Calwell, police constable and Kauri-gum Ranger, of Houhora; Ralph Kenworthy, gum-digger, of Houhora; Frederick McGrath, gum-digger, of Houhora; Adam William Howsham, gum-digger, of Houhora; Robert Hetherington, gum-digger, of Houhora; Timothy Walsh, gum-digger, of Houhora; William Henry Evans, hotelkeeper, of Houhora; William Burke, gum-digger, of Waihopo; Samuel Wells, gum-digger, of Houhora; Thomas Collins, gum-digger, of Houhora; and George Akast, gum-digger, of Houhora.

The Commission adjourned at 10.30 p.m.

HOUHORA, FRIDAY, 3RD APRIL, 1914.

The Commission again met at Houhora on Friday, the 3rd April, 1914, at 9 a.m.

Otumaroki Kauri-gum Reserve: On the motion of Mr. Stafford, seconded by Mr. Hebden, it was decided that the lifting of the reservation over the Otumaroki Reserve be recommended, that the land may be freed for settlement purposes.

Houhora Foreshore Gum Reserves (three): On the motion of Mr. Stewart, seconded by Mr. McKay, it was decided to recommend the retention of the existing reservation over the three foreshore reserves at Houhora.

On the motion of Mr. Stafford, seconded by Mr. McKay, it was agreed to recommend Government to reserve the balance of the Crown land around the present Otumaroki Reserve as a kauri-gum reserve.

The Commission then adjourned, to meet at Waiharera at 7.30 p.m. to hear evidence.

WAIHARERA, FRIDAY, 3RD APRIL, 1914.

The Commission met at Waiharera on the 3rd April, at 7.30 p.m., to receive evidence from persons interested.

All the members of the Commission were present.

The following witnesses were present and voluntarily offered evidence: Richard Ellerby, gum-digger, of Waiharera; Joseph Dudgeon, gum-digger, of Waiharera; Patrick Shine, gum-digger, of Waiharera; John Pausina, gum-buyer of Waiharera; Toni Kosovich, gum-digger, of Waiharera.

The Commission adjourned at 9.30 p.m., to meet on the 4th instant, in the schoolroom, at 7.30 p.m.

WAIHARERA, SATURDAY, 4TH APRIL, 1914.

The Commission resumed its sitting at Waiharera on the 4th April, at 7.30 p.m., to receive further evidence from diggers and others.

During the day members of the Commission visited various portions of the gum reserves in the district.

The following witnesses were present and voluntarily offered evidence: James Steed, of Waiharera, gum-digger; Frederick James Hagger, of Kaimaumu, gum-buyer; Edward Costar, of Waiharera, gum-digger.

WAIAPAKAURI, MONDAY, 6TH APRIL, 1914.

The Commission met at Waipapakauri on Monday, the 6th April, at 6.30 p.m., to receive evidence from persons interested.

All members of the Commission were present.

The following witnesses were present and voluntarily offered evidence: Joseph Evans, sen., trader, of Waipapakauri; George Cosson, settler, of Awanui; James Bonar Wright, gum-digger, of Waipapakauri; Edward Evans, hotelkeeper and storekeeper, of Waipapakauri; Michael William Gleeson, gum-digger, of Waipapakauri; Grgo Sulenta, gum-digger, of Waipapakauri; Robert Marshall, gum-digger, of Waipapakauri.

AHIPARA, TUESDAY, 7TH APRIL, 1914.

The Commission met at Ahipara on Tuesday, the 7th April, at 8 p.m., to receive evidence.

The following witness was present and volunteered evidence as recorded: Joseph Dragicevich, farmer, stock-dealer, and gum-buyer, of Ahipara.

AHIPARA, WEDNESDAY, 8TH APRIL, 1914

The Commission resumed at Ahipara on Wednesday, the 8th April, at 8 p.m., to receive evidence.

The following witnesses were present and volunteered evidence: Thomas Stewart Houston, J.P., of Ahipara; James Noble Berghan, J.P., of Ahipara; William Atherton, gum-digger, of Ahipara.

AHIPARA, THURSDAY, 9TH APRIL, 1914.

The Commission held a further meeting at Ahipara on Thursday, the 9th April, 1914, at 10 a.m., all members of the Commission being present.

It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Houhora Kauri-gum Reserve, Houhora Kauri-gum Extension Reserve, and Houhora Kauri-gum Extension No. 2 Reserve be retained as kauri-gum reserves.

It was resolved, on the motion of Mr. McKay, seconded by Mr. Hebden, That the Otaia Kauri-gum Reserve, the Otaia Kauri-gum Extension Reserve, the Otaia Kauri-gum Extension No. 2 Reserve, and the Otaia Kauri-gum Extension No. 3 Reserve be retained as kauri-gum reserves.

It was resolved, on the motion of Mr. Hebden, seconded by Mr. McKay, That the Rotorua Kauri-gum Reserve and the Rotorua Kauri-gum Extension Reserve be retained as kauri-gum reserves. (Memo: Portions of both these reserves are included in the provisions of the Kaitaia Land Drainage Act, 1913.)

It was resolved, on the motion of Mr. Hebden, seconded by Mr. Stewart, That the Ahipara Kauri-gum Reserve and the Epakauri Kauri-gum Reserve be retained as kauri-gum reserves.

It was resolved, on the motion of Mr. Stewart, seconded by Mr. Hebden, That in respect of the Opoe Kauri-gum Reserve, the Opoe Kauri-gum Extension Reserve, and the Opoe Kauri-gum Extension No. 2 Reserve, the existing reservation be retained, but that members of the Commission desire to place on record that there are scattered areas of non-gum-bearing land of considerable extent in the aggregate within these particular gum reserves the boundaries and areas of which it is impossible to define until a careful topographical survey of the reserves has been made.

It was resolved, on the motion of Mr. Stafford, seconded by Mr. Stewart, That it having come under notice of the Commission in the course of inspection that a large proportion of the Crown land in Blocks VI, VII, VIII, Ahipara Survey District, is gum-bearing land, it be a suggestion to Government to have such gum-bearing land set apart as a kauri-gum reserve.

It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That, in regard to the portion of the Houhora Extension Reserve and the Opoe Extension Reserve, known as the Motutangi Swamp, special consideration be given to the question of dealing with it before the Commission's final report is prepared.

It was resolved, on the motion of Mr. Hebden, seconded by Mr. Stafford, That in regard to applications for areas within kauri-gum districts under section 20 of the Land Laws Amendment Act, 1912, and regulations, this Commission respectfully suggests to the Hon. Minister of Lands the desirability of instructing the Auckland Land Board to hold over the final approval and survey of such applications until the report of the Commission is in the hands of His Excellency the Governor. The members of the Commission having now inspected a large area of gum reserves, and, having had the evidence of a great many gum-diggers, are of opinion that some modification of existing regulations is necessary, and propose making recommendations to that effect in their report.

AWANUI, SATURDAY, 11TH APRIL, 1914.

The Commission met at Awanui on the 11th April, at 8 p.m., when the following witnesses attended and volunteered evidence: Alfred Hibbs Long, J.P., farmer, of Lake Ohia; James McKeown, gum-sorter, of Mangatete; William Ridon Middlemore Thomasen, gum-buyer, of Awanui; Nicholas Covich, gum-buyer, of Lake Rotoroa.

LAKE OHIA, TUESDAY, 14TH APRIL, 1914.

The Commission met at Lake Ohia on the 14th April, at 1 p.m., all the members of the Commission being present.

The following witnesses were present and volunteered evidence: George Scheigis, gum-buyer, of Kohanga; William Wilkinson, gum-buyer, of Lake Ohia; Rudolph Joseph Matthews, settler, of Lake Ohia; David Sherman, gum buyer and digger, of Lake Ohia; Brian Willis, Government Surveyor, camped at Lake Ohia; George Potter, gum-digger, of Lake Ohia; Wiki Tikahu, gum-digger, of Parapara; Wiremu Hetirika, gum-digger, of Parapara; Hone Raneka, gum-digger, of Parapara; Alexander McKenzie, gum-digger, of Lake Ohia.

MANGONUI, TUESDAY, 14TH APRIL, 1914.

The Commission resumed its sittings at Mangonui on the 14th April, 1914, at 8 p.m., when the following witnesses were present and volunteered evidence: Richard Theopilus Wrathall, settler, of Mangonui; George Green, gum-digger, of Mangonui; Douglas Dodds, gum-digger, of Mangonui.

KAE0, WEDNESDAY, 15TH APRIL, 1914.

The Commission resumed its sittings at Kaeo on the 15th April, at 8 p.m., when the following witnesses attended and volunteered evidence: Samuel Sandford Bramley, of Kaeo, Gum Ranger and Ranger for the Kauri Timber Company; Ernest Edward Carr, of Kaeo, storekeeper; Albert Hayward Nesbit, of Kaeo, farmer.

TOTARA NORTH AND SAIES, THURSDAY, 16TH APRIL, 1914.

The Commission held a sitting at Totara North and Saies on the 16th April, 1914, when the following witnesses attended and submitted voluntary evidence: William Richard Lawrence, of Totara North, storekeeper and gum-buyer; Walter Bramley, of Iwitaia, gum-digger; William Henry Saies, of Saies, storekeeper and gum-buyer; Abner Sherman, of Totara, gum-digger; George Moselem, of Saies, gum-digger; Frank Ball, of Totara, gum-digger.

WAIAPAPA, MONDAY, 20TH APRIL, 1914.

The Commission held a sitting at Waipapa on the 20th April, when the following witnesses attended and volunteered evidence: Walter Clapham Mountain, of Purerua, farmer; Harold C. Bull, of Kerikeri, farmer; Arthur Edwin White, of Waipapa, farmer and storekeeper; Herbert Mountain, of Waimate, farmer; John Urlich, of Waipapa, farmer and gum-digger; Hepi Pote, of Purerua, gum-digger.

OHAEAWAI, TUESDAY, 21ST APRIL, 1914.

The Commission held a sitting at Ohaeawai on the 21st April, when the following witnesses were present and tendered evidence: Joseph Solloway Lane, of Totara, manager; William John Dunlop, of Ohaeawai, Inspector of Rabbits and Noxious Weeds, Department of Agriculture; Thomas Simpson Hayes, of Kaeo, farmer.

It was resolved, That a letter of thanks be forwarded to Mr. Walter C. Mountain, of Pureua, for his services in connection with the Commission's inspection of the Kapiro, Rangitane, and other reserves. (Moved by Mr. Greville, seconded by Mr. McKay.)

It was resolved, That application be made forthwith to the Governor for an extension of sixty days' time in which to furnish the Commission's report to His Excellency. (Moved by Mr. Stafford, seconded by Mr. Stewart.)

KOHUKOHU, FRIDAY, 24TH APRIL, 1914.

The Commission held a sitting at Kohukohu on the 24th April, the following witnesses being present and tendering evidence: William Maxwell, Timber-measurer, of Kohukohu; George Andrewes, storekeeper, of Kohukohu; Robert Jarvie, carpenter, of Kohukohu; David Brown Wallace, settler, of Kohukohu.

OPONONI, MONDAY, 27TH APRIL, 1914.

The Commission held a sitting at Opononi on the 27th April, 1914, the following witnesses being present and tendering evidence: Alfred Andrewes, storekeeper, hotelkeeper, and gum-buyer, of Opononi; William Jarvie, settler and ex-gum-buyer, of Opononi; George William Kendall, settler, of Mitimiti; Robert Ngakauru, gum-digger of Mitimiti; James Watkins, farmer, of Rangi Point.

TAHEKE, TUESDAY, 28TH APRIL, 1914.

The Commission held a sitting at Taheke on the 28th April, when the following witnesses were present and tendered evidence: James Brennan, of Taheke, dairy-farmer; Henry Pickering, of Omanaia, gum-digger; William Henry White, of Taheke, butcher; Valentine Albert Ernest Rickcord, of Taheke, bush-manager; John Julius Lindvart, of Awarua, farmer; Moku Harris, of Taheke, gum-digger; Harold Montrose Webster, of Taheke, storekeeper; Rewiri Moki, of Taheke, gum-digger; Robert Haines, of Taheke, farmer.

KAIKOHE, WEDNESDAY, 29TH APRIL, 1914.

The Commission held a sitting at Dickeson's Hall, Kaikohe, on the 29th April, when the following witnesses were present and tendered evidence: William Forbes, of Taheke, gum-buyer and storekeeper; Frederick Hingston, of Kaikohe, storeman; Alfred William Edwards, of Kaikohe, storekeeper; Henry Dickeson, of Kaikohe, gum-buyer; Harry Stewart, labourer, of Kaikohe.

RUSSELL, SATURDAY, 2ND MAY, 1914.

The Commission held a sitting at Russell on the 2nd May, all members being present.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Hebden, That the portion of the Pairatahi Reserve west of the Mangatete River be retained as a gum reserve.

It was resolved, on the motion of Mr. Stewart, seconded by Mr. McKay, That the portion of the Pairatahi Reserve east of the Mangatete River be freed from the kauri-gum reservation. (Memo: The west part of the Pairatahi Reserve comes within the provisions of the Kaitaia Land Drainage Act, 1913.)

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That this Commission is of opinion that a large proportion of the Pukewhau Reserve, the Puketoetoe Reserve, and the Puketoetoe Extension Reserve are non-gum-bearing lands the boundaries of which cannot be determined without a careful survey, and recommends that a topographical survey be made of these reserves, in order that such non-gum-bearing portions may be cut out and excluded from the existing reservation.

It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the Ohia Extension Reserve (the Lake) be retained as a kauri-gum reserve.

It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Ohia and Puheke and Puheke Extension Reserves be retained as kauri-gum reserves.

It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That all that portion of the Parapara Reserve south of Section 1 from the south-west corner of Section 1 passing through the trig. station and following the ridge about due west to the west boundary of the said reserve be uplifted from the gum reservation, and that all of the said reserve to the north be retained as a gum reserve.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Taipa and the Taipa Extension Reserves be uplifted.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Peria Reserve, being mostly forest land and not suited as a gum reserve, be uplifted, and that the

Commission when in Auckland obtain correct information as to the Crown land (if any) adjoining and available for a suitable gum reserve in lieu of the Peria Reserve.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Totara Extension Reserve be retained.

It was resolved, on the motion of Mr. McKay, seconded by Mr. Stafford, That the Rangitane Reserve be retained.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in regard to the Kapiro Reserve all that portion east of the main road from Waipapa to Kaeo, excepting a block of 1,500 acres of gum-bearing land, be uplifted; the said area of 1,500 acres being as roughly indicated on the Commission's map, the correct boundaries to be indicated on survey. It was further resolved, on the motion of Mr. Stewart, seconded by Mr. Stafford, That in regard to the portion of the Kapiro Reserve west of the main road Waipapa to Kaeo it be uplifted from reservation, except an area of about 400 acres, including the swamp land adjoining Sections 12, 8, and 1, Block XII, Kaeo Survey District.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in regard to the Pungaere Extension Reserve the portion west of a line shown on the Commission's map be retained as a gum reserve, and that the balance of the reserve be uplifted.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Maungapererua Extension Reserve be uplifted, except a portion of about 640 acres to be determined on survey, to include the gum-bearing land adjoining the residence of Mr. Marsh, shown on the Commission's map.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Hebden, That the Maungapererua Reserve be retained.

It was resolved, on the motion of Mr. Stewart, seconded by Mr. McKay, That the Puketotara Reserve be retained.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Parahirahi Reserve be retained.

It was resolved, on the motion of Mr. Stafford, seconded by Mr. Stewart, That the Omahuta Reserve be uplifted.

It was resolved, on the motion of Mr. Hebden, seconded by Mr. Stafford, That the Wairau Reserve be retained.

It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the Warawara Reserve be uplifted.

It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in regard to the Punakitere and Mangatōa Reserves the portion north of a line striking due west from the waterfall on the Mangatōa Stream be uplifted, excepting an area of 500 acres north of the Raukawahi Stream, as shown on the Commission's map; also that the portion of the Punakitere Reserve on the south-west corner joining the Paheke Settlement and bounded by Sections 18, 2, 3, N.R. 4004, by a depth of, say, 50 chains, be uplifted; the whole of the Mangatōa Reserve and the balance of the Punakitere Reserve to be retained.

The Chairman read a telegram received from the Under-Secretary for Lands, Wellington, stating that an instrument would shortly be forwarded extending the time of the Commission until the 29th May.

TOWAI, MONDAY, 4TH MAY, 1914.

The Commission held a sitting at Towai on the 4th May, when the following witnesses attended and volunteered evidence: Edward Rowley, farmer, of Hukerenui; Charles Smith, gum-digger, of Hukerenui; George Kent, gum-digger, of Te Mata; William Alexander Kerr, farmer, of Riponui; Frederick Wyatt, farmer, of Towai; William Smith, bushman, of Towai; William Burt, gum-digger, of Towai; James George Paddison, farmer and digger, of Towai; Arthur Dawson, settler, of Te Mata; Edward Brock, farmer and butcher, of Towai.

It was resolved, on the motion of Mr. Stewart, seconded by Mr. Stafford, That this Commission respectfully suggests to the Hon. Minister of Lands, in respect to all the kauri-gum reserves as at the 20th March (the date of the constitution of the Commission by His Excellency the Governor), that all dealings in regard to such reserves be suspended until the Commission has furnished its report, whether such dealing be by way of completing their uplifting, the procedure for which had been commenced prior to the date of the Commission, or by way of initiating any procedure authorized by section 46 of the Land Laws Amendment Act, 1913, to uplift the reservation from such reserves, and also in regard to any reserves the procedure for uplifting the reservation from which has been completed since the date of the Commission.

KAWAKAWA, TUESDAY, 5TH MAY, 1914.

The Commission held a sitting at Kawakawa on the 5th May, 1914, when the following witnesses were present and tendered evidence: Charles Barker Ross Turner, Government Surveyor; George Lincoln Douglas, of Kawakawa, police constable and Kauri-gum Ranger; Frederick William Goodhue, farmer and flax-miller, of Kawakawa; Vernon H. Reed, M.P., solicitor, of Kawakawa; Ronald Duncan Campbell, Crown Lands Ranger, of Kawakawa.

It was resolved, on the motion of Mr. Stewart, seconded by Mr. Hebden, That this Commission is still of opinion that the full extension of time asked for is necessary, and that the Chairman be empowered to write to the Under-Secretary for Lands setting out the full facts of the case.

HIKURANGI, THURSDAY, 7TH MAY, 1914.

The Commission held a sitting at Hikurangi on the 7th May, when the following witnesses were present and tendered evidence: Henry Hawkins, farmer, of Marua; John Alexander McInnes, farmer, of Marua; Lawrence Gordon, farmer, of Marua; John Malcolm McPhee, farmer, of Marua.

POROTI, TUESDAY, 12TH MAY, 1914.

The Commission held a sitting at the School-house, Poroti, on the 12th May, when the following witnesses were present and tendered evidence: Nicholas Alach, farmer and gum-digger, of Kokupu; William Snelgar, farmer, of Ruatangata; Victor Kokich, farmer, of Kaitara; Paul Kokich, farmer, of Poroti; James McKinley, farmer, of Kara; John Urquhart, gum-digger, of Ruatangata; Arthur Owen, storekeeper, of Poroti.

WHANGAREI, THURSDAY, 14TH MAY, 1914.

The Commission held a sitting at Whangarei (Council Chambers) on the 14th May, when the following witnesses were present and tendered evidence: Henry Morey, of Parua Bay, farmer; Joseph André, of Whangarei, gum-buyer; James Sullivan, of Puwera, gum-digger; William Wilson, of Puwera, farmer; William Hart, of Otaika, gum-digger; Albert Tavinor, of Maungakarama, farmer; Thomas Martin Condon, of Whangarei, police constable and Kauri-gum Ranger; Harry Wilson, of Puwera, farmer; Alexander Speedy, of Whangarei, Inspector of Noxious Weeds, Department of Agriculture; Alexander Hoey, of Puwera, storekeeper's assistant; John David McKenzie, of Whangarei, farmer; Thomas Linnell, of Poroti, farmer.

PARUA BAY, SATURDAY, 16TH MAY, 1914.

The Commission held a sitting at Parua Bay on the 16th instant, when the following witnesses were present and tendered evidence: Joseph Timperley, farmer and gum-digger, of Parua Bay; Edward Donald Harnett, farmer, of Parua Bay; Harry Hubbard, gum-digger, of Parua Bay; Mewellyn Richards, storekeeper, of Parua Bay; George Owen, storekeeper, of Parua Bay.

LOWER RUAKAKA, MONDAY, 18TH MAY, 1914.

The Commission held a sitting at Lower Ruakaka on the 18th May, at 1.30 p.m., when the following witnesses were present and tendered evidence: Robert Hamilton Black, gum-digger, of Ruakaka; Harry Owen, gum-digger, of Lower Ruakaka; James Stanton, gum-digger, of Lower Ruakaka; Iras Hoggard, gum-digger, of Ruakaka.

WAIPU, WEDNESDAY, 20TH MAY, 1914.

The Commission held a sitting at Waipu on the 20th May, when the following witnesses were present and tendered evidence: Daniel Bowmar, farmer and storekeeper, of Waipu and Mangawai; Angus McKay, farmer, of Waipu; John Campbell McKay, farmer, of Waipu; George McKenzie, farmer, of Waipu; John Alexander Finlayson, farmer, of Waipu.

MANGAWAI, FRIDAY, 22ND MAY, 1914.

The Commission held a sitting at Mangawai on the 22nd May, when the following witnesses were present and tendered evidence: William Pearson, gum-digger, of Mangawai; Joseph Francis, gum-digger, of Mangawai; Kenyon Parker, labourer, of Mangawai; Eric Black, farmer, near Coal Hill; Andrew Vuseko, gum-digger, of Mangawai; Robert Hastie, farmer, of Mangawai; Frederick Gilpin, farmer, of Pakiri; Charles Robert Duke, police constable and Kauri-gum Ranger, of Mangawai.

ARATAPU, FRIDAY, 29TH MAY, 1914.

The Commission held a sitting at Aratapu on the 29th May, when the following witnesses were present and tendered evidence: Arthur Harold Le Grice, farmer, of Tikiui; Henry Schick, farmer, of Tangaihi; John Stallworthy, farmer and journalist, of Aratapu; George Lendrum, farmer, of Tatarariki; John Hawthorn McCarroll, farmer, of Aratapu; James Kidd, farmer, of Tatarariki; James Cochrane, gum-digger, of Red Hill; Henry James Montgomery, police constable and Kauri-gum Ranger, of Aratapu.

DARGAVILLE, TUESDAY, 2ND JUNE, 1914.

The Commission held a sitting at the County Chambers, Dargaville, on the 2nd June, when the following witnesses were present and tendered evidence: Peter Brown, settler and gum-buyer, of Waimata; Ellis Reece Ellis, Ranger at Dargaville; Vivian Trounson, cattle-farmer of Maropui, and Chairman of the Hobson County Council; John Joseph Powell, settler, of Taita, and member of the Hobson County Council; Charles Selby, storekeeper and gum-buyer, of Kairara; Walter Coombes, gum-digger and farmer, of Red Hill; Martin Franich, gum-buyer, of Manga-whare.

HELENSVILLE, THURSDAY, 11TH JUNE, 1914.

The Commission held a sitting at the Town Board Office, Helensville, on the 11th June, when the following witnesses were present and tendered evidence: Frederick Herbert De Courcy Power, gum-digger, of Kaukapakapa; Henry George McBride, gum-digger, of Kaukapakapa; John Gavin Shanks, gum-digger, of Kaukapakapa; Ernest Herbert Woodcock, farmer and gum-digger, of Wellsford; James Parker, farmer, of Wellsford; John Ross McKenzie, farmer, of Wayby, and member of the County Council; John Gillies, farmer, of Wellsford.

AUCKLAND, MONDAY, 15TH JUNE, 1914.

The Commission held a sitting at Auckland on the 15th June, at the Government Buildings, Customs Street, commencing at 10 a.m.

The following witnesses were present and tendered evidence: Henry William Sturch, gum-digger, of Swanson; William Forrest Hale, gum-digger and bricklayer, of Henderson; Joseph William Shannon, Crown Lands Ranger, formerly of Mangonui and now stationed at Hamilton; John Hugh Boscawen, Inspector of Reserves, stationed at Auckland; Robert Rowan, Fields Inspector, Department of Agriculture, Auckland; James Trounson, farmer, of Northcote; Samuel Isaac Clarke, builder, of Auckland; Lewis Philip Becroft, fruitgrower, of Port Albert; Henry Paul Kavanagh, settler, of Auckland, and formerly Crown Lands Ranger; James Russell Pirritt, settler, of Auckland; Archibald Whitelaw, gum-digger, of Auckland; James Donaldson Steedman, Crown Lands Ranger, stationed at Whangarei; Francis William Feltrim Fagan, of Auckland; Harry May Skeet, Commissioner of Crown Lands for the Auckland Land District.

At 4.15 p.m. the Commission adjourned until 10 a.m. on the 16th June.

AUCKLAND, TUESDAY, 16TH JUNE, 1914.

The Commission resumed its sitting at 10 a.m. on the 16th June, when the following witnesses were present and tendered evidence: William Johns, farmer, of Parnell, and member of the Auckland Land Board; John George Bendely, Chief Clerk, Lands and Survey Department, Auckland; Harry Dugald McKellar, Chief Draughtsman, Lands and Survey Department, Auckland.

AUCKLAND, THURSDAY, 25TH JUNE, 1914.

The Commission held a meeting in committee at Auckland on Thursday, the 25th June, commencing at 7.30 p.m., all members being present.

Towai Reserves: It was resolved, on the motion of Mr. Stewart, seconded by Mr. Stafford, That the Towai and Towai No. 1 Reserves be retained.

Towai No. 2 Reserve: It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the Towai No. 2 Reserve be uplifted.

Hukerenui Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the portion of the Hukerenui and Hukerenui Extension Reserves west of Sections 19, 20, 21, 22, and divided by the production of the south boundary of Section 19 to the west boundary of the reserve, be uplifted, and that the balance of the reserves in question be retained.

Te Mata Reserve: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That all that portion of the Te Mata Reserve north of the south boundary of Sections 8, 4, 3, 31, and 9A to the intersection of the formed road, thence following the said road to the west boundary of the reserve, as indicated on the Commission's map, be retained as a gum reserve, and that the balance of the reserve be uplifted.

Otakairangi Reserve: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Greville, That the Otakairangi Reserve be uplifted.

Opuawhanga Reserve: It was resolved, on the motion of Mr. McKay, seconded by Mr. Greville, That the east portion of the Opuawhanga Reserve as described by a line from the north-east corner of Section 32 to the south-west angle of Section 23, and by the production of the east boundary of Section 32 to the south boundary of the Reserve, be retained, and that the balance of the reserve be uplifted.

Parahaki Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That Parahaki No. 2 Reserve (57 acres) be uplifted. It was resolved, on the motion of Mr. Stafford, seconded by Mr. Greville, That Parahaki No. 1 Reserve be retained.

Otaika Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the Otaika Extension No. 1 Reserve be uplifted. It was resolved, on the motion of Mr. Stewart, seconded by Mr. McKay, That in respect of the Otaika Reserve, the Otaika Extension No. 2 and Otaika Extension No. 3 Reserves, the portion east of a line drawn from the south-west corner of Section 140 to a point opposite the division-line between Sections 33 and 34 be uplifted, and that the balance of the said reserves be retained.

Ruatangata Reserves: It was resolved, on the motion of Mr. Stewart, seconded by Mr. McKay, That in respect of the Ruatangata No. 3 Reserve, Sections 111, 112, 113, and 99 comprised therein be retained as a gum reserve, and that the balance of the reserve be uplifted. It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Ruatangata Reserve (145 acres) be uplifted, and that the Ruatangata No. 2 Reserve be retained.

Kaitara Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Kaitara No. 2 Reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the Kaitara Reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Poroti Reserve be retained.

Purua Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in respect of the Purua Extension Reserve 300 acres laid out so as to include the big swamp being dug by Austrians as shown on the Commission's map be retained, and that the balance of the reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That in respect of the Purua Reserve Sections 12 and 13 comprised therein be retained as a reserve, and that the balance of the land be uplifted.

Mangakahia Reserves: It was resolved, on the motion of Mr. Hebden, seconded by Mr. Greville, That the Mangakahia Reserve be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Mangakahia Extension Reserve be uplifted.

Ruarangi Reserve: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Greville, That the Ruarangi Reserve be retained.

Mata Reserve: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Mata Reserve be retained.

Ruakaka Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Ruakaka No. 1 and Ruakaka No. 2 and the Mangapai Reserves be uplifted.

Waikare Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That in respect of the Waikare and Taiharuru Reserves the portion comprising Sections 8, 7, 6, 10, 11 (the hilly part) within the reservation be uplifted, and that the balance of the reserves be retained.

Manaia Reserve: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Manaia Reserve be retained.

Marsden Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Marsden, Ruakaka No. 3, Uretiti, and Pohoenui Reserves be retained.

At 9.45 p.m. the Commission adjourned until the 26th instant, at 11 a.m.

AUCKLAND, FRIDAY, 26TH JUNE, 1914.

The Commission resumed its sitting at 11 a.m. on the 26th instant, all members being present.

Waipu Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in respect of the Waipu Reserve all that portion north of a line drawn from Trig. F to the south corner of Section 129, and also that portion of the reserve east of the production of the west boundary of Section 129 to the intersection of the road forming the south boundary of the said reserve, be retained, and that the balance of the reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Waipu No. 2 Reserve be retained.

Mareretu Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Hebden, That the Mareretu Reserves be uplifted.

Parirau Reserve: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Parirau Reserve be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That in respect of the Matakoho Reserve the portion of the reserve north of Sections 116, 117, and comprising Sections 108, 109, be uplifted, and that the balance of the reserve be retained.

Mangawai Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Mangawai and Mangawai Extension Reserves be retained.

Pakiri Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in respect of the Pakiri and Pakiri Extension Reserves the northern portion of the two reserves in question, containing about 650 acres, as indicated on the Commission's map, be uplifted, and that the south portion of the two reserves be retained.

Snell's Beach: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That Snell's Beach Reserve be retained.

Wayby Reserves: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Arai and Wayby Reserves be retained.

Tauhoa Reserves: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Stewart, That the Tauhoa No. 2 Reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That in respect of the Tauhoa No. 1 Reserve, Section 140 (175 acres), being the north-west portion of the reserve, be retained, and that the balance of the reserve be uplifted.

Mangawai Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Mangawai No. 2 Reserve be uplifted. It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Molesworth No. 1 and the Molesworth No. 2 Reserves be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in respect of the Mangawai No. 3 Reserve the portion north-east of the Tara Road be uplifted, and that the balance of the reserve be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Hebden, That the Mangawai No. 4 Reserve be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Mangawai No. 5 Reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in respect of the Hakaru No. 2 Reserve (132 acres) and the Hakaru No. 3 Reserve (125 acres) the reservation be retained, and that the balance of the Hakaru Reserves be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Kaiwaka Reserve be retained.

Kaukapakapa Reserve: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Kaukapakapa Reserve be retained.

Orewa Reserve: It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Orewa Reserve be uplifted.

Wade Reserve: It was resolved, on the motion of Mr. Stewart, seconded by Mr. Stafford, That the Wade Reserve be uplifted.

Okura Reserves. It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That in respect of the Okura Reserve (61 acres) and the Pukeatua Reserve the reservations be uplifted. It was resolved, on the motion of Mr. Stafford, seconded by Mr. Hebden, That the Rangitopuni Reserve be retained.

Swanson Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That in respect of the Swanson and Swanson Extension Reserves the reservations be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Hebden, That the Taupaki Reserve be uplifted.

Waioneke Reserve: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That in respect of the Waioneke and Waioneke Extension Reserves the portion south of a line drawn from the south-west corner of Section 24 to an angle of the road about the middle of Section 10 be uplifted, and that the balance of the reserves in question be retained.

Te Kuri Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Te Kuri Reserve be uplifted, and that it be a recommendation to Government that the swamps on the land in question be drained and developed prior to it being offered for settlement, and that a paragraph to that effect be embodied in the Commission's report.

Puketapu Reserve: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That the Puketapu and Tikinui No. 3 Reserve be uplifted. It was resolved, on the motion of Mr. Greville, seconded by Mr. Hebden, That the Tikinui Reserve, the Tikinui No. 2 Reserve, the Te Kopuru Reserves, and the Tatarariki Reserves be all retained.

Kaihu Reserves: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Kairara Reserve be retained. It was resolved, on the motion of Mr. Greville, seconded by Mr. Stewart, That in respect of the Kai Iwi Reserves the portion of the Kai Iwi Extension No. 2 Reserve east of the line between Sections 15 and 16 produced to the south boundary of the said reserve be uplifted, and that the balance of both reserves be retained.

Port Charles Reserve: It was resolved, on the motion of Mr. Stewart, seconded by Mr. McKay, That the Port Charles Reserve be uplifted.

Katikati Reserve: It was resolved, on the motion of Mr. Stewart, seconded by Mr. Hebden, That the Katikati Reserve be uplifted.

Koheroa Reserves: It was resolved, on the motion of Mr. McKay, seconded by Mr. Stewart, That the Koheroa No. 2 Reserve be uplifted.

Great Barrier Island: It was resolved, on the motion of Mr. Greville, seconded by Mr. Stafford, That the Awana Reserve be retained.

The Commission adjourned at 1 p.m.

AUCKLAND, MONDAY, 29TH JUNE, 1914.

The Commission met at 2.30 p.m., all the members being present.

The minutes of previous meetings were read and confirmed, on the motion of Mr. Stafford, seconded by Mr. Stewart.

The Commission's report was read and adopted.

It was resolved, on the motion of Mr. Greville, seconded by Mr. McKay, That the Chairman and Messrs. Stewart and Stafford be a committee to wait upon the Right Hon. the Minister of Lands, Wellington, and submit the Commission's Report.

The Commission concluded its final sitting at 5.15 p.m.

MINUTES OF EVIDENCE.

HOUHORA, THURSDAY, 2ND APRIL, 1914.

DAVIS LEWIS CALWELL, Police Constable and Kauri-gum Ranger, stationed at Houhora for the past seven months.

To Mr. Greville.] His district extended from Kaikino on the south to the North Cape, and he was frequently over the ground, his duties as Ranger being to collect license fees and issue kauri-gum licenses to the diggers. He satisfied himself before issuing any licenses that all conditions had been complied with. In his opinion, based on the number of licenses issued, there were about six hundred diggers on the Houhora Reserves.

(Witness subsequently handed in the following statement of gum licenses issued in the district for the previous three months: Ordinary licenses, 18; special licenses, 519; gum-buyers' licenses, 31: total, 568.)

RALPH KENWORTHY, Gum-digger for fourteen years, now resident at Houhora.

To Mr. Greville.] He was a married man, with fourteen children living with him, and considered that the whole of the Houhora Reserves should be kept for digging gum therefrom. He agreed with Constable Calwell that the number of diggers engaged on the reserves in the locality was about six hundred, of which probably 20 per cent. were married men with families. In his opinion these reserves would support more men by digging than by being cut up and opened up for settlement purposes. He did not think it would pay for diggers to dig this land "on a face."

FREDERICK McGRATH, Gum-digger with sixteen years' experience; married.

To Mr. Greville.] He considered the Houhora Reserves should be retained solely for gum-digging purposes. He was aware of the encroachment of the sand from the west, and knew that in places it had encroached over half a mile during his sixteen years' residence in the district, and could point out one swamp that had become entirely obliterated by the sand during that time. No alien should be allowed to dig until he had become a naturalized subject, and all burning-off of vegetation should be stopped by the Government during certain months of the year, as indiscriminate firing was responsible for the loss of thousands of pounds' worth of gum each year. He did not consider it feasible to have gum lands dug "on a face." The drainage of some of the gum swamps by the Government as an object-lesson would receive the support of the body of the gum-diggers.

ADAM WILLIAM HOWSHAM, of Houhora, married, and a family of fourteen children living with him.

To Mr. Greville.] He had spent sixteen years on the Houhora gumfields, which he considered should be retained purely for gum-digging, and if small portions were found to be dug out or free from gum they should be cut up for the resident diggers only. He thought the Austrian influx should receive the attention of the Government, and only naturalized subjects be allowed to dig for gum. He did not consider it practicable to work the gum swamps "on a face." He was aware of the encroachment of the sands on the west coast, but could not give any idea of its progress during the time he had lived in Houhora. He thought £2 per week a fair average for an industrious digger, though many he knew were earning less. He did not consider it more difficult to earn a living at digging now than formerly, because the quality of the gum that can be sold at the present time is much inferior to that sold previously. The collection of fees and issue of diggers' licenses should be entrusted to one of the diggers themselves, as the local constable already had more work than he could undertake. He did not think the Government should drain the gum swamps systematically, but that nature should be allowed to work out her own ends, otherwise the gum would be too easily won and the field become prematurely exhausted.

TIMOTHY WALSH, of Houhora, married, and with a family of five children, and twenty-four years' experience on the field.

To Mr. Greville.] He did not think any part of the Houhora Reserves should be lifted for settlement. He knew under present regulations 25 acres could be selected by a digger, but considered the area too limited to be of practical use. Diggers have done better during the last five or six years than previously, owing to the better price prevailing for gum. He considered £2 per week a fair average for an industrious digger all the year round. He was aware of several gum swamps that had become covered by sand-drift during his twenty-four years' residence in the north. He was of the opinion that the south end of Houhora Reserve would be a good field for settlement if drained, as the land was not gum-bearing.

To Mr. Stewart.] He was of opinion that the firing of vegetation on the gum reserves should be stopped altogether.

WILLIAM BURKE, of Waihopo, thirty years a Gum-digger from Auckland to the North Cape; married, with nine children.

To Mr. Greville.] He endorsed previous witnesses' evidence in regard to £2 per week being the average earnings of an industrious worker, week in and week out all the year round. He considered any small areas in the Houhora Reserve that were found to be non-gum-bearing might be cut up into small areas for the resident gum-diggers to settle on. The areas should be small, as the climate was good, and three crops of potatoes could be grown in the year. Tomatoes could also be grown very readily.

To Mr. Stafford.] He considered diggers must burn the scrub to a certain extent, and they should be restricted only during the very dry months of the year.

SAMUEL WELLS, married, with eight children, and a Digger of sixteen years' experience.

To Mr. Greville.] He obtained a fairly good living on the Houhora field, which he considered should be retained for the diggers. The lower end, consisting of raupo swamp, might be dealt with for settlement purposes, as it contained no gum, and was well suited for cultivation if drained. He was of opinion that Ngatumaroki Reserve, which he knew, was non-gum-bearing.

THOMAS COLLINS, married, with one child, and a resident at Houhora for seventeen years.

To Mr. Greville.] He considered the Houhora Reserve should be retained solely for gum-digging. He estimated there were a thousand persons resident and digging on the Houhora Reserve at the present time.

GEORGE AKAST, married, with a family of six children.

To Mr. Greville.] He had been in turn a storekeeper, gum-buyer, and gum-digger for over sixteen years. He thought the firing of vegetation should be stopped altogether for certain months of the year, as thousands of pounds' worth of gum were destroyed every year by indiscriminate firing as at present.

WAIHARERA, FRIDAY, 3RD APRIL, 1914.

RICHARD ELLERRY, of Waiharera, Gum-digger, and a single man.

To Mr. Greville.] He had had six years' experience as a gum-digger, and knew the Stony Cross end of the reserve to be very good gum land. On the Waiharera side, towards the coast, there was a big strip of gum-bearing country that should be left for the diggers. He knew Bunkall's Flat, and did not think it carried more than twenty-five diggers at the present time. Within a five-mile radius of Waiharera there would be some hundreds of diggers all the year round. An industrious digger would average from £2 10s. to £3 per week throughout the year. He could show one flat where Austrians had obtained fifteen hundred sacks of gum within three months, and the land was considered to have been all dug over.

To Mr. Stafford.] So far as firing the gum reserves was concerned, there were some swamps that could not be dug unless cleaned up by fire, and he had not personally seen much damage resulting from fires.

JOSEPH DUDGEON, of Waiharera, Gum-digger, and unmarried.

To Mr. Greville.] He had been a gum-digger for twenty-five years. The swamp between Rio and Stony Creek contained little gum, in his opinion. There was a portion of it very deep and known as a "hooking-ground" which might be rich in gum, and should be withheld for some years, as ground to that depth had not been thoroughly tried yet. He believed the Opoe Reserve to be more or less gum-bearing, and at present carrying from three to four hundred men, who were making a fairly good living. He knew of some swamps that could be dug on the face, but in some instances it was impossible owing to the presence of timber and logs. He considered gum-digging as profitable now as it was twenty years ago, owing to the better prices obtained.

To Mr. Stewart.] So far as firing the swamps was concerned, it could not be altogether stopped, but diggers ought to know the nature of the swamps before burning. He quite understood the present regulations about gum lands under the Kauri-gum Industry Act, but did not think any man could be a digger and a farmer at the same time.

PATRICK SHINE, of Waiharera, Gum-digger, with sixteen years' experience.

To Mr. Greville.] He knew the Opoe Gum Reserve very well, and considered that the Selwyn Swamp of about 350 acres should be lifted from the reservation and opened for settlement. He gave it a good testing last winter, and considered it to be non-gum-bearing. The Rio raupo swamp was gum-bearing in parts, and should be retained for that purpose, though until drained it was useless to diggers. No private individual could undertake the drainage, which he considered should be taken in hand by the Government, and then, when dug out, be opened for farming. So far as firing the swamps was concerned, he considered that in the case of deep swamps it assisted the digger by burning 2 ft. or 3 ft. into the peat and bringing the gum nearer the surface. Very few swamps could be burned right down to the gum, and he did not think any action should be taken in regard to stopping fires by diggers.

To Mr. Stewart.] He knew of places in the district where the sand had encroached a mile since he had come into the district, and could point out a spot now covered with sand where there used to be a lake; this was near Kaikino.

JOHN PAUSINA, a Gum-buyer who had lived at Waiharera for eight years or so.

To Mr. Greville.] He knew the swamp between Rio and Stony Creek, and thought it might contain a little gum, but was useless for any digging until drained. This, he was of opinion, it was the duty of the Government to do, and the land could then be safely opened for farming purposes. In its present state the swamp was useless to digger and farmer. He could not say if it contained much timber, but thought it would be expensive to drain.

To Mr. Stafford.] In regard to fires on swamps, in some cases digging could not be done until they had been fired. On the whole, the Opoe field was a fairly good one, and the principal seat of the gum industry for Waiharera. He did not consider it practicable to dig on the face.

PONI KOVOVICH, a single man, and a Digger with six years' experience at Waiharera.

To Mr. Greville.] He knew the Opoe field well, and agreed with former witness that the swamp between Rio and Stony Creek should be opened up for farming purposes, as in its present state it was useless to any one. He knew the sand was encroaching very fast, and could show one place where it had travelled over 200 yards since he came into the field.

To Mr. Stafford.] In regard to the firing of the swamps, he thought nothing should be done in that direction between December and March, as there is always the danger in very dry weather of the fire going right down to the cement bottom and burning every piece of gum. He knew very serious damage was being done in that manner.

WAIHARERA, SATURDAY, 4TH APRIL, 1914.

JAMES STEED, Gum-digger, of Waiharera, and a married man.

To Mr. Greville.] From his experience of twenty-two years he knew the nature and extent of the Opoe Gum Reserve, and was of opinion that it was not all gum-bearing, there being portions in areas of from 50 to 100 acres in different parts that were free of gum and fit for settlement. He knew the swamp between Rio and Stony Creek Crossing, about four miles long, and of considerable area, and thought it might be set aside for farming purposes. It was called the Motutangi Swamp, and should be drained by the Government and then thrown open for digging on a royalty charge. It would be a valuable field after drainage, but it was work no private person could undertake. If opened in that manner no fires should be allowed, but he did not think it would pay the diggers to fill up the potholes if paying a royalty. He did not think it a feasible plan at all. He knew the "Big Flat," about 800 acres, south of Bunkall's, and it was gum-bearing. Selwyn's Flat was also gum-bearing, though he had not done much digging there himself. Another flat to the north of that, known locally as Stony Crossing Flat, was also gum-bearing, and should be retained for the diggers. He knew of men who had made big wages there during the past month. The land about Kaimarama Lake was gum-bearing, and he knew that thousands of pounds' worth of gum had been taken out of it in the past. The stretch of country towards Waipapakauri was gum-bearing generally, though small areas in different parts could be found non-gum-bearing and fit for cultivation. There were many such small areas from Parengarenga right down to Waipapakauri non-gum-bearing, but hardly in sufficient quantity or extent to be made payable for agricultural purposes.

To Mr. Stewart.] The sand-encroachment was becoming serious. He could show members of the Commission some small lakes that he had shot around a few years ago now lost in the sand, and other localities where the sand had encroached two miles.

To Mr. Greville.] If the Motutangi Swamp was drained and cut up into lots of from 5 to 10 acres he did not think the diggers would compete for them. From the Motutangi Swamp up to the hills there were rush basins containing gum, and he had at different times done spearing there himself.

FREDERICK JAMES HAGGER, Gum-buyer, of Kaimaumau, where he had lived for twelve years.

To Mr. Greville.] He had known the country for thirty-five years, and was probably the oldest gum-buyer in New Zealand. The past year, and so far this year, had been record years in the gum business, because the poor earthy gum that had formerly been rejected was now of marketable value, and consequently the gum-digging industry was more profitable all round. He knew the lower part of the Motutangi Swamp to be a profitable one in summer, and had bought very large quantities of gum from that locality. Every basin of the swamp was gum-bearing, but the upper part of the swamp was barren of gum.

To Mr. Stafford.] In his opinion the firing of the peat swamps was regrettable, involving the destruction of the gum-dust, which may eventually prove to be of even greater value than the gum itself. He had sent samples of peaty earth to San Francisco for analysis, and was certain it contained essential oils of great commercial value. If the mode of treatment was satisfactory any peat swamp might be taken in the face and the soil treated, and he was quite certain there was great economic value in it. Only fifteen years ago the purest gum-dust was rejected, now even the peat soil was valuable. Personally, he had great faith in this new development, but apparently our knowledge of it had to advance before anything very practical would be the outcome. Unless something of the sort came about the gumfields would ultimately become a breeding-place for noxious weeds. He hardly considered that the cutting-up and balloting for the lands fit for cultivation would altogether meet the case.

To Mr. Stewart.] The sand-drift, at its present rate of progress, must in course of time wipe out the whole peninsula.

To Mr. Greville.] The population of Waiharera was about 250 Europeans and Maoris, the field supporting, he considered, about 1,000 souls, though all the married diggers did not have their families with them. It was also the centre of the industry, and the export during the summer months from the two northern ports amounted to three thousand sacks per week. He knew the country across the bay (Pukeke Reserve), and formerly had a branch store there. The country was much the same as around Waiharera, and at present carries a large population, chiefly Maoris. Certain swamps there he believed to be devoid of gum.

To Mr. Stewart.] He could not see how the difficulty about potholes could be got over.

EDWARD COSTAR, Gum-digger, of Waiharera.

To Mr. Greville.] He knew the field thirty-two years ago, but did not think the Motutangi Swamp to be of any use to digger or settler in its present state. The Government should undertake its drainage, but to cut up the land afterwards in areas of 2 to 4 acres would not be of much use unless the land proved to contain gum. In regard to fires on swamps, they were unavoidable if the digger wanted to dig. The Government might restrict them on Motutangi if drained.

To Mr. Stafford.] He had dug around the Kaimarama Lake with very fair results. Gum had been found below the sandstone 2 ft. down, and as deep as 7 ft. or 8 ft. He considered it a good field, which would not be worked out for many years. The kauri-gum reserves should have corner-posts to mark the boundaries.

PATRICK SHINE, Gum-digger, of Waiharera (who had been examined at a previous meeting), drew the attention of the Commission to the possibilities of the flax industry if promoted in the swamp country when drained.

WAIPAPAKAURI, MONDAY, 6TH APRIL, 1914.

JOSEPH EVANS, sen., resident in the district for forty-nine years, thirty-one years of which had been spent in the gum trade.

To Mr. Greville.] He knew all the gum areas in the district very well, and was aware there were large swamps in the reserves that would not yield enough gum to buy salt for a man's porridge. The reserve adjoining Subritsky's had never had a shovelful of gum taken out of it, as it was not in the ground. Nearer Waiharera there were big areas of hilly land certainly non-gum-bearing, and quite suited for growing vines and getting a living off if some satisfactory title could be given. Some of the flats about the hills were still rich in gum, though he had dug there himself twenty-five years ago. The same ground was still profitable, and even more profitable than when he had dug, because better prices were obtainable and the more inferior stuff could be turned to account.

To Mr. Stafford.] So far as the potholes were concerned he could see no way of overcoming the difficulty, and it was impracticable to insist on diggers filling them up as they went along. Diggers might be willing, but they were too tired to go back on their work.

To Mr. Greville.] Firing he believed to be necessary for the digger and unavoidable, and it would stand in the way of flax-growing. Constant burning was very costly, and, of course, against the interests of the digger, but quite unavoidable as far as he could see. He knew there were large areas in the gum reserves between Waipapakauri and Waiharera, and also down to Ahipara, which were non-gum-bearing and ought to be cut up and settled. So far as dug-over fields were concerned the only suggestion he could make to utilize them would be to have them levelled up, dug, and planted with some variety of strong grass and afterwards leased by the Crown.

To Mr. Stafford.] So far as treating peat-soil for by-products was concerned, he had not particularly considered the matter. [Witness proceeded to give his experience when in London ten years ago in regard to the grading and sale of gum on the market, which led him to believe that at that time there existed a "ring" controlling the sale of gum-supplies from New Zealand.]

FREDERICK RUSSELL, a Gum-digger for twenty-two years, and now a Settler in the district and also still handling gum.

To Mr. Greville.] From Waiharera down to Ahipara gum was rarely found on the hills, having been dug out over twenty years ago wherever it existed. No one could say that a swamp was barren of gum until it had been put through a sieve. He was of opinion that the various Governments had never tried to foster the industry or help the diggers. The swamp between Rio and Stony Crossing Creek was known to him, and he was of opinion it should be drained by the Government and opened for application on a royalty charge. Sections might comprise 40 to 50 acres, taking in the hills and including 5 to 10 acres of the swamp land to help the selector in carrying out his improvements. About sixteen hundred sacks of gum per month were carted out of the field known as "Sweetwater" all the year round, and he himself carted about a thousand sacks of that quantity. He could produce books to show it, or the same information could be obtained from the gum-buyers' books. He did not think the flax industry could be run hand-in-hand with the gum trade.

To Mr. Stafford.] He knew the sections rounds Lakes Rotoroa, Ngatu, Woodlake, Te Kapua, and small Waiparera all contained gum, but there was no gum on the hills in the same locality. So far as firing was concerned, he thought it ought to be limited to certain months in the year—say, November to April. Probably *Gazette* notices to that effect, also newspaper notices, and

posters in the settlements, warning diggers, would meet the case. A footnote to that effect on the license to dig would help in the same direction.

To Mr. Greville.] He considered the best Gum Rangers would be from the ranks of the diggers themselves.

To Mr. Stafford.] He agreed with the idea of grading and standardizing gum in the same manner as butter and flax.

GEORGE COSSON, of Awanui, for twenty-five years in gum business as Digger and Buyer, and now a Settler.

To Mr. Greville.] He knew the district well, and agreed with former witnesses that little or no gum could be found on the hills, but that generally the flats and swamps were rich in it. In the interests of the country the non-gum-bearing areas ought to be released for settlement. In regard to fires, he could not suggest any practical method of meeting the difficulty, though he was aware thousands of pounds were lost to the diggers on that account. He thought the appointment of gum-diggers as Rangers impracticable, as every digger had friends, and the suggestion would not work out in practice. He recognized the seriousness of the sand-drift, and was of opinion that at Gleeson's it had encroached some 300 yards within five years. It was quite possible the whole district would be wiped out unless some urgent steps were taken to check it. He was of opinion that fruitgrowing would follow the exhaustion of the gumfields, especially on the low-lying areas.

To Mr. Stafford.] In regard to the grading of gum, he thought the best arrangement would be to auction the gum at the various centres on the fields before shipping to Auckland. Auction was fairer to the digger, who was too much at the mercy of the gum-broker.

JAMES BONAR WRIGHT, a resident of the district for twenty-five years, and a Gum-digger for four or five years.

To Mr. Greville.] He knew there were certain small areas suitable for cultivation, but no one would select the hilly land without a piece of the gum land being attached to it. He had cultivated 5 to 6 acres and grown wheat, barley, oats, carrots, mangolds, and other crops, and had been successful at various agricultural shows. He considered there was sufficient non-gum-bearing land on the reserves for a sprinkling of holdings—say, 50 acres in each—part for cultivation and part to run cows or pigs. For the past two years or so an industrious digger could earn from 8s. to 10s. per day all the year round. The firing of the reserves was an evil, and should be stopped during the months December to March, and it would entail no hardship on diggers. So far as his observation went the sand encroached in places about a chain per annum. He considered digging could be done on the face by undermining and letting the ground fall, afterwards extracting the gum, as was done where he was now working.

To Mr. Stafford.] Some of the swamps at least would be of greater value to the district carrying oats, wheat, and other crops than being withheld merely because they contained gum-chips.

EDWARD EVANS, Hotel-manager and Storekeeper, Waipapakauri.

To Mr. Greville.] He did not consider any one could know the district better than he did. No gum was now got from the hills. A little might still be dug on the lower sides, but it was confined chiefly to the flats. Face-work might be done on some swamps, in the same manner as Mr. Sulenta was working. He knew the Motutangi Swamp well, and was about to go farther north in regard to the sale of a piece of land, the same quality and also in that locality, and the price which was being asked for it would probably surprise the Commission. The Motutangi Swamp in its present condition was useless, and should be drained and opened in small areas. He believed there was no gum in it payable for the digger. Probably 50- to 70-acre sections would be best, applicants to take their chance with the gum, and Government to act according to the gum revealed after drainage. A considerable area in the reserves down to Ahipara did not contain gum, and would be good country if drained.

To Mr. Stafford.] In regard to firing, it should be stopped from January to March. Though a hardship in a degree, it would be to their advantage later on. As to the used-up gumfields, he could offer no practical suggestion as to what should be done with the land. He did not favour the standardizing of gum, and to send it to a Government agent to grade and make advances was not possible.

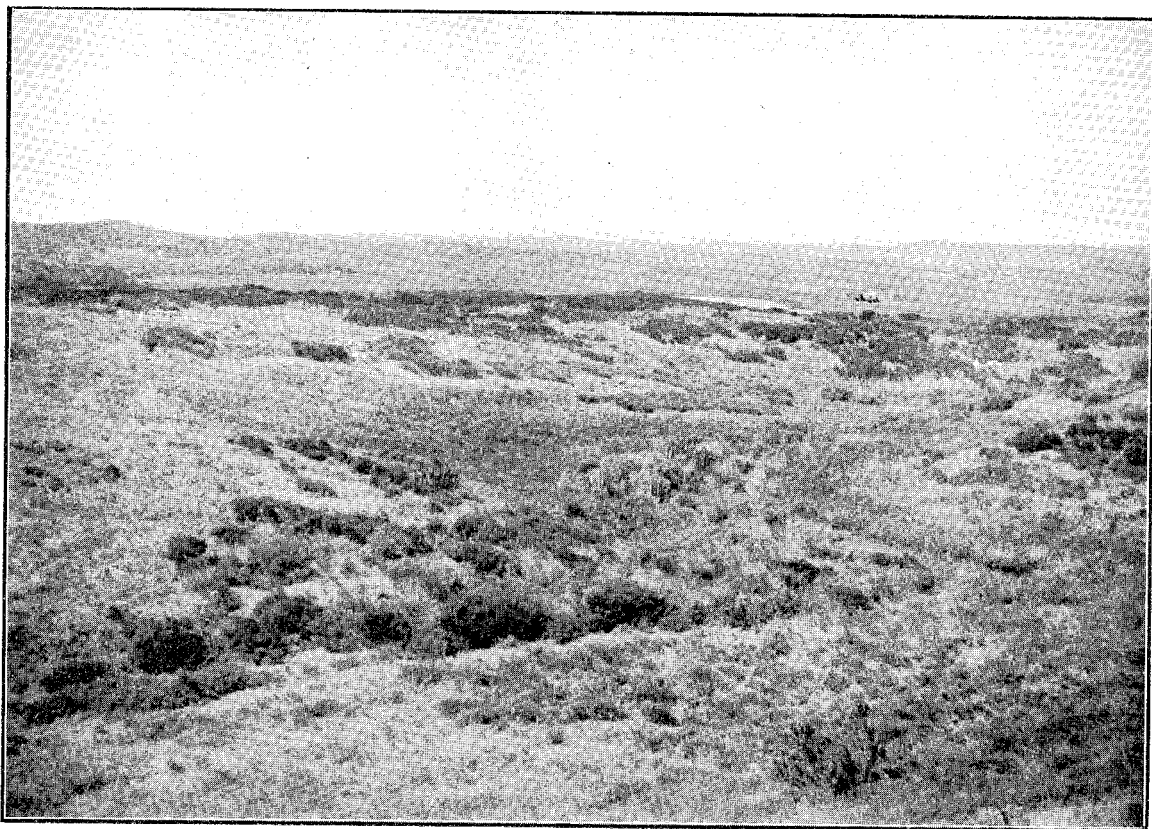
MICHAEL WILLIAM GLEESON, resident in the district for nine or ten years, married, with a family of eight children.

To Mr. Greville.] He had 6 acres under cultivation, and had been successful in cropping and gardening. He obtained 10 tons of potatoes from 1 acre, and could get anything to grow with manure. It would certainly be beneficial to the country and the digger to have the non-gum-bearing areas thrown open for settlement.

To Mr. Stafford.] He thought experimental plots for fruit and forest trees would be a good object-lesson to settlers if established by Government.

GRGO SULENTA, resident for sixteen years in New Zealand.

To Mr. Greville.] He was working an area of about 2 acres on the face, making from 10s. to 15s. per day. [Witness subsequently handed in a statement showing the earnings of four men for two months to be £200.] He believed facing-work to be the only real way of making digging payable.



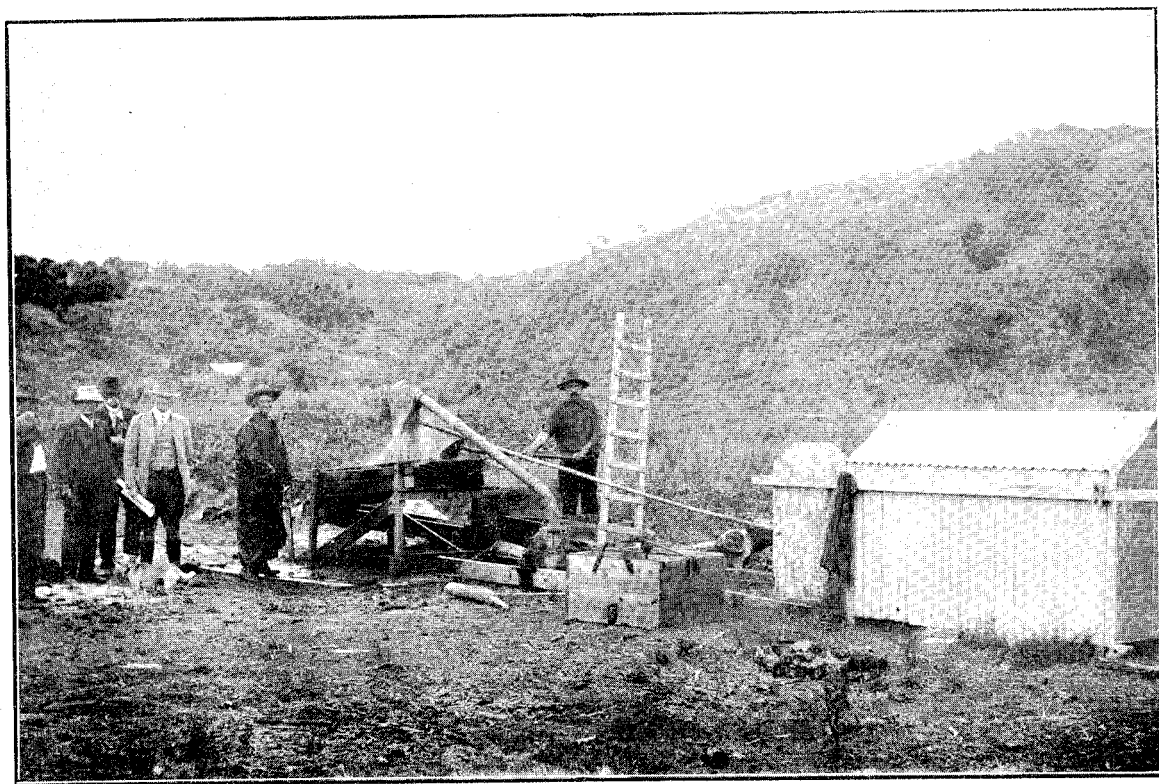
HOCHORA GUMFIELDS, LOOKING SOUTHWARD FROM NGATAKI PA.



MR. GLEESON'S HOME, ROTORUA RESERVE, WAIPAPAKAURI.



DIGGING "ON A FACE" NEAR WAIPAPAKAURI.



DIGGING "ON A FACE."—THE WASHING PLANT.

ROBERT MARSHALL, a resident in the district for about seven years, and digging gum the whole time.

To Mr. Greville.] He had followed the evidence of the preceding witnesses. So far as the hilly land was concerned, the gum there was in it had been dug out, and there was no use in keeping it as a gum reserve. He had tried face-working in the swamps, but it had not always been payable.

To Mr. Stafford.] He was of opinion that firing should be prohibited for certain months in the year—say, December to April.

AHIPARA, TUESDAY, 7TH APRIL, 1914.

JOSEPH DRAGICEVICH, Farmer and Stock-dealer at Ahipara for eight years.

To Mr. Greville.] He had about five hundred head of sheep (Romney-Merino) and eighty head of cattle, and was doing fairly well. He knew the south part of Rotoroa Reserve well, and considered the swamp part towards the Awanui River contained gum in places. At present digging was going on along the sides of the swamp, and also in the basins, but there was no digging in the main swamp, as there was too much water in it. The soil in the big swamp was good in parts, and there was not much timber in it. In its present state the swamp was not of use to the diggers, as there was too much water on it. His holdings comprised 1,375 acres, and 300 acres farther north, part of it being in grass, and about 300 acres were sand-drift. The sand had encroached on from 50 to 100 acres since he came into the district eight years ago. In regard to the wine-shops, witness had seen a great deal of drinking about, and believed it to be a great evil, more especially to the Maoris. He had been on the Epakauri Reserve, and knew diggers did well there some years ago.

To Mr. Stafford.] Epakauri was a winter field, and the ground could not be speared at this time of the year.

To Mr. Greville.] He had cultivated 107 acres on his holding, growing melons, kumeras, potatoes, and cabbage. Cultivation repaid with manure.

To Mr. Stewart.] If the Government supplied plants for sand-binding purposes he would be glad to plant them.

AHIPARA, WEDNESDAY, 8TH APRIL, 1914.

THOMAS STEWART HOUSTON, J.P., a resident of Ahipara for twenty-three years, and engaged for the past fourteen years in the gum-buying business.

To Mr. Greville.] He had a good general knowledge of the country and the various gum reserves, and especially the country between the locality known as "Sweetwater" and Ahipara. He was acquainted with Russell's holding, near Lake Ngatu, where some thirty or forty men were working in the swamp. In his opinion the south part of the Rotoroa Gum Reserve adjoining the Awanui River contained gum, but the field was unworkable in its present wet state. He had never known any one to dig there except around the hills, but "hooking" had been done in the swamp proper. From a farmer's point of view he knew that the swamp, if drained, would make first-class farms. In its present condition he would be willing to pay £3 per acre for the land, and if drained the land would be worth from £5 to £15 per acre, especially that part near the river. In his opinion the land should be drained and cut up for the benefit of the whole district. The difficulty in regard to the gum could be met by charging a royalty for it for the upkeep of the works. The best method of charging the royalty would be a levy of 5 per cent. on the value of the gum extracted, which would meet the case of all grades of gum. Another stipulation should be that when the gum was dug the land should be left in a fit state for cultivation. [Witness pointed out that already the kauri-gum reservation over this particular area and other areas in the Mangonui County had been lifted under the provisions of the Kaitaia District Drainage Act, 1913.] In regard to the Epakauri Reserve, he had known a large number of men to be digging there in former years, as many as a hundred at a time, but the field had been abandoned during the last two or three years.

To Mr. Stafford.] He regarded the land as still gum-bearing except on the beach portion, and considered the reserve should be retained for the diggers. About two-thirds of the Ahipara Reserve consisted of sand-drift, under which good gum had been found in parts. As it would never be fit for farming purposes, he considered the reserve should be retained for gum-digging. He had always regarded the sand-drift as a serious menace to the country, and in particular it would become a danger to the drainage operations about the Tongonge Reserve, and eventually spread through the Kaitaia Swamp unless checked.

To Mr. Stewart.] If supplied with plants settlers would readily plant the same for their own protection.

To Mr. Stafford.] In regard to firing on the gum reserves, he had seen a great deal of damage done by indiscriminate firing by diggers and others, and if persisted in it must destroy the future livelihood of diggers. In his opinion fires should be stopped altogether on the peaty swamps. Facing-work in the swamps was not practicable unless a body of men could be got to work together. Potholes, except the very deep ones, gradually fill up in time, but they were a danger to stock in many instances. He knew the field called "Sweetwater": the main swamp in it contained from 200 to 300 acres, and it had been worked to his knowledge for the last twenty years. The influx on the field was caused by the riddlings becoming of commercial value. Last year he handled about £4,000 worth of gum, partly won from his own field (about 800 acres)

and partly from the Epakauri Reserve. Probably seven-eighths of the whole had been dug from his own land. Austrians paid a royalty of 10 per cent. for digging on his own field, and other diggers must deal at his own store. Digging over his own land had been going on for the past twenty years, and the area dug on was from 400 to 500 acres. [Witness handed in a statement showing the value of the gum purchased by him during the past four years, as follows: 1909–10, £2,152 18s. 6d.; 1910–11, £1,847 3s.; 1911–12, £2,341 1s. 7d.; 1912–13, £2,653 14s. 7d.]

To Mr. Greville.] In regard to the wine-shops existing in different parts of the various gumfields, they should certainly be stopped and not allowed to continue in any shape or form. They were conducive to great immorality. That was the general opinion in the districts. He had known of cases where gum was bartered for wine, and in such instances the cash buyer was beaten every time. The usual experience was that whenever a field opened the wine-shops followed. The Maoris became demoralized; they could not dig and ran into debt.

To Mr. McKay.] Besides destroying the gum, the fires in the peat swamps destroyed the earth to a depth of from 2 ft. to 6 ft.

JAMES NOBLE BERGHAN, J.P., of Ahipara.

To Mr. Greville.] He had been in the gum trade all his life, and knew the district well, and corroborated the statements of the former witness. In regard to the stopping of fires, he did not think it would be altogether a hardship on the digger, at all events in the Ahipara district. Probably the best authority to fix dates when fires should not be lit would be the County Council. [Witness handed in a statement showing the value of the gum purchased by him for the past five years, as follows: March, 1909, to March, 1910, £3,048 1s. 7d.; March, 1910, to March, 1911, £3,243 7s. 4d.; March, 1911, to March, 1912, £3,947 13s. 2d.; March, 1912, to March, 1913, £2,758 8s. 9d.; March, 1913, to March, 1914, £4,055. Roughly, 20 per cent. of this gum was purchased from diggers working on privately owned grounds.] He knew the country well to the south of Ahipara, and most of the gum-digging was on the Crown land and not on the gum reserves there. Both Ahipara and Epakauri Reserves he regarded as good fields and not worked out. There was a very good quality of black gum obtained from these reserves and Crown land contiguous from 2 ft. to 12 ft. deep.

To Mr. Stafford.] He regarded the Crown land in question as well suited for occupation by diggers in areas of, say, 25 acres, under the Land Act Regulations.

To Mr. Stewart.] In regard to the sand-drift, he quite agreed with the former witness. His brother had endeavoured to obtain sand-binding grasses and plants from the Government, but without success.

To Mr. Greville.] He quite agreed with Mr. Houston's remarks about the wine-shops on the gumfields and the evils they brought about.

WILLIAM ATHERTON, resident in Ahipara for nine years, and a Gum-digger for twelve years.

To Mr. Greville.] He was on the Great Barrier Island about nine years ago, but there was not much digging then, and he could not say if the gum reserve specially set apart for the diggers had ever been dug over, as he had dug on the property of the Kauri Timber Company (Limited). He agreed generally with the statements of former witnesses, except in regard to fires on the reserves, as it seemed to him impossible to stop firing altogether even in swamps. Firing in some fields was quite necessary for the digger. The most damage from fires occurred in the peaty soils. He was of opinion that the wine-shop evil should be stamped out altogether. The scenes that occurred very frequently were dreadful, and were productive of wretchedness on all sides. He knew of the existence of five shops at one time at the field known as "Sweetwater."

AWANUI, SATURDAY, 11TH APRIL, 1914.

ALFRED HIBBS LONG, J.P., Farmer, Storekeeper, and Gum-buyer, of Mangatete.

To Mr. Greville.] He was acquainted very well with the Pairetahi Gum Reserve, and was of opinion that there was a fair amount of gum in it, but confined entirely to the edge of the river, and was probably drift-gum. On the flat on the eastern boundary there did not appear to be much, if any, gum left, as the ground had been fully exploited, and there was nothing to induce diggers to remain there. He had never bought gum from that locality. The land between Mangatete and Pairetahi was subject to flood, but gum-bearing, and a good deal of gum had been obtained there. The eastern portion of the reserve would be good land for farming, and there was no longer gum in it sufficient to justify the Government in holding it back. It certainly should be utilized for farming purposes. He knew the Puketoetoe and Pukewhau Reserves fairly well, and had on different occasions bought gum from there. There was still a fair amount of digging going on over them. The lower portions of the reserves did not appear to be gum-bearing. Hooking had been tried in the raupo swamp, but apparently without any success. Regarding the hill country on those reserves, it varied considerably, and there were areas in them non-gum-bearing, while in other parts gum was still obtainable. Last winter there were a considerable number of men digging on the flat on the west side of the foreshore past the lake. The hills in the Pukewhau Reserve contained no gum, but the foreshore had gum, though it was not a rich field. There had not been much digging on the Puketoetoe Reserves lately, but he regarded them as gum-bearing country except on the hills, as stated previously, and, on the whole, that country had very well been gazetted reserves and should continue for some years yet. Probably there were patches here and there on them quite fit for cultivation, but they would be difficult to point out unless explored. Regarding the Pukewhau Reserve, the lower part of the swamp and the south-east end of the reserve were non-gum-bearing. He bought from £1,000 to £1,500 worth

of gum in the year, a good deal of it, no doubt, from Lake Ohia lands. The population was shifting: sometimes he had seen hundreds of men working there at certain seasons of the year.

To Mr. Stafford.] The class of gum got from the Puketoetoe Reserves varied, but he had seen a very good class worth from £45 to £50 per ton got there. He was of opinion that the quality was hardly as good as that obtained, say, ten years ago. He had known diggers on the winter fields there average a half-hundredweight of gum per week. He knew the Mangatete Hills, marked "C.L.," to be gum land. It had been a splendid field, and in the winter he had seen from twenty to forty Natives digging there.

To Mr. Greville.] The Mangatete Hills were very inferior in quality and better suited for gum-digging than farming. Much of them comprised pipeclay and cement formation, and were not suited for agriculture. Puketoetoe Reserve was quite a different class of country.

To Mr. Stafford.] The grading and standardizing of gum before leaving New Zealand would be a move in the right direction.

JAMES MCKEOWN, Gum-sorter, and resident at Lake Ohia for five years and a half.

To Mr. Greville.] The south part of the Pukewhau Reserve contained very little gum, and consequently very little digging was going on there. There was very little digging back on the hills and on the south part of the reserve. Gum was got about four years ago by hooking. The swamp he believed to be worked out as a gumfield. He knew the hills to the north of the raupo swamp, and did not regard it as a payable field. He had known several to dig there who found it not payable. There was digging on the hills as late as last winter, but the men did no good. The hills would take grass, in his opinion, but would require manuring.

NICHOLAS COVICH, resident in New Zealand for nine years, and now a Gum-buyer at Lake Rotoroa.

To Mr. Greville.] His turnover was about £700 for gum in the year. He knew the Pukewhau Reserve, but had never dug there nor bought gum from that locality. He could give no information about the Mangatete Hills.

MANGONUI, TUESDAY, 14TH APRIL, 1914.

RICHARD THEOPHILUS WRATHALL, resident and Settler at Mangonui all his life, and a Gum-buyer for fifteen years.

To Mr. Greville.] He was acquainted with both the Taipa Reserves, and regarded them more as winter fields. There were no diggers on them at present, and it was some time now since they were occupied by many diggers. He certainly did not regard them as exhausted fields, as good mixed gum was still to be obtained there, and they should be retained yet for digging. He suggested the cutting-out of about 5 acres near the hospital-site as a site for tree-planting experiments, also an area he believed to be already surveyed (but not shown on the maps) as a scenic reserve. He knew the Parapara Reserve fairly well. It was not worked much now, but the ground was dug by Natives from Parapara and Taipa Settlements in the winter months. He did not think any portion suited for settlement purposes, as the land is chiefly pipeclay and wiwi. Though there might not be digging on a reserve, he did not think that was sufficient evidence to condemn it as a gum reserve. He had known fields to be temporarily abandoned by the diggers, but reoccupied again at later dates. He thought the Taipa Reserve should be retained yet, as it might in time become the terminus of the North Auckland Railway line. A part would also be required at some future date for the extension of the Mangonui Township.

To Mr. Stafford.] He certainly believed in the grading and standardizing of gum, and personally could see no special difficulties in the way of carrying it out.

GEORGE GREEN, residing for eighteen years at Mangonui, and a Gum-digger for sixteen years.

To Mr. Greville.] He had dug on the Parapara, Taipa, and Ohia Reserves, and did very well on the Taipa Reserve. He did not consider the field as exhausted, as there was still shallow digging to be got on the hills. Taipa Reserve would still carry a good many men, who could make £2 per week in the winter. He thought the gumfields presented a solution of the "unemployed" difficulty, but personally would not like to see Mangonui flooded with undesirables. The grading of gum might prove a good thing, but a good deal would depend on the requirements of the market, and there possibly existed a danger even in the grading.

To Mr. McKay.] Taipa Reserve had been ploughed in parts, but there still remained a good deal of gum. It would be wise to retain the Parapara Reserve if only for the Native population thereabouts.

To Mr. Greville.] There might be fifty men digging on the Taipa Reserve in the winter.

DOUGLAS DODDS, a Settler in Mangonui for twenty years.

To Mr. Greville.] He had dug on the Taipa Reserve all last winter, and did well. There were still places—the deep ground—which had not yet been tried. He did not regard the Parapara Reserve as exhausted by any means.

To Mr. Stafford.] The Natives, he should say, averaged about 40 lb. of gum per week from the Parapara Reserve, and it would be quite a mistake to lift the reservation. The market value of gum-chips had given the industry new life. He considered the grading of gum quite feasible. In the swamp lands about Lake Ohia firing should be stopped four years out of five.

At present the swamps were being reduced quite 2 ft. by fires, and digging was hindered thereby in the summer. He did not think firing ought to be stopped altogether, as that would be injurious to the industry. He did not think there was any likelihood of the Taipa Reserve being selected if cut up and thrown open, and not one digger in ten would make a success on a 25-acre section on the field.

KAEO, WEDNESDAY, 15TH APRIL, 1914.

SAMUEL SANDFORD BRAMLEY, Settler of Kaeo for fifty-five years, also Gum Ranger and Ranger for the Kauri Timber Company (Limited).

To Mr. Greville.] He had been over the Totara Reserve and knew the country, which had been dug over for forty years. About five years ago there was a good deal of digging done, mostly by Europeans and settlers of Totara, and there were still a few diggers there. The reserve was land of poor quality, but could be grassed if treated with basic slag. The land was certainly not uniform in quality, and the swamp part was the best. The greater portion was ploughable, but it was hardly likely much gum could be obtained in that way, as the land had been stripped so often for so many years. He would favour it being cut up into, say, 100-acre sections, with a right to the gum by the selector, provided he improved the land and put a certain area into grass each year. Personal residence should also be a condition of the lease. He knew the Puketotara Reserve (Bay of Islands County). There was no one living on it, and he regarded it as played out for gum-diggers. There was some passable land on it which could be brought into cultivation by manuring, even more so than the Totara Reserve.

To Mr. Stafford.] What gum there was left in the Totara Reserve was in the swamps and was deep. It was generally black gum. He could give no idea of the average quantity dug out per week. The only gum got on the hilly parts was nuts, as the ground had been dug over so long and so often.

ERNEST EDWARD CARR, Storekeeper and Gum-buyer, of Kaeo, for twenty-five years.

To Mr. Greville.] He knew the Totara Reserve well, and shared the former witnesses' opinion as to its present state. The reserve was virtually dug out, but enabled some of the Kaeo settlers to get a picking at times. He believed settlers and diggers would jump at the chance of getting a section there if the reservation was lifted and the land cut up into areas of, say, 200 or 300 acres. If dug over consistently he did not think that it would yield £3 worth of gum to the acre. The land would carry grass if manured, and it was far ahead of gum lands of the north generally. He had bought no gum from the Totara Reserve last year.

To Mr. Stafford.] If the reserve were first ploughed and then dug he did not think the result would pay for the time and labour. As a payable field it was absolutely exhausted.

ALBERT HAYWARD NESBIT, Farmer, and resident in the district for forty years.

To Mr. Greville.] He knew every inch of the Totara Reserve, and regarded it as an exhausted field. The land as a whole was very sour, and it appeared to him if a man had the capital to tackle it he would prefer to take up land elsewhere, as the cost of improving the gum land was too great.

To Mr. Stewart.] He had never specially considered the question of breaking in poor lands.

To Mr. Stafford.] It would be a splendid scheme to reforest the reserve, say, with larch, gums, pines, and wattles. The reserve had been dug over for fifty years to almost any depth, and he knew one good digger (Sullivan) who could hardly get 20 lb. of gum in the week. At one time the reserve was full of Austrian diggers, who left the field several years ago, and as a rule when they moved away it was safe to conclude there was not much if any gum left in the ground.

LAKE OHIA, TUESDAY, 14TH APRIL, 1914.

GEORGE SCHEIGIS, Gum-dealer, of Kohanga, Kaimaumau North, a resident for fourteen years and Gum-buyer for eleven years.

To Mr. Greville.] His purchases last year amounted to £3,574, and were the highest he had made. For 1912 his purchases were £1,197 16s. 7d., and the previous year's buying averaged from £600 to £800 worth of gum. At Lake Ohia there were probably fifteen hundred men digging last year, and, say, a hundred men in the winter months. It was mainly a summer field. He was acquainted with all the gum reserves in the locality, and knew them to be generally poor lands and gum-bearing, which might eventually be suitable for grazing stock. He had dug as deep as 11 ft., and considered the fields still good for digging purposes for many years to come. Generally speaking, all diggers made good money, more particularly so during the past two years. He considered it advisable to stop the firing of all swamps, as it destroyed both gum and soil; but firing could not be stopped altogether on gum reserves.

WILLIAM WILKINSON, Gum-buyer at Lake Ohia for three years, and previously farming at Oruru.

To Mr. Greville.] Last year he bought gum to the value of from £4,000 to £5,000. On the Puheke fields and about Lake Ohia there were six gum-stores—Ulrich (two stores), Sherman, Scheigis, Phelan, Saintsbury, and his own—all established about the same time. On the summer fields the population (men, women, and children) would be from five hundred to eight hundred souls, in the winter probably three hundred. He knew Puheke Reserve fairly well. It was all

deep digging, and the reserve should certainly be retained, except perhaps the hills, which might be cut out. Some of the swamps might carry grass after draining, though the quality of the soil generally was not good. The drainage, in his opinion, would not be expensive, and should be undertaken by the Government. The chief difficulty, it appeared to him, would be the blocking of drains by shifting sands. In regard to face-working, it could only be done in rich swamps. Potholes did not injure the country as much as was generally supposed. He knew Parapara Reserve only casually. There was a little digging recently, but so far as he knew there was no great quantity of gum left. In fact, he regarded it as a used-up field. From a farmer's point of view the reserve would not carry English grass, and the land was only fit to be cut up into large cattle-runs—say, from 1,000 to 2,000 acres—and sown with strong grass. Any area less than 1,000 acres would be useless to any one. Near the trig. station on the reserve the land improved a little, and brown-top grass might take there. In his opinion Parapara Reserve would make a good field for the Government to afforest, and if fires could be kept off it the land would gradually improve in time. In regard to firing, any time except during, say, the months of December to April was generally safe.

To Mr. Stafford.] The Government should certainly grade gum, as the matter did not present very great difficulty. If the Government would grade it would be more satisfactory to digger and buyer alike. He was not prepared to say into how many grades the gum should be placed, as it would have to be according to requirements. The work of grading would have to be done in Auckland, and he was certain it would benefit the industry, as it would do away with inferior qualities of gum being exported if there was a standard grade and a standard price. He had not studied the question of the by-products of gum, and was not prepared to speak on the subject. In regard to the Parapara Reserve, it was difficult to say when a gumfield was actually exhausted. If the land were more fertile he would certainly say, have it open for settlement.

To Mr. Stewart.] Danthonia grass would take on the poor gumfields. It was hard to say what variety of trees was best suited for these lands, but probably wattle and gums would be best.

To Mr. Stafford.] He knew white gum had been got on the Parapara Reserve, and he had seen diggers there himself. The average quantity obtained might be 40 lb. per week. The reserve had a few Native diggers on it at the present time. The peat soil sent from the north was, he understood (though he had no authority for saying so), for the purpose of mixing with the gum-chips.

RUDOLPH JOSEPH MATTHEWS, resident in the Lake Ohia district for over forty years.

To Mr. Greville.] He knew the Parapara Reserve well, and regarded it as having been exhausted as a gumfield for the last fifteen years, though a little gum had been found in places at different times, and there was a tribe of neighbouring Maoris digging there now. The quality of the land was such that he did not think it would be selected by any one even if cut up into 1,000-acre blocks. In fact, it would hardly be worth fencing in. The back portion near the bush was perhaps of better quality generally, but the land could only be worked in large areas of from 1,500 to 2,000 acres. It contained a few useful valleys on that side that would take grass. He was of opinion that as a field for tree-planting the reserve would answer the purpose, as it was a pity to see so large an area of land lying absolutely idle as at present. For planting purposes he would suggest wattle as a quick grower and improving the soil. In regard to the Puheke Gum Reserves and the Puheke Peninsula in general, there was very little of the land in the main body of the peninsula that could be put to good use. There was a belt, say, from 10 to 20 chains, from the coast-line of better quality, but hardly worth dealing with. He had had some experience himself with an area down the coast, and after draining and surface-sowing found the grass would not hold. He was of the opinion the soil would require a deal of manure to make anything of it. So far as the climate was concerned, it was generally mild and good for farming, but the gum-digger was not a settler, and would move off as soon as the gum was no longer payable. He suggested small fruit-farms in suitable places as the only method of permanently improving the district, but gum-diggers were not the class of persons to undertake that sort of life. They were out only for gum and making money out of gum. In regard to the Taipa Reserves, he had been over all the reserves, but had never seen much gum-digging done there. The land was much the same in character as the Parapara Reserve, and it might cut up into large grazing-runs.

To Mr. Stafford.] As to the reason for so much of the private lands round the Parapara and Taipa Reserves lying idle and unprofitable, he thought it was generally because of the poor quality of the soil making it unsuitable for ordinary settlement. Such land would require capital to bring it into production. He considered afforestation of such lands very desirable, and if undertaken by Government on their own lands it would give surrounding owners a lead in the matter.

DAVID SHERMAN, a resident at Lake Ohia for ten years as a Gum-digger and Gum-buyer.

To Mr. Greville.] The value of the gum purchased by him during the last eight years would average about £6,000 per annum. In regard to the Puheke Reserves, he thought there were small areas in parts that could with advantage be cut out and opened for settlement purposes. There was a belt about 30 chains back from the coast, and about a mile and a half long, non-gum-bearing land, which might be dealt with first by draining and then sowing in some strong grass. In areas of 100 acres a settler of the right sort might do something with it. He knew the Pukewhau and Puketoetoe Reserves, and very little digging was being done on any of them.

Last winter they did not have more than fifteen men on them at any time, but four years ago there was a big crowd of diggers on the ground. He would hardly care to call them exhausted fields.

To Mr. Stewart.] The water difficulty on the Puheke Reserve could be overcome by using artesian wells.

BRIAN WILLIS, Government Surveyor.

To Mr. Greville.] He had been surveying the Lake Ohia district for about six months, and knew the Parapara Reserve. He thought portions might take grass, especially on the east side, but the land was of poor quality, consisting chiefly of pipeclay soil. He had been engaged for some months surveying selections under the 25-acre system applying to kauri-gum districts, and endeavoured to fit in his work with the lay of the country. His instructions were not to include valuable gum land in these selections. In regard to the difficulty about road access to these holdings, he was of opinion that some comprehensive scheme was very necessary and would have yet to be undertaken. He knew the Motutangi Swamp, containing about 2,000 acres, and from his observations it appeared there was not much fall for draining the area. It would be hard to say if the swamp in question was non-gum-bearing until properly drained.

To Mr. Stewart.] He was certainly of opinion that a proper road system should be initiated before surveys of gum-diggers' selections were undertaken. It was the only way to avoid complications later on.

GEORGE POTTER, a Settler for eighteen years in the Ohia district, formerly a Bushman, and now gum-digging.

To Mr. Greville.] He had heard the evidence of the preceding witnesses, and agreed generally with their statements. He knew the Puheke Reserve well. There was no gum inside the sand on the east coast for a width of from 15 to 20 chains right through, and the land in his opinion would carry grass if drained. It would make cattle-runs or dairy farms and grow *paspalum* if basic slag was used on the ground. He was of opinion that from 70 to 80 acres was ample for a man on that peninsula, and if it contained any gum only the holder of the lease or members of his family should be allowed to dig it.

WIREMU HETIRIKA stated that he wanted a gum-digger's holding at Parapara, and would make it his home. He had heard other Natives say the same.

[The Chairman explained the conditions briefly, and handed witness a copy of the regulations.]

HONE RAMEKA wanted to bring under notice of the Commission the matter of a piece of Crown land on which he had built a house and for which he wanted a title.

[The Chairman referred him to the Commissioner of Crown Lands, Auckland.]

THOMAS SHARP, residing at Ohia for twelve months, and gum-digging for thirteen years.

To Mr. Greville.] Instead of cutting up the gum reserves for settlement the Government should charge a fee of £3 to £5 per annum to dig for gum, otherwise the digger would in time get pushed out.

[The Chairman explained the purpose of the Commission.]

Witness considered that all existing reserves should continue as such whether there was gum in the land or not. An industrious digger could make on an average from £2 10s. to £4 per week all the year round. It would certainly be a good plan to utilize the gumfields as a solution of the "unemployed" difficulty in the cities, instead of on the roads-work. The gum-digger, in his opinion, would never settle permanently on the land. He was not in a position to suggest what ought to be done with the exhausted gumfields.

ALEXANDER MCKENZIE, for twenty-five years a Gum-digger.

To Mr. Greville.] He considered that a steady man could earn from £2 10s. to £4 per week all the year round. He would not like to see the gum reserves interfered with in any way for settlement purposes, as the real digger would never make a settler. He would take 25 acres under the Act himself, but not to be tied down to it in any way.

TOTARA NORTH, THURSDAY, 16TH APRIL, 1914.

WILLIAM RICHARD LAWRENCE, Storekeeper and Gum-buyer, and resident of the district nineteen years.

To Mr. Greville.] His turnover for the past five years in gum purchases was—1909, £3,880; 1910, £4,000; 1911, £3,390; 1912, £2,500; 1913, £3,100. In regard to the Totara Gum Reserve, he bought very little gum at all dug in the district. It would not exceed altogether £100 per annum, his purchases being chiefly from fields further north, as far as Waiharera and Lake Ohia. He handled lower-grade gum and what was known as "dirt." There was a ready sale at times for it, but it was tricky to handle. The gum-dirt, he believed, was used in Germany for linoleum-dressing. In regard to grading gum, he did not think it possible, for the reason that every buyer has a grade of his own, and in the end grades will be as wide as chalk and cheese. Besides, the gum was practically earmarked from the time of digging to the date of

disposal in Auckland, which in his opinion pointed to the existence of a gum "ring." If grading were attempted it would have to be done in Auckland, where there were the biggest buyers, who might be able to lie back. Small storekeepers on the fields could not afford to do that. If grading was an absolute necessity it should have been taken in hand ten or fifteen years ago.

To Mr. Stafford.] The local storekeeper would not have much say in the matter of gum-grading. The digger would benefit by it; buyers might also benefit, but at the same time the shipper would have to have a say in the matter. Any grading would have to be done by the Government in Auckland.

SALES, THURSDAY, 16TH APRIL, 1914.

WALTER BRAMLEY, a Gum-digger of Iwituau all his life.

To Mr. Greville.] He was a digger on the Totara Reserve, and knew the country well, and knew there were twenty men digging on it at present. It was regarded as an all-round field—that is, summer and winter digging—and the average earnings all the year round would be £1 per week. As much as £4 per week could be made by a good man in the summer months, and 15s. per week would be the lowest in winter. In his opinion there were one or two parts of the reserve fit for farming. The south-east corner did not contain gum. If the block was cut up into sections of from 50 to 100 acres for diggers it would not pay. He did not know what manures would do for the land there.

To Mr. Stafford.] There was chiefly black gum in the deep ground on the reserve, perhaps from 4 ft. to 5 ft. down. There was no gum in the raupo swamps and guts. There was cement ground on the reserve, and gum ran through it, but no spear could touch it. A pick would be necessary, as a plough would not reach it.

WILLIAM HENRY SALES, Storekeeper and Gum-buyer, and resident of the district all his life.

Witness submitted the following statement showing his gum purchases for the past three years: Year ended March, 1912, £2,112; year ended March, 1913, £2,310; year ended March, 1914, £2,523: total, £6,945.

To Mr. Greville.] About one-half of the gum in question came from the Totara Reserve or field. There were always diggers on the Totara field, and he regarded it as a fair average field. It was certainly an advantage to have such a reserve for the use of the settlement to absorb the unemployed. In his opinion there would be no demand for the land even if it were cut into 50-acre lots, as the quality was so poor. No one had availed himself of the 25-acre system of selection in the reserve. Grading would put the digger on a better footing, and it would also be of some advantage to storekeepers.

ABNER SHERMAN, Gum-digger of Totara North all his life, and holder of 40 acres of freehold.

To Mr. Greville.] He knew the Totara Reserve, where he had been working for about eighteen months and earning, on the average, £2 10s. per week. He regarded the reserve as a payable field still, and would rather see it kept open for diggers than withdrawn and cut up for settlement. He believed as many as forty men could be supported on the field permanently.

To Mr. Stafford.] The shallow field had been rich in gum, and still contained gum. Ploughing did not go deep enough to reach the gum. He sold all his gum in Auckland, and had sent over £200 worth since Christmas. In his opinion grading would be a good thing for the digger and the storekeeper.

To Mr. Stewart.] The Totara Reserve would take a long time to work out, because it was full of cement land preventing it from being speared. Cement fields lasted for years and years.

To Mr. McKay.] The digger did not always get a fair deal, because the gum passed through so many hands.

GEORGE MOSELEM, a resident of Sales, and a Gum-digger.

To Mr. Greville.] He agreed with the statement of the former witness. His average earnings for last summer would be £2 10s. per week, and sometimes he earned as much as £1 per day. He considered the reserve should be kept for the men of Totara Settlement to supplement their incomes.

FRANK BALL, a resident of Totara, and a Gum-digger.

To Mr. Greville.] He did not make particularly good wages, as he did not work regularly at it week in and week out like some of the diggers. He was satisfied with less, being a single man. He considered the reserve should be kept, as it was the only field for the settlement and helped to solve the local "unemployed" difficulty. The greater part of the field was so bad with potholes that it could not be ploughed, even if the land were cut up and opened for settlement.

WAIKAPA, MONDAY, 20TH APRIL, 1914.

WALTER CLAPHAM MOUNTAIN, of Purehua, Farmer.

To Mr. Greville.] He was acquainted with the Kapiro Reserve as a whole, and considered the portion on the north-east side of the Kapiro Stream all gum-bearing and capable of supporting from four hundred to five hundred men yet. On the south side, known as "the plains," the reserve was non-gum-bearing, and from a settlement point of view could be brought in,

though he was doubtful whether grass would hold on that class of country. Turnips would do well without doubt. On similar land he had used $2\frac{1}{2}$ cwt. of manure to the acre, and had had wonderful results with his turnip crops. Not many European diggers were working on the gum portion of the reserve. Last year there were about fifty Maoris working there, and they made from 15s. to 18s. per day at it. The gum-bearing portion would not carry seventy head of stock in its present state, and he did not think there was 5 acres in any place that could be ploughed. He was acquainted with the Rangitane Reserve, and knew nothing poorer than the land there. It was all hilly and non-ploughable. There had been no digging on the reserve for quite six or seven years, but he believed that men could make 10s. per day in wages on the field. In regard to the Pungaere Reserve he could not say much, but did not think the gum had been dug out yet. So far as he knew no one could do much with it for farming, and the land would probably be more profitable as a gum-digging field for some years yet.

To Mr. Stafford.] If the plains on the Kapiro Reserve were cut up for settlement it would be only reasonable to keep the remaining portion of the reserve, which was gum-bearing, for the use of the settlers. In his opinion no man without capital could handle this class of land successfully. The depth of the gum on the hills would be from 4 in. to 10 in., and in the swamps probably 5 ft. or 6 ft. The gum got on the Kapiro field was chiefly white gum. Ironstone land would grow good turnips, but it was doubtful if grass would hold.

To Mr. Hebdon.] There were not more men on the field because of higher wages at other work.

To Mr. Greville.] His gum purchases last year amounted to £2,000, chiefly from the Kapiro field and his own freehold lands. The previous year the figures were a little higher.

To Mr. Stafford.] Diggers earn more now than fifteen years ago, on account of the saleableness of the poorer grades of gum.

HAROLD C. BULL, of Kerikeri, Farmer.

To Mr. Greville.] He had resided nearly six years in the district, and knew the Kapiro Reserve, but could not quite agree with the former witness as to the digging on the land. In regard to that portion of the reserve known as "the plains," it could certainly be brought into profitable occupation, but the areas would have to be from 1,000 to 1,500 acres. 200-acre or 300-acre sections would be quite useless. An expenditure of from £4 to £5 per acre would be required on this class of land to make it one-sheep-to-the-acre country, and the outlay would have to be spread over a number of years. He did not quite agree with gorse-farming, and from his own experience did not think it advisable to plant gorse. He was of opinion that the late Mr. T. C. Williams, who advocated it and experimented with it for some years, was in the end disappointed with the results. At present he was farming about 9,800 acres of his own, and had brought into profit 700 or 800 acres of permanent grass. The balance of his land was in different stages of being broken in. In regard to the climate of the district, last year was not very favourable, but this year had been a good one for stock. He was not well acquainted with the Pungaere Reserve, but had always regarded it as purely gum country, and for the most part of little use for anything but gum-digging.

To Mr. McKay.] His own holding, being largely volcanic country, was not fallowed.

ARTHUR EDWIN WHITE, a resident at Waipapa for two years, and following the occupation of a Farmer and Storekeeper.

To Mr. Greville.] He only started gum-buying this season, and since Christmas had purchased about 12 tons, mostly got from his own freeholds. He was not acquainted with all the reserves in the district, but knew a little about the Kapiro field, and regarded the portion known as "the plains" as non-gum-bearing and quite fit for settlement purposes, speaking from his own experience in farming that class of country. The Pungaere Reserve he regarded as patchy and in parts non-gum-bearing, and knew persons who would be glad to have parts of it for sheep-farming if opened for settlement. So far as he knew there were fourteen or fifteen men digging on Pungaere last year. There had not been much gum-digging on the Maungaperua Reserve for some time to his knowledge, and the field contained some better country than in the other reserves in the district, but if offered the areas would require to be fairly large if anything was to be done with it successfully.

To Mr. Stewart.] If cut up the Maungapererua field would need to be in areas of, say, 1,000 acres, which could be worked to carry one sheep to the acre. At present, parts would carry one sheep to 3 or 4 acres.

HERBERT MOUNTAIN, of Waimate, Farmer.

To Mr. Greville.] He knew the country well throughout, and largely agreed with Mr. Mountain, an earlier witness. So far as the Kapiro Reserve was concerned, there were parts containing very little gum, and not worth keeping the land back for. It was country that would take grass, and turnips would do well on it. The Pungaere was poorer than the Kapiro plains land, and had several patches of ironstone country without gum; perhaps in the aggregate one-half would come under that heading. He did not know the Maungapererua Reserve sufficiently to speak of it. The Rangitane Reserve was certainly all gum-bearing country, and fit for nothing else. It had not been dug much in recent years. Local settlers take to the field in their spare time.

JOHN URLICH, Gum-digger and Farmer, of Waipapa.

To Mr. Greville.] He knew the Pungaere field, which was a winter ground, and contained gum enough to get a living from.

To Mr. Stafford.] The gum in Pungaere Reserve was 10 ft. deep in parts, and he had got both black and white gum there at that depth. The local settlers dug on that field regularly.

To Mr. Greville.] The Pungaere field was a great help to settlers to put in their spare time on.

To Mr. Stewart.] He did not think there was any farming land in the Pungaere Reserve.

To Mr. McKay.] Diggers could make from 7s. to 10s. per day there.

To Mr. Stafford.] For six months in the year he could average from £2 to £2 10s. per week on Pungaere.

HEPI POTE, Gum-digger, of Purerua.

To Mr. Greville.] A good many Natives dug on Kapiro Reserve, but the plains portion had no gum at all. The Rangitane Reserve had no diggers on it now, as the gum had become scarce. He had never dug on Pungaere or Maungapererua fields. He paid Mr. White a royalty of 2s. 6d. per hundredweight for digging on his freehold property, and could make from 9s. to £1 a day sometimes. It paid him better than digging on the reserves.

OHAEBAWAI, TUESDAY, 21ST APRIL, 1914.

JOS. SOLLOWAY LANE, of Totara North.

To Mr. Greville.] He was not connected with the gum trade now, but knew the Totara Reserve well, which was dug over all the year round by adjoining settlers. He considered at least twenty diggers got their living on that field. Most of the digging was done on the east side of the reserve going to Mangonui. When men were getting a living from the reserve he regarded it as a gumfield. He believed the land could be drained and put into grass. He had never farmed that poor class of country, but there was quite a lot of it just as good as the land around Waipapa, and with the same subsoil, that was being brought into cultivation.

WILLIAM JOHN DUNLOP, Inspector of Rabbits and Noxious Weeds, stationed at Ohaebawai.

To Mr. Greville.] He was not connected with the Government experimental plot, but was acquainted with one at Akerama, about fourteen miles from Ohaebawai. It comprised about 20 acres of the poorest of gum lands. It had been broken in by deep ploughing, and a small part of it had been drained and ploughed several times, and under cultivation three years with green crops such as oats and lupins. He knew also of a plot at Kaitara, also about 20 acres in extent, a lighter class of gum land, and showing a very high percentage of silica on analysis. The Agricultural Department was getting good results with certain crops. A further experimental plot was situated at Otaika, where Mr. Speedy, the officer in charge, could give full particulars. He had seen experiments tried here and there to break in small areas of the poorer-class lands. Mr. Thompson, at Purerua, seemed to be making the best effort to his knowledge, and meeting with success in that direction. Mr. Thompson had ploughed from 60 to 100 acres which he was now fallowing. It was purely gum land from which he had taken a good deal of gum. Adjoining the area in question was another plot of about 30 acres in extent, land of a better quality, sweeter and not so heavy, being of a limestone formation. He considered the Kapiro Reserve similar land to the area Mr. Thompson had got his best results from.

To Mr. Stewart.] He knew the country about Waihopo and Waiharera and the encroachment of the sand there. It was hard to suggest a very practical remedy because the drift had become so rapid. The same problem was puzzling his Department in the Manawatu district, where the sand-encroachment was perhaps the worst in New Zealand. He considered the *Pinus insignis* would flourish on the sand-dunes if the sand could be prevented from smothering them until they got under way.

To Mr. Greville.] He knew that part of the Manawatu best between Waikanae and the Otaki coast. He knew also Himatangi, but not well enough to speak definitely about it. He had observed the growth of noxious weeds on some of the gum reserves, especially blackberry about old camps. He thought the spread of the blackberry especially might be checked if the diggers could be compelled to keep the blackberry cut down about their camps.

To Mr. Stafford.] He had seen the blackberry quite as thick on some of the roads as at deserted camps.

To Mr. Stewart.] The spread of hakea was becoming a menace in some parts of the country. He considered the only way to eradicate the plants was by hand-cutting and keeping burnt until the seeds become destroyed.

To Mr. Greville.] The botanical name of hakea is *Hakea acicularis*, and was generally plentiful on gum and ironstone lands.

THOMAS SIMPSON HAYES, Settler, of Raeo.

To Mr. Greville.] He had held a section for about twelve years near the Waipapa Gum Reserves, and ploughed up 70 acres, and planted part in grass and part in gorse. He was satisfied that gorse made good land, and grass would do well on land that had been in gorse for some years. He was satisfied that in the summer months six or seven sheep per acre could be grazed on gorse land, and there was not the least danger of the gorse getting out of hand if properly handled. He was acquainted with the Kapiro Reserve, and part of it was equally as good as his own land, and would take gorse just as readily. He had also tried pines, but they had not made very rapid growth. He found acacia much quicker. He had seen pines planted near the Pungaere Reserve about ten years ago, and they were now big trees. There was very

little digging on the Kapiro field now. What digging was being done was certainly not sufficient to justify the land being held up solely for the purpose. Whatever digging was being done there was at the back of Pungaere, near Hearn's. There was not much digging on the Pungaere and Maungapererua Reserves. Maungapererua land was not as good as on the Kapiro Reserve, but it would take gorse if drained, as gorse did not take on the wet land.

To Mr. Stewart.] He had one hundred sheep on 70 acres at Waipapa in the winter. He had found the best way to deal with that class of country was to plough it up and let it lie for the summer, and then sow in Italian rye-grass.

To Mr. McKay.] The land about Waipapa if ploughed and planted with gorse improved every year. He had never tried to eradicate the gorse on his own land, but it would not be a difficult undertaking. Disc ploughs would cut out the roots quite easily, as they were very soft.

KAIKOHE, WEDNESDAY, 22ND APRIL, 1914.

CHARLES BRYCE, Gum-digger, residing at Ngawha Springs.

To Mr. Greville.] He had been a digger for twenty years, and had been working on the Parahirahi Reserve for twelve months. He regarded the reserve as a payable field, and last winter about fifty men were working there. The field was better for spring and winter digging, and an industrious man could make good wages on it. The field had been worked about forty years, and had been dug all over, and still there was a good yield of gum.

To Mr. Hebden.] He had worked on the Houhora fields about thirteen years ago, also at the Wade, Awitu, Tairua, Hukerenui, Lower Ruakaka, and Mangawai. In his opinion gum-diggers had not much desire to become permanent settlers.

KOHUKOHU, FRIDAY, 24TH APRIL, 1914.

WILLIAM MAXWELL, Timber-measurer, and resident in Kohukohu for many years.

To Mr. Greville.] He was acquainted with the Omahuta Gum Reserve, and to his knowledge no digging had been done there. There was a large area (probably 5,000 acres) open burnt country on the Omahuta State Forest Reserve comprising good land, and quite fit for subdivision. He knew the Warawara Gum Reserve, having been around the block at different times. His knowledge about digging on it extended back fourteen years, when about a dozen men were making a living from the gum there. The land seemed of good quality, a kind of volcanic, and quite unlike the ordinary run of gum lands. It would take grass well. The reserve was practically a table-top, steep on the sea face and also on the back boundary towards Waihou.

To Mr. Stafford.] There was to his knowledge payable gum on the flat clearings in the Omahuta Forest Reserve, and in fact throughout the whole reserve.

To Mr. Greville.] Gum bleeding was still going on in the Crown forests. He knew that in the Waipapa Forest, joining Puketū, on the Kerikeri side, three out of five of the kauri-trees were being cut about by bleeders.

To Mr. Stafford.] The Warawara Reserve was bush land. There was still a good deal of bush in the Omahuta Forest Reserve. The Warawara Reserve had a large quantity of humus in it. The access was steep on all sides.

To Mr. McKay.] It was ten or twelve years since he had been in the Omahuta Forest Reserve.

GEORGE ANDREWES, Storekeeper, of Kohukohu.

To Mr. Greville.] There was not a great quantity of gum handled in Kohukohu, the bulk of it going through their headquarters at Opononi. It came mostly from the Waihou fields, and would average from 1 to 2 tons per week. Their Opononi store would supply the exact figures. He knew there was not much digging on the Wairau Gum Reserve. He did not know the Punakitere Reserve. The gum industry was declining in those parts. The position was quite different from the northern fields, and in their turnover only gum of good quality was handled.

To Mr. McKay.] He thought the chief difficulty in the way of Government grading of gum would be the finding of practical men for the purpose.

To Mr. Greville.] He could see no harm in bleeding the kauri-trees for one year before selling the timber. Private firms did it, and he considered the State lost a large revenue by not doing the same thing, as it did not damage the timber at all.

ROBERT JARVIE, Carpenter, and resident in the Hokianga district for twenty years.

To Mr. Greville.] He knew the Wairau Reserve. It was a sandy soil, and there never had been much digging on the field. To his knowledge very little gum had been taken from the reserve. He knew the Punakitere Reserve from his residence at Taheke as a storekeeper for two years. It was of the poorest quality of gum land, and dug over by a few Maoris, who got very little gum out of it. The reserve was covered with scrubby fern and manuka, and consisted chiefly of white sandy soil. He had no knowledge of the reserve as to digging there in recent years.

To Mr. Hebden.] He was speaking of the condition of the field ten or twelve years ago.

DAVID BROWN WALLACE, Settler of thirty years in Kohukohu.

To Mr. Greville.] He had known the Omahuta Reserve for twenty-six years, and agreed with Mr. Maxwell's estimate of it. He was sure there was no digging on the reserve now, and there had been very little digging for twenty years. The digging had been going on in the Omahuta Forest Reserve proper, and not on the gum reserve. The quality of the open land was fair second-class land, capable of carrying a sheep and a half to the acre. He was quite sure that the land would be readily selected if cut up and roaded.

To Mr. Stafford.] He thought it would be a difficult matter for the Government to grade gum satisfactorily.

[Mr. Maxwell subsequently informed the Commission that in his opinion the bleeding of kauri-trees did depreciate the value of the timber, though it would certainly be a profitable practice for the State. The damage to the timber would be less if the trees were bled at the top—that is, in the forks of the tree.]

OPONONI, MONDAY, 27TH APRIL, 1914.

ALFRED ANDREWES, Storekeeper, Gum-buyer, and Hotelkeeper, of Opononi.

To Mr. Greville.] He had been resident in the district for eighteen years, and handled more gum at Opononi than at any of their five stores. Most of the gum bought had come from privately owned land around the river, and had been received from Maori diggers. He understood the bulk of the gum from the Punakitere Reserve went to Kaikohe, and very little passed through the Taheke stores. Local gum-digging was an important industry for the Maori population in that part of the river.

To Mr. Stafford.] He did not think much, if any, gum was obtained from the Wairau Warawara Reserves.

To Mr. Hebden.] Gum-digging was one of the mainstays of the Maoris thereabouts.

WILLIAM JARVIE, Settler in Opononi for thirty years, and ex-Gum-buyer.

To Mr. Greville.] He had a good knowledge of all the northern gumfields, and knew the Punakitere Reserve, which he believed was all more or less gum-bearing land. The eastern side was at one time one of the richest parts of the field, and still contained gum, in his opinion. It was high country covered with fern and tea-tree principally, and containing small clumps of bush in parts. A good deal of it was ploughable. The reserve generally was a very poor class of country, and might take grass, but not readily. In his opinion it was a poorer class of country than the Wairau Reserve, the soil being more like that on the gum reserves about Kirikiri. He knew the field best about ten years ago, when there was a good deal of digging done on it—principally by Maoris, some Austrians, and a number of the settlers about. He had no definite knowledge of digging there more recently. The gum obtained was of good average quality. There was not much swamp digging at the time he referred to. He knew that at certain seasons of the year a good deal of digging was done on the Wairau Reserve, chiefly by Natives. In his opinion the State forest and also the Crown land adjoining the Wairau Reserve was all gum-bearing, and dug over in parts. There were only a few European diggers at work on the portions referred to. He believed the Wairau Reserve would take danthonia and paspalum grasses if ploughed, and a considerable portion of the reserve could easily be ploughed. At present the carrying-capacity of the land would be one sheep to 4 or 5 acres, but if ploughed and grassed it would carry one sheep to the acre easily. He had had no experience in breaking in poor country.

To Mr. Stafford.] He had no knowledge of the depth of the gum in the reserve. No black-jack gum was found on the reserve to his knowledge. It was hardly country in which deep digging would be done. He believed the Warawara Reserve contained gum in the swamps as deep as 7 ft. or 8 ft. It had been a very rich field. He did not think that when the forest had been cleared off the State forests any portions containing gum should be cut out especially for the diggers. The land should be cut up for general settlement purposes, and any gum remaining be dug out by the selectors themselves.

GEORGE WILLIAM KENDALL, Settler at Mitimiti for twenty years.

To Mr. Greville.] He knew the Warawara Gum Reserve, and had seen no digging there for the last seven or eight years. Formerly the Natives obtained a good deal of gum from it, and especially the forest of the same name adjoining. A good deal of gum bleeding had been done in the Warawara Forest Reserve. He believed the Warawara Reserve would take grass readily, as he had similar country in grass and carrying a sheep and a half to the acre.

To Mr. Stafford.] He bought no gum now, not being able to get it. He had never heard of gum-digging on the gum reserve. What had been got from the locality had been dug from the forest reserve adjoining.

ROBERT NGAKAURU, Settler, of Mitimiti.

To Mr. Greville.] He knew the boundary of the Warawara Gum Reserve on the sea side, having helped in the survey. He agreed with Mr. Kendall that what gum had been obtained had been dug in the forest reserve only. Grass would take well on the Warawara Gum Reserve,

as it was similar land to his own adjoining, which he was grassing. The principal bush on the forest reserve was taraire, a few puriri, kohekohe, rata, nikau, mahoe, and a good deal of karaka. He would like to apply for the land himself if opened for settlement.

To Mr. McKay.] The forest reserve was not very broken, and it contained a plentiful supply of water.

JAMES WATKINS, Farmer for twelve years at Rangī Point.

To Mr. Greville.] He had formerly been a gum-digger at Kaihu, Omahuta, and Warawara Forest Reserve. He agreed generally with Mr. Kendall's estimate of the Warawara Gum Reserves. The Warawara Forest was largely a kauri forest with large clumps of other mixed bush. The kauri lay generally at the back of the reserve. The mixed bush on the reserve contained puriri, taraire, tawa, kohekohe, nikau, and kawakawa, with supplejacks. The land would take good grasses, as the country thereabouts held very well.

To Mr. Stewart.] The Warawara Gum Reserve contained no extent of open land.

To Mr. Stafford.] He knew digging was carried on amongst the kauri clumps in the Warawara Forest Reserve.

TAHEKE, TUESDAY, 28TH APRIL, 1914.

JAMES BRENNAN, Dairy-farmer for twenty-two years at Taheke.

To Mr. Greville.] He knew the Punakitere Reserve, having dug over it himself for about six years. There were a good many diggers, chiefly Natives, on the reserve seven years ago, but since then it had been going off as a field for making a living from. He did not suppose there were more than fifty diggers all told digging there last year, for the reason that for some years now it was not possible to make a living there. It was a fact that only a portion of the reserve ever contained gum, and there was a large extent of it non-gum-bearing country. If the reservation were lifted from the non-gum-bearing portion so that the land could be opened he was of opinion that it would carry grass with proper treatment, but it required capital to develop that class of country.

To Mr. Stafford.] The diggers on the reserve this summer were chiefly Natives, and 2 lb. to 3 lb. of gum per day would be the most they would get.

To Mr. Stewart.] All the settlers in the district had knocked off digging on the field, and personally he would not care to try and make a living there now.

To Mr. Stafford.] He did not think any one could make £2 per week in wages there. It would be nearer 10s. per week.

HENRY PICKERING, Gum-digger, of Omanaia.

To Mr. Greville.] He had been working on the Punakitere field for twelve years, nearly the whole time, and could do as well now as when he first started. His average earnings per week for his boy (sixteen years) and himself were £3. His digging extended all over the reserve, and last summer he had seen fifty diggers—men, women, and children—working all over the field. So far as he knew they were strangers and not settlers. He still regarded the Punakitere and Mangatōa Reserves as payable fields, because the price of gum was up and grades of inferior kinds were now marketable. When he commenced working on the field ten or twelve years ago there were hundreds of men on it. Many of these had taken up land in the meantime, or taken up farm-work, or gone to more virgin fields in the north. He had no desire to make a selection of 25 acres under the Land Act, but would like to see the reserves kept to occupy spare time of himself and other men like himself.

To Mr. Stewart.] The average wage of £3 stated was earned on the Punakitere Reserve alone.

WILLIAM HENRY WHITE, Butcher, of Taheke, where he has resided a lifetime.

To Mr. Greville.] He had dug on the Punakitere Reserve in the past, and considered the field as practically worked out, and even since the price of gum went up had been very little dug over. Settlers in the district generally regarded the field as exhausted, and he believed there was a desire in the settlement to have the land cut up for settlement purposes. There was certain to be a demand for holdings as they could be brought into profitable use. He had no doubt as to the boundaries of the two reserves in question, as, being a butcher, his business took him over every part of the country thereabouts when delivering meat. He considered there would not be more than from fifteen to twenty male diggers, Europeans and Maoris, on the reserve at present. There appeared some misapprehension as to the number of diggers on the Crown reserves in question. There were Native gumfields adjoining where a good deal of digging was being done. He had had some experience at farming, and thought these reserves, if opened, would take most grasses well, also clover.

To Mr. Stewart.] In his opinion the south part of the reserve between the Pakaretu and Mangatōa Streams was good country, easily drained, and would grow anything.

To Mr. Stafford.] There was a small part of the reserve next the Mangatōa Stream patchy in black gum, especially in the basins, but in his opinion the quality would be very small and hardly worth considering.

To Mr. Greville.] It was really to his interests as a butcher to have the field kept for the diggers, who would be his customers, but from every point of view, now the gum was exhausted, it would be better to have the land opened for permanent settlements.

To Mr. Stewart.] It would make chiefly sheep-country in areas from 400 acres upwards.

To Mr. Stafford.] If settlers got the land and ploughed it up he could not say how much gum they might get, but it would be very small, and would help towards the cost of laying down the land in pasture.

To Mr. McKay.] The land would certainly grow turnips if manured.

To Mr. Greville.] He had had no special experience in farming poor lands.

VALENTINE ALBERT ERNEST RICKCORD, Bush Manager for the Kauri Timber Company (Limited).

To Mr. Greville.] He was in charge of the bush-works of the Kauri Timber Company (Limited), who were clearing some kauri timber, partly on the forest reserve and partly on the Punakitere Reserve, purchased direct from the Crown some time ago. [Witness produced a plan showing the boundaries of the purchase, edged green.] He crossed the Punakitere Reserve three or four times in the month in connection with his duties, and had seen as many as fifty diggers on the ground at one time.

JOHN JULIUS LINDVART, Farmer, of Awarua.

To Mr. Greville.] He was a member of the Hokianga County Council, and resident in the district for ten years. He had been over every part of the Punakitere Reserve, and was of opinion that a large portion of it could be brought into cultivation. In his opinion the bush portion of the reserve never contained gum. The County Council received no revenue from the reserve, and he considered it should be made available for settlement. He spoke as a farmer, and considered that in the interests of the whole district and the county the land should be cut up and disposed of, more especially the part next the Taheke Settlement.

To Mr. Hebdon.] The County Council had always been anxious to see the reserve occupied by settlers.

MOKI HARRIS, Gum-digger, of Taheke.

To Mr. Greville.] He had dug on the Punakitere Reserve, but not for the past thirteen years or thereabouts. He had seen some diggers on the field, but they were not doing much. He could not agree with Mr. Pickering's evidence altogether, as digging on the reserve did not pay the Natives, and they could do better at bush-work, earning from £2 5s. to £2 10s. per week. Even the older Natives were able to do bush-work. The Natives generally regarded Punakitere Reserve as dug out, and went north when they wanted to dig. He could not say they left in order to have a change of field: they went because they made more money elsewhere. Some Natives might be affected if the reserve were cut up, but if a portion were retained for them it would quite meet the case and satisfy them. He knew some Natives who went to Lake Ohia, others to Waihou and Motukaraka.

HAROLD MONTROSE WEBSTER, Storekeeper and Gum-buyer, of Taheke.

To Mr. Greville.] He bought gum, chiefly from Rakawahi and Kirikiri and from Native gumfields. For the years 1912, 1913, 1914 (to date) he had bought 37 tons valued at £2,950. In his opinion part at least of the Punakitere Reserve was quite dug out, and part never contained gum at all, and ought to be opened for settlement at once. If digging ceased altogether on the reserve he would not be benefited in business. The diggers now on the reserve made a living-wage and could always pay for stores.

To Mr. Stafford.] After paying store accounts he did not think diggers cleared more than from 10s. to £1 per week. He knew one digger who cleared £20 in two weeks' work on one occasion. He was an exceptional man.

To Mr. Stewart.] He thought the top part of the reserve could safely be opened for settlement.

PAMATI KIRIŀNGI, Gum-digger, of Taheke.

To Mr. Greville.] He was not digging on the Punakitere Reserve himself, but he thought a portion of the field should remain for Natives and European diggers to dig on. He did not think 500 acres sufficient for the purpose. Most of the Natives about owned land, but they preferred digging to farming.

REWIRI MOKI, Gum-digger, of Taheke.

To Mr. Greville.] He was a digger on the Punakitere Reserve, and had dug there off and on for fourteen years. A Maori family could make £1 5s. per week in wages digging there.

ROBERT HAINES, Farmer, of Taheke.

To Mr. Greville.] He was an ex-gum-buyer and storekeeper on the Punakitere Reserve, and knew the field fairly well. He did not regard it as payable field now. There were two stores on the field at present. The storekeepers were generally diggers themselves, and did not stock more than a few days ahead. He thought a good plan would be to cut out a portion of the reserve and keep it for the Native diggers. In his opinion the centre of the field was the best part for digging purposes, and an area of from 300 to 400 acres ought to satisfy the Maori diggers.

KAIKOHE, WEDNESDAY, 29TH APRIL, 1914.

WILLIAM FORBES, Gum-buyer and Storekeeper at Taheke for twenty-five years.

To Mr. Greville.] He knew the boundaries of the Punakitere and Mangatōa Gum Reserves, also the fields, which he visited from time to time in connection with his business. He was of opinion that not more than thirty diggers, European and Native, were making a living on these reserves at the present time. What gum he was buying now came almost wholly from privately owned gumfields, and not from the reserves in question, as it appeared there was not much to be got from them. He based his opinion as to the Punakitere Reserve being an exhausted field on the very small quantity of gum coming in from it. He had had some experience at farming, and considered the gum reserve would do very well for a run if uplifted, but would not be of much use for anything else. He did not claim to have special experience in the farming of the poorer-class lands. He could not speak definitely as to the quality of the land through and through the reserves, but was firm in his opinion that as a gumfield it was worked out, and considered every portion of it has been thoroughly explored by the diggers. When at their height these particular reserves carried at least two hundred diggers, European and Maori, who were continually coming and going. The number of diggers had dropped off within the past six years, and going back twenty-five years he did not think more than a hundred men were digging then. When the gum was at its best on these fields he made probably £1,000 per annum from that source.

FREDERICK HINGSTON, Storeman, of Kaikohe.

To Mr. Greville.] He knew the Punakitere Reserve fairly well, and was of opinion it was a worked-out field for gum, and so far as he knew that seemed to be the general opinion in the district. As to the quality of the land on the reserve, he considered the northern portion could be brought in, especially what was known as the bush portion, which was ordinary second-class land and would carry two sheep to the acre. He had had experience in farming that class of country. He knew the wiwi swamp on the reserve between the Pakaretu and Mangatōa Streams, and did not think very much of it. Taking the reserve all over he certainly thought a large part of it, with proper farming, could be brought into cultivation. His firm bought very little gum from these fields now.

To Mr. Stafford.] The swamp on the Pakaretu Stream would be about 20 acres in extent. Black gum was obtained there, but diggers could not get into the swamp until last summer. So far as he knew the gum obtained from the swamp was rubbishy in character. He knew a good digger who had been working on the northern end for three months, and had not cleared more than 15s. per week. It was possible a digger might clear £1 per week outside of food on the reserve.

To Mr. Greville.] It was regarded both as a summer and a winter field in parts. He was certain there was no gum on the ridges. It was worked out altogether. He had no hesitation in saying these reserves were done for digging.

To Mr. Hebden.] He had dug gum in his time, and his opinion about the field being exhausted was based on his own observations and the information received generally from the diggers themselves. They had left the district and gone north because they could not make both ends meet.

To Mr. Stafford.] The reserve had been dug on for over forty years. It was possible some gum might be under the cement formation in places, but it was doubtful.

ALFRED WILLIAM EDWARDS, Storekeeper, of Kaikohe.

To Mr. Greville.] He was a resident of twenty-five years in the district, and knew the reserves in question very well. He agreed with Mr. Forbes's estimate of the number of men working there fifteen years ago, and considered the field had declined during the past ten years. He was quite of opinion that the field was played out, and knew that the Taheke settlers had not dug there for some years, and could do better at other work or by digging elsewhere. He had had some experience at farming in his youth, and thought that some parts of the reserve, especially on the lower side towards Taheke, could be brought into fairly good country if properly handled. It was well known that the present-day farmer, with better knowledge, could make this so-called useless country produce crops. He was sure the land would go off if opened for settlement, and adjoining settlers would gladly add to their holdings if the block were made available. He had been over the northern part of the field, and quite agreed with Mr. Hingston's estimate as to the carrying-capacity of the land. He did not think the few men who were scattered over the 10,000 acres justified the retention of the land as a reserve. He considered some of the Punakitere Reserve would fetch £1 10s. per acre if cut up. From his knowledge of the district and locality it was a matter of public opinion that the reserves should be opened for settlement purposes and not remain locked up as at present.

To Mr. Stafford.] A very large part of the reserve would take grass. He knew Dickeson's land adjoining was lying idle at present, but it would soon be sold if put on the market. It was not the quality of the land that kept it idle.

To Mr. Stewart.] Complaints had been made about difficulties in finding the boundaries of all the gum reserves, and he considered it very necessary that the reserves should be marked in some manner.

HENRY DICKESON, of Kaikohe.

To Mr. Greville.] He had been gum-buyer for his firm for twenty years, and was conversant with the different fields from Parenga to Whangarei and Dargaville. He had done no buying for about four years, and had no recent knowledge as to the number of men digging on

the Punakitere Reserve. From a farming point of view he considered there were 700 or 800 acres on the northern end of the reserve that could be made into farms if ploughed and manured. He had known similar land yield a ton of oats to the acre by treating the soil with lime. The land on the northern end referred to was good second-class country. Only about 10 per cent. of the quantity of gum was received now from these reserves compared to, say, fifteen years ago. It might be a hardship to turn off the few landless Natives who were digging there now, but some provision could be made for them by retaining a small area of the more gum-bearing part.

To Mr. Stafford.] He did not think it practicable for Government to grade gum, because about a hundred and fifty different samples would be required. It might be done if all the gum to be graded came from one field.

HENRY STEWART, Settler, of Kaikohe.

To Mr. Greville.] He knew the Moutere district, Nelson, very well, having lived a great part of his life there. It was mostly clay land, and could have been bought six or seven years ago at 10s. or even 8s. per acre. Some of it, in fact, could have been had for the rates. It was now bringing in from £20 to £40 per acre for apple-growing, and the country was very similar to the gum lands generally of North Auckland. The climate of the two places was much the same. He did not think all gum country would grow fruit, but there were very large areas of it all over the North that would give just as good results as the Moutere lands, in his opinion.

TOWAI, MONDAY, 4TH MAY, 1914.

EDWARD ROWLEY, Small Farmer, of Hukerenui.

To Mr. Greville.] He was a resident for twenty-eight years in the district, and a gum-digger for forty years, and had dug on the reserves in the vicinity over twenty years ago, when he was quite able to make a living from the gum. He knew the Te Mata Reserve (about 3,000 acres) as a whole, but did not now regard it as a payable field. It was locally known as a "fossicking field." A digger might get 4 lb. or 5 lb. of gum on it one day, and next to nothing the next. It was not all hilly country. There was one flat he knew and gentle slopes, but he did not think there was any payable deep digging left, as the field had been so completely dug over. Generally speaking, Te Mata was a winter field, but only for casual diggers, and he had not known any permanent diggers on it for the past three or four years. There was part of the reserve inferior in quality, but part of it would take grass. As a gumfield he had no hesitation in saying the ground was exhausted. There was no doubt the land would be applied for if opened, and he had tried for nearly fourteen years past to get a part of it to add to his own holding contiguous. It would certainly be to the best interests of the district as a whole to have the land put on the market.

To Mr. Stafford.] Settlers occasionally dug on the reserve in their spare time. They might get 28 lb. in a week or so, but the field was certainly not so good as fourteen years ago.

To Mr. Stewart.] He knew Gray's swamp, and had dug there about five years ago. All the blind creeks were worked out there now.

To Mr. Greville.] He knew of no one who had dug on the swamp last summer.

CHARLES SMITH, Gum-digger, of Hukerenui.

To Mr. Greville.] He had been a digger for eighteen years, principally on the Te Mata Reserve, but did not agree with the former witnesses' evidence in regard to the non-gum-bearing qualities of the field. He had dug there constantly for eighteen years, and still could make an average of from £1 15s. to £2 10s. per week. His digging had been mostly in the hills on the reserve. The deepest digging was in Gray's swamp, where he had dug last summer, and knew of other ten diggers on the same ground. The gum was generally of poor quality, and the diggers had to go 4 ft. down to get the best gum out of it. In his opinion there were not 500 acres on the field barren of gum, and he had been over every inch of the reserve. There were over thirty men working on the reserve last year, and he knew a large number of them wanted to select under the 25-acre system. The reservation ought not to be lifted, and he spoke as the oldest constant digger on the ground.

GEORGE KENT, Gum-digger, of Te Mata.

To Mr. Greville.] He was a digger of thirty-five years, and had worked constantly for eight years on the Te Mata field, and was able to make a living, and more, there. He believed the average good digger could make £2 per week, and in his opinion the reserve was far from being worked out.

To Mr. Stewart.] He had not succeeded yet in getting a homestead lot on the reserve.

To Mr. Stafford.] On Saturday last he obtained £6 15s. for three-quarter-scraped gum, £2 16s. for nuts, and 16s. for dust. The gum averaged from 6 ft. to 10 ft. in depth.

To Mr. Greville.] He would like to take up a 25-acre section, but could not get the hang of the regulations on the subject.

WILLIAM ALEXANDER KERR, Farmer, of Riponui.

To Mr. Greville.] He was a resident for twenty-five years in the district, close to the Te Mata Reserve, and knew the field well. During the past five years there had been very few permanent diggers on the ground, and he regarded the field as played out. The quality of the land was such that a large part of it could be laid down in grass, brown-top and other varieties, and much of it was well suited for fruitgrowing. He could not agree with the last witness, because he regarded the field as exhausted of gum. His holding adjoined the reserve in question, and he had planted paspalum, brown-top, and clovers. He found Chewing's fescue did not do well. He knew the small Otakairangi Gum Reserve, which was partly swamp and had been well dug over. There were no diggers on it now, and to his knowledge no one had dug there last summer. It was about two miles from his home. The quality of the land was much the same as on the Te Mata Reserve. His holding was Section 3, Block XIII—650 acres.

To Mr. Hebdon.] He did not think any digger could average £2 per week in wages on the Te Mata Reserve.

FREDERICK WYATT, Farmer, of Towai.

To Mr. Greville.] He was farming 100 acres near Towai No. 2 Reserve, and had a family of seven children. He had known the Towai Reserve for ten years, where there had been on-and-off digging since he had lived in the district. He could not say any one had permanently dug there. Those he had seen were casuals and school-children. He quite thought the Towai Reserves were dug out, and would challenge any one to prove that he could make 5s. per day wages there. He certainly thought the reserve in question could be brought into profitable occupation just as well as his own holding. [Witness drew attention to the specimen crops which he had brought to the meeting for exhibition.] He considered the hills would make sheep-country and the flats on the reserve would make good fruitgrowing lots. All except the highest parts of the ridges would take grass. He was quite satisfied that the gum land, so called, in the district would grow almost anything with the right man behind it.

WILLIAM SMITH, Bushman, of Towai.

To Mr. Greville.] He had dug gum in the north, and considered a good part of the Towai Reserves could be brought under. Some parts of it were not worth while, being chiefly pipeclay land. He had dug on the reserve only last winter, and made up to £3 per week in wages. He could make £2 10s. per week now, and did not regard the reserves as exhausted by any means. These reserves were a good stand-by for settlers in the winter, and he would not like to see the Towai Reserves lifted. He did not know the Te Mata field.

To Mr. Stewart.] He believed the north-east portion of the Hukerenui Reserve was barren of gum.

WILLIAM BURT, Gum-digger, of Towai.

To Mr. Greville.] He had been a digger for six years, and was now on the Towai No. 2 Reserve, where his average earnings last winter were close on £1 per week. He started at 8 or 9 o'clock in the morning and finished up at 4 or 5 o'clock in the afternoon, and did not work on wet days. He considered it paid him to dig there, as the field contained good gum. He would not like to see the reserve lifted. He held a 25-acre selection under the regulations.

JAMES GEORGE PADDISON, Farmer and Gum-digger, of Towai.

To Mr. Greville.] He knew the Towai No. 1 Reserve, and had dug there last winter, making 10s. per day. It was mostly a winter field, and good wages could be made on it at that time of the year. He had seen as many as a dozen men working there in the winter months. He considered the reserve should be kept for the settlers. He did not know the Hukerenui Reserve at all, but knew that men were digging on the Te Mata field all through the year, and a good digger could make wages there still.

ARTHUR DAWSON, Settler, of Te Mata.

To Mr. Greville.] He was a settler, farming Sections 17 and 21, Block VI, of 187 acres, and had been there thirteen or fourteen years. He knew the Te Mata Reserve adjoining his land, and had not seen much digging there for some time. A good many, especially Austrians, had dug on the reserve about fourteen years ago, but the numbers had dropped, and for the past four or five years there might have been an average of between ten and twenty men from time to time working on the field. From a farmer's point of view it would suit him better if the land remained a reserve, because if short of work he could always dig there and get wages. It was a good stand-by. He knew that reserve had practically put some of the settlers on their feet in the past. For seven or eight years all the money he had earned had come from the field. In his opinion there were no extensive portions of the Te Mata Reserve that did not contain gum.

To Mr. Stewart.] The Te Mata Reserve is already carrying grass (danthonia) in parts. He knew Gray's swamp, about 150 acres in extent, to be a good area of land lying useless to the diggers and settlers alike.

To Mr. Greville.] Chewing's fescue had died out on his ground.

To Mr. Stafford.] Gray's swamp could, in his opinion, be drained. It no doubt contained gum.

EDWARD BROCK, Farmer and Butcher, of Towai.

To Mr. Greville.] He owned from 300 to 400 acres, and knew the various gumfields about, and from the nature of his business as a butcher had a good idea as to the number of men digging. In regard to the Towai No. 2 Reserve, there was a little gum left, but very few diggers worked

at it, and the field was only used as a fall-back. He knew the Te Mata Reserve only in part, and the part he did know would carry grass and grow fruit well. There would be about fifty diggers on these fields all the year round. He certainly did not regard it as a good proposition for Government to leave 7,000 acres tied up for about fifty men. It would be better to let the fifty men have 100 acres each to settle on and become farmers. He could say with confidence the number of men digging all the year round did not exceed fifty. He believed diggers in general had fought shy of these fields for the past seven years.

KAWAKAWA, TUESDAY, 5TH MAY, 1914.

CHARLES BARKER ROSS TURNER, Government Surveyor.

To Mr. Greville.] He did not know the reservations in the district by official names, but had been pretty well about them during the past twelve months. He was over the reservation near the trig. last winter, but did not see any men digging there, and he formed the opinion that it was practically an exhausted field. He based his opinion on an experience of a number of fields. The reserve opposite the hotel had been subdivided for settlement. He did not consider it quite an exhausted field, and had only seen two men digging there. All the land was capable of being brought into grass. All the gum land required fallowing more than manuring. He did not think it was actually poor-man's land, as money must be spent upon it to bring it under cultivation. He had no experience as a farmer, but he took notice of things. He knew the Hukerenui Reserve, having surveyed a road there in connection with the Motatau Block about four years ago, and at that time there were a few diggers on or near it. They might have been digging on the Maori land. There was more variety in the nature of the land at Hukerenui Reserve than Towai; though portions of it were mere swamp, the valleys were better. Nothing could be done with the rough portions in the way of cultivation, but any part that could be cultivated could be brought into grass. He did not know the Te Mata Reserve.

To Mr. Stafford.] Towai No. 2 Reserve he considered nearly exhausted. He did not inquire as to whether there was a second layer under old workings, nor how much those digging made a week.

GEORGE LINCOLN DOUGLAS, Constable stationed at Kawakawa, and Ranger for Kauri-gum Reserves.

To Mr. Greville.] He did not know the reserves by name, but knew their position. In 1913 he issued twenty-four licenses to Europeans digging on these fields, and up to the present time of this year (1914) he had issued thirty. He had seen all the diggers he issued licenses to digging on the fields. He had issued four licenses last year for Towai No. 1. They dug there for four months in the year, and some made an average of £3 per week on that field. He had issued five licenses on Towai No. 2 field last year, and one man had made £4 a week working there during March of last year. He had issued five other licenses, three being for the Hukerenui field. This year he had issued eleven for the Te Mata field and nine for that field the year before. There was digging going on on the southern portion of the Hukerenui field. Men were digging about a mile from McMaster's house. Digging was going on on the eastern portion of the Te Mata Reserve, but he had never seen men digging on the western portion, though he had issued one license for that side of the reserve: he was digging well back.

To Mr. Stewart.] Last year seven men were camped on Towai No. 2, but this year there were only two men camped there, and a man with a family. On the Towai No. 1 there was one man who had been living on it for years. There was also one camp on it, and he had issued six licenses. There was only one man digging on the Hukerenui field, near Sarick's. At present there were quite a number of men digging on Gray's swamp on the Te Mata Reserve, on the hilly country and the locality up to Paiaka. He knew of nine men digging on the Te Mata Reserve inside the Bay of Islands County. Six old men, probably over fifty years of age, who were living in cottages built by the Public Works Department when constructing the line, and who were working there, made good wages.

To Mr. McKay.] None of the elderly men were camped on the field. A person just travelling across the field could not form a correct estimate of the number of diggers who might work on it.

To Mr. Stafford.] He knew the gum lands adjoining the Puhipuhi State Forest. There was a large area that had been dug over for gum, and there were several there digging now. He did not know whether it was Crown lands or gum reserve. When he was round Towai No. 1 and Hukerenui Reserves this year he had issued eleven licenses to settlers to dig on those fields.

To Mr. Greville.] The licenses were for Towai Nos. 1 and 2 fields.

To Mr. Stafford.] The settlers dug on the fields in their slack season when the cows went off. Many of them could not put a whole season on their holdings. If the fields were exhausted they would not bother to take out licenses.

FREDERICK WILLIAM GOODHUE, Farmer and Flax-miller, resident at Kawakawa.

To Mr. Greville.] For ten years he had been purchasing gum round Towai, and had travelled frequently over the fields, but during the last two years he had not bought much gum. He believed there was still a fair amount of gum to be removed from Towai No. 1 Reserve. He knew Hukerenui field, and had been over it frequently. On the south-eastern portion there was

a good deal of gum, but he looked upon the western portion as a spent field. When he was purchasing gum the bulk of it came from the eastern portion of the field—that was three years ago. He had as a farmer a little experience in breaking in the poor gum land. He believed that class of land could be brought into profitable occupation by turning it up and breaking it with basic slag. The great thing was to get the plough in. All the land this side of Towai would come into brown-top and danthonia. In regard to tree-planting, he believed that *Pinus insignis* (or *radiata*) was the only pine to grow, because when it got established in eight or ten years nothing grew under it which would carry fire. The trees would come to profit in from twenty-five to thirty-five years, and if they were planted thickly they could start cutting out after fifteen years. The *Pinus insignis* did well on the gum country, and also on the clay hills like those at Kerikeri. The black-wattle was another tree that did well on the clay lands. He thought that planting the *Pinus insignis* would be a profitable way of utilizing land of that nature.

To Mr. Stewart.] Growing black-wattle on these lands would also be a profitable investment if it were in the vicinity of the railway. It made good firewood, and the bark commanded £7 10s. in Auckland to-day. It was about five years coming into profit for firewood, and at eight they came to maturity. There were 1,200 acres planted with black-wattle at Waerenga, where the soil was no better than on the gumfields; but it must be ploughable. New Zealand was importing a lot of wattle-bark from Australia.

To Mr. McKay.] The blue-gum was not a success on the gum land owing to its slow growth and the necessity of giving it liberal treatment.

VERNON HERBERT REED, M.P. for Bay of Islands.

To Mr. Greville.] He knew the northern districts fairly well, and had a considerable personal knowledge of the reserves. Where lands were gum-bearing and men making a living on them he certainly would not think of removing the reserve. But on some lands reserved there never was any gum, and some reserves were worked out, and some reserves would be gum-bearing and profitable for very many years to come, so they should be classified. He thought the clay lands could be worked profitably. It was inconceivable to think that country that was capable of carrying kauri forests could not be made profitable. He agreed with Mr. Goodhue that *Pinus insignis* would grow very readily, and he would go further than Mr. Goodhue and say gums would also grow very readily. Wattle would grow without the land being ploughed; the tea-tree had only to be cut and the wattles sown and they would come up. The great danger to plantations was fire; but a few fire-breaks could be made, as in Australia, by a belt of *paspalum*. Commercially, plantations in the Bay of Islands district would be more profitable than at Rotorua, where the timber had to be transported so far by rail. The everlasting question of protection from fire would not be as serious in plantations in the Bay of Islands as at Rotorua, as the fern would not grow here as there. Ploughing a strip a chain wide was not sufficient protection from fire, but if a sward of *paspalum* were put in there was no doubt it would check the fire. Unless the question of fire could be contended with tree-plantation could not be considered. In regard to settling the clay lands, the most effective way would be for the Government to do the development-work. Apple-growing was the only kind of fruit-culture they could consider, because unless they could export there was not much profit in fruitgrowing. The best stock to be used in apple-culture was the Northern Spy, which grew anywhere in the district and bore well. He had been assured by Mr. Horton, the well-known pomologist, that the apples grown in the Northern Peninsula for flavour and colour could compare favourably with any grown in New Zealand, and were also as lasting. As they had suitable soil for apple-growing and a market was available he thought an experimental plot should be established in the North to see what treatment was required for fruitgrowing on clay lands. With reference to providing homes for the diggers, he thought some modification of the Workers' Homes Act should be made to meet the case. He thought they should be encouraged to improve the land round them. The reason why so few diggers out of a thousand at Houhora had decent homes was because the 1898 Act only provided for diggers holding 2 acres on Crown lands—not on gum reserves—and there was no Crown land in the vicinity. The 1910 Act, which he had drafted, remedied this, and enabled the digger to have his holding on the reserve. He thought the regulations should provide that only diggers should be allowed to take up a holding on gum reserves. He would like the Commission to consider the question of sand-drift as it affected certain reserves. The values of any of the clay lands thrown open for settlement should be kept as low as possible, as it took a long time to bring the land to profit. It would be a feasible plan for the Government to drain swamp gumfields, get the gum taken out, and cut it up for settlement. But its success would depend upon the class of land. In treating the gum lands it was absolutely essential that the tea-tree poison be taken out. The way to overcome that difficulty was to plough very deep and let the land lie fallow.

To Mr. McKay.] The State could very well spend money in the development of the gum country.

RONALD DUNCAN CAMPBELL, Crown Lands Ranger.

To Mr. Greville.] He had been in the northern districts all his life, and three years and a half in Kawakawa. He thought there was as much digging going on on Towai No. 1 Reserve as on any other of the reserves about. He thought it should be reserved. It was very poor quality land and difficult to work. During seven or eight years he had seen very little digging on Towai No. 2 Reserve. He did not think there was much gum left there. He had several times officially reported on it. His first report was in June, 1911. At that time there was only one regular digger working there, who stated he made 4s. a day. In November, 1911, he made another report practically to the same effect. He recommended the Government to lift the reserve, and

in consequence it had been surveyed in two 25-acre sections and several smaller sections and opened as one lot. The settlers had petitioned to have the reserve lifted. There was a counter-petition, to which there were twenty-nine signatures. He made inquiries and found eight diggers had signed it, and eight who occasionally dug, and thirteen who were not interested in gum-digging at all. He regarded the field as an exhausted one. He had gone through the gum-buyers' books in Whakapara and Hukerenui and there was no gum purchased from there. He had made a report on the Hukerenui field last year. He had never seen diggers at work on it, but he believed there were some at work this year. The only one last year was a man named Sarich, and he said he only made 5s. a day. He had never seen men digging on the western portion of that field. He did not regard it as gum-bearing. The northern portion never had been gum-bearing. Speaking of the field as a whole he thought the reservation should be lifted. In regard to Te Mata, he had reported on the field. Several settlers round Towai in 1911 wrote asking that the reservation be lifted. He made a report. He found thirty men digging occasionally, half of whom were settlers. One man had been digging continuously for thirty years, and made an average of £1 10s. or £2 a week. Broomfield, the storekeeper at Hukerenui, said he had purchased 1½ tons a month for the previous year from the Te Mata field. He had interviewed the gum-buyers in Whangarei, and they said they had purchased about 1½ tons the previous year from the field. Clark, the storekeeper at Towai, had purchased the previous year from that field about half a ton. He thought it should be left as a gum reservation, though there might be some portions that did not contain a great deal of gum.

To Mr. Stafford.] He had had evidence from diggers that Towai No. 2 was a payable reserve. If they had sent their gum to Auckland they would have told him so. He never dealt with any reserves without going into the question as fully as possible.

To Mr. Hebden.] He had power to examine gum-buyers' books.

To Mr. Greville.] He inspected the land and then got evidence of what was being done, carefully testing the evidence.

HIKURANGI, THURSDAY, 7TH MAY, 1914.

HENRY HAWKINS, Farmer, of Marua.

To Mr. Greville.] He was a farmer residing near the Opuawhanga Gum Reserve, which he knew well, and could state that of late years there was very little digging done on it. Forty years ago the field was a very rich one, and even up to twenty years ago a great many men derived their living from digging there, but within the last five years or thereabouts there were practically no diggers in the ground. The land would come under the description of "good" in parts, some of it was second-rate, and a part was poor land; but he considered at least three-fourths of the area was ploughable, and if properly treated could be made to carry crops. He had had experience in farming so-called gum lands, as some of his own farm had been much the same as the Opuawhanga Reserve in quality. Soil of that description required to be well tilled. He had cleared and cropped his own land for two years and afterwards laid it down in grasses. As a local farmer and old resident in the district he thought it a pity to see so much land of fair quality lying unused by either digger or farmer, and considered the time had arrived for cutting it up for settlement purposes. None of the settlers dug on the reserve now. The casual digger who came along was usually from the Hikurangi Township. One digger had told him recently that the reserve still contained some gum in parts, and the lifting of the reservation could hardly affect them as a body of diggers could clear it right out in a season before the land was surveyed and made ready for settlement. He had known miners from Hikurangi to dig on the field—perhaps five or six all-told—but they did not stop. When the strike occurred there he offered the men inducements to come and dig in his paddock by building a number of shanties and allowing them patches of ground to grow vegetables in order that when not digging he could employ them as farm hands. He could not, however, induce them to stop, as they considered the field was done and they could get better digging elsewhere. He considered it would be a difficult matter to cut out a portion or portions of the reserve for gum-digging in the future and open the balance for settlement. A better plan would be to have the whole area thrown open and settled upon.

JOHN ALEXANDER McINNES, Farmer, of Marua.

To Mr. Greville.] He occupied Section 12, Block XII, Opuawhanga Survey District, and knew the Opuawhanga Reserve, where he had cattle running at the present time. He could say that within the last ten years there had been very few gum-diggers on the field.

To Mr. Stafford.] The field would be used by the Hikurangi miners in times of unemployment if it contained gum, and he had known men go there and give it a trial, but leave again with only a few pieces of gum in their pockets.

LAURENCE GORDON, Farmer, of Marua.

To Mr. Greville.] He knew the Opuawhanga Reserve, having shot over it at different times, but had never dug in the fields. During the coal strike three of the miners to his knowledge had come out to give the place a trial, but did not stop any time. The settlers in the locality regarded the reserve as exhausted of gum. He agreed generally with Mr. Hawkins's evidence on the subject.

To Mr. McKay.] He had grown fruit successfully, but did not favour the Government of the day starting experimental plots in that direction, as there was no market for fruit.

JOHN MALCOLM MCPHEE, Farmer, of Marua.

To Mr. Greville.] He was a farmer of twenty-five years' standing in the district and knew the Opuawhanga Reserve. He had seen no diggers there for the last five years, and held much the same opinion about the land as Mr. Hawkins, a former witness. He did not favour the idea of cutting out any portion which seemed to contain gum, because the field was patchy, and for all the gum there might still be in it the proposal was not worth while. The ploughable portion of the land could be brought in for £2 10s. per acre outlay. Settlers about had dug on the reserve in the past, and it had been a good stand-by for them, but none of them were to be seen in the field now.

POROTI, TUESDAY, 12TH MAY, 1914.

NICHOLAS ALACH, Farmer and Gum-digger, of Kokopu.

To Mr. Greville.] He was a farmer and gum-digger, and had resided on his holding of 324 acres adjoining the Poroti Gum Reserve for the past ten years. He had fifty-six head of cattle, and had milked nineteen cows for the factory this season. He dug on the Poroti Reserve the winter before last. It was both a summer and a winter field, and he knew of thirty men who dug there the whole of last year. The quality of the land in the reserve was not the same all over, the west portion being the better class of land, though he did not regard it as good farming land. The east part of the field should still be kept as a gum reserve. His own farm, being river-flat, was of better quality than the land in the reserve.

To Mr. Stafford.] On some parts of the reserve, especially on the east portion, the gum was 15 ft. deep and was found under the cement. Both black and white gum were found. He did not consider that the field was as good as it was fifteen years ago. There was less gum to be obtained, but it paid diggers because better prices prevailed to-day.

WILLIAM SNELGAR, Farmer, of Poroti.

To Mr. Greville.] He farmed 180 acres adjoining the Ruatangata Reserve, and had his holding fenced in and ploughed. He ran twelve milking-cows and had ten dry cattle running on the section. He knew both the Poroti and Ruatangata Reserves well. On the latter field there were over a hundred men digging last summer, but some of the number might be digging on the absentee land adjoining, as he was not quite sure about some of the boundaries. He considered the flats on these reserves very rich in gum, and gum was also to be found on the hills, and he was of opinion that they would yield gum for many a year to come. He was aware that hundreds of head of cattle ran over the gum reserves in the district.

To Mr. Stafford.] He knew the Purua Flat to be one of the best digging-grounds about. There were quite a hundred men on that flat last summer obtaining a good quality of gum worth £5 12s. per hundredweight. The gum was dug as deep as 25 ft.

To Mr. Greville.] The trenches referred to were not timbered. They were dug in tiers of about four layers.

FRANK ALEXANDER, Gum-digger, of Mangere.

To Mr. Greville.] He had resided in the district four years, and had followed gum-digging for about seventeen years. He knew the Poroti field, where he had dug for four years, and was camped there now, making good wages in both summer and winter. His companions on the field averaged £3 per week, and an expert digger could make that in wages all the year round. From his point of view the Poroti field was certainly a paying one.

To Mr. Stafford.] He had found gum under the cement under old diggings, but there had not been much digging of that nature on the reserve so far. He regarded the Poroti as one of the best winter fields.

VICTOR KOKICH, Farmer, of Kaitara.

To Mr. Greville.] His holding was Section 15, of 103 acres, which was fenced in and nearly all ploughed, and carrying at the present time from fifty to sixty head of cattle. He had milked twenty-one cows last season. The quality of the land in his section was generally better than the quality of the land in the Poroti Reserve. He was a gum-buyer, and last year sold over £2,500 worth of gum got from the Poroti, Kaitara, and Purua Reserves. He has assisted in the breaking-in of the Government experimental plot at Poroti. About 60 acres of it had been ploughed about 6 in. deep and the gum collected, but less than £50 worth had been obtained in that way. The quality of the land in the experimental plot was much the same as the rest of the remaining gum reserve, which he considered could be brought into the same state of cultivation. He had dug gum on the Poroti Reserve, and considered that good wages were still to be made on that field, as the good prices prevailing for gum made it worth while going over the land again. He had dug at one time on the Ruatangata Reserve, and there was still a good deal of summer digging taking place there. There were over a hundred head of stock running on the Ruatangata Reserve, grazing on the danthonia.

To Mr. Stafford.] The gum on the Ruatangata Reserve was found at all depths down to 16 ft. on the flats.

PAUL KOKICH, Farmer, of Poroti.

To Mr. Greville.] The cost to put the Government experimental plot into grass had been about £2 10s. per acre. Lucerne-grass had taken well on the plot, and the land seemed suitable for that kind of grass. He had had no experience with lucerne as fodder for cattle. His own

farm had been treated in much the same way as the Government experimental plot, and he considered it a paying proposition. Though it took money to work up the poorer class of land, a selector would always get it back in results.

JAMES MCKINLEY, Farmer, of Kara.

To Mr. Greville.] He knew the Kaitara Reserve of 600 acres, and was often over the land. Last year five men were working on it both summer and winter, but he had only seen one digger there during the past five or six weeks. The quality of the land on the reserve was much the same as Section 25, owned and worked by his father. Ten years ago there was a big camp south of Kaitara, where forty or fifty men dug, but at the present time there was only one camp left.

To Mr. Stafford.] If the reserve were thrown open for settlement he would not mind a section of 500 acres. Small holdings would be of little use with that class of land.

JOHN URQUHART, Gum-digger, of Poroti.

To Mr. Greville.] He had been gum-digging for thirty-five years, and for the past five months had been camped on the Ruatangata Reserve, digging on both the flats and the hills and making a living. Last summer between thirty and forty men worked on the reserve, and there were about twenty men there last winter digging on the hills. He knew the Purua Reserve, having dug there some years ago. On the flat the Austrians dig as deep as 15 ft.

To Mr. Stafford.] He had dug on the Mangakahia field, and considered it as good as any field about. White gum chiefly was dug there, as deep as 20 ft., in some of the "guts."

To Mr. Greville.] There were only four men on that field now, though it was some of the best gum country in the district. The gum was deep, and the field was not half exhausted yet. Younger men than himself could still make a good living there. Such fields did present a solution of the "unemployed" difficulty, and would do away with the necessity of soup-kitchens in Auckland and elsewhere.

ARTHUR OWEN, Storekeeper, of Poroti.

To Mr. Greville.] He had occupied the store for only two years past, but was a resident in the district for thirty-five years. He was a gum-buyer, and went round the fields for business. From November, 1912, to May, 1914 (nineteen months), the value of the gum purchased amounted to £2,734. There was a good deal of competition in the gum trade, but he secured about a quarter of the business in the locality, some of the diggers preferring to send to Whangarei and Auckland direct. About thirty of the gum-diggers dealt with him for stores.

To Mr. Hebden.] There were six or eight other gum-buyers in Poroti and surrounding districts. Some of the men sent direct to Auckland.

WHANGAREI, THURSDAY, 14TH MAY, 1914.

HENRY MOREY, Farmer, of Parua Bay.

To Mr. Greville.] He knew the Parahaki Gum Reserve. He was a dairy-farmer and owned 200 or 300 acres. He had known the reserve for at least forty years, but had never dug gum on it, but he walked practically all over it some six months ago looking for cattle. He did not think there had been two diggers on it for the last eight years, as it was considered worked out. He was a member of the County Council and Charitable Aid Board. He had not seen any evidence of digging on it within the last six months; in fact, he had not seen a digger on it for years. He knew another small reserve in Parua Bay, and the gum-digging population in that district consisted of about three diggers. There were two stores in the district.

To Mr. Stafford.] He did not think there was one settler round there that dug gum. The gum reserve he referred to was not the one that the Whangarei people went to. He knew the exact boundaries of the reserve. The most of the gum-digging done near Whangarei was on private property. The gum-diggers might be making better wages now on this gumfield than they did many years ago, perhaps, on the deeper ground, but not on the shallow clay fields. He had never known of a colony of diggers on the Parahaki gumfield.

JOSEPH ANDRE, Gum-buyer, of Whangarei.

To Mr. Greville.] He had been in business in Whangarei for about sixteen months, and last year had sold about £6,000 to £7,000 worth of gum, which he got from different fields. The gum was sent in to him, so that he only knew through the diggers from what gumfield it came. Some diggers were living at Parahaki last winter, but not many, and they were casual diggers—certainly not ten in all—and there were settlers close by who sometimes got gum. He got very little gum from the Otaika field, but received parcels from Purua, Hukerenui, Maromaka, Poroti, One-tree Point, near Marsden Point, and very little from Parua Bay. He had bought Mr. S. Rawnsley's business. He formerly lived at Purua and knew the Purua Reserve well, which was mostly dug in the swamp, which went a good way from the river. Some gum came from the hills, but not much. He thought there might be up to seventy diggers in the winter-time and forty to fifty in the summer. He had been out to Purua in the winter, but there were not many diggers in the swamp, as it was too wet.

To Mr. Stafford.] Several men were digging on the Parahaki Reserve last summer as well as during the winter. He knew a digger who sold him £7 worth of gum which had been dug in a fortnight, but there were great differences in diggers.

THOMAS SUTHERLAND, Gum-digger, of Puwera.

To Mr. Greville.] He had never dug at Parahaki, but at Otaika, on the right-hand side of the road from Whangarei. During the six months he had been digging there he had made £1 1s. 6d. a week, working seven hours a day, but he did not go out on a very wet day. There were about ten men on the Otaika field, and with settlers perhaps fifteen in all. Other men made more than he did. He had been digging for fifteen years, and had been on all the fields right through to Riverhead, and so would consider himself an experienced gum-digger. The £1 1s. 6d. was his net earnings after paying for his "tucker," which cost him 17s. a week, which was more than it used to be on account of the increased cost of provisions. During fair weather he supposed that he made £2 a week.

To Mr. Stafford.] Stores had gone up considerably in price during the last ten years. There was deep gum, and he had got it from 1 ft. to 9 ft. in the gullies.

To Mr. Greville.] He knew Turner's, on the other side of Hoey's, and he had dug up to 9 ft. there, getting gum worth £6 10s. The best he had done was a pocket for which he got £4 10s. for the one day's work, and his best week was £6.

WILLIAM WILSON, Dairy-farmer, of Puwera.

To Mr. Greville.] He had lived there all his life. He knew the Otaika field, on which it was mostly old-age pensioners that dug. Ten years ago there might have been twenty to twenty-five men there, and fifteen to eighteen years ago up to thirty or forty camping on the field, but this number consisted of diggers who were constantly coming and going. The number of diggers had steadily declined. He himself had dug gum, but not during the last two or three years. He could not make a living at it although he had given it a fair trial. He considered 9s. to 10s. a day a living-wage. He considered the reserves ought to be opened for settlement, as at present they were being overrun with noxious weeds, which were a menace to the adjoining lands. He considered that gum land could be brought into profitable use for £5 to £6 per acre, and he supposed it would then be worth £20 or more an acre after having been cultivated. In its present state some of it was worth £1 an acre, and some parts more than this. He did not see the force of keeping a lot of land locked up for the benefit of about a dozen old-age pensioners. Diggers as a rule only stopped three or four months on a field. He knew Turner's, and had been up the gully, but had never seen diggers thereabouts; the diggers he knew had been working on the ranges, and there were perhaps twelve men living on the field now.

To Mr. Stafford.] He had kept a store five or six years ago. About twelve or fifteen men were camped round his store then. He knew Morgan's store but could not say how many there were there, but the diggers there were mostly Maoris. He knew the "basins" at Otaika, but never knew much gum come out of them, and a visit to them would show that there was little digging on them. There was hardly any digging for gum on the Puwera Swamp, and he had been up and down it hundreds of times.

WILLIAM HART, Gum-digger, of Otaika.

To Mr. Greville.] He was camped at Mr. Turner's store, and had worked about four years. For the last fortnight he had sold £7 7s. worth of gum, and could make 7s. to 8s. a day, but he did not work all his time. He gave the names of fourteen diggers and thought there might be fifteen men digging, who dug on both sides of the road and in various parts of the reserve.

To Mr. Stafford.] He knew that settlers dug on the field—say, nine or ten of them in all. Otaika was a field that would not be worked out for many years. He had found gum in the "basins" from about 1 ft. to 8 ft.

To Mr. Greville.] He had not dug on the rough country at Tavenor's.

ALBERT TAVENOR, Farmer, of Otaika.

To Mr. Greville.] He had resided in that (Maungakarama) district for thirty-nine years. There had not been much digging on the land near his place, and on Pukeata there had not been digging for years. Between his place and Hoey's there was more digging than on any other part of the field. He had seen only a few diggers this last year, and these were working towards the road. He had himself dug gum five or six years before. Diggers made very little at the work now. The men working on the field now were old-age pensioners, and he did not think they should be turned off even if they did have pensions. He considered the pensioners ought to have a piece of land on which to live even if it was not fit to dig gum on. The most of the land near to his place was ploughable and would be worth spending money on, but some parts were very poor. He had seen the experimental section, and there was better land on the field than what the Government had ploughed up. He did not think there was any worse land, or very little, than what the Agricultural Department were experimenting with.

THOMAS MARTIN CONDON, Police Constable, of Whangarei.

To Mr. Greville.] He had been stationed in Whangarei about four years, and this was the second season during which his Department had issued licenses to diggers. Last year he had collected £73 15s. for licenses. He knew the Parahaki Reserve, and from memory thought he had issued twelve licenses for the Whangarei Borough, and for Otaika only two. For Poroti

he had issued eight £2 licenses and thirteen at 5s. each; Purua, ten at £2 and twenty at 5s. They relied on the gum-buyers to get the fees from the diggers. He had no doubt but that licenses were "farmed out," an instance having come under his notice, and as the result of a special trip to Purua he had collected £13, and on which 10 per cent. commission was allowed.

ERNEST WILSON, Farmer, of Puwera.

To Mr. Greville.] He had been there twenty-five years or so, and he considered that the evidence as regards the number of men on the Otaika field was correct. He had a little poor land himself, but he was able to do something with it. His orchard of about $1\frac{1}{2}$ acres had all been dug over for gum, and it was a profitable orchard, being chiefly in apples, the trees producing good fruit, and the trees had not been manured, although one portion which he had cropped had been manured. He considered that if the ploughable land on the gumfield was worked in the same way as the experimental plot it would pay all right, but it would not require to be taken up by a poor man, and the price should not be over £1 an acre. He had dug gum fifteen years ago, but from a farmer's point of view it was played out, as a man had better take a job at something else than dig gum there now; it was only an old man's field, although it was twelve years since he had been over it. At one time there were perhaps two hundred men on the flat from Turner's store to Hoey's—this was from fifteen to twenty years ago—but since then there had been a gradual decrease. The Austrians and Maoris at Morgan's place were paying Morgan a royalty to dig, but the Austrians were not supposed to dig on the reserve.

To Mr. Stafford.] When the two hundred men were there this was generally for the winter. If drained the Otaika Reserve would in time all be taken up. Fifteen years ago gum was worth £2 to £2 8s. Professional gum-diggers who came there now did not stay long, which was a sign that they did not do well. There might be young men on the field, but he could not say how many.

ALEXANDER PHILIP SPEEDY, Inspector under the Agricultural Department, Whangarei.

To Mr. Greville.] He had been in the district seven years. They had established experimental plots on gum reserves at Akerama, Kaitara, and at Otaika. At the first point they had 33 acres, all of which had been worked, and experiments with grasses were being conducted, the ground having been limed. In selecting the plot at Akerama they picked up probably the poorest piece of land on the reserve so as to see what could be done with land of that character. At Kaitara they had 500 acres; of this 52 acres had been ploughed. Lucerne was one of the crops they had grown, and until this last rain he had been very pleased with its appearance, but the ground was now very sodden, and the lucerne was not looking quite so well when he saw it yesterday. Part of the land had been subsoiled. At Otaika they had 31 acres, all of which had been ploughed, and he was satisfied from the appearance of the land that it could be brought into profitable use. At Akerama part of the land was in English grasses—brown-top, Western Wolths, crested dogstail, cocksfoot, *Lotus angustissimus*, *Lotus pilosa*, sheep's fescue, brome-grass, tall oat-grass, and yellow oat-grass. These had been laid down last autumn, and they were well pleased with the results so far, although it would take five years before they could judge definitely of the result; the indications at the present time were good. He knew no one who had dealt extensively with that poor land, and he believed the Government were the first to tackle land of that particular quality on any scale. He did not know Mr. H. H. Hawkins's place at Marua, but he imagined that his land was of better quality than what the Government were experimenting with. Subsoiling had not been done extensively—perhaps half an acre had been treated in this manner. Their endeavour was to fallow the ploughed land for about a year. He regarded the experiments as most encouraging, and considered that the Government was quite justified in continuing them.

To Mr. Stafford.] They had used slag, but the basis of the whole working had been liming.

To Mr. Greville.] The lime was worked into the soil. It would require a man with considerable capital to take up such lands, and a larger area could be brought in quicker if the requisite capital was available, but whoever took up these poor lands would have to wait some time for his returns, so that it was no use for a poor man to attempt it. He thought that it was quite warrantable to improve these lands with the view to their future settlement.

To Mr. Stafford.] A level-headed man would probably spend his money at the present time on the better-class lands than on the gumfields.

ALEXANDER HOEY, Storekeeper's Assistant, of Puwera.

To Mr. Greville.] He had lived at Puwera about eighteen years, and had been all over the Otaika Reserve. He considered there were about fourteen gum-diggers, mostly old-age pensioners, on the field, apart from settlers. He considered that half of the number were men who could do a good day's work. He did not know how much gum Mr. Hoey got from the field. In the winter-time they carted to Whangarei twice a week, always with two or three sacks of gum, and every fortnight or three weeks they made an extra trip. There would be $1\frac{1}{2}$ cwt. to $1\frac{3}{4}$ cwt. of good gum in a sack and, say, $1\frac{1}{2}$ cwt. second-class gum. They got the gum chiefly from Otaika, with odd pieces from Waikiekie, and the settlers also brought some gum in. From his gum-book his brother would be able to supply particulars of the gum sold by him during the last five years. Diggers camped close to the swamp brought the gum in. They also got gum from Pukeata, three or four miles off, the camp being about half a mile this side of Mr. Tavenor's place. Gum came from all over the reserve, the younger men going further out than the old men, who worked close to their camp. He considered that the average earnings of a digger were more than sufficient to pay for his stores, and counting the old men each digger would draw

from 15s. to £1 a week over and above their store account all the year round. He should say that six men dug there permanently, one man having been there eight years, as they could dig on different portions of it any time of the year—in the swamps in the summer-time and on the hills in the winter months—but Otaika was very heavy digging at any time. More men dug on it in the winter than in the summer.

To Mr. Stafford.] Otaika was perhaps more suitable for digging in the spring or during a wet summer than when it was dry. Mr. Hoey did not buy all the gum that came from Otaika, part of it going to the storekeepers in Whangarei.

To Mr. Greville.] They bought most of the gum that came from the diggers, as the settlers would take their gum to the Whangarei storekeepers. During a wet summer it would be as easy to dig as during the spring months, and there were parts of it on which a digger could work all the year round according to the weather-conditions. Diggers got tired working on one piece and left, not because they were not making a living at it. He knew two men who left Otaika although they were making good money while there. Taking the young with the old an average of £1 a week clear he considered good money. If there were no other gumfields he could not say that two hundred gum-diggers would make £1 a week on the Otaika gumfields, but he thought that sixty could do so.

To Mr. Stewart.] He considered that parts of the Otaika gumfields could be brought into profitable occupation if worked in the same way as the experimental plot.

To Mr. Stafford.] The season had nothing to do with gum-digging; it was a matter of rainfall. He knew the swamp near Turner's and had seen gum taken out of it.

To Mr. Greville.] The ploughing on the experimental plot was done about 6 in. deep, and although they collected the gum which was ploughed out they did not get much, as the gum there was at least 18 in. deep.

To Mr. Stafford.] He had seen gum taken from 7 ft. deep, that being in the basins; there was also gum on the hard clay ridges.

JOHN DAVID MCKENZIE, Farmer, of Whangarei.

To Mr. Greville.] He had been a member of the County Council for fifteen years, being on the Council when the gum reserves were set apart. When the Commissioner of Crown Lands had asked the Council to define the areas containing gum, the Council got their Engineer to plot out the various parts which he believed to contain gum, and after these were all plotted out the Councillors found that good-sized areas were included in the gum reserves that really contained no gum at all. Their Engineer was constantly travelling over the roads, and thus came to know the land that was gum-bearing, the poorer lands covered with tea-tree and scrub being set down as of this class. He had frequently travelled over the gumfields when acting as a Census Enumerator, in which capacity he had acted on three different occasions. As regards the Poroti field, he had noticed a large decrease in the number of diggers there. At both Poroti and Mangakahia, during April, when the census returns were filled up, the number of men was considerably less than at the time of the previous census—quite 50 per cent. less. He visited every camp on the field when taking the census returns.

To Mr. Stafford.] When filling up the returns he had insisted on diggers describing their occupation as that on which they were then employed.

To Mr. Greville.] In taking the census he took the number of men that were actually living on the field. During his travels he was struck by the great impoverishment of the land through the constant burning of the scrub, which was done every year or two, and he thought that this should be stopped, or else that grass-seed should be sown on the burned areas. He considered this a practical proposal, although admitting that it would be very hard to get the diggers to do it. *Danthonia* would be suitable. He did not know *Lotus angustissimus*.

To Mr. Hebdon.] The census papers were revised by him when collected, it being part of his duties to see that they were correctly filled in.

To Mr. Greville.] When he took the census the men put down as "gum-diggers" were really living on the gumfields.

THOMAS LINNELL, Farmer, of Poroti.

To Mr. Greville.] He had lived ten years there, and had been in the Poroti district twenty years. He knew the boundaries of the reserves, having teams on the road, and he had carted the gum from all the reserves, but the greater part of the gum was not dug on the reserves, but came from the Crown lands between the hotel and the bridge. There was a floating population of sometimes forty men there, and it was not worked out. There was an education reserve swamp on which there was a lot of gum, and it was a field that was very little worked, the ground being wet. The gum on the field was patchy. The cattle on the reserve came in from Purua and other parts, and did well there in the winter months, and the reserve ought to be put to a better use than shut up as a gum reserve. He did not know of any settlers who were digging gum on the reserve. He knew the Kaitara field, and in fact he had done the ploughing on the experimental sections for the Agricultural Department, and which he considered the worst parts of the whole block. He was of opinion that the land could be worked profitably, but it was not poor man's country, and he considered that a man could spend his money to better advantage than the Government. At the present time there was not a large gum-digging population at Poroti. Unless on the flat where the Austrians were digging, it would be good policy to open the rest of the reserves. He had taken £10 worth of gum from the 50 acres that he had ploughed for the Department at Kaitara, having men to follow the plough, and the men also filled in the holes, which were up to 5 ft. deep. There were Austrians and men of different nationalities at Poroti on the fields, and the land was practically dug a second time.

PARUA BAY, SATURDAY, 16TH MAY, 1914.

JOSEPH TIMPERLEY, Farmer and Gum-digger, of Parua Bay.

To Mr. Greville.] He was a resident of seven years both as a farmer and gum-digger, and his holding adjoined the Waikare Reserves on his south and east boundaries. He made £3 per week at digging by putting in a fair day's work. He had never dug on private fields, and was of opinion that most diggers soon knew whether they were digging on the reserve or on private fields. He thought there would be at least fourteen men engaged at present on the reserves, which provided both summer and winter digging. He had not attempted to break up his land (education reserves) beyond cultivating an acre or so of garden.

To Mr. Stafford.] He was certain the Parua Bay Reserves were not exhausted of gum, and would not be for years to come, and the diggers still made wages on the fields. The gum found was of good quality, averaging from £7 10s. to £8 8s. per hundredweight. He did not know the Manaia Reserve. Most of the settlers were digging on the reserves on and off.

EDWARD DONALD HARNETT, Farmer, of Parua Bay.

To Mr. Greville.] He owned 100 acres in the district, where he had lived thirty-eight years, and went in for cattle-grazing. He dug gum in his spare time, and considered that good wages could be made by diggers on the Parua Reserves if they cared to work. He did not think the reserves were dug out. He knew that a good many cattle ran over the land. They were owned by adjoining settlers, who made a fair living by the grazing in that manner, and also by digging in spare time.

To Mr. Stafford.] He could not say what quality of gum was dug on the Manaia Reserve.

HARRY HUBBARD, Gum-digger, of Parua Bay.

To Mr. Greville.] He had been digging for ten months, and when he came to the district was absolutely inexperienced at the work, but was able to make a good living on the Parua Bay Reserves. His average wages were 8s. 6d. to 9s. per day, and he was of opinion that an industrious man could easily make a living by digging on the reserves in question.

To Mr. Hebden.] There were about six Maoris digging there at present. In the winter-time there would be as many as thirty digging.

LANGLEY RICHARDS, Storekeeper, of Parua Bay.

To Mr. Greville.] He had resided at Parua Bay three years, and was the only gum-buyer in the bay. He got most of the gum dug from the Parua Bay Reserves. The gum sold would average about £100 per month. Most of the men digging were about fifty years of age, and there were two old-age pensioners on the field. Most of the settlers milked for the butter-factory.

GEORGE OWEN, Storekeeper, of Parua Bay.

To Mr. Greville.] He had resided ten years in the district, and had had experience at gum-digging. He considered a good deal of gum still remained in the reserves, but it was deep, a fact which the diggers only recently discovered. More men were to be seen digging ten years ago than now. Not more than fourteen men would be seen digging on the reserves at the present time. Most of the farming carried on in the district was on non-gum-bearing land.

To Mr. Stafford.] In his time there were diggers on the Manaia Reserve, where the gum was deep in places and of good quality, but the numbers had dwindled away.

LOWER RUAKAKA, MONDAY, 18TH MAY, 1914.

ROBERT HAMILTON BLACK, Gum-digger, of Lower Ruakaka.

To Mr. Greville.] He had lived in the district six years, and had dug over Ruakaka No. 3 Reserve for two years. It was still a payable summer and winter field. Every inch of it contained gum to every depth. He could not say how many had dug on the Marsden Reserve last summer. The part near the south boundary was the richest in gum. The part to the east near Sections 73 and 74 and the road was not so rich in gum. He had never dug on the Ruakaka No. 2 Reserve. There had been digging on it some years ago, and the men did fairly well, but as there was no store in the vicinity the men did not stop on the field. He considered that before any areas were parted with under the 25-acre system of the Land Act and regulations the land ought to be thoroughly inspected and certified to as not containing gum in payable quantities. No one should be allowed to select gum-bearing land under any tenure, but he could see no objection to an area of, say, half an acre to an acre of gum land being included in the selection provided the digging on it were strictly limited to the holder of the lease and not farmed out. As the regulations were framed at present he considered there was a loophole for gum-farming on these holdings.

To Mr. Stafford.] He did not consider the present methods of pricing the gum satisfactory, as the price did not depend on quality but on the need to sell the commodity. He did not know whether a gum "ring" existed in the generally accepted term, but knew of the existence of a merchants' association in the gum business.

To Mr. Greville.] He could see no special difficulties in the way of Government grading gum in the same manner as the butter and flax trades, and was in a position to advise Government how to proceed in the matter if asked. Grading would certainly be beneficial to the diggers.

To Mr. Stafford.] Gum could be found from 6 in. to 7 ft. and 8 ft. deep on the Marsden Reserve. The Lower Ruakaka Swamp contained every quality of gum, some of it as deep as 11 ft. He knew of one hole that eighteen sacks of gum had been taken out of. In his opinion no one could raise the question as to the gum-bearing qualities of the Ruakaka Reserve. If Government assisted diggers in the way of building homes on the 25-acre selection it would be one of the best ways of solving the settlement of the gum lands in the north. He considered that there was too much red-tape about the regulations in their present form, and the conditions as to improvement should be on the same lines as the improvement conditions on ordinary Crown leases and licenses. In regard to the cultivation of 1 acre of garden or orchard within four years, as at present, it was out of the question, and the regulation in that respect should be amended. Before any areas are granted by the Land Board under the 25-acre system the onus of proof that the land is actually non-gum-bearing should be on the applicant and backed up by further independent evidence. He considered all the gum reserves should be distinctly marked by corner-pegs so that diggers may be sure of their ground. The Uretiti Reserve was certainly gum-bearing all over, but many acres had been lost by sand-encroachment.

HARRY OWEN, Gum-digger, of Ruakaka.

To Mr. Greville.] He had resided seven years in the district and held 75 acres under the special regulations regarding settlement in kauri-gum districts. He found the improvement conditions press heavily, especially in regard to the acre for garden and orchard within four years from date of selection. He agreed generally with Mr. Black's evidence regarding the Marsden field, having been all over it at different times and also dug there. He had never found gum on the portion out towards the sandhills or the part east of the lake. He knew the Kokonui field, having dug there. It was shallow digging, and good white gum was obtainable. He knew no one there at the present time. It was a winter field, and dug over by settlers. He had never worked on the Uretiti Reserve.

JAMES STANTON, Gum-digger, of Ruakaka.

To Mr. Greville.] He had worked on the Uretiti Reserve part of last summer and winter, and found it a good payable field. There were seven or eight others digging there at the same time as himself. He had never dug on the Ruakaka No. 2 Reserve.

IRAS HOGGARD, Gum-digger, of Ruakaka.

To Mr. Greville.] He was working on the Ruakaka field, but last summer was camped on the Uretiti Reserve, and made very good money. He had dug on the Marsden Reserve, and there were twelve other diggers camped on the reserve at the same time, and averaging from 10s. to 16s. per day in wages for a good day's work. The average weekly wages would be from £2 10s. to £3, less stores. The cost of living would be about 10s. per week.

To Mr. Stafford.] There were others camped with him on the Uretiti Reserve, and they all did well.

WAIPU, WEDNESDAY, 20TH MAY, 1914.

DANIEL BOWMAR, Farmer and Storekeeper, of Mangawai.

To Mr. Greville.] He had considerable experience in the working of gum lands, especially in the way of swamp-draining and the ploughing of hilly gum land. His method in the case of the swamps had been drainage first and then working the ground on the face if payable, but in that matter he was not tied to any hard-and-fast rule. He could not offer any practical suggestions for the satisfactory filling-up of potholes, and all his experience went to show that unless land was well dug over and potholed it never contained much gum. He had broken in considerable areas of swamp land on gumfields by drainage and digging on the face and removing the timber. He could see no hope of making the dredging of the swamps for gum a success, on account of the timber, and even if there were no timber there was a further difficulty in that the earth had to be washed to get the gum in it. He ploughed about 300 acres at Mangawai last year for gum, but did not get enough to make the work pay. The land in question had been dug over at all times within the last four or five years at a depth of from 1 ft. to 10 ft. He did not get all the gum available, but the main object was to break in the ground. He had it ploughed twice and treated with $1\frac{1}{2}$ cwt. of bonedust and afterwards sown with a mixture of grasses. Only the brown-top and danthonia had held. He also grew potatoes and turnips on part of the same land at the same time, and they did well. The land which he had treated in this manner was very similar in quality to the land on the Waipu Reserve, except that the reserve was hardly so well sheltered as his land. He considered the quality of the Waipu No. 2 Reserve was better than his own land experimented with, having more growth of tea-tree on it. His experiments with the gum lands so far have not brought back all the capital put into them, but he was quite of opinion that he would get it back, and more, in time. His expenditure on the 300 acres experimented with amounted to about £10 per acre, but he had given as much as £33 per acre for similar land after it had been brought in. He considered that most of the kauri peat swamps would make fair farming-lands when drained and put into grass. He did not think that the grading of gum by Government would be beneficial altogether for diggers, and he could see no very practical advantage in grading it as in the case of butter and flax, because the digger could sell at his whare and most of the risk fell on the buyer. His

experience as a buyer did not lead him to suspect a "ring" in the industry. The slumps that occurred from time to time were caused mainly by oversupply of the commodity. It was subject to the same fluctuations as any other article of commerce. He knew that a good deal of rubbishy gum had been sent out of Waipu in the past. The output of it had been overdone, and it would be some years before the same stuff would be marketable again. He knew the Uretiti Reserve, and regarded it as a payable field, especially all the lower ground, which he considered should be drained in order to make it more profitable. He knew the sand was encroaching on the reserve and covering up some of the best part of it. The drainage of the reserve was a work for the Government to take in hand, or if left to private enterprise some protection would have to be given by the State. This would be necessary, because the digger would not be satisfied, and there were too many to please in a matter of the kind. He was well acquainted with the Waipu No. 2 Reserve, and did not regard it as a payable field. The bulk of it was certainly worked out, and if any gum remained at all it would be on the south-west side of the reserve. He knew of two or three men working there now.

To Mr. Stafford.] Nearly all the gum he purchased was from the local kauri-gum reserves. He knew the Ruakaka No. 2 field of 960 acres. Diggers made very little on it now. The quantity of gum dug from Waipu No. 2 Reserve was hardly worth mentioning. Last season there were a few men camped on the north-west corner, who made only fair wages from it.

To Mr. Hebden.] He had never broken in these poor lands without getting some gum. No potholing was allowed on his fields. It was mostly face-work.

To Mr. Greville.] When he saw ground not very much potholed he concluded there was very little gum left, and he considered there were hundreds of acres on the reserves never dug on because the land never contained gum.

To Mr. Stafford.] Where old workings existed it was safe to conclude that some gum still remained. The wages made now were as good as ten years ago, because of the better prices obtained for gum.

To Mr. Greville.] Speaking generally, there were fewer diggers to be seen now than, say, five years ago. No one could pass an opinion on a field simply because it was not being dug over. He had known fields to be neglected for years, and then taken to again by diggers.

ANGUS MCKAY, Farmer, of Waipu.

To Mr. Greville.] He farmed Section 83, of 105 acres, and had dug gum a little about fifteen years ago. It was not the means of his livelihood now. He knew the Waipu Reserve, portions of which in his judgment were still payable to the digger. There were three or four camps on the field now, but it was mainly a spring and dry summer ground, especially on the swamp portions. Most of the digging he had seen going on was in the centre of the reserve. That and the north portions he regarded as being the richest in gum. There was very little gum to the south of the trig. station. He hardly considered that the amount of digging going on at present justified the whole of the reserve being retained for the purpose, and it would be quite safe to cut out the south side for settlement purposes.

To Mr. Stafford.] The Waipu Reserve had a lot of deep gullies, where gum had been found. He thought the State should drain the swampy portions to allow of the gum being recovered. He had known diggers to leave these fields and go to easier places.

To Mr. Greville.] He had known of two diggers who left the Waipu Reserve this summer for the Uretiti field.

JOHN CAMPBELL MCKAY, Farmer, of Waipu.

To Mr. Greville.] He knew the Ruakaka No. 2 Reserve, joining his farm, Section 38. It was six or seven years since a camp of four or five men worked on that field. They all left within six weeks. It was not possible for diggers to be there unknown to him. He did not regard the field as a payable one, because in his opinion there was next to no gum in it. The best digging in that locality was in private land.

To Mr. Stafford.] None of the settlers to his knowledge had ever dug on the reserve.

GEORGE MCKENZIE, Farmer, of Waipu.

To Mr. Greville.] He knew the Waipu Reserve very well, having to muster stock there frequently, but he did not know of more than four or five men camped there at the present time. He considered the land should be cut up and thrown open for settlement purposes. He believed it would carry one sheep to the acre, as similar land adjoining was doing. Speaking generally, it was fairly good land, and when cleared and ploughed would readily take mixed grasses. The present value would be from 7s. 6d. to 10s. per acre, and an expenditure of £6 to £7 per acre would be required to bring it in. The existence of such a large area shut up as a reserve was in his opinion a drawback to the district, and the land was fast becoming a hotbed for gorse, which would be checked if the land were leased. The cutting-up of the land would not entail any hardship on the diggers.

To Mr. Stewart.] He did not favour the subdivision into large areas. From 100 to 200 acres would, he considered, meet the case.

JOHN ALEX FINLAYSON, Farmer, of Waipu.

To Mr. Greville.] He farmed Section 22, adjoining the Waipu Reserve, and he considered the land could be broken in by spending £5 per acre, when the carrying-capacity would be one beast to 5 acres. About twenty years ago there were a great many men working on the reserve and making a living there, but he knew of only one digger now. He regarded the existence of

the reserve a drawback to the whole settlement. As a common run it was of little use to settlers. He considered the whole reserve should be uplifted for settlement purposes.

To Mr. McKay.] The local body had already applied to the Land Board to have the reservation lifted.

MANGAWAI, FRIDAY, 22ND MAY, 1914.

WILLIAM PEARSON, Gum-digger, of Mangawai.

To Mr. Greville.] For the past two summers he had worked on the Coal Hill (Mangawai Reserve), and previously at Hakaru. Coal Hill was in his opinion a first-class summer field at the present price of gum, and there was also good winter digging on it in parts. He had dug very little in the swamp on the lower portions of the reserve, but from his knowledge of that part of the field it was certainly gum-yielding, and showed diggings all through it. He knew diggers worked on it last summer in its present condition, but he was not prepared to say that if drained it would be of benefit to the diggers. The objection he saw was that the ground when drained would be rushed and big cheques made, and the field be spoilt for the regular digger. In his opinion it would be better to work out the other portions of the reserve before undertaking any drainage of the swamp. Last season the reserve carried at least a hundred regular diggers, including one or two Maoris, and there was a good general run of gum throughout it. He had in the past worked all over the Molesworth Reserve, on the coast side of the road, and, though well dug over, he considered a competent man could still make wages on the ground. It was purely a winter field, handy for men to change from Coal Hill, and already he knew a number of men were on it for winter digging. He knew the country on the west side of the same road adjoining Hastie's farm, and considered it even better gum-bearing land than the eastern side. In the past he had dug on the flat running to King's boundary, and proved it to be a good field. Two winters ago there were other twelve men and himself camped on that portion, and they did not consider the hills dug out. The reserves near Tara were winter fields, and he knew three men were digging there last winter. He had a good knowledge of the reserves about Hakaru, having dug there last winter. It was purely winter digging on the hills, and those fields were about the usual type.

To Mr. Stafford.] The old clay gumfields were as payable now as twenty years ago, on account of the better prices obtainable for gum. The gum on Coal Hill (Mangawai Reserve) ran from 2 ft. to 15 ft. in depth, being black and chalky gum of a rubbishy kind. He did not believe in the drainage of the gum swamps. The private fields in the district were open to Austrians and others on royalty, but he could give no exact information as to the prices paid to the owners. As far as his knowledge went the men were engaged on wages (at per week) up to 10s. per day at eight hours, and they could not be had at lower rates, because the Coal Hill (Mangawai Reserve) was so good a field for general digging. He considered a proper system of gum-grading would help the digger and the storekeeper enormously.

To Mr. Greville.] He had never dug on royalty himself, preferring to work on the Crown reserves in the district.

JOSEPH FRANCIS, Gum-digger, of Mangawai.

To Mr. Greville.] He had been in the Mangawai district for about seven years, but had never dug on a royalty or paid any premium for digging. He had dug on Coal Hill, but at present was on Wintle Bros.' private field. There was no agreement between them about the sale of the gum or the purchase of stores. The firm bought his gum and he dealt at their stores. When digging on Coal Hill (Mangawai Reserve) his wages in the summer averaged from £1 to £1 5s. per day, and in the winter the average would be about £3 per week. He was personally considered a good digger. He thought a fair average wage all the year round for a worker on Coal Hill would not be less than £3, without deducting stores. He dug on the Molesworth Reserve four years ago, and made 9s. to 10s. per day. There were at that time seven or eight other diggers camped on the field. He regarded the Molesworth field worth 9s. or 10s. per day to a digger at the present time. He had made 10s. per day on the reserve at the back of Bowmar's (Tara), and regarded that as a fair average wage for a good digger in those parts. There were still a good many men digging both on the reserve and on private fields about Mangawai, and he had noticed that diggers who came into the district generally remained. He knew that privately owned lands in the district were farmed out for digging purposes, but he had never dug on royalty himself. He had heard of one digger who gave between £60 to £80 per acre for the right to dig, but the information had come to him second-hand, and he could give no definite particulars.

KENYON PARKER, Labourer, of Mangawai.

To Mr. Greville.] He combined general labouring in the district with gum-digging, and was at present working on the Coal Hill Reserve. He could earn from 10s. to 12s. per day at labouring, and his earnings by digging on Coal Hill for the past two months averaged from £1 to £1 2s. 6d. per day. He had dug on a premium at one time, paying £30 cash for the sole right over half an acre (Hogan's), and in the end it paid him. The agreement was that the land had to be dug in the face and left without any holes. The average depth he went would be from 2 ft. to 3 ft. It was quite a speculation on his part, and he never tested the ground by spearing or otherwise before entering into the arrangement. He had made £2 per day for the first two months' work on the half-acre. He could not name any one else in the district who farmed out land on similar conditions. He knew the Molesworth Reserve, having dug there three or

four years ago. He had dug for three months, and made 8s. or 9s. per day. The gumfields generally about Mangawai were payable, and he quite agreed that there was no need for any one to be unemployed in the district when digging was so profitable.

To Mr. Hebden.] The class of gum obtained about was considered some of the best, the average price of three-quarter (unscrapped) bringing as much as £8.

To Mr. Greville.] He had only a partial knowledge of the swamp on the lower side of the Coal Hill field (Mangawai Reserve), but from what he knew regarded it as a rich field. He was of opinion that it would be beneficial to the diggers as a whole to have the swamp drained. He had never dug on the Pakiri Reserve.

ERIC BLACK, Farmer, of Mangawai.

To Mr. Greville.] He was farming about 1,030 acres joining the Coal Hill Reserve, and went in mostly for cattle-fattening. Part of his property was bounded on the north by the Coal Hill field, and he had drained some of his land as a cost of £1 2s. 6d. per chain. The work was done by Austrians, but he had had no arrangement with them regarding any gum that might be found when digging the drain. As a matter of fact, he knew they obtained no gum from the drain. Spearing was tried, but the only indications of gum were some colour along the sandhills end of drain. He was quite certain that in the portion of his swamp referred to there was no gum up to 6 ft. deep. No levels were taken at the time, and he could not say what the fall might be. The velocity in the main drain might be three miles an hour. He did not think that the swamp in the Coal Hill Reserve joining his boundary contained any gum, and the quality of the land was, in his opinion, poorer than the drained swamp on his holding. So far as he could judge the tendency of the swamp was to depreciate in quality as it went north, but all of it could be brought into cultivation if drained. The carrying-capacity of his flat land would be one cattle beast to 3 acres. He had previously farmed in the Poverty Bay district, the Forty-mile Bush, also in Marlborough and Canterbury. In country capable of carrying two sheep to the acre he thought that a farmer could make a profit of from £1 5s. to £1 10s. per acre, under present conditions.

To Mr. Stafford.] The Austrians who carried out the drainage-works on his holding were paid so-much per day. They speared, but found only logs.

To Mr. Hebden.] Only small quantities of gum had been found on his land. Experienced diggers had speared down to 12 ft. in parts, but discovered nothing worth speaking about.

To Mr. Greville.] He knew Sellwood's 700-acre section, having ridden through it at different times. It ran about twelve sheep and six head of cattle. Gum-digging was going on over it, some of it on a royalty basis. There were other two neighbours who owned between them about 1,100 acres, and carrying altogether about twenty head of stock (sheep and cattle). It was land that he considered would carry one sheep to the acre if cultivated. The owners were old settlers of twenty years' standing, who made their living by gum-digging. He quite thought that some restrictions should be put on persons owning biggish areas of land and making a living at gum-digging. He could not agree with a former witness's statement in regard to digging in the middle of the swamp on the south side of the Coal Hill Reserve. His house was on a hill overlooking the swamp, and he had never seen any digger at work there.

ANDREW VUSCKO, Gum-digger, of Mangawai.

To Mr. Greville.] He had been a digger for ten years, and was camped at present on the Coal Hill Reserve. He had dug on the swamp at the south side of the field, but found it too wet to continue. He had speared there, and found gum all over the swamp from 6 ft. to 15 ft. deep. He was sure there were valuable patches of gum in that part. It would pay to dig that swamp on the face, and he would deal with it in that manner if the land belonged to him. The gum in Black's swamp would be down as low as 15 ft. When he dug on royalty on Campbell's land it was part of the agreement that potholes should be filled in, but that was not a very difficult thing to do. Had dug on the Mangawai Reserves for four years, and made good wages—averaging from £10 to £20 per month. He considered that good men could make good wages at the work. It generally took a beginner a month getting into practice before doing much. He was of opinion that the gumfields around Mangawai would give five hundred men a living at the price of gum now.

To Mr. Stafford.] The depth of gum on the Molesworth Reserve was as much as 20 ft. in places. Had speared chalk gum there himself 18 ft. down, and known as much as sixteen sacks a day having been got on the reserve by spearing.

ROBERT HASTIE, Farmer, of Mangawai.

To Mr. Greville.] He farmed a holding of 1,000 acres adjacent to the Mangawai No. 4 Reserve. A large part of it was grassed, and he grazed ninety head of cattle, sixty sheep, besides several horses. The Mangawai No. 4 Reserve was being dug over, and he regarded it as still a good field. He had handled land similar in quality to what was on the reserve, and his experience went to show that the so-called poor land could be "brought in" successfully. His treatment had been to plough and cross-plough and to fallow the land for about twelve months. On part he had sowed grass right away, and elsewhere had cropped first and grassed afterwards. On one patch he had tried potatoes after treating the soil to special potato-manures, and the yield was 10 tons to the acre. Generally after cropping he sowed turnips, and later English grasses, after top-dressing with basic slag, and the best results had been obtained. His own land was similar and even poorer in parts than the gum reserve adjoining, which he quite thought could all be brought into profitable occupation. He had a theory that the stiff gum lands could

be fertilized by earthworms, and he had tried experiments in that direction on part of his own land, and the results were encouraging and cost very little. Little colonies of the worms had been established by him in various places on his land, and he was of opinion, speaking from a knowledge extending over fifteen years in the district, that if the worms could be got all over lands of the same quality it would be the making of them. He had seen from thirty to forty men digging on the Mangawai No. 2 field at one time, but the numbers varied month in and month out. The depth of the gum on the hilly land in the reserve ran from the surface to 2 ft., and in the narrow gullies it would be deeper. The flat adjoining Section 306 he considered rich gum land, and it was occupied by several diggers at the present time, the quality of the gum obtained being good. The ground had been potholed and dug over twice already, and diggers still did pretty well there. He had dug gum himself, and spoke as a practical man. He was satisfied that any good worker could make good wages on the reserve adjoining his (Hastie's) land, and was of opinion that while the gumfields remained there should be no unemployed about.

FREDERICK GILPIN, Farmer, of Mangawai.

To Mr. Greville.] He had resided in the district about twelve years, and farmed 550 acres close to the Pakiri Reserve. He had about 150 acres in grass, and went in mainly for cattle-grazing and pig-raising. He knew the Pakiri Reserve well. It consisted of flats and hills. There were three men camped on the field at the present time, and the numbers so far as he knew had not varied for the past six years. He quite confirmed Mr. Black's evidence in regard to the three neighbouring farmer-diggers who owned fairly large areas but neglected them in order to follow up gum-digging for a livelihood.

CHARLES ROBERT DUKE, Police Constable and Kauri-gum Ranger, of Mangawai.

To Mr. Greville.] He was Gum Ranger for the district, and had issued 134 diggers' licenses for the past year. He always made careful inquiries as to the naturalization of Austrians before issuing any licenses. The Lands Department allowed him a commission of 10 per cent. for collecting the license fees.

MANGAWAI, SATURDAY, 23RD MAY, 1914.

RIZMONDO LUPIS, Gum-digger, of Mangawai.

To Mr. Greville.] He had been digging on the Coal Hill Reserve for the past eight or nine years, and had made good wages. He had spent last summer working about the swamp near Black's drain. He and other Austrians had cut the drain along Black's boundary. It was from 4 ft. to 5 ft. deep. They did not spear for gum in the drain, but had tested Black's property in other places. They had struck colour in several places, and considered that black gum was contained in the land. He thought the big swamp on the lower side of the reserve was worth digging in the summer. He and others had speared in a good many places over the swamp, and had found gum in pockets. He knew two or three places about 2 chains from the bank where plenty of gum had been taken, and one party secured £24 worth from near the centre of the swamp. He considered it would pay to drain the swamp for gum-digging. The ground could easily be tested by spearing 16 ft., and it could be thoroughly tested all over by six men in two weeks or less. As the gum would only be got in patches he hardly thought it would pay to dig the swamp on the face. Any drain through it would have to be fairly deep in order to get sufficient fall. The quality of the swamp was good peat soil that would make good farming-land in time. He considered the land would be worth from £15 to £20 per acre when drained and put in grass after the gum had been taken out of it.

JOHN BUNCUGA, Gum-digger, of Mangawai.

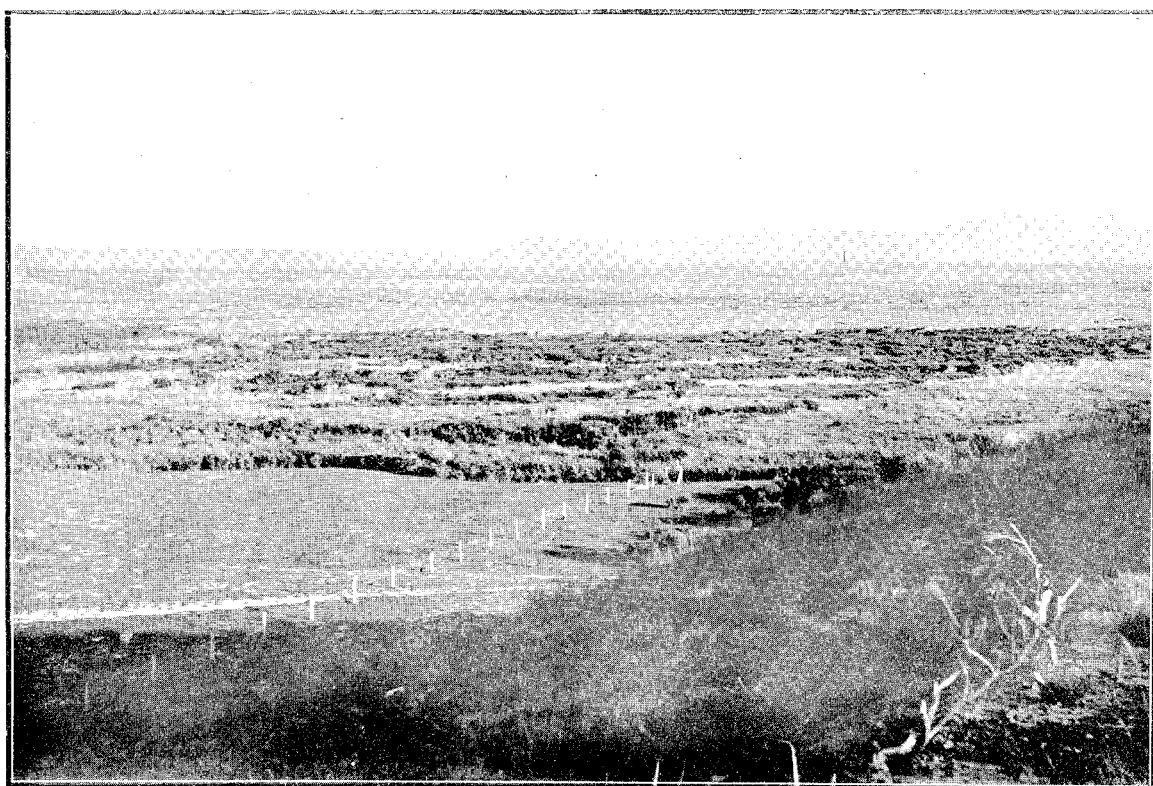
To Mr. Greville.] He farmed his own land, and was also a gum-digger. He had dug on the flat (Coal Hill Reserve) adjoining Hogan's, and got good returns. He considered a lot of gum could be obtained in the dry summer months, and he knew of twenty men who did very well on that particular ground before the wet weather set in. He was of opinion that it would not pay to "face" the swamp on account of the quantity of timber in it, but if drained by Government he thought the diggers would fill in holes so that the land could be farmed afterwards. So far as his knowledge went there was gum all over the flat, and men could make good wages on it.

To Mr. Stafford.] He had dug on the swamp (Coal Hill Reserve) close to Black's boundary as deep as 11 ft., and was quite sure the gum would pay if the land was drained. It would make good farming-land afterwards. He knew gum had been struck all over the swamp, and there was plenty in it still.

To Mr. Greville.] A party of thirty men had paid a premium of £10 per head to dig for two years on Coate's run, Pukekaroro, about 1,000 acres in extent. Some of them had done very well. On Hogan's flat (Coal Hill) a premium of from £60 to £80 an acre was paid for gum-digging rights over an area of 12 or 13 acres. Poole was the lessee of the land, and he farmed out the digging-rights.

GEORGE HOGAN, Farmer, of Mangawai.

To Mr. Greville.] His property, known as "Hogan's flat," comprised 195 acres, and joined the Coal Hill Gum Reserve. Forty acres of it were gum-bearing, and valued by Government for taxation purposes as such at £60 per acre. The balance of the section, he considered, con-



THE AWANUI FLAT, FROM WAIPAPAKAURI. KAITIA IN BACKGROUND.

tained no gum. On his mother's death he came into possession of half-interest in the land, and Mr. Speedy, surveyor, upon resurvey found the gum portion of the section contained only 32½ acres. He tried unsuccessfully to sell the freehold of the land at £100 per acre, but subsequently sold the gum rights only in his half-interest in the 32 acres to a Mr. Poole for the price of £80 per acre. The gum in the land ran from 18 in. to 7 ft. in depth. Spearing would be useless, as the logs and timber buried in it were too thick. Before acquiring the digging-rights Poole tested half an acre of the land, and then negotiated for the gum rights. His experience went to show that no one could tell what gum there might be in the swamps until properly tested. He considered the Coal Hill Reserve to be one of the best gumfields remaining. He was prepared to pay the Crown from £15 to £20 per acre for the gum rights over Coal Hill, provided he were allowed to pick out the gum-bearing portions of it. It would be impossible to carry through such an arrangement alone, but he could associate himself with others and pay that price. He would stake his reputation that the gum on the land was worth what he had stated.

To Mr. Hebden.] He knew one digger (Louis Erceg) whose earnings for two months on the Coal Hill Reserve had amounted to £40.

STATEMENT OF GUM PURCHASES by MESSRS. WINTLE BROS., Mangawai, from June, 1911, to 30th April, 1914.

Total for two years, £24,885; averaging per month, £731 18s. 8d. Practically the whole amount represents gum purchased in and around Mangawai, the bulk of it coming from the Coal Hill Reserve near Mangawai Township.

ARATAPU, FRIDAY, 29TH MAY, 1914.

ARTHUR HAROLD LE GRICE, Farmer, of Tikinui.

To Mr. Greville.] He had resided in the district for twenty-two years, and was a dairy-farmer and grazier holding 150 acres of freehold and about the same area under Maori lease. He carried about a hundred head of stock in the spring months of the year. His farm adjoined the Tikinui Gum Reserve, and he knew the ground thoroughly from end to end. The only diggers camped on the field at the present time were four Dalmatians. There were no British diggers, the men being mostly engaged on roadworks. In the early days most of the gum from the reserve was bought by Mr. Moloughney, of Tikinui. About ten years ago there was one camp at the back of the reserve composed of three or four British diggers, and he knew of other camps of about two hundred Dalmatians who also dug in the back part of the field, and remained there for two years or so. After the Dalmatians had left, the gum-digging population on the reserve did not exceed half a dozen, scattered here and there. As a farmer and resident of over twenty years he regarded the field as played out. He knew of two swamps on the reserve—one of about 150 acres in extent and the other about 200 acres. The swamps were good, with a clay bottom and 3 ft. or 4 ft. of peat, and growing flax, wiwi, and tea-tree. If drained and under grass the land would be worth £20 per acre. The hilly part of the reserve was poor, but if cut up into sufficient areas would grow turnips, and the ploughable portions could easily be brought in. The small gum reserve (Tikinui No. 2) jutting out into the Crown land was certainly not gum-bearing, and only one small corner ever contained any gum at all. The flat portion of it he regarded as first-class soil, and it had been drained. In its present state the land was well worth £3 per acre at the lowest estimate, and he would be quite willing to give a higher figure to acquire the same. He considered the two surveyed sections at the back of Sections 5 and 6 would make good grazing-land. He had been over them fairly often, and had not seen any diggers working there for some considerable time. The land was ploughable, and would grow turnips well. The block of Crown land in among the gum reserves was very much the same in quality as the surrounding reserves, and contained considerable areas of swamp. There was no digging on the land at the present time. He did not know much of the Te Kuri Reserve to the south of the county, near Lake Rototuna, but regarded it as being more gum-bearing in nature than the land further north. He had never been over the Tatarariki Reserve, and could not say anything about the land. There were Austrians digging at the present time in the Crown land in Block XIV, Tokatoka Survey District, and so far as he knew they had been there for the last five or six years. He considered there would be twenty permanent diggers in that locality. He had never ploughed an acre of the hills himself, but a Mr. Rogan had ploughed some 8 or 9 acres of similar land to that in the gum reserves, and from his observations he had obtained very little gum.

To Mr. Stafford.] He had never dug gum in his life, but had done a little hooking in the swamps about eighteen years ago. He had known parties of twos and threes hook about the edge of the gum swamps on the Tikinui Reserve, but they soon gave up the work. He regarded the Tikinui Reserve as an exhausted field, because if it contained payable gum diggers would be on it still. The alien population was desirable in a sense if they became farmers, but he did not think the reserves should be kept open if only dug on by them.

HENRY SCHICK, Farmer, of Tangaihi.

To Mr. Greville.] He had resided in the district twenty-five years, and farmed an area of 600 acres, carrying about a hundred and fifty head of cattle, and he milked thirty-three cows for the local factory. At one time he was in the gum trade, and for ten years had bought most of the gum obtained in the district, but had dropped the business eight or nine years ago because

of the insufficient quantity of gum coming forward. He knew all the gumfields in the district thereabouts, and agreed with Mr. Le Grice's estimate of the number of diggers still on the different fields. He also knew of a batch of about eighteen Austrians who were at work on the reserves eight years ago, but had left owing, he believed, to the scarcity of the gum. Ten years ago there were three gum-stores in the district and from two hundred to three hundred diggers at work in the surrounding country. He knew the Tikinui Reserve well, but had not seen a single digger on it lately. The absence of diggers on a reserve led him to believe that the ground did not pay. If they could make money on a field it would not be altogether deserted. That was human nature. On the gum reserve adjoining his holding there was no digging at all going on, though it was both a summer and a winter field. He knew of a camp at the back of the Tikinui Reserve two or three years ago, but the men were not there now because, in his opinion, the field did not pay them. He agreed with Mr. Le Grice's valuation of the swamp portions of the Tikinui Reserve, and would gladly take up some of the land himself if there was the opportunity.

To Mr. Stafford.] In the big gorges on the reserves black-, white-, and sugar-gum had been got, but he was certain no man could dig 10 lb. per day of any class in those places. He had dug gum himself, and held to the opinion that if the gum was in the ground the diggers would be there. Not much gum had been got out of the swamps, and he was sure that even in the early days of the fields no single man could get 10 lb. of gum in a day. Experienced diggers had told him that they could not make "tucker" there. He believed the reserves to be exhausted because of the absence of diggers on the ground, and this was borne out by what the men themselves had told him.

To Mr. Greville.] He had turned up some shallow gum-bearing land in a 5-acre paddock, but only obtained a few pounds of gum, though he had ploughed from 6 in. to 7 in. deep. He concluded there was not enough gum in the ground to pay for the cost of ploughing.

JOHN STALLWORTHY, Farmer and Journalist, of Aratapu.

To Mr. Greville.] He had resided in the Aratapu district since 1880, and was generally acquainted with the whole district. He helped in getting all the gum reserves set aside some years ago, the main purpose of which was to meet the alien influx at the time. He had also taken a keen interest in the kauri-gum industry for many years, and though it had brought some millions of pounds into the country in the way of revenue, the industry had been neglected by the various Governments and local authorities, with the result that the digger had been exploited all through. In this matter he held very strong opinions. He could not state definitely the total area of all gum-bearing lands, both Crown and private, in the Auckland District, but was quite prepared to believe that the area could not be much less than 1,000,000 acres when it was remembered that the revenue from gum-export up to the present time exceeded £14,000,000. In the matter of grading, he had always held it was the duty of the State to grade the product and so regulate the sale that the diggers might receive more benefit. He had given consideration to the subject of settling the diggers on the land. Originally only 2 acres were allowed, but in 1908 Parliament by an amendment in the Act agreed to increase the area to 10 acres, provided the 2 acres had been satisfactorily cultivated. He was aware that under present legislation the digger had a right to select 25 acres, and under certain circumstances could acquire up to 100 acres. He was quite of opinion that one way to assist the diggers in getting settled on a field and establishing permanent homes would be for the State to grant small advances for building and fencing, in the same manner as is done under some other forms of settlement in vogue. To his mind, as a public man, he considered the granting of small non-gum-bearing areas to the diggers with some such inducement to become permanent settlers to be quite feasible, and it would result in large areas in the aggregate being put to some practical use and producing wealth for the country instead of lying idle as at present. In regard to royalties for gum rights he knew of one case at Waipu where as much as £40 per acre was paid for the right to dig gum. In another instance, at Port Albert, an area of 10 acres which had been worked over for thirty years and considered to be exhausted was turned over for the purpose of making lawn-tennis grounds. It carried twenty-five men who earned 10s. per day each, and in the end the authorities cleared over £100 in gum royalties alone, for the further improvement of the property. He had seen much harm done to both the Crown reserves and private fields by potholing, and the land practically ruined for farming purposes. It was, to his mind, another evidence of the State's neglect of the industry by not exercising proper control—at all events, so far as the Crown reserves were concerned. In regard to lifting the reservations over any of the Tatarariki or Tikinui fields, he thought the diggers should be considered first in the matter. They were really in the best position to judge as to whether certain land was gum-bearing or not. At the present time he occupied land which his wife had drawn in a ballot at the Lands Office some years ago. At the time of opening the section for application it was supposed to be non-gum-bearing, and in fact the diggers themselves had agreed that it was exhausted ground. The land in question was now down in grass, but before breaking it in and sowing the grass the section was thoroughly dug over again, and good wages were made by the men—up to £1 per day—from the gum obtained, showing that it was always a most difficult matter to decide when land was no longer gum-bearing. He was aware that when the bulk of the reserves were set aside in 1898-99 there were considerable areas of ordinary Crown land available for settlement, and he did not think, with the present demand for settlement lands, large areas of country fit for occupation should be held back for a few casual diggers to roam over. At the same time there were many men about the various settlements who obtained casual employment on the fields when other work was scarce who would be injuriously affected if the reserves were lifted indiscriminately. He considered that before any gum reserve was lifted the ground should be

tested by systematic digging. In some of the larger reserves made up of gum-bearing and non-gum-bearing portions it would be difficult to cut out the non-gum-bearing parts for settlement in a satisfactory manner and at the same time not to interfere with the portions in which there was still gum in payable quantities. Before any part was freed from reservation for settlement the ground should be tested in a practical manner, because it would be wrong to throw away the wealth in the land even for the sake of agriculture, which could always be fostered after the gum had been removed.

GEORGE LENDRUM, Farmer, of Tatarariki.

To Mr. Greville.] He was the holder of Sections 3, 4, 35, 57, and 58—about 700 acres—which he farmed principally with sheep, carrying at the present time five hundred head. He knew the gum reserves adjoining his farm very well. The hill country was gum-bearing land and the balance good flats. There was no one camped on those particular reserves at the present time, but in the summer months a casual digger, but never more than three or four men at one time, could be seen on the field. He knew the Tatarariki Reserve, and had often travelled over it, and had dug there formerly himself. He had seen a few Austrians on it, and also a few men working in the swamp. For the past ten years there had been very little digging on the reserve—most of it being on the Crown land in the vicinity—and he could say that the settlers did not go out on the field in slack times. In regard to the swamp in the Tatarariki Reserve, he considered it required draining. It could be crossed on foot in a dry summer. Diggers had often hooked in the swamp and had told him there was no gum in it. He considered that the swamp if drained would be worth, say, £20 per acre. In its present state the value would be from £5 to £6 per acre, and the hilly portion of the reserve would be worth from £1 to £1 10s. per acre. The land would make good farms if brought into cultivation, and in the interests of the State it should be thrown open for settlement. He had held his own land about eight years, and at one time was under the impression that it was gum-bearing. Four Austrians had agreed to pay a royalty of 2s. 6d. per head per week for the digging rights over it, but, after turning the place upside down, left it, telling him there was not gum there to pay them. There had been gum in the gullies in the reserve, but there was not enough left to make digging payable now, and he considered any remaining gum would only be sufficient to assist the selector of the land to put up fences. As representing the Tatarariki Farmers' Union he would like to see the reserves opened for settlement, and thought the reserves could be converted into farms. The opening of the land would be in the interests of the district generally. The Farmers' Union had held a meeting at Tatarariki on the subject about three weeks ago, when fifteen or sixteen were present, mostly farmers on the Tatarariki flats. He considered the undulating portions of the reserves if opened should not be too small in area—probably 150 acres or thereabouts would meet the case. Personally he did not wish to see large holdings in the district.

JOHN HAWTHORN MCCARROLL, Farmer, of Aratapu.

To Mr. Greville.] He had lived for ten years in Aratapu, where he owned 40 acres. He also owned land at Matakoe, and about 1,200 acres at Kaikohe, carrying six hundred head of sheep and one hundred and twenty head of cattle. He had been all over the gum reserves in the Aratapu district and knew them very well. He regarded the shallow ground as practically exhausted right through, but the swamp land would not be exhausted in his time by the methods of digging pursued at the present time. He knew a man at Tatarariki working on a swamp and making £1 per day, and again he knew shallow fields in the east and west coasts where men were barely making a living. He had done no digging for sixteen or seventeen years, and the price of gum was 100 per cent. better now than when he dug. This did not, however, apply to the digging on shallow ground. He considered the quality of the hilly land would be equal to a sheep or a sheep and a half to the acre when brought in.

To Mr. Stafford.] He had never dug on the Tikinui Reserve. He favoured retaining the swamps for gum-digging and opening up the hilly portions for settlement.

To Mr. Greville.] The shallow fields were exhausted from the point of view of a practical man, and should be turned to some use for agriculture. He would not regard land as gum-bearing because it contained traces of gum. If there was gum in it in payable quantities the diggers would be there in crowds.

JAMES KIDD, Farmer, of Tatarariki.

To Mr. Greville.] He had a dairy farm of 600 acres on which he grazed 250 head of stock, and had resided in the district for twenty years. He agreed generally with Mr. Lendrum's evidence, and with reference to the sections upon the swamp thought the Crown ought to continue the present outlet drain and afterwards load the land with the cost.

JAMES COCHRANE, Gum-digger, of Red Hill.

To Mr. Greville.] He was a resident of Red Hill, and had been a gum-digger for twenty-six years, and was at present digging on his own land—50 acres, part of Section 56. He had held the land nine years, and had made a garden and put a small part of the section in grass. He had dug on the Crown land, and made on the average 5s. per day working wet or dry. He regarded himself as a fair average of the diggers in the locality, and knew of other men whose earnings were less than 5s. per day. He could instance two men younger than himself who did not clear more than 1s. 7d. per day after paying for stores. He had discussed the subject of wages with other diggers, and was aware that the ruling rate for a labourer was 10s. per day,

at bushfelling from £2 5s. to £3 per week, and 10s. per day for roadwork. He was of opinion that a man could not make decent wages on the gum reserves now. There were about ten men digging on the fields about Red Hill. They were mainly young men, and considered their time was being idled for all they made at the work. No farmers had asked him to come forward and give evidence. The notice of the Commission's meeting he had received from the County Clerk, and he had made it as widely known as possible among the diggers in the district. He had told at least seven or eight of the meeting.

To Mr. Stafford.] He knew a digger by the name of Copedo, but he was working on a private field and not on the Crown reserves.

To Mr. Hebden.] He thought the reserves in the district were only fit for throwing open for settlement.

HENRY JAMES MONTGOMERY, Police Constable and Kauri-gum Ranger, stationed at Aratapu.

Witness submitted a statement of the licenses issued by him under the Kauri-gum Industry Act, 1908, from 1st May, 1913, to 30th April, 1914, as follows: 165 special licenses, £40 5s.; fifty-seven ordinary licenses, £114; fifteen gum-buyers' licenses, £15; fifty residence-site licenses, £2 10s.: total, £171 15s.

DARGAVILLE, TUESDAY, 2ND JUNE, 1914.

PETER BROWN, Settler and Gum-buyer, of Waimata.

To Mr. Greville.] He lived at Waimata and had a business in Kairara. He had been engaged in the gum business for over thirty years. He had had the business at Kairara all that time and still carried it on there. He considered that last year there were one hundred and fifty diggers there—mostly Natives—and they did very well. He had bought about £2,000 worth of gum there. He considered the field to be undoubtedly a payable one—in fact, one of the best gumfields in the North. He should say that digging had been going on there for over thirty years—all the years he had known it there had always been digging going on there. He did not know much about the Kai Iwi gumfield now, although at one time he knew every inch of it, but of recent years he had not been over it. He did not know much about the reserve at Aratapu, but Kairara he was thoroughly acquainted with. He considered that there would be 1,000 acres or something like that which would be a good gumfield. It was very stony and fit for nothing but gum-digging. Not only was it giving valuable gum, but it was a standby for a good many Natives up the line.

To Mr. Stafford.] His opinion was that all the gullies on that reserve contained good gum. In some places you could go down 15 ft. or 16 ft. before coming to solid ground. It had been dug over two or three times. There was no second layer underneath. He considered that there was very little brown gum on the Kairara Reserve.

To Mr. Greville.] The shallow ground on top of the ranges was over 1 ft. deep. He was thoroughly satisfied it was a payable field. He thought that a piece of land which was easily accessible was pretty well worked out. He thought Kairara was rather inaccessible, but good wages were made on it.

ELLIS REECE ELLIS, Ranger on Mr. Thomas Hawkins's private gumfield.

To Mr. Greville.] There were 2,600 acres in Mr. Hawkins's private field. It was being let on royalty, £1 5s. per week being paid for males and 15s. per week for females. They were mostly Native diggers. It was only opened that day (2nd instant), and there were thirty permits issued already. It was a "fossicking" field, and patchy in places. It was very easy to get to. It was about eight miles from Dargaville. He knew Kai Iwi Reserve. He thought the richest gum-bearing portions were the basins. Johnston's swamp was about the richest portion. He had dug on it himself from the lakes to the coast—that portion called "Russell's Gap." He knew the reserve at Maropiu—that part of Red Hill which belonged to Mr. Trounson: he regarded this as good land. He knew Mr. Cunningham, who knew the field pretty well, but did not agree with him that a considerable portion had been dug out. He considered it was carrying gum all over in payable quantities. In his opinion, a payable gumfield was one on which a man could make a living-wage. He considered from 8s. to 10s. per day to be a livable wage. He knew Kairara Reserve. He had heard Mr. Brown's evidence and agreed with it. He had not dug at Kairara, but was down there last winter. He was at Kai Iwi Reserve last summer and should think that fifty men were working there—most of them at Johnston's camp. He knew where Johnston's swamp was, and thought that it was a good camping-place. In regard to that portion called Red Gully, he was not over it last year. There were some Austrians digging there last year on that reserve—young men. He knew the reserve farther down the river—Te Kuri. In his opinion the larger portion of this reserve was not gum-bearing. He had been at Te Kuri since last September, and it was his duty to go round it. With regard to the gulches, he had never known any digging in the centre. The gum was mostly obtained from the sides. It was not a good hooking field. He considered there was a very large area that did not contain any gum. He thought that it would be awkward to cut out these gulches. There might be a possible chance of cutting the lower end of them. He knew the reserves up the river at Aratapu and Tikinui. There was a big slump in the gum last year, but the year before there were seventy Austrians employed there. He knew the big swamp on that reserve, and

regarded it as a good swamp, and considered that it was gum-bearing in payable quantities. He had heard that the drained swamp land adjoining had been sold at £10 per acre. He knew Tatarariki Reserve and all those reserves up through Aratapu. He was not intimately acquainted with them, but could speak generally of them. He regarded all those reserves as payable gum land. He did not know how many men there were working on the Tatarariki Reserve last year. There was a slump on all the time he was ranging there. He thought there was a fair market this year. There were hundreds of men left in the winter-time on account of the slump, but in the summer months men could make good money there. He had never had experience in gold-mining.

To Mr. Stafford.] He knew the southern part of the Kai Iwi Reserve. He thought that there was sufficient gum in it to make it payable. His opinion was that all these basins would pay working over again. He knew that the diggers at Te Kopuru were making good wages. With regard to that land adjoining Trounson's, he thought it contained some gum. He thought a digger could make about £2 per week. The fields might still be valuable gumfields even though the diggers had left them.

To Mr. Greville.] He thought the owners of private land regarded it as important that the holes should be filled up. He himself regarded it so. It struck him that the Government had been very neglectful in allowing the holes to be dug and not filled up. He knew the reserve at Mangawai. He knew the Coal Hill Reserve, and he knew that very large royalties had been paid for digging land there. He knew they were paying £80 per acre for the right to dig the gum, and then they left the land ready to plough. When he was Ranger he never felt it his duty to draw the attention of the Government to the neglect as regards the holes. If he owned land himself he would insist on the holes being filled up.

VIVIAN TROUNSON, County Chairman.

To Mr. Greville.] He had about 700 or 800 acres at Maropiu—not adjoining Kai Iwi, but at Maropiu. He had known the Kai Iwi Reserve for a number of years. As long as he had known it there had always been some diggers on it. He looked upon it as a good gumfield. He knew Kairara Reserve very little—not well enough to speak of it. He considered there were large areas of gum-bearing lands in this district. He knew there were several large holdings about here, and knew there were large areas unimproved. There were a few sections he considered the reservation should be removed from, principally down the river at the back of Aratapu, Tatarariki, and Le Grice's (Sections 124, 125, 126, behind Stallworthy's; Sections 56, 70, 74-77 (behind Masefield's; Section 31, behind Le Grice's drained swamp). These sections had been brought under his notice, and he had been asked to have the reservation removed. Speaking as Chairman of the local body, he thought the gum reserves were no disadvantage to the county. The privately owned gum land was a source of revenue. He thought that between £300 and £400 per year was obtained from private land by his Council.

To Mr. Stafford.] He knew nothing of the sections, but they had been represented to him as being valuable land, but wanting draining. He thought most of the hilly land was poor land. He had not studied the values of kauri-gum recently. He knew that at the present time there was a camp of fifteen men at the back of the Aratapu Reserve. He knew Aratapu gumfields well.

To Mr. McKay.] He believed it would pay the State to drain the swamps.

JOHN JOSEPH POWELL, Member of County Council.

To Mr. Greville.] His home was at Taita. At the present time he lived at Aratapu. He had lived in the district for thirty years, and knew it well. He had had a lot to do with gum-fields, and had been frequently over these reserves. Speaking of all these shallow reserves, he did not think it would be advisable to disturb them, but he thought the swamp areas should be drained. He knew that timber-workers, casual workers, and day labourers made a good wage. Dealing with swamp lands, his suggestion was that the Crown should drain these swamps. He regarded all these swamps as gum-bearing, the peat lying for a depth of from 5 ft. to 15 ft. He would call a profitable wage a living-wage. He regarded £1 10s. and "tucker" as the lowest possible wage on which to live.

To Mr. Hebden.] He knew something of the washing-out of the diggings. He thought good money could be made from parts of the swamps. He thought that in all Government reserves where the potholes were over 2 ft. deep it was absolutely necessary these holes should be filled, but the holes less than 2 ft. deep were no detriment.

CHARLES SELBY, Resident of Kairara.

To Mr. Greville.] He had lived in the Kairara district for about five years. He was a storekeeper and gum-buyer. He wished to speak especially of the Kairara Reserve. He agreed generally with what the other witnesses had said. He thought a man could earn £1 per day at the Kairara field. Last week he had paid a man £15 for about a fortnight's work. Out of that he had to pay £3 6s. for stores. The balance was clear profit. An average digger could make £3 per week. He considered that it would not cost a single man more than £1 5s. per week at the outside to live. It cost 4s. per hundredweight to get stores out there. He had camped out himself, and it cost him 18s. per week. For a single man it would come more expensive than for six or seven living together. He regarded Kairara as a payable gumfield.

To Mr. Stewart.] He did not know the Kairara Reserve boundary very well.

WALTER COOMBES, Resident of Red Hill, about five miles from Te Kopuru.

To Mr. Greville.] He knew all the reserves between his place and the river. He knew the Tatarariki reserves. Speaking generally in regard to these gum reserves, he thought a good living could be made by gum-diggers. He had heard Mr. Powell give his evidence in regard to swamp lands, and agreed with him in what he had said. He owned gum land himself, but all of it had been dug over. He knew a couple of education reserves out his way. The lessee of one of the reserves was a Mr. Millar. Two sections (one on each side of the road, Nos. 80 and 65) were let for digging. The land had not been fenced. Potholes had been dug all over and not filled in. He knew of no portions of reserves out there which he would regard as non-gum-bearing. He was not able to form any opinion as to the number of men working there last year, but he knew there were about twenty-five or thirty residents round the hill working on them. Some of the settlers and farmers also worked on them—the majority of them were residents. He regarded these reserves as a good standby for casual workers. He did not know the provisions of the Land Act himself, and he was speaking the other day to some of them and they knew nothing about it.

To Mr. Hebden.] He knew Te Kopuru Reserve. There was a large camp there. He believed that in that part of Te Kopuru past the Austrian's store there were thirty men digging. All the men he knew, and, with the exception of four or five, they camped in the district. He thought that they would be making £6 per week, or perhaps even £4 for three days, but thought it safe to say an average of £4 per week. He had only been on his farm about twelve months, and dug gum in his spare time. There were a lot of men who were working at the sawmill, but he did not know what wages they were getting.

MATI FRANICH, local Gum-buyer, with a place of business at Mangawhare.

To Mr. Greville.] He had been seven years in Dargaville. He bought gum in the country extending from Kaihu to Tikiu. He bought a lot of gum from the Aratapu fields. From December to March the earnings of one camp of seven men at Aratapu were £350. Another man at Aratapu named Martinovich had bought as much gum as he had from the same camp. He also bought gum from Red Hill and Scarrott's. He had bought in fifteen months' time £38,000 worth of gum, his operations extending from Kaihu to Tikiu. He went wherever there was gum to be bought.

STATEMENT OF KAURI-GUM LICENSES issued by Sergeant J. C. GRIFFITHS, Ranger in Hobson and Hokianga Counties.

I beg to advise that the following kauri-gum licenses have been issued by me during the past twelve months ending 30th May, 1914:—Hobson County: 179 ordinary licenses at £2 each, £358; 312 special licenses at 5s. each, £78; fifteen gum-buyers' licenses at £1 each, £15; thirteen residential licenses at 1s. each, 13s: total, £451 13s. Hokianga County: Eight ordinary licenses at £2 each, £16; twenty-eight special licenses at 5s. each, £7: total, £23: totals, Hobson and Hokianga Counties, £474 13s.

HELENSVILLE, THURSDAY, 11TH JUNE, 1914.

FREDERICK HERBERT DE COURCY POWER, Gum-digger, of Kaukapakapa.

To Mr. Greville.] He had lived at Kaukapakapa for eighteen years and a half, during which time he had been engaged in gum-digging. He could not say exactly how many gum-diggers there would be on the Kaukapakapa Reserve, because they lived such distances apart that he did not always see them, but probably twenty at the present time. There were 570 acres in the reserve. It was not really a summer field, although, of course, there were places that could only be dug in summer, but in both summer and winter he could always find places to dig. A fair average digger could make about £2 10s. per week on the field. He considered himself a fair average digger; some could make more, some less. He himself had made £33 in twelve weeks, and in proof of this statement witness handed in his sale-slips, as follows: £13 1s. 7d.; £9 9s. 5d.; £10 9s. 5d. He knew another digger, a Mr. Bright, who for the last four weeks had earned £16 4s. His average for two years was £3 per week. Twenty average men, if fairly good, could make £2 10s., provided they understood the work. Some, of course, said there was some of it barren ground; he got a lot of gum in that sort of land that others would not dig, and it was about the best sort of gum that goes into Auckland. He was a married man with no family. He was not aware of the provisions of the Land Act, 1912, that would enable him to take up 25 acres of land on the reserves, but he thought 25 acres would not be of much use to any one.

To Mr. Stafford.] The Wayby Reserve was generally known to the diggers as Outhwaite's. This reserve was taken up originally by a man named Drinnan, who eventually threw up the land, and when witness first came to Kaukapakapa he paid a royalty of 1s. per week to dig on it. The deepest he had got gum on this reserve was 10 ft., but a little while ago two of the men mentioned on the statement handed in had sunk 16 ft. through solid clay in the swamp. He had never found any brown gum. It was quite true that he made just as much money now as he did years ago.

To Mr. Greville.] He was before the Commission in a representative capacity, authorized by seven of the diggers signing the joint letter which he produced.

"Kaukapakapa, 10th June, 1914.—We, the undersigned, who are engaged in digging gum in the Kaukapakapa district, hereby appoint and authorize the holder of this, Mr. Frederick

Power, to act on our behalf at the forthcoming sitting of the Royal Commission on Gum Lands, to take place at Helensville, 11th June, 1914.—P. Carr, Joseph Bright, Patrick Fitzpatrick, Thomas Gibbons, Thomas Kennedy, Henry Kennedy, James Hughes, Gum-diggers.”

They had had held a meeting amongst themselves, but, of course, there were others who lived in different parts whom he had not seen. There were several others living in that locality who dug gum; amongst them Messrs. Shanks and Hinds. The unanimous opinion of all the diggers was that the Kaukapakapa Reserve should be kept as a gum reserve.

HENRY GEORGE MCBRIDE, Gum-digger, of Kaukapakapa.

To Mr. Greville.] He had lived at Kaukapakapa about eighteen years, and had been gum-digging for about nine years. His average earnings were about £2 7s. 6d. per week. He was a single man. He had been on the Kaukapakapa Reserve with Mr. Power. He had dug mostly on Crown lands adjoining the reserve. He had been working on the railway for the last three months at 9s. per day. He had never worked more than six hours a day gum-digging; some work longer. He agreed with Mr. Power about the quality of the gum lands on the reserve.

JOHN GAVIN SHANKS, Carter, of Kaukapakapa.

To Mr. Greville.] He had lived at Kaukapakapa for thirty years. His father owned a farm adjoining the reserve. His present occupation was that of a carter; now and again on wet days he filled in odd times working on the gumfields. He was working with his father's team. He knew the Kaukapakapa field well, and reckoned the average number of men always working on the Kaukapakapa Reserve at ten or more, and as far as he knew many of them made good wages there. Several had been there for years, but they usually shifted about. The deep digger shifts away when the ground gets too wet. He agreed with the previous witnesses about the gum-bearing quality of the land.

ERNEST HERBERT WOODCOCKS, Gum-digger, of Wayby.

To Mr. Greville.] He was a married man with a family, and owned about 38 acres of land. The Kaukapakapa Reserve practically surrounded him. He was born there, and had been a gum-digger all his life. He had only been on two other fields, and always came back to this one. His average earnings were £3 per week all the year round—sometimes £4. He dug mostly in the vicinity of his house. He only knew his own locality, and had been digging there for about fourteen years. During the last few years the number of gum-diggers had averaged about nine. At the present time there were about twenty-six men, several of whom had camped there recently. Some of the men did not make much, others did well, but an average digger could make his £3 per week there still. He knew Mr. Brown, a gum-digger, and knew that he did not make high wages; he only put in about two days and a half a week, and worked for the settlers at times. He was quite positive any man could make £3 per week if he liked to work. The only stock he kept was one horse; he did not even keep a cow. He thought that the southern portion of the reserve had been lifted somewhere about five months ago. The authorities stop men digging there now. The portion of the reserve they took off was the best on the field; he used to dig on it himself. He was not asked his opinion as to whether he thought the reservation should be taken off. He did not know anything about it until it was being cut up into sections; as far as he knew none of the other diggers knew about it. In his opinion, if the Wayby and the Te Arai Reserve, which contained 1,260 acres, was the only gum land remaining in New Zealand it would support twenty diggers all the year round. There were a good many basins and small swamps. The deepest he had been down was 12 ft. in the swamp; it was only in the dry season he could work there. [He handed in a statement showing he had made £31 2s. 8d. for nine weeks and a half ending 9th June of this year; £11 2s. 9d. for seventeen days from the 3rd to the 23rd October; and £21 16s. 1d. for eleven days ending the 27th August, 1913.]

To Mr. Stafford.] The highest price he had received for gum was £8 5s. per hundredweight, his lowest £7 per hundredweight. The depth of the digging ranged from 3 in. up to any depth. There were a great many slips on the reserve, and they were rich in gum. He had made as much as £2 per day on one of the slips. Some of the slips did not carry gum.

To Mr. Greville.] Some of the recent arrivals on the field came from Kumeu, some from Mangawai. These men were making from £2 10s. to £3 per week. They were a mixed lot of Austrians and Britishers. The only thing that had kept the field back and in past years prevented more men working there was that there was no storekeeper there who would deal in gum. The men had always to swag their own food on to the field and swag their gum out, but recently a storekeeper and gum-buyer had started in business, and this accounted for the increase in the number of men now on the field. He generally sold his gum in Auckland.

JAMES PARKER, Farmer, of Wayby.

To Mr. Greville.] He was a farmer at Wayby, and his land adjoined the reserve. His wife and himself together owned 280 acres. He went in for dairying; milked twenty cows. He lived on the east side of the reserve, and knew the reserve thoroughly. In the early days he had been a gum-digger, but did very little now. He had lived there for twenty years, during which time there had always been a fair number of diggers on the field. During the last winter the average number of diggers had been ten, but the year before there were very few—perhaps five—and previous to that very few. In his opinion as a farmer and gum-digger the field was nearly played out. The Austrians came there a few years ago and made big potholes about 6 ft. to 9 ft. deep, which would take some filling in. He reckoned the Austrians had worked the field out. In his

opinion Mr. Woodcocks was an exceptional gum-digger at the present time. When he himself was working on the gumfields he could make his £3 5s. per week comfortably, but would not like to have to try and make that on the Wayby Reserve now. He had been moving in the direction of getting the land thrown open for settlement. In its present condition it was bringing in very little in the way of rates. The gum-diggers as a class do not want land; all they want is the gum. He knew all the gumfields from Flagstaff to Whangaroa. As a settler he thought the land should be thrown open.

To Mr. Stafford.] The price he got for his gum ten years ago was about £2 10s. per hundred-weight, and nowadays the same class of gum brought £8. He admitted that a man could make as good wages now if he got only one-third of the quantity, owing to the increased prices.

To Mr. Stewart.] The class of land would be suitable for fruitgrowing and general farming.

To Mr. Greville.] There was very little of the land that was not ploughable—probably not more than 30 or 40 acres. There were not many slips on the land, as it was not steep enough; there were more washouts than slips.

To Mr. McKay.] He had ploughed a piece of his land and never had put any manure on it. It was formerly gum land. He had sown it in grass four years ago—tall fescue and danthonia—and never had to put any manure on it.

JOHN ROSS MCKENZIE, Farmer, of Wayby.

To Mr. Greville.] He was a farmer, residing at Wayby, and a member of the County Council. He owned an area of about 82 acres, and went in for dairy-farming. His land ran close to the reserve. He had lived there for about four years, and had been farming all his life. During the last four years there had not been many men working on the adjoining gumfields. In the course of his duties as a Councillor he had to ride through the district, and he only knew of three or four diggers. He agreed that the Wayby Reserve was practically all ploughable. He knew of some gum land that had been ploughed and brought under cultivation. It had been treated with phosphates. In his opinion, the proper way to treat the land would be to have it ploughed up in the autumn as soon as the rains came, let it lie fallow all winter, work it all the spring, and keep it stirred up during the summer. He would put in swede turnips. He would use about 3 cwt. manure—1 cwt. super., 1 cwt. bonedust, and 1 cwt. guano. The cost would be 15s. an acre for manures, 14s. by contract for ploughing and working—that is, by filling in the potholes himself. He reckoned he could work the land at a cost of £2 per acre. After he had taken the turnips out he would plough it up in the spring and would sow it down the first week in March; with a fair amount of luck he would get enough out of the turnips to pay for the outlay, and reckoned it would be a good investment. He knew several settlers who had ploughed up the gum lands, one of whom got enough gum to pay for the ploughing. From his point of view as a Councillor and settler he thought the gumfields at Wayby were played out. He knew Mr. Brown; he worked for the settlers, who paid him 8s. per day. He also knew several of the men who had come there lately.

To Mr. Hebden.] He regarded Mr. Woodcock as an exceptional gum-digger. He had never dug gum himself, but gave his opinion merely as a farmer and Councillor.

To Mr. McKay.] He considered that by throwing open the reserve it would benefit the district. In its present state he considered it a blot on the district.

To Mr. Greville.] If cut up into farms the Wayby Reserve would support more farmers permanently than it would gum-diggers. If the Government cut it up into fruit-farms 25-acre lots would be required, but 200 acres would be needed for agricultural purposes. He considered the land if ploughed and sown down in grass would be worth £7 an acre.

To Mr. Stewart.] He would sow in English grass, a fair mixture. The diggers as a rule were against the reservation being lifted, and in his opinion certain diggers had come there lately for the purpose of having the reservation retained.

To Mr. Greville.] The settlers adjoining were anxious to get more land and were coming from other parts for fruit-farms. He still adhered to his opinion as to the reason for the increased number of gum-diggers at Wayby lately.

JOHN GILLIES, Farmer, of Wayby.

To Mr. Greville.] He was a farmer, residing at Wayby, and had lived there for fifteen months. He owned an area of 495 acres, and had 50 acres of gum land on his property. He had brought under cultivation 30 acres recently. He ploughed it 7 in. to 10 in. deep in the autumn; let it lie fallow for six months, and gave it the usual treatment, to thoroughly work the land up afterwards. He put 15 acres straight into grass, 2 acres into turnips as an experiment, and 12 acres into oats. In regard to the grass land, it took well; he put it down in Italian and perennial rye-grass, and was quite satisfied with the result. He had put twenty-five cows on it for seven months. As regards the oats the result was equally as good as the Waikato lands. (He produced some turnips grown on the land, weighing 12 lb. each.) He had used 3 cwt. of manure—1 cwt. super., 1 cwt. Malden Island guano, and 1 cwt. blood and bone—the cost averaging about 17s. 6d. an acre. It was ploughed when he came there by his predecessor, but he had to fill in the potholes himself. The piece he had put in turnips was as poor land as any in the vicinity. He had had about fifteen years' experience of farming—seven years in the Waikato. The Waikato land was a free loamy soil; the gum land here was of a soft clayey nature. In his opinion the North Auckland was far superior; there were no frosts to check the growth of grass. The climate was altogether in favour of the North. From his experience as a Waikato farmer he reckoned that any man should do well as a farmer in the North Auckland district. The prospects of a farmer in the North Auckland district were better than the Waikato. In regard to the land

on the Wayby and Te Arai Reserves, he had seen no land that was not capable of being ploughed. He considered it could all be brought into profitable use. He agreed generally with Mr. McKenzie. He considered the land worth about £8 per acre for general farming. The cost of working the land in the North was £1 an acre more than in the Waikato; the latter, however, had been under cultivation for the last twenty-five years, whilst much of the North Auckland was in its virgin state.

AUCKLAND, MONDAY, 15TH JUNE, 1914.

HENRY WILLIAM STURCH, Gum-digger, of Swanson.

To Mr. Greville.] He had lived at Swanson for a period of five years, being away for a few weeks only at times. He had been engaged in gum-digging all that time, practically speaking, with the exception of a week or two when he was away. His earnings amounted to about £1 per day gum-digging. This, however, was not for all the time—week in and week out he would be safer in saying 15s. per day. He showed a receipt showing his last nine days' selling, which amounted to £9 3s. 6d. This was earned off the Swanson Reserve. He was not exaggerating in saying this. His average earnings during the last five years counting wet and fine days was 15s. per day; sometimes it was more, sometimes less. He might make not more than 5s. one day, and then again perhaps £1 10s. another, but the average was about 15s. This, however, was counting only five days for the week, as he did not go out in the fields on Saturdays, on which day he did the necessary scraping. Taking six days for the week his average earnings would be 12s. 6d. He attended the Commission as a representative for Swanson: between thirty and forty men had asked him to appear. There were, in his opinion, about twenty-five men engaged in digging on the Swanson Reserve to the north-east of the station. Last Friday when the Commission saw only two men in the reserve he knew of six from the reserve were down working with him. He considered that he was just an average digger—any other man could make as good wages as he did provided he had the necessary knowledge. There were other men making even more than he did. He worked in both summer and winter, but the summer months were better than the winter. He considered that there was undoubtedly sufficient gum in that land to justify it being retained as a gum reserve. The rest of Swanson was as good a field. He sold his gum to the two stores. There were some of the diggers who sold their gum in Auckland, but many of them sold it to the local stores. The ground was very swampy in places, and the gum 15 ft. deep. The gum was of the best quality—not another field in New Zealand yielded a better quality of gum. There was not much black or brown gum on the reserve. There was decidedly a living to be made out of the ground. The gum was to be found on the slips where the ground had been thrown up. There were often three layers, and sometimes even four, on the slopes and hillsides. Not particularly under the cementy ground—there was practically no cementy ground at Swanson. He did not think that grading the gum would enable the gum-diggers to get a more reliable price. They were not getting the price at the present time that the merchants in London were.

To Mr. Stewart.] He was not confusing the reserve with the Swanson gumfields. It was the reserve he made the 12s. 6d. per day off.

To Mr. Greville.] He did not say that there was not a gumfield in New Zealand better than the one at Swanson. There were others decidedly better, but Swanson was amongst the best. He had also worked on gum reserves at Mangonui, Awanui, and the Bay of Islands; also in the Helensville district. He sometimes found four layers of gum on the Swanson Reserve. There were four layers of gum down in the gully just about where the Commissioners met the Maori—principally in the slips. The usual number of layers, however, was two. That particular locality was a slip field. He had not taken up an inch of land, although he was trying to get some. He knew that under the provisions of the Land Act, 1912, he was entitled to 25 acres of any gum lands. There were several of the diggers who had availed themselves of this. He said he was most anxious to make a home for himself. There were two big families in Swanson, one of which consisted of thirteen members. There was not a living to be made in town, but they were making good money on the Swanson Reserve.

WILLIAM FOREST HALE, Bricklayer and Gum-digger, of Henderson

To Mr. Greville.] He was living on the Swanson Reserve. Practically speaking he was a gum-digger, although by trade a bricklayer. He left the place for sometimes two weeks at a time, but most of his time was spent digging on the Swanson Reserve. He did not know what his average wages amounted to. It was not more than, say, 6s. per day. When he went as bricklayer he got the current rate of wages—viz., 12s. to 13s. per day. The bricklaying paid him the best, but he liked the gum-digging. There were working on the Swanson Reserve about forty to fifty men. They worked wet and fine days. He remembered that last Friday was a fine day, and thought that probably the reason the Commissioners had only seen two men working was that the others might have been hidden from view down in the gullies. He could not positively say from his own knowledge how many worked there. He was able to give the names of six men who worked on the reserve. He certainly agreed that there was a good living to be made at Swanson, more especially in summer.

JOSEPH WILLIAM SHANNON, Crown Lands Ranger, stationed at Hamilton.

To Mr. Greville.] He was formerly a Crown Lands Ranger in the North of Auckland. His headquarters were then at Kaitia. He had been a Ranger there for nearly eight years. He was born up there, and knew the North Auckland district very well. He knew the northern gum-

fields. He had reported on the Tongonge Reserve (now included in the Kaitaia drainage area) for flax several times, and reported on part of it for its gum-bearing qualities. His report was made owing to an application for, he thought, 2,600 acres. There was a lot of flax, and gum at one end. He had reported a certain area of this land to be gum-bearing. One portion had no gum. He pointed out on a map portions upon which he had reported and which were now included in the Kaitaia land-drainage area. He confessed that some pressure had been brought to bear to make him say that it was not gum-bearing. There were, however, in his opinion, parts rich in gum. He knew some of the gum reserves at Mangonui. He had, however, forgotten the names, though he had been over that country. He regarded the Taipa as quite a played-out field. He had in the course of his travels in recent years seen very little digging indeed. He had been over the other reserves there. He knew it fairly well, and up to a few years ago used to strike some good patches, but it was pretty well worked out now. He did not know the Koheroa Reserve, ten miles from Mercer. Referring to the gum lands generally up north, he certainly thought they were not being properly treated; that there was a great waste in a lot of the northern lands, some bringing in nothing at all. He had reported on some of these, as he thought it was his duty to do so, but his reports had been made on such lines as he had been asked to do. He had never made any reports unless specially asked. He had travelled about the Waikato country a lot. Comparing the poor lands north of Auckland with the poorer lands in the Waikato country from a farming point of view, he said there was a good deal of land up north which would yield as good returns as the Waikato. Some parts, however, were very poor. In regard to the comparison of climates between these two, he thought the advantage was with the North of Auckland. The climate, in his opinion, compensated in a certain degree for the quality of the lands to be found there. A lot of the poor land would grow grass well if manure could be brought to it. He certainly did not consider that the average farmer in the North was an up-to-date man. The results obtained were only fair, owing to want of knowledge and apathy. He had seen small portions giving good results where gum lands had been improved. They could be brought into profitable use. Some parts of the land he had noticed riddled with potholes. He could not remember having at any time brought this under the notice of the Government.

To Mr. Stafford.] If the diggers had to fill up the holes he considered that it would probably stop them from digging. He suggested that the proper way of working a field was to work it on some system. It seemed to him that potholing was a very crude way of finding gum. The ground might be potholed one year, and perhaps two years after potholed again.

To Mr. McKay.] He did not know that private owners of land got from £30 to £50 per year as royalty. £10 per head was what he thought they got. Referring to Ford's ground, next to the Tongonge Kauri-gum Reserve, most of the gum was taken from Section 3. He could not say for certain how many men were working there, but he thought over two hundred. It was a private block.

To Mr. Hebden.] He did not know that larger royalties than £10 per acre were paid for gum-digging. He knew of only one large area of gum reserve leased for grazing—Mr. Reid's—which area, about 5,000 acres, had been previously his property.

To Mr. Stafford.] He did not know of any diggers having been stopped from working on the land. Large owners grazed sometimes one thousand head of cattle on reserves, and the diggers might start small herds of cattle themselves.

JOHN HUGH BOSCAWEN, Inspector of Forests and Kauri-gum Reserves, stationed at Auckland.

To Mr. Greville.] He had a pretty free hand to do what he considered necessary. He had held the position for three years. He could not exactly say how many gum reserves there were. He always took a map with him, together with a list of the reserves, which they had registered in the Auckland Office. There would be close on 200,000 acres of gum reserves under his care. He had a fairly good knowledge of the most of the reserves. He knew the reserves at Houhora, and had visited the reserves at the back on the west coast down as far as Hikurangi. His duties were to see that the men had their licenses, to inspect the stores and look occasionally at the store-keepers' books, and he very often interviewed the gum-diggers themselves. He was at Houhora last about eighteen months ago. It would take him about six months to make one tour over the whole area to be inspected. Practically, when he had finished one tour he would have to begin on the next. The forest reserves were much bigger than the gum reserves, hence his task was a fairly big one—an uncomfortable one, too. He had heard the evidence of Mr. Shannon. He had been impressed with the injury done by the diggers by digging big holes, and had made reports about this up north, near Kaitaia. The cattle often fell into the holes. He had lately come across private owners that were dealing with their gum lands systematically. He had not brought under the notice of the Government the way in which the private owners were treating the land, contrasting it with the gum reserves. He had not on any occasion applied for any assistance in carrying out his duties. He thought that Mr. Hogan, on the reserve near Mangawai, was asking a high royalty for the digging of his land, but did not know that it was £80 sterling per acre. Hogan's land was separated from the Coal Hill Reserve by a fence. He had been there and had walked all over it; also a good part of the swamp. The Coal Hill Reserve was in a deplorable condition. He had recommended in his report to the Government that the non-gum-bearing land should be opened. He had never made any exhaustive report to the Government, and in the course of his duties had never made such an extensive tour as the Commission was now doing. He certainly agreed that the devastation of many of the reserves was deplorable—it was only necessary to walk over them to know that, but he did not blame the gum-diggers for it—there had been a lack of proper control.

To Mr. Stafford.] There was no cultivation about the adjoining lands. In his opinion, the owners acquired them for speculation purposes. They said it was for grazing, but usually used it for gum-digging.

ROBERT ROWAN, Fields Inspector for the Department of Agriculture, stationed at Auckland.

To Mr. Greville.] He was now stationed at Auckland. He had established an experimental farm at Albany. The area was nearly 6 acres. This land was just fair—not especially good. It was in the spring of 1912 that he commenced his experiments. He first cleared the land of scrub, and tea-tree, and blackberry and then ploughed it. He was not much troubled with pot-holes, which were not more than 8 in. or 9 in. deep. It was late in the winter when this was done, and he left it for about three months, then started to work it up. The working given was very thorough. He then put in oats. As manures he used basic slag, blood and bone, and lime. The cost was about £1 15s. per acre altogether. The ground was not very deeply dug. The results obtained were splendid as regards the grasses; also a good crop of oats, which had to be ploughed in three times before it was got rid of. No more manure was used—he just put it down in grasses—about thirty-five varieties: (1) Brazilian water-grass (*Paspalum Brazilianum*); (2) *Paspalum virgatum*; (3) prairie-grass (Mediterranean *Carinatus*); (4) prairie-grass (*Bromus unioloides*); (5) *Bromus pumpillaria*; (6) hairy oat-grass (*Avena pubescens*); (7) canary-grass or Toowoomba grass (*Phalaris commutata*); (8) false brome-grass (*Brachypodium sylvaticum*); (9) florin (*Agrostis stolonifera*); (10) brown-top (*Agrostis canina*); (11) red-top (*Agrostis vulgaris*); (12) *Festuca decolorens*; (13) sand-fescue (*Festuca arenaria*); (14) timothy (*Phleum pratense*); (15) Wakeman's fescue (*Festuca arenaria*); (16) Chilian fescue (*Dumetorum*); (17) *Bromus pacificus*; (18) *Danthonia Cunninghamii*, small-flowered (oat tussock-grass); (19) *Brachypodium pinnatum* (heath, false brome-grass); (20) *Avena elatior* (tall oat-grass); (21) wood meadow-grass (*Poa nemoralis*); (22) subterranean clover (*Trifolium subterraneum*); (22a) German clover (*Onobrychis sativa*); (23) giant white clover; (24) wild white clover (*Trifolium repens* var.); (25) *Lotus angustissimus*; (26) melilotus (yellow); (27) yellow oat-grass (*Avena flavescens*); (28) *Danthonia semiannularis*; (29) serrandella; (30) sheep's burnet (*Poterium sanguisorba*); (31) red fescue (*Festuca rubra*); (32) hassock-grass (*Aira casspitosa*); (33) reed canary-grass (*Phalaris arundinacea*); (34) bittle-grass; (35) *Lotus villosus*. He had arrived at the conclusion that if the gum lands were thoroughly worked they would grow anything. Lucerne grew splendidly. Some of it they had cut six times within the year. The last time it was cut was in the month of February. Some of it had been planted last spring, some the spring before. The secret was in the working of the land. He had travelled no further north than Kaukapakapa. What they had done at Albany could be done anywhere in the North provided the land was cultivated properly. It was very hard to say what the land at Albany was worth per acre since they had treated it, but he thought that a prudent farmer could pay £20 per acre for it and it would pay him. He was a firm believer in the manuring of the ground. They had made no attempt to get gum out of the land, though a little was got out now and then.

To Mr. Stafford.] The Department would give information at any time to any one inquiring: and would let any one see all they were doing. The results of the three experimental places north of Whangarei were not so good as those at Albany.

To Mr. Greville.] Large areas of Government land were lying idle which were capable of being cultivated. It was practically an undeveloped country, but was capable of growing anything.

JAMES TROUNSON, Elective Member of the Auckland Land Board.

To Mr. Greville.] He was the elective member of the Auckland Land Board, and had been on the Board for six or seven years. He had property up Kaihu way, which was partially gum land. He had been across the Kai-iwi country. He had listened to the previous evidence carefully. He had been to Albany and found the results there very good—very encouraging indeed. He knew the gum lands in many places, and had for a long time past considered that most of the reserves should be lifted and the land settled. Some of the gum land was not worth anything, but a good deal of it was valuable land. In regard to the Kaihu land, portions of it were all right, but other portions were not worth anything, as the deep swamps in the valley could not be drained. He thought that a great deal of the gum lands could be profitably dealt with. He was of the opinion, after examining the Kai Iwi Reserve, that the reservation should be lifted. He thought that the Government should be quite satisfied that they were right in lifting the reservations before they acted, but all the same he was of opinion that if the reserves were lifted the land would be taken up by better men than at present. The value of the kauri-gum exported from New Zealand last year was somewhere about £500,000. In regard to the lifting of the reservations, he thought that the Ranger was capable of advising the Land Board; that he was sufficiently expert to give proper advice. He regarded the Commission as unnecessary. The Ranger was quite capable of giving a disinterested report. He would not object to having any land of his dug over. He considered that it did more good than harm having the ground turned over by the diggers. He knew of some private people who were developing their gum lands at the present time. He was developing his own.

To Mr. Stafford.] He did not think that all the gum reserves should be lifted. The Government should discriminate. When they were lifted the land should be cut up and put into the open market in the ordinary way—that is, by ballot. He had never interfered with the diggers. In regard to potholing, he would discriminate as to whether he would allow it or not. He considered that if the diggers had to fill in the potholes the industry would suffer.

To Mr. Greville.] He had about 6,000 acres of land at Kaihu, but did not set much store on it as gum land. He bought it for the sake of timber rights. When he had got the timber out he fenced it and put it down in grass, the results being far better than he expected. He spent about £10,000 in putting the land back into grass. He raised six thousand sheep on the land. He had never thought of selling his land, and did not know the value of it. Unimproved value

might be £1 per acre for most of it, £4 or £5 for the flat fields. The part of his land which was gum land was poorer than the other part—the flats were good. He had lived in the North of Auckland since 1862. Not many of the people had gone in for developing their land. There were large areas lying idle. It required capital to do the work necessary.

To Mr. McKay.] In regard to the lifting of the reserves, he would give preference to the people already on the land when disposing of it.

SAMUEL ISAAC CLARKE, Builder, of Auckland.

To Mr. Greville.] He was a member of the Forestry Commission and also of the Timber Commission, and it was in that connection that he wished to appear before the Commission—that they might not lose sight of the necessity for afforestation of some of the gum lands. He thought that the plantations at Rotorua were too far inland to be of much use in the North of Auckland. He considered it would be a very good plan indeed for the Government to have plantations near a port—deep-sea freight being so much cheaper than railway freight. He had been to North Auckland, but did not know it very well. He had a fairly good idea as to what trees could be profitably planted. He suggested that the Commission should look through the report of the Forestry Commission. He would suggest trees from other parts of the world as being the best. The *radiata* would do well. There was nothing approaching it for good returns and for growth per acre. He also suggested some of the Australian gums which are known to be of rapid growth and valuable timber. He had never thought of the black wattle. The Forestry Commission, in regard to the lifting of forest reserves, had only recommended a comparatively small area to be retained for permanent purposes. The kauri-tree took anything from five hundred years upwards to three thousand to come to maturity. *Pinus insignis* could be profitably cut at forty-five years—even at twenty-eight years, but the best results were obtained from trees forty-five years old.

To Mr. Stafford.] Where the Oregon pine has been tried in the Government plantations it had succeeded remarkably well. Its original home was Monterey, and it grew on comparatively a small area. It would be advisable to plant this Oregon pine to see if it was a profitable tree for growing.

LEWIS PHILIP BECROFT, Fruitgrower, of Port Albert.

To Mr. Greville.] He was a fruitgrower, living in Port Albert, where he had lived for fifty years. He went in for growing pears and apples; also peaches. He had about 50 acres in orchard, 40 of which was in apples. His orchard was about twenty-eight years old. He had tried to reduce the number of varieties of apples for the last twenty-five years, and now had about ten. The three principal ones were American Horn, Dougherty, and Delicious. His land was not good enough to grow the Northern Spy: it was not at all rich land. There were 140 acres in the original holding, and 70 acres of that was poor gum land. About 20 acres of his orchard was gum land. Only four acres was as yet giving any return. The other part was not old enough. The results of the orchard on the gum land were encouraging to a certain extent. On his 70 acres there were five different kinds of gum lands, and some of it very nearly approached to the ordinary gum land. He ploughed his land very deeply in the winter, and never thought of putting crops on it for two or three years—never before two years—the ground was so hard to pulverize. He had never tried subsoiling the gum lands. All his land was ploughable. Any land that could be ploughed could be brought into profitable use with more or less expense. He thoroughly agreed with Mr. Rowan in regard to the working of the land, but disagreed as to the time that the land should be left after ploughing. He would get nothing out of his land if left for only three months. In regard to manures, green manure was as good as anything. His first crop of oats had not fine heads, but produced good straw. He had never sown green crops in between the fruit-trees, but had allowed the weeds to grow up and then dug them in. He had no earthworm in his land—He was quite sure of that. He did not think that it would be practical for all gum lands to be treated as his land had been. There were thousands of acres that he would not take as a gift—round Wellsford and the Mangawai Block and at Wayby. The swamp was no good for fruitgrowing. He knew Mr. McKenzie, of Wellsford, and considered him to be one of the best farmers in New Zealand. He did not, however, agree with Mr. McKenzie that the Wayby Reserve was quite suitable for fruitgrowing; he did not think it was. It would take at least ten years to get it fit for fruitgrowing. He considered the North of Auckland to be a wind-swept place. He had lived in Wellington, but thought that the North of Auckland was dreadful. Autumn in the North is the calmest time of the year, which accounted for the Commission getting no wind when they were there a short time ago. The spring was the worst time of the year. Some of the ground was suitable for planting if the shelter was planted beforehand, say, five or six years before. He considered that the potholes were a great loss to the State. A piece of land opposite his, about 12 acres, was put aside for a recreation-ground, and was put into his hands to get into order. He got the land dug, specifying that it should be dug all over and the timber within 3 ft. of the surface should be placed on the top, and the ground left level. The area was a worked-out gumfield, and the settlers had dug it, but when the diggers came to work it they found a considerable quantity of gum there and did very well out of it. He then had it drained, and the land would eventually go down in good grass. He put 6 cwt. of manure to the acre. He had not tried lime. This would show what could be done with swamp land by systematic digging and getting the diggers to leave the ground as level as they had found it. He did not think that 25 acres was a large enough area for a settler. Nothing less than 60 to 100 acres should be set aside for each settler.

HENRY PAUL KAVANAGH, retired Civil Servant, residing in Auckland.

To Mr. Greville.] He had been in the Government service for a great many years, about a quarter of a century. He had been Crown Lands Ranger in various parts of New Zealand, and was stationed in the Eastern Wellington District before he came up to Auckland. He was in the Timber Branch of the Lands Department, and had been there for five or six years. He was stationed partly in Wellington and the remainder of his time in Auckland. He had travelled over a lot of the Northern Peninsula and visited a great many of the gum reserves. He was conversant with the gum industry before he joined the Department. His experience of gum-digging began at Swanson, Henderson, and all along to Helensville, when the Maoris used to bring gum in kits about fifty years ago. His recollections began when the gum-digging was done principally by military men and old soldiers, none of whom went far from Auckland. The second stage was when the diggers swarmed over the country. They were not particular on whose land they did their digging. He had kept fairly in touch with the work ever since. He certainly had been struck with the devastation of the land. He had originally lived in Mauku, where they had to exercise great care when travelling over the land on horses. A great deal of damage had been done by potholing, especially on roads and tracks. He had never drawn the attention of the Government to the injury done in this way, as no one would take sufficient interest in the matter. The diggers had free access to Crown or other lands, and if they thought there was gum inside the fences they would go inside. He had not been so closely in touch with gum-digging since he had gone down to the Wairarapa. He considered that the present system was not a good one for the land, which was deteriorating instead of improving. He had been up north within the last five years. Some of the land was very much dug up, other parts only a little. As a matter of fact, there were places which had been abandoned in the past where a lot of gum had been found when the ground was again dug over. He was sure that the time had come for a system of regulating the digging on the Crown lands—it should have been in vogue years ago. The plan that the Government should take up, say, 200 or 300 acres at a time and reclaim it was, he considered, a good one. He would suggest settling a portion of land at a time by giving the Gum-diggers' Union notice that they would have so many years to dig that particular part; then, when that was worked out, take up another part of the land and do the same to it, thus gradually reducing the large areas of land which are now in a state of devastation. He did not think it was too late to do this. In the early days the land was not valued. He thought that there was no doubt that the private individuals were quite awake to the proper way of using those lands. He did not think it would pay the Government to employ labour to work the land. It would be better to let the diggers work it as their own. Rather than pay wages it would be better to dispose of it in its present condition. It would not be practicable to confine the diggers entirely to one portion of the country, but if they had due notice in the way suggested they would have no cause to complain. There were some fine men amongst the gum-diggers, though on some of the gumfields close to Auckland there were many bad characters. There were certainly good men among the gum-diggers, and the industry now seemed to become a settled one. It was not so much regarded as a refuge for the destitute as it used to be. It had occurred to him that the kauri-gum industry was a monopoly, and that the State had certainly not received as much from the land as they should have done. The figures of the returns in connection with this industry showed a great uniformity. He did not wish that there should be any false impression as to the Ranger's duties in reporting on the potholing that was being carried on in the gumfields. In 1886 there was actually only one Crown Lands Ranger for the whole of the Auckland Provincial District. There were two Rangers for the North of Auckland district nominally classed as Crown Lands Rangers, whose duties were for the most part monopolized as Forest Rangers. After the Act of 1898 the administration and control of the Crown gum lands and the kauri-gum industry was virtually in the hands of the several local bodies, mostly County Councils. The local bodies, as a matter of fact, had supreme control—indeed, more control than the Lands Department—and had power to appoint Gum Rangers whom they could authorize to do things which the ordinary Crown Lands Ranger had no authority from anyone to do. It was only of recent years that private owners had insisted on a royalty for the right to dig on their lands, and this was largely owing to the increased value of gum and the aliens being excluded from the ordinary Crown lands. The quality of the gum had gone down, but the price had gone up. The men could make as good wages now as they could twenty years ago, but at the same time it was harder to get the same quantity.

To Mr. Stafford.] It was very difficult to know where there was gum and where there was not. He thought that Auckland had at one time been a vast kauri forest prior to the eruption of Mount Eden.

JAMES RUSSELL PIRRIE, Farmer, of Auckland.

To Mr. Greville.] He knew nothing about the gum industry, but came before the Commission to draw their attention to the Pakiri Reserves, between Mangawai and Matakana. He had been there about half a dozen times. He considered it lent itself for cutting-up purposes. In regard to the gum-bearing qualities of the land—he had passed through it several times, but had never seen a gum-digger. He was impressed with the quality of the land, and thought that it could be made into a good sheep-country. Some of the land was already being settled on, but the bulk of it was unoccupied wilderness. The gum reserve was not very much worse than the privately owned land adjoining. The land was very poor quality, the reserve being the best portion of it.

To Mr. Stewart.] The best part of that reserve was from the top of the hill. That lying up towards the ranges was good land, and it was a pity to let it lie there idle. He had not noticed the forest there. He had heard about it, but it could not be seen either from the road or from the top of the ridge.

To Mr. Greville.] There might be no forest there, though it was marked as forest land. He would like to see the land cut up, as it would only be liable to become a bed of noxious weeds. It was not worse than the surrounding country, but he pointed out that when poor land became overrun with noxious weeds it was a difficult matter to get rid of them.

ARCHIBALD WHITELAW, Gum-digger, of Auckland.

To Mr. Greville.] He was a gum-digger, at present residing in Auckland. He had been gum-digging at Waiharera since Christmas until about three weeks ago. He usually went up there for the summer, and on to the high lands in the winter. He was going to dig this winter in the best place he could find. He had been three seasons at Waiharera and had dug a good bit round there. In the summer he made about 10s. to 12s. per day. He was not an expert digger, and did not make as much in the winter. Last winter he was digging in a private field at Mackley Island. He paid a royalty of 10 per cent., and made very good wages—about 10s. to 12s. per day. He had dug over a great part of the Crown reserves at Mangawai, Ruakaka, Dargaville, Hokianga, Ngaruawahia, and Ohinewai. In regard to the Waiharera fields, they had been potholed a good bit. He considered that potholed land, if it was swamp and could be drained properly, should be fairly good for other purposes than gum-digging. He would get over the difficulty of potholes by filling them up—it did not take very long. He suggested that to bring the land into a condition for profitable use some of it needed draining and drying. He thought that it would be hard to say whether the diggers would take on the regular digging of the land. He had never himself worked for wages, though a lot of the men did.

To Mr. Stafford.] After the land was cleared of gum, he considered that it might become of some value if it were drained.

To Mr. Greville.] In connection with the weighing of the gum, it was not weighed by the merchants fairly. Sometimes the gum was sold to the storekeepers, and sometimes brought to town. He could get the signatures of a hundred gum-diggers to justify his statement in regard to the unfair weighing. The diggers weigh the gum themselves, and the merchants weigh it, but the merchants deduct a certain proportion for moisture—sometimes as much as one-quarter.

JAMES DONALDSON STEEDMAN, Crown Lands Ranger, stationed at Whangarei.

To Mr. Greville.] His district extended from Helensville on the south to Hikurangi on the north. He had had charge of that district for about three years and had travelled over quite a lot of the country—pretty well all of it—and knew nearly all the gum reserves in the district. There were just one or two that he had only passed by. He did not know the reserves in the neighbourhood of Parua Bay, but knew the Waipu country and Marsden Point. He had made three special inspections there. He had never seen any gum-diggers in that locality. There was very little digging done at Marsden Point. He did not think that there would be any injustice to the diggers if the reservation were taken off. The land was worth about £3 per acre. He had always seen a number of diggers at Lower Ruakaka. It was swamp country and very deep digging. He had never been over the field there, but had looked at it from the road and had seen diggers there every time. He knew the Uretiti Reserve. Some of it still contained good quantities of gum, but other parts were pretty well worked out. He thought it might still be kept as a gum reserve. He had not been over the big reserve at Waipu, but had passed through it. He saw very few diggers there. The reservation should be taken off there, he thought, any way from the biggest part of it. He had been at Mangawai, but saw very few diggers at work. He had been asked to report on them. In fact, he had only seen one man there, and he lived in a whare on the field. He had never reported on the Coal Hill Reserve, but a lot of gum had been taken out of it. He had been over two of the Northern Wairoa reserves. Applications were made from time to time for portions of the reserves. He had ridden through part of the Tekuri reserves, but did not know enough about them to speak definitely. He knew the Tikinui Reserve—it was rich swamp land. He had never seen any men working there. The County Council had formed a surveyed road right through the swamp, and no trace of gum had been found. The reservation should be taken off. The land was very rich—worth about £5 per acre. He had passed through the Tatarariki reserves, but never inspected them. One of them was a very deep wet swamp pretty well cleared out, but he had no special knowledge of it. He could only speak generally about the Te Kopuru Reserve, as he had only been round the boundaries. He had never been there on the Waioneke Reserve. He had been over the Tauhoa Reserve a few months ago. He had found no men there. He had consulted all the adjoining settlers, who said that there was no digging done, and there had not been any for four years. This applied to both reserves. In regard to the reserves about Wellsford, Te Arai, and Wayby, it was on the strength of his report that the Land Board had acted. He inspected the field himself and saw if there were any huts about, as naturally the diggers live where they are working. He made inquiries from the adjoining settlers and got all the information he could from them; he made inquiries from the storekeepers, who are very interested parties. He had met Mr. Woodcock, but not in the first instance when he made the report. He thought that Woodcock was not there always, but sometimes went elsewhere to work. The Swanson Reserve was out of his domain. Speaking generally, his opinion was that in the majority of cases the fields were about worked out. He considered that some of the swamps were also worked out. He admitted that it was a great responsibility for the Ranger to decide whether a field was a payable one or not. He realized that the Commission would relieve him of a portion of his responsibility. He had been on the goldfields in Coromandel for some time. A goldfield was not such unless the getting-out of the gold was a payable proposition: so with a gumfield. He considered it would cost more to fill

up the potholes in ground than the land was worth. The education reserves were under his jurisdiction. It was a deplorable state of affairs to allow the potholing. There should be much more control over the lessee. He had practically no control over the education reserves at Aratapu. They were under a twenty-one-years lease with a perpetual right of renewal. One report had been made on an education reserve held by a man who simply fenced it in and let it out for gum-digging. No improvements were done on the land at all.

To Mr. Stafford.] When making his report he consulted the settlers who were adjoining the reserves: sometimes there were no gum-diggers to consult. He had never seen a digger on the Wellsford reserves. The majority of the settlers did a little bit in their spare time. He had inspected the land on the right-hand side and went right up behind the Austrian's place, and right through the swamp. He saw no potholes. It was about eight months since he had reported on this field, and some of the holes might have been made since then. When he was there there was an old lady living in a whare near the station, and Mr. Woodcock. These were the only residents on that reserve.

FRANCIS WILLIAM FELTRIM FAGAN, Company Manager and Land Agent, of Auckland.

To Mr. Greville.] He had had a lot of experience in the development of poor lands. He was the originator of the Parenga development scheme. The greater bulk of the land at Parenga was gum-bearing. The area which the company held was about 46,000 acres. They were going to proceed with systematic development if they could get the men to help them. He considered that right from the start the gum-diggers wasted their energies. He certainly was firm in the opinion that there was a proper way of dealing with gum land—certain areas, of course—he could not say that of all the land. In regard to the potholes, he would not allow the diggers to leave them if he could make them do otherwise, but that seemed impossible. In the course of time the holes filled in themselves to a certain extent. They would not now allow the diggers on their land unless they undertook to fill up the holes they made. The way the company went about the matter was this: they took Mr. Boucher, of the Government Orchard Department, up to the land, and he chose the ground. In his report he advised them to take up part which they had thought quite unsuitable, and ignored the part they would have chosen. This land was cut up into sections of from 22 acres to 76 acres. The section costs a man £200. £10 would be accepted as a deposit, and he must undertake to put another 10 per cent. or 15 per cent. of improvements on to the land during the year. He had to plant not less than 3 to 5 acres annually, so that the whole thing would go forward simultaneously. It would be five years, approximately, before the trees would begin to bear, and seven years before they yielded any profit. In the meantime the man could make his living by gum-digging. Mr. Boucher recommended three varieties of apples as being better than any others—American Horn, Delicious, and Dougherty. Apples were the only variety of fruit which they thought it advisable to go in for. They had commenced operations, inasmuch as they had put about £400 into the surveying of the land. They had seen the County Council in regard to the roads, which were to be constructed later on by the men who took up the sections. They had had over three hundred inquiries in regard to these sections up to the present, but would not be able to satisfy the demand at the present time. No start had been made to break in the poor land, as they had only had the place for six or seven months. Witness considered that it was most certainly a payable proposition to bring the gum lands into proper use. He considered the climate in the North of Auckland to be an important factor.

To Mr. Stafford.] It was on the shallow ground that witness had started the seven men working on wages. The ground was about 18 in. deep. He was willing to put a big gang of men on now, but he could not get the men. 10s. a day would be the wages. He had not tried to get any of the unemployed from the south. A lot of the men expected to pick up gold, as it were. He could get a hundred men off the wharf there, but not one of them knew how to use a spade. The place is not so inaccessible as some people are inclined to think. He did not want to plough if men could be got to do the digging. Otherwise machinery would be put on the land.

To Mr. Greville.] He certainly thought that the opening-up of gum land would be a good proposition for the State. He wished that he had the backing that the Government could have given him. He did not think that the most had been made of the industry. It had been very neglected. But there was still a lot of good that could be done—they would not have done what they had if they did not think so. There was unquestionably no doubt, in his opinion, that this industry had not been appreciated. The scheme for extracting the oil and gum by means of retort work was a good suggestion. He thought that there was a big future before the industry if the retort method was used.

To Mr. Stafford.] By "retort work" he really meant the extracting of gum from the wood. Everything could be put through, and all the value possible obtained. He quite agreed that there was great waste going on in the kauri-gum fields and in the bushes: practically thousands of pounds worth of oil and gum being destroyed every year.

HARRY MAY SKEET, Chief Surveyor, Commissioner of Crown Lands, and Conservator of State Forests in the Land District of Auckland.

To Mr. Greville.] He had been stationed in the Auckland District since 1911 and knew the district pretty well. The bringing of gum lands into proper use was a very difficult matter to deal with, and as far as he could judge it would require a fairly large expenditure both of labour and capital to make them profitable. He thought that the land could not be brought in for settlement purposes in the ordinary way by burning off and grazing. Experience went to show that fallowing was a necessity in dealing with these lands. Much capital would have to be expended to

bring them into profit, and if private enterprise would not supply the capital then there would have to be some system of State aid introduced. Then, another phase of the subject was the fact that roads would have to be made and a system of roading evolved before the selectors could be put on the land, and this of course would require additional expenditure. He did not think that the cutting-up of the land into sections would make the public settle on it. Large sections might be taken up by men of capital, but for the ordinary settler the problem was very grave. He thought that £3 to £5 was too low an estimate of the cost per acre for bringing in such land. He considered that from £4 to £7 per acre was more like what would be required. The climate of North Auckland was an important factor in the treatment of soils. Fertilizers would have to be selected to suit that climate, because a genial climate was not always an advantage. Too dry a climate was a disadvantage. There was also the water question, as there must be water for stock. The continuous supply of artesian water was not always possible. In reference to the Nelson District and the Moutere lands, there was something there that suited the growing of fruit-trees exceptionally well. In North Auckland they did not seem to grow the most suitable kinds of fruit, and especially apples for export, and the lands generally were not kept so well as in Nelson. In regard to the settlement of the gum lands he considered that there might be an impetus later in this direction under the provisions of the Land Act, 1912, for the gum-digger who wanted to make a home for himself, but it seemed to him that many of these men did not want to make permanent homes, and whether the better class of men would take to the land remained to be seen. As yet there was very little being done in the way of farming, either agriculture or pastoral. He considered that the time was just beginning when it would be opportune to enter into a new system for dealing with such lands. He would like to refer the members of the Commission to the subdivisions of some of the northern districts showing small holdings many of which were neither occupied nor improved. It seemed to him that the conditions of the country did not then allow of the selectors being able to make a living from such small areas. The time when these holdings were opened up had not, in fact, been opportune, but it required consideration at the present time before the settlement of the gumfields was forced.

To Mr. Stafford.] Referring to the gum reserves which had been lifted during the last few years, he stated that a Mr. John Knight had taken up an area of that rough gum country and had really proved that it was worth cultivating. He had done really well with it, again showing what judicious handling of the gum lands would do. He considered that the Government could help a good deal by assisting in planting suitable fruit-trees, as the majority of the gum-diggers knew very little about fruit-culture. Apples could be grown for exportation, and they had reduced the paying exporting varieties to about four. The Waerenga Fruit Farm had tried all sorts of fruit, and the present indication was to go in more for apples.

To Mr. Greville.] As far as afforestation was concerned, there was more than compound interest in timber, and if something was not done in the way of replanting suitable trees the Dominion in the course of a few years would require to import largely for the necessary timber for general use. Indications already showed that the natural supply from New Zealand would be exhausted in a few years' time. In his opinion, much of the poorer gum lands would be very suitable for afforestation purposes. In regard to the reclamation of the flat lands that had been potholed by diggers, there had been something radically wrong in the Act to allow persons to leave such holes, many of which were very deep and rendered the land useless. He could only suggest that gum-digging should be controlled in such a way that all such holes would be filled up by the diggers as they went along.

To Mr. Stewart.] He did not think that it was by any means too late to control gum-digging in such a way as to prevent waste through potholing, and so conserve the lands for use afterwards. It would not be an altogether easy task, but he believed it would be quite possible. He thought the gum-digging of the North and the mining industry of the South Island furnished a useful comparison in this connection. In the South the dredging companies after their operations had left large tailing heaps of stone, rendering useless what was in many instances good land. Now there was a tendency on the better alluvial flats to replace the soil behind the dredge, thus making the land of some value again for agricultural purposes. In the same manner he considered that the gum-diggers when they potholed the ground should be compelled to do something towards filling up the holes again and leaving the surface as even as practicable for future cultivation.

AUCKLAND, TUESDAY, 16TH JUNE, 1914.

WILLIAM JOHNS, Retired Farmer, of Parnell, Auckland.

To Mr. Greville.] He still had a little interest in farming in the Waikato, but did not do much. He was an old resident of New Zealand—in fact, one of the old veterans. He has not had actual experience in the North of Auckland, but had been there in the capacity of President of the Auckland Fruitgrowers' Association, and was therefore fairly well acquainted with it. He had taken an interest in the development of gum lands, and as member of the Crown Lands Board he had become interested in fruitgrowing. In regard to the conclusion he had come to in connection with the working of the gum lands, he was inclined to think that the gum lands are better adapted for fruitgrowing than are the very fertile soils. In travelling over the gum lands it certainly had occurred to him that in their present state there was a lot of waste and that the land required utilizing. He was not acquainted with any definite areas of land, but from his lifelong experience as farmer and fruitgrower the gum lands were in his opinion better adapted for forestry and fruitgrowing purposes than was any other land. He was now a member of the Land Board. Under the existing Land Act the Board had power to uplift the reservations.

They acted solely on the report of the Crown Lands Ranger. That was the only information they received. He agreed that the Ranger had his limitations in the way of knowledge, as he was not an expert gum-digger, and was therefore not expert to deal with gum lands. He had seen the difficulty under which the Land Board worked in this respect, as the Ranger could not be expected to be a judge in these matters, and he thought it would be advisable to have his reports confirmed by a visit of the Land Board to the district, when they could get evidence either confirmatory or otherwise from the people themselves. It was not a desirable state of affairs that a man who had lived on a reserve for twenty-five years should know nothing about the lifting of the reservation until the surveyors came on to the field for the purposes of cutting it up. He said he had come forward as a witness chiefly because he thought it might be of service to the Commission to hear the evidence of a man who had lived by fruitgrowing all his life. The gum lands were a splendid asset when they were thrown open. He thought that the measure brought forward by the Government recently in the direction of opening up the poor land was a very good one provided that it was capable of extension. He also thought that it would be a feasible proposition for the Government to convert these lands into farms. He referred to the test made by the Agricultural Department at Waerenga, where they planted vines: 180 acres there were planted with fruit-trees, and the system was found to be practical. Money must be spent to make the land profitable, and if the poor man cannot find the money it must be the Government. And if the poor man took up a farm, he must be able to find employment while the farm was in process of development. It would be a much better and more successful method of settlement of the gum lands for the Government to do the opening-up, planting, and otherwise improving the ground. He had had no practical experience in working gum lands, but had seen a lot of work done. He considered it would be inadvisable to deal with that land which was still yielding gum, as there were many men earning their living at gum-digging. He was most emphatic on that point.

To Mr. Hebden.] He knew that in connection with the lifting of the reservations weight was always given to petitions received from the diggers. He hoped that the Commission would be able to help the Land Board in the matter of opening up the land, as it seemed to him that this was a weak point. The Land Board had not always sufficient evidence in all cases to enable them to deal competently with the blocks.

JOHN GEORGE BENDELY, Chief Clerk, Lands and Survey Office, and Secretary of the Land Board at Auckland.

To Mr. Greville.] He was the Chief Clerk and Secretary of the Land Board, and had been in the Auckland District since October, 1911—a matter of three years. Prior to that he was Chief Clerk in Canterbury for twenty-six years. He had a good working knowledge of the Land Act and its amendments, and was familiar with section 20 of the Land Laws Amendment Act, 1912, relating to the settlement of gum lands. The regulations and the forms accompanying had been drafted out in the Auckland Office, and he had done a good deal of it himself. They had been further revised in the Head Office and in the Crown Law Office at Wellington. The application form for licenses to occupy land on kauri-gum reserves would be applicable either for surveyed or unsurveyed land. The only applications dealt with so far were under section 13 of the regulations. He understood that that section of the Act was intended to encourage the settlement of the lands by poor men, but not solely by gum-diggers. Inquiries had been received at the office under section 20 of the Act quoted, but none had yet been finally dealt with. He did not consider that a man was legally entitled to occupation of a residence-site under the Kauri-gum Industry Act until he had paid his 1s. license fee. The regulations had never been tested by actual working experience. No doubt improvements would be found necessary, but those points could best be discovered by experience. Under section 13 of the regulations about five or seven applications had been dealt with. These were all that had been received, to his knowledge. He understood that it had been ruled that lands to be opened under section 20 of the Act must first be proclaimed in allotments. It might be advisable to allow preference to resident gum-diggers subject to a general scheme of subdivision and provision for access. The reservations had been lifted from a number of gum reserves. The procedure under section 46 of the Land Laws Amendment Act was as follows: A report was obtained from the Crown Lands Ranger, and if the land was no longer required for digging the Land Board made a recommendation to the Minister. The Crown Land Ranger's report was the only evidence which the Land Board had before them. The Ranger's report showed whether signs of recent digging were to be found on the land. He believed that the Rangers always made inquiries from any diggers found on the land—their reports gave him that impression. The Land Board did not visit the ground itself or take any evidence.

To Mr. Stafford.] In regard to the licenses for residence-sites of not exceeding 2 acres of land he did not think this was compulsory, but without the license, which cost 1s., diggers were not entitled to occupation of the land—in other words, their occupation would not be legal. This was provided for under the Kauri-gum Industry Act.

To Mr. Greville.] It would appear reasonable that consideration should be given to those actually living on the gumfields, though perhaps technically speaking they had no legal right to be there.

HENRY DUGALD MCKELLAR, Chief Draughtsman, Survey Office, Auckland.

To Mr. Greville.] He was Chief Draughtsman in the Auckland Survey Office, and produced for the Commission maps showing all the kauri-gum reserves in the Auckland Province. They were correct according to the best available information. He kept no particular register of the gum reserves, that being the function of the Lands Branch of the Department. He did not devote much of his time to those reserves, that being the duty of a special officer.

HERBERT SUBRITZKY, Farmer, at present residing in Auckland.

To Mr. Greville.] He had had over thirty-five years' experience both as a gum-digger and buyer, and subsequently as a farmer. He was of opinion that the gumfields generally had been rather neglected in the past—had been dug without any system, and the land more or less ruined. He knew all the gum-bearing country from Whangarei to the North Cape thoroughly. In regard to the large flats at Waiharera and Houhora, in his opinion it would be a practicable proposition to take portions of the devastated flats and for the Government to have them dug "on a face," recovering what gum there was in the land, throw up all the timber on the surface, and generally leave the land in a fit state for future cultivation. He thought this suggestion not only a practicable one, but that it would be a payable proposition. He was quite confident from his own experience that it would be a financial success. As a matter of fact he himself had often employed labour to dig out "on a face" apparently worked-out land, and the results had always proved satisfactory. He agreed that the development of the Crown gum lands along these lines would result not only in the lands being reclaimed, but would be an easy solution of the "unemployed" difficulty. He felt assured that he could take up a gang of men, fair average workers, with no previous experience on the gumfields, and proceed to dig the flat lands "on a face." He was prepared to pay such men 10s. a day, and was quite satisfied that from the gum derived from the land he would make a profit on the transaction. Speaking more in regard to the hilly lands where the digging was generally shallow, he thought that it was quite a practicable proposition that the State should have it ploughed and put on men to recover the gum, and was sure that in many instances enough gum would be recovered to cover the cost of the ploughing and to put the land into grass. In his opinion it would be a proper scheme for the Government to improve the land—in other words, convert it into farms prior to it being cut up for settlement. He thought that the license fee of the diggers should be £2 a year, with a view to providing revenue for improving the lands which had been dug over. In his opinion the proper solution of the management of the kauri-gum industry was for the State to exercise a general control over it, by the establishment of a Kauri-gum Bureau attached to, say, the Mines or the Lands and Survey Department, and that there should be an export duty on gum sufficiently large to make such a Department self-supporting. He recognized, of course, that any such duty that might be imposed under the present existing circumstances would have to be borne by the diggers, but he felt sure that the beneficial results would be such that the digger would cheerfully agree to pay his share of the burden.

APPENDIX.

DETAILS OF ITINERARY.

THE members of the Commission assembled in Auckland on the 28th March, and left Auckland for Houhora by the s.s. "Aupouri" on Monday, the 30th March, arriving there on the morning of the 1st April, 1914.

A meeting was immediately held at Houhora, followed by an inspection of the Houhora and Opoe Reserves in the vicinity.

A public meeting was held at Houhora on the night of the 2nd April, after the inspection of the Ngatumoroki and Houhora Reserves. Eleven witnesses gave evidence.

The Commission again met in committee at Houhora on the morning of the 3rd April, and adjourned to meet at Waiharera, the Opoe Extension and the Otaia Reserves being inspected *en route* there.

Waiharera was reached on the night of the 3rd April, and a meeting was held and several witnesses examined. The inspection of the Opoe Extension Reserve was completed on the 4th April, and at night a second meeting was held to hear further evidence.

From Waiharera the Commission continued their work of inspection of the Rotoroa Reserve, reaching Waipapakauri on the 6th April, where a meeting was held and evidence was taken.

Ahipara was reached on the 7th April, after a thorough inspection of the Rotoroa Extension Reserve between the two centres, and a meeting was held on the 8th April to receive evidence. Subsequently the Ahipara and Epakauri Reserves were inspected, and on the 9th April a meeting of the Commission in committee was held. In the afternoon the party proceeded to Awanui, which was reached the same night.

At Awanui, on Saturday, the 11th April, the Commission inspected the Pairatahi, Pukewhau, and Puketoe Reserves, and at night held a meeting at which four witnesses gave evidence.

On the 12th April the Commission proceeded by coach to Mangonui via Kaitaia, which was made the base for two days for the purpose of inspection.

The Taipa, Ohia, Puheke, and Parapara Reserves were inspected on the 13th and 14th April, and a meeting for receiving evidence was held at Lake Ohia on the afternoon of the 14th April, when ten witnesses attended for the purpose. At night a further meeting was held at Mangonui, when three witnesses gave evidence.

From Mangonui the party proceeded by coach to Kaeo on the 15th April, inspecting the Totara Reserve *en route*. A meeting was held at Kaeo at night, three witnesses being examined.

Whangaroa, Totara North, and Saies were visited on the 16th April, and meetings held at the two latter centres and six witnesses examined.

From Kaeo the Commission proceeded to Ohaeawai on the 17th April, and a meeting was held at Waipapa on the 20th instant, after the inspection of the Kapiro Reserve: five witnesses gave evidence. A meeting followed at Ohaeawai on the 21st April, after the inspection of the Parahirahi Reserve, at which three witnesses attended.

Kohukohu was reached by coach and launch on the 22nd April, and the following day was spent inspecting the Omahuta Reserve. A public meeting followed on the 24th, when four witnesses gave evidence.

From Kohukohu the Commission proceeded by launch on the 25th April to Opononi, on the west coast, and after the inspection of the Warawara and Wairau Reserves a public meeting was held there on the 27th April, five witnesses being examined.

On the 28th April the party took launch to Taheke. The inspection of the Punakitere and Maungatoa Reserves occupied part of the 28th and 29th instant. A meeting was held at Taheke on the night of the 28th instant, and nine witnesses were examined.

Kaikohe was reached on the afternoon of the 29th April, after completing the inspection of the Punakitere Reserve, and a public meeting followed at night, and several witnesses gave evidence.

From Kaikohe the Commission proceeded by brake to Kawakawa on the 30th April *en route* to Russell.

On the 1st May the party took launch and proceeded to Kerikeri and Waipapa, to complete the inspection of the Maungapererua, Pungaere, Puketotara, and Rangitane Reserves.

A meeting in committee was held at Russell on the 2nd May, and on the 3rd May members left by launch and brake for Kawakawa.

On the 4th May the Commission proceeded by train to Towai, occupying the rest of the day in the inspection of the Towai, Hukerenui, and Te Mata Reserves. At night a public meeting was held and ten witnesses were examined. There was a large attendance of the public.

The Commission returned to Kawakawa on the 5th May, completing the inspection of the Towai Reserve in the morning, and held a public meeting the same night, when evidence was received from five witnesses.

Kawakawa was left on the morning of the 7th May, and the inspection of the Te Mata and Otakairangi Reserves completed; and on the 8th instant, after the inspection of the Opuawhanga Reserve, a meeting was held at Hikurangi at night, when four witnesses attended and gave evidence.

On the 9th May the party took train for Whangarei, which was made the base for inspections for seven days, covering the following reserves: Parahaki, Kaitara, Poroti, Purua, Maungakahia, Ruatangata, Otaika, Mata, Maungapai, Ruakaka, and Ruarangi. A public meeting was held at Poroti on the 12th May and was largely attended, several witnesses giving evidence.

A meeting was held at Whangarei on the 14th May, and twelve witnesses gave evidence.

The Commission arrived at Parua Bay by launch on the afternoon of the 16th May and held a meeting at night, when five witnesses were examined. The inspection of the Waikare, Manaia, and Taiharuru Reserves was completed on the 16th and 17th instant.

On the 17th instant the party left for Tarikura by launch, and on the morning of the 18th May left for Marsden Point by launch.

After the inspection of the Marsden and Ruakaka Reserve a public meeting was held at Lower Ruakaka at 1.30 p.m. Four witnesses were examined. The members afterwards left for Waipu, inspecting part of the Uretiti Reserve *en route*.

After completing the inspection of the Waipu, Pohoenui, Mareretu, and Ruakaka No. 2 Reserves, a public meeting followed at Waipu on the 20th May, and several witnesses gave evidence.

On the 21st May the Commission further inspected the Waipu No. 2 Reserve, and left by brake for Mangawai. The whole of the next day was spent inspecting the Mangawai and Molesworth Reserve, and at night a public meeting was held, at which eight witnesses gave evidence. The next two days were spent completing inspections of the Mangawai, Pakiri, and Hakaru Reserves, and on the 25th May the Commission left for Kaiwaka by horse and coach *en route* for Helensville, inspecting the Kaiwaka Reserve *en route*.

The Commission arrived at Ruawai at 2 a.m. on the 26th May, and left by launch for Tangaihi, inspecting the lower portion of the Tikinui Reserve and Puketapu Reserve.

The Matakoho and Parirau Reserves were inspected on the 27th instant, and a meeting in committee held at night discussing the future itinerary.

On the 28th May the Commission left Ruawai by launch for Tangaihi, inspecting the Te Kuri Reserve, and journeying through the back portion to south of the lake, thence to the coast to Tangitiki Bay, returning to Ruawai by launch at night.

On the 29th May the Commission left Ruawai by launch for Tikinui, inspecting the Tikinui and Tatarariki Reserves, and returned to Aratapu via Red Hill. At night a public meeting was held to take evidence, and eight witnesses were examined.

On the 30th May the Commission left Aratapu for the inspection of the Te Kopuru Reserve and other Tatarariki reserves, and in the afternoon proceeded to Dargaville.

The Commissioners left Dargaville by morning train on the 1st June for Kaihu, and inspected the Kai Iwi Reserve, and spent the night at Kaihu.

On the 2nd June the party left Kaihu on horseback and crossed over into the Awakino Valley, inspecting the Kairara Reserve, and afterwards travelled to Dargaville by the Awakino Valley Road. This was a very rough, wet trip. Dargaville was reached at 4.30 p.m., and at 8 p.m. a public meeting was held at the Council Chambers, when a large amount of evidence was taken.

On the 3rd June (King's Birthday) the Commission left Dargaville by boat at 5 p.m. and arrived at Helensville at 2 a.m. next morning. The inspection of the Kaukapakapa, Wayby, Arai, Waioneke, and Tauhoa Reserves followed, and the party returned to Helensville at night.

On the 6th June the Commission left Helensville for Auckland.

On the 8th June the Commission met and discussed the future itinerary.

On the 9th June the party left Auckland by morning boat for Devonport, and rode out to Silverdale, inspecting the Orewa, Wade, and Albany Reserves.

The 10th of June was spent completing inspection of the Pukeatua, Rangitopuni, and Wade Reserves.

On the 11th June the Commission returned to Auckland, and left for Helensville by the evening train, where a meeting was held and seven witnesses examined.

The Commission inspected the Swanson and Taupaki Reserves, and returned to Auckland by the afternoon train.

The Commission met in committee on the 13th June and discussed future itinerary.

The public meeting for evidence was held at Auckland at 10 a.m. on Monday the 15th June. Fourteen witnesses were examined, and the Commission adjourned at 4.30 p.m.

On the 16th June the Commission resumed its sitting at Auckland and received evidence from three other witnesses.

At midnight the Commission left by boat for Cabbage Bay to inspect the Port Charles Reserve. The Commission arrived at Cabbage Bay at 10 a.m., rode to Port Charles, and after inspecting the reserve returned to Cabbage Bay, where the night was spent.

The Commission left Cabbage Bay at 7.30 a.m. for Thames via Coromandel, arriving there at 7.30 p.m.

On the 19th June the Commission took train from the Thames to Waihi, and from Waihi proceeded to Katikati by motor, and, after inspecting the Katikati Reserve, spent the night at Katikati.

On the 20th June the Commission left Katikati by motor for Waihi and entrained, reaching Auckland at 5.30 p.m.

Monday, the 22nd June, was spent drafting the Commission's report.

The Commission left Auckland by morning train for Pokeno for the inspection of the Koheroa Reserve, and returned to town at 5 p.m.

From the 24th to the 27th June the Commission sat at Auckland, drafting and revising their report.

A final sitting of the Commission was held at Auckland on the 29th instant when the report was read and finally adopted. A sub-committee, consisting of Mr. Greville (chairman), Messrs. Stewart and Stafford, were appointed to proceed to Wellington on the 30th instant to submit the Commission's report to His Excellency the Governor.

STATEMENT OF KAURI-GUM LICENSES ISSUED
UNDER THE KAURI-GUM INDUSTRY AMENDMENT ACT, 1910.

Local Body.	From 1st January, 1911, to 31st March, 1912.		Year ending 31st March, 1913.		Year ending 31st March, 1914.		From 1st April to 29th June, 1914.	
	Ordinary.	Special.	Ordinary.	Special.	Ordinary.	Special.	Ordinary.	Special.
Mangonui	169	1,422	72	526	31	1,195	6	126
Hokianga	52	395	39	140	15	167	..	26
Whangaroa	9	118	1	74	..	101	..	23
Bay of Islands ..	34	237	25	185	15	227	14	52
Whangarei	71	284	19	127	36	252	..	23
Rodney	10	27	14	86	5	104	..	36
Otamatea	1	50	7	39	10	82	..	19
Hobson	449	265	286	276	225	428	16	66
Dargaville Borough ..	4	..	..	..	..	9	..	..
Great Barrier .. ..	..	..	..	..	1	10	..	..
Waitemata	44	289	9	190	17	219	11	75
Manukau	3	33	42	26	14	50	..	1
Thames	223	107	83	48	156	116	22	27
Coromandel	48	47	10	4	6	16	12	13
Ohinemuri .. ..	..	..	..	11	3	21	..	7
Katikati Road Board ..	..	..	..	..	..	7	..	..
Waikato .. ..	..	..	3	10	..	..	..	..
	1,117*	3,274*	610	1,742	534	3,004	†	†

* Approximate only.

† Broken period.

APPLICATIONS RECEIVED AND DEALT WITH

UNDER SECTION 20 OF THE LAND LAWS AMENDMENT ACT, 1912.

THE only applications received and dealt with under the above section have been for exchanges from existing leases under the Kauri-gum Industry Acts, in terms of section 13 of the regulations.

H. M. SKET,.

Auckland, 18th June, 1914.

Commissioner of Crown Lands.

AREAS REMOVED FROM KAURI-GUM RESERVATION

UP TO 31ST MARCH, 1914.

TOTAL area released : 48,849 acres.

Area subdivided and opened for settlement : 31,034 acres.

Area at present under survey for settlement : 2,724 acres.

Number of sections and total area selected at 31st March, 1914 : 156 sections ; 30,424 acres.

Number of sections and total area remaining unselected on 31st March, 1914 : 1 section ; 610 acres.

In addition to last item there are—Six sections, 916 acres, withheld as reserves for various purposes ; seven sections, 1,830 acres, subdivided but not yet dealt with ; 12,345 acres withheld for survey, roading, &c. : total, 15,091 acres.

CORRESPONDENCE.

SIR,—

Royal Commission on Gum Lands, sitting at Houhora, 1st April, 1914.

At a meeting of the Royal Commission appointed by His Excellency the Governor to inspect and classify the kauri-gum reserves of the Auckland District, held at this centre to-day, it was decided to have forwarded to you for analysis a sample of kauri-swamp peat soil, in order to ascertain, for the information of the Commission when compiling their report, whether the sample contains any by-products of economic value as suggested in Parliamentary Paper C-16 (1909), being the report of Mr. Graham Gow, Trade Commissioner, on the kauri-gum industry. The particular portion of that report bearing on the matter will be found on page 7 of the paper in question, and has reference to some experiments conducted by Mr. Rosse Trevor, chemist, of Auckland, in regard to extracting certain valuable products from such kauri-swamp peats.

It may be interesting to note that it has come under the notice of the Commission since setting out on its investigation that very considerable quantities of such peaty soil are bagged and regularly shipped from all gum centres, and apparently an industry for the export of it is

already well established. There are many vague statements made as to the particular uses this peat is put to by the purchasers.

I have arranged to have forwarded to you at the earliest possible date what I consider a sufficient quantity of soil to enable you to carry out the required analysis, and I shall be favoured to receive from you your report in order that the matter may receive careful consideration when the final report is being prepared for presentation to the Governor about the end of the present month.

Kindly address me care of the Lands and Survey Office at Auckland, which is the headquarters of the Commission.

The Colonial Analyst, Wellington.

I have, &c.,

R. P. GREVILLE, Chairman.

Dominion Laboratory, Wellington, N.Z., 15th June, 1914.

REPORT ON SPECIMEN NO. E/381, FORWARDED BY THE CHAIRMAN, ROYAL COMMISSION ON GUM LANDS, HOUHORA.

Kauri Swamp Peat.

THE sample when dried consisted of vegetable fibre, peat, and small fragments of gum, which from smell and appearance were undoubtedly kauri-gum.

The portion was dried at 100° C., and extracted in a Soxhlet apparatus with absolute alcohol for several days.

On evaporation of the alcoholic extract a powdery resin, representing 13 per cent. by weight of the sample taken, was obtained. The constants for this extracted resin, as compared with those of hard clear kauri-gum, were—

	Extracted Resin.	Good Kauri.
Acid number	106.4	61.6
Iodine number	72.3	132.4

The constants are those of a kauri-gum that had been much altered by the action of air and water. The quality would be very poor.

The composition of the peat was—

	Per Cent.
Resin	13.0
Peat and other vegetable matter	52.0
Ash	35.0
Nitrogen in organic matter	0.43

It was suggested by the Commission that valuable products other than gum might be obtained from the peat.

In the report of Mr. Graham Gow, Trade Commissioner, on the kauri-gum industry (Parliamentary Paper, C-16, 1909) mention is made of experiments made by Mr. Rosse Trevor in distilling peat. It was not stated whether the gum was extracted prior to distillation, so portions of both the original peat and the extracted sample was carefully distilled, first by heating slowly in an air-bath up to 400° C., and then, after transferring to an iron tube, to a red heat.

The products obtained from first heating were—

	No. 1 (Original Sample).		No. 2 (Extracted Sample).	
	Per Cent.	Gallons per Ton.	Per Cent.	Gallons per Ton.
Light oil	4.0	10.0	1.2	3.0
At red heat, heavy oil	2.2	5.5	2.0	5.0
Pitch and tar	0.35	0.8	0.3	0.7

Some acetic acid was also given off, and a large amount of inflammable gas.

It will be noticed that the percentages of oil obtained from No. 1, the original sample, are much larger than those from No. 2, the extracted sample. The light oil from No. 1 contains a small amount of creosote and tar acids, equivalent to half a gallon per ton. The pitch from No. 1 is harder and of better quality than that from No. 2.

The main use for the oils obtained would be for lubrication. The quantity of ammonia obtainable by distillation is small, as the total percentage of nitrogen present, 0.43 per cent. is lower than that found in many coals.

The carbonized residue left after distillation contains too large a percentage of ash for it to be of use as a fuel.

Its value as a fertilizer would be very small, as the amounts of potash and phosphates present are negligible.

Distillation of the extracted peat would therefore not be commercially profitable.

The extraction of kauri-gum alone should, however, yield a fair profit.

Considerable more work on average samples of peat from other areas would be necessary to decide whether these conclusions would apply to all kauri-swamp peats.

J. S. MACLAURIN, D.Sc., Dominion Analyst.

SIRS,—

Marua, 7th May, 1914.

When your Commission were passing through Marua you viewed a paddock of grass near the road and expressed a desire to know how good grass came to be growing on such poor pipeclay soil, and at your request I furnish the information.

The soil is average pipeclay similar to that on the neighbouring gumfield, and is heavy, cold, and sour; the top being grey pipeclay with patches of hard white cement, so hard that the plough would not enter or touch, and the subsoil a light-coloured yellow clay; and the surface was covered with stunted tea-tree, very short fern, and moss.

Kauri gum was dug out of it, and each time of ploughing more gum was exposed, and from a farmer's point of view was a very uninviting piece of land.

Two crops of oats were taken off it, and then laid down in grass, about ten years ago. The tea-tree was cut and burnt, the mounds and hollows all levelled, and the land ploughed shallow, say 3 in., then well disc- and tine-harrowed, then cross-ploughed a little deeper, which brought a thin layer of under-soil to the surface, then disc- and tine-harrowed. Between each of these four workings the land was left for a spell exposed to the sun and weather according to the season, and probably four or six months elapsed from clearing the land till the last working, and in this way all fern and tea-tree were checked and not allowed to grow. If there had been only one ploughing and deeply, and the land left for a longer time, then the fern would start and get a fresh lease of life, and the disc harrows not penetrate to the bottom, and there would remain underneath a mat of roots or surface rubbish through which the oat or grass roots seem unable to penetrate. All working of this land should be done only when dry, and never when at all wet, or the soil will become clayey and lumpy.

The first oats were sown in winter, choosing a dry time, and gave a good crop. The manure used was chiefly bonedust; trial plots of potash and nitrogen did not give satisfactory returns. The land lay in stubble with stock grazing thereon during the summer, and then it was again ploughed and another sowing of oats; but this crop was a poor one. Very little or no manure was used, and the oats sown late, and the land worked when too moist, and a bad job was made of it all.

All fern and tea-tree were by this time thoroughly eradicated. It was then laid down in grass, being ploughed to about 6 in. by this time, and two lands of the paddock, where most of the hard cement patches were, were subsoiled about 3 in. or 4 in. by using one pair of horses and two ploughs, the team doing one round with the first plough and then hitched to the second plough, which had the mouldboard removed; but this plough was old and bent, and did not do satisfactory work. Still, the grass showed a difference between the subsoiled part and the remainder of the paddock, and also after a heavy rain that part did not sour so much when the land was in fallow. The manure used was chiefly bonedust and basic slag, and one part was sown with extra slag, and the resulting grass showed extra well there for years after. Also, on another patch two or three sacks of lime in the calcium-oxide state were put in with spade and rake and well mixed up into the soil, slaking it at the time with buckets of water. That was about ten years ago, and that patch shows up greener even now, and stock keep it always closely eaten down. About a year after the grass was sown a stock auctioneer remarked that the paddock would easily carry three sheep per acre. The grass is *Paspalum dilatatum*, *Agrostis stolonifera*, and *Triodia decumbens*. A few weeks ago the paddock was given a dressing of basic slag, which should show its effect later on.

Such soil, unlike the lighter lands, requires little or no rolling, as if worked when dry into a fine tilth it will be nice and loose and no lumps, and the first rain will set it down quite compact enough for any seed sown; but if it is ploughed up wet, rough, and lumpy, then a heavy roller would be used to press these lumps down into the soil and present a better appearance on top.

The method of treating this paddock is no secret. It only goes to prove that these clays require suitable treatment, as is advocated by agricultural scientists now, to be made highly reproductive; and though there are different classes of gum soils, varying in texture, colour, and depth, yet all can be profitably worked or planted. Some that are near the coast or receive sea-air influence have grasses growing naturally, and this seems to suggest that salt should be tried as a manure on other fields, but they are all non-calcareous and by analysis deficient in lime, and lime properly applied is very beneficial.

I have found that this clay, if hollow-drained, trenched, or subsoiled, and green crops and rubbish worked in, that the top soil, which was only 3 in. deep, became a good dark colour for a full spade-depth, and remained dry and workable all winter, and would grow abundance of garden crops; and as for subsoiling, it would probably be cheaper to do that with explosives.

Tea-tree cutting is slow and tedious, but better methods will yet be employed. A settler is experimenting with a motor cutter, and I think another cheaper way would be to fire the standing tea-tree in the height of summer—first taking precautions against the fire spreading—at the time the sap is up, and then the charred plant and its stump will rot so much quicker than if cut in winter, and afterwards use a Cambridge roller over it and reburn.

These gumfield lands have been despised and allowed to be waste land, but such can, generally speaking, be made into good farming land, and that at a low cost. Even the roughest and untillable will grow *Pinus* and other trees for fruit- and butter-box making, and what else would better conduce to the material progress of Auckland City and Province than to have all these large areas covered with farms and sending away tons of produce?

Yours truly,

H. HAWKINS.

The Chairman and Members Kauri-gum Commission, Auckland.

SIR,—

Royal Commission on Gum Lands, sitting at Awanui, 9th April, 1914.

I have the honour to transmit to you the following resolution passed by the Commission at a meeting held at Ahipara on the 9th instant:—

“That, in regard to applications for areas within kauri-gum districts under section 20 of the Land Laws Amendment Act, 1912, and regulations thereunder, this Commission respectfully suggests to the Hon. the Minister of Lands the desirability of instructing the Auckland Land Board to hold over the final approval and survey of such applications until the report of the Commission is in the hands of His Excellency the Governor. The members of the Commission having now inspected a large area of gum reserves, and having had the evidence of a great many gum-diggers, are of opinion that some modification of existing regulations is necessary, and propose making recommendations to that effect in their report.”

Proposed by Mr. Hebden and seconded by Mr. Stafford.

I have, &c.,

R. P. GREVILLE, Chairman.

The Hon. the Minister of Lands. Wellington.

SIR—

Pukenui, 12th April, 1914.

Owing to a paragraph appearing in the *Star* stating that your Commission was not calling evidence I did not attend you at Houhora, but I was surprised when Mr. T. Taffe informed me that the Commission was seeking information from all quarters.

Re Raupo Swamp, situated between Waiharera and Houhora: Some years ago I was camped on the Waiharera side of the swamp. I hooked a few hundredweight of white gum near the edge, but could spear nothing out in the swamp. There has been a considerable amount of white gum hooked at odd places around the border, but I have never heard of any gum being found towards the centre—say, from about 5 chains out. If there had been I should most likely have heard of it, as I followed prospecting and was a considerable time in the Waiharera district. It seems to me to be a suitable place to cut out of the reserve, keeping well away from the gum lines and with the following provisions: That the Government have the right to resume, on paying compensation, if a payable gumfield is found; (2) that the Government have the right to put prospectors on spearing; (3) that no lessee or purchaser be allowed to charge royalty or make any profit whatever outside his own labour on any gum found.

Regarding the shallow white fields: Before resuming any such areas the Government should plough and harrow portions under capable supervision to find out what they are worth. A good many people would like to have them for the ploughing. Personally, I would like these reserves to be left alone for a few years yet.

Regarding the washing swamps: Your Commission cannot be too careful about these. Any swamps or basins containing gum or chips should be left at all costs. There is an enormous labour value in some of them.

It might be interesting if I gave an account of the washing process. In the first place, about seven years ago, it was found that in many swamps, by making a puddle of the ground and running it through sieves, the earthy matter is eliminated, leaving gum sticks and fluff; on the sticks and fluff being picked or winnowed out the remnant will be ready for the market. The first object of a washer is to pick places containing quantities of chips with a minimum of refuse, as the cleaning requires a considerable amount of manipulation.

In the first year the market was generally oversupplied, and very often a poor price was obtained. At the present time the clean pockets are almost gone from the shallow ground, which is the sort of ground that has been mostly worked, and the washer has had to work dirtier places containing also a less percentage of gum, but this has been made up to some extent by improved methods of working, and also improved methods of cleaning in Auckland, which does not necessitate cleaning on the field to the extent that was formerly required. Also, the prices have been higher. The ground worked in this way would not run more than 4 ft. in depth. Over that suction pumps are used. (The shallow ground is poured into sieves by buckets.) I have no doubt in my own mind that a good many washing-swamps will some day be worked on a face by power-driven plants. There is a large amount of value left in some that are considered worked out by hand labour—that is, in those that contain a run of chips. It is impossible, or nearly so, to work out a swamp by the ordinary methods.

The question might be asked, If power-driven plant would be able to work these places at less cost, why not use them? I will answer this with the following reasons:—

(1.) The washer in working at the present time differentiates—that is, picks places as free as possible from charcoal sticks and burnt gum, &c.—while the ground being taken in a face the product would contain all the refuse, including the gum left in the swamps, minus the soil, and in spite of the improved methods of cleaning in vogue the amount of foreign matter is a factor to be reckoned with.

(2.) The washer in removing timber will make it less hard in the final working.

(3.) The danger of overproduction. The market price always has a tendency to a point whereby sufficient diggers will be available to keep the supply up, and the present methods of working are equal to the demand for some time to come, judging by the requirements of the past.

There is also a suggestion I would like to make—that the gum license be so construed making a holder incapable of using power plant on Government fields until such time as, owing to the paucity of supply, it can be put on a business footing.

There is another suggestion—making the holder of a license incapable of working for another digging gum on Government fields, as there are instances of proficient diggers a bit soft working in slavery for a sharp, and no outlay required on the fool's part in working for himself.

The fire question: There is one thing vastly more important than cutting out land for settlement—that is, the shameful amount of damage caused by fires. During the last fourteen years, since the demand came for the poor gums, there must have been millions of pounds' worth destroyed. The swamps destroyed or greatly damaged were mostly all the washing sort. I do not think a single one escaped damage. These are the swamps most easily burnt. It is a wonder any are left. I lay claim to be an expert washer, and I have travelled around a good bit prospecting, and know what a good washing-swamp is worth to a degree. I cannot compute the loss in less than millions. The best swamps have fared, as a rule, the worst. Any respectable storekeeper who deals in riddlings, or diggers who have been washers, should have the same tale. Last summer above Ngatake, where I was camped, the best swamp in the place was burnt right out, besides others partly damaged, resulting in some thousands of pounds lost to the country. It is not only what gum is destroyed, but it makes the swamps dirtier from the amount of charcoal left, charcoal being the worst to eliminate from the riddlings. This summer where I am camped near Pukenui there is one swamp or large basin (called the Sugar Basin) probably totally destroyed. The gum burnt is estimated at £10,000 worth—it might be nearer £20,000. This one was most wantonly set fire to in the height of the summer. There are several other places burning in a minor degree. I hear reports of great damage done in other parts of the district. Also, the land is ruined for agricultural purposes. There is a strong undercurrent of feeling among diggers. Care is taken by the bulk, but as there are no regulations in active force it is extremely difficult to deal with the "lost soul" portion—only the strong arm of the law will stop them. I would like to make a few suggestions towards stopping this evil:—

(1.) That the bulk or all the diggers, all the storekeepers, or any one directly connected with the industry on the fields, be declared honorary rangers under the ordinary Gum Ranger.

(2.) That the ordinary Ranger confer with the diggers in the different sections of his district on when to close the fire season. The closing of the season cannot be made a hard-and-fast rule as to a special date; sometimes you can burn in December, other times it is not safe to burn in September; also some places will not burn, which might be taken into account owing to its being of common interest both to the storekeepers and diggers. Considering the strong feeling showing but, as far as I know, not yet reached publicity, there should not be much trouble in carrying this into effect; also, burning at the right time is necessary for working conditions and to lessen the change of a large conflagration.

(3.) The delinquents be prosecuted with extreme vigour.

(4.) That where there is an incipient fire in a swamp any Ranger be empowered to put labour on to put it out.

(5.) That any one convicted of burning out of season be made to pay for damage done.

(6.) That diggers firing out of season have their licenses cancelled.

(7.) That stringent regulations be put into force as soon as possible.

(8.) That inquiry be made as to the advisability of making both east and west coasts, or portions of these coasts, situated north from Awanui North, a closed area for fires, with the view of hindering the sand from drifting in.

(9.) That an inquiry be made as to the ways and means to stop the sand-drifts on these coasts.

In conclusion, I hope your Commission will weigh well what I have written. I do not think there has been any exaggeration; and considering the kauri-gum with such eminent qualities above most, if not all, other resins in the world, what potentialities there might have been for the country if the industry had not been so fearfully mismanaged in the past! Both political parties never seem to have put real seriousness into the question—perhaps one side no more to blame than the other, but, even so, with the want of regulations, the almost total absence of control, the low commercial spirit engendered, and the destructive propensities in full blast, the whole might be qualified for the subject of universal derision.

I am, &c.,

The Secretary, Gum Lands Commission.

WM. F. RULE.

SIR,—

Waihopo North, 23rd April, 1914.

I have been digging gum since 1903. The time has been spent on the shallow white fields in Waitemata County and on the Houhora fields. Some of the reserves on which I worked in Waitemata have already been resumed. In my opinion, the sooner the reserve is lifted off the remainder the better, as the chief use made of them at present is as a dumping-ground for undesirables whom Auckland Magistrates send out of town. I have seen portions of this country ploughed, and all the gum got only paid for first ploughing. In my opinion the reserves there ought to be lifted.

Coming to Houhora Reserve, matters are different. The reserves will, in my opinion, yield payable gum for the next twenty years. There are, however, many small areas not actually gum-bearing which might be given to the digger as freehold homestead areas, as is indeed already law. Only the Crown Lands Board will not at present carry it out, waiting, I believe, for the Commission's report on the matter. If the Commission is against the right of purchase being given to diggers I would suggest that the Commission recommend the alteration of Regulation 16, clause 2 of the Kauri-gum Industry Acts, as published in the *New Zealand Gazette* of the 1st December, 1911, so as to give diggers either fixity of tenure or, in case of removal, compensation for improvements.

Should a digger desire a piece of land that bears gum, then let him have it after he has faced it and taken the gum out. An excellent example of this method is to be seen on Mr. Howarth's place, which no doubt Mr. Hebden pointed out to the Commission. This gentleman, Mr. Howarth, has faced 4 acres in a by-no-means rich spot, and while doing so has got enough gum to keep himself and wife. Some of it is in grass, and the remainder is being put in grass now. The low estimate of the gum in the ground is £75 per acre; some of the ground would be double that.

Sand-encroachment: I could have shown the Commission ground where I dug for gum ten years ago, which was never dug out, but is now covered by from 10 ft. to 20 ft. of sand. In several places here the sand has encroached 200 yards on the last ten years. I advocate, first, planting or sowing marram-grass on the western side; second, the taking of cattle off the run, as they destroy the flax and toetoe bushes, and thus give the wind free play at the sand; third, the prohibition of burning near the sand.

Burning: During the last two years there has been at least 2,000 tons of gum destroyed in this district by a few fools who have too many matches and too few brains. I advocate an amendment to the Kauri-gum Act to prohibit burning on peaty swamps during the months of December, January, February, and March.

Employment: There are a large number of men employed digging gum on the deeper fields. Any tendency to take the reserve off the gum-bearing portions of these fields would tend to upset the labour-market. There are at present large numbers of men on the fields who have been unable to obtain work at their usual employment. There are also a large number of men on the fields who, through no fault of their own, but by sickness and accident, are now unable to follow their trades. These men can earn an honest living here, but if driven from the fields they may become a burden to the State. Many old-age pensioners also live on the fields and supplement their pensions by digging a little gum. All these men are entitled to be thought of by the Commission, as well as the wives and children of those who are married.

Thanking you, Mr. Chairman, and you, gentlemen of the Commission, for your courtesy,
I am, &c.,

JAMES CHISHOLM.

The Chairman, Gum Lands Commission.

SIR,—

Kawakawa, 3rd May, 1914.

I have the honour to transmit as below, for your favourable consideration, a copy of a resolution passed by the Commission at a recent sitting:—

"That this Commission respectfully suggests to the Hon. Minister of Lands, in respect to all the gum reserves as at 20th March last (the date of the Commission), that all dealings in regard to the reserves be suspended until the Commission has furnished its report, whether such dealings be by way of completing their unlifting, the procedure for which had been commenced prior to the date of the Commission, or by way of initiating any procedure authorized by section 46 of the Land Laws Amendment Act, 1913, to uplift the reservation from such reserves, and also in regard to any reserves the procedure for uplifting the reservation from which has been completed since the date of this Commission."

I have, &c.,

W. J. MUNRO,

For the Chairman.

The Hon. Minister of Lands, Wellington.

Department of Lands and Survey, Wellington, 14th May, 1914.

Re Kauri-gum Reserves.

Referring to your letter of the 3rd instant, covering a resolution passed at a recent meeting of the Royal Commission on Kauri-gum Lands, I have to inform you that the Commissioner of Crown Lands, Auckland, has been instructed to, if possible, give effect to the recommendation of the Commission.

JAMES MACKENZIE,

Under-Secretary.

R. P. Greville, Esq., F.R.G.S.,

Chairman, Royal Commission on Kauri-gum Lands, Auckland (or forward).

SIR,—

Tikinui, 8th June, 1914.

In reply to yours of the 4th instant, I beg to state that the bulk of the gum bought by me was obtained most part from the hills and swamps in the Te Kuri district, all obtained from Crown lands. The following are the amounts of my purchases for the past five years: 1909, £69 4s. 10d.; 1910, £124 12s. 6d.; 1911, £317 2s. 8d.; 1912, £654 14s. 3d.; 1913, £1,012 3s.: total, £2,177 17s. 3d.

Yours faithfully,

The Chairman, Gum Lands Commission.

A. N. TOMIC.

Re gum licenses issued at Wellsford: During 1913 there were nine special licenses and one gum-buyers' license issued. During 1914 there have been thirteen special licenses and two

gum-buyers' licenses issued. The total number of men at present (4th June, 1914) digging on the field is about twenty-eight. Most of them have come from Mangawai, where the ground is now too wet to dig on. There are now four men on the field who belong to the locality. Two of these men are solely depending on the gum; they are old and indigent, and pay nothing for their licenses, which are just renewed from year to year; the other two men who belong to the district dig part of their time and do other work when they can get it. All the other men on the field just come during the winter months; some only stay a few days. I believe the late strike in Auckland is responsible for the large number at present here. During the winter of 1913 the largest number on the field at one time was eight.

J. HORAN,
Constable 1125, Wellsford.

SIR,—

Kairara, 15th June, 1914.

Yours of the 14th instant just to hand *re* Gum Commission, which I did not receive till the 12th. I have only taken over my present business since the 1st October, 1913; previous to that it belonged to Mr. T. C. Hawkins, of Tangowahine, but I had charge of it. Mr. Hawkins did not begin to buy gum till about October, 1912; from that date to 30th September, 1913, he bought about 21½ tons, for which the value would be £2,177 10s.: there was besides an Austrian gum-buyer, who has bought gum to the value of about £1,000. This gum was taken from the gum reserve, and a small quantity from the forest reserve—not more than about £200, as the bush was being worked at that time.

I bought gum from the 1st October, 1913, to the 13th June, 1914, 7 tons 16 cwt. 1 qr. 7 lb., to the value of £565 8s. 1d. As far as I can estimate, about £100 came from the forest reserve, and £60 from private property, and the balance of £405 8s. 1d. from the gum reserve.

There will be a greater number of white gum-diggers here this winter than last; about ten or twelve have arrived since the Gum Commission inspected the reserves.

I am, &c.,

Mr. R. P. Greville, Auckland.

A. C. SELBY.

SIR,—

Waimate, near Dargaville, 16th June, 1914.

I am very sorry not to have been able to send the enclosed by the 12th instant as requested: the fact is, owing to my not going to Dargaville for over a week, I did not get your letter till last Saturday, the 13th. I trust, however, it will still be of service.

For several years there have not been so many diggers on Kairara, owing to our being ordered out by the Department. It is only since the timber has been cut out that there has been any number of diggers on the field. Of course, my purchases are but a small portion of the gum dug for 1913, as there were five of us buying—Love Urlich taking about half the gum dug for the year; Mr. Charles Selby, who has a store on the field, bought a good deal; likewise did Mati Franick, Thomas Ellis, and myself. Trusting this is not too late to be of service,

Yours respectfully,

Mr. Greville.

PETER BROWN.

Gum bought by me on Kairara Reserve and Waimata (privately) for the last Five Years.

					T. cwt.	qr.	lb.	£	s.	d.	
1909—Kairara	2	18	2	9	228	7	4
Waimata	2	0	2	27	128	11	1
1910—Kairara	8	7	1	17	576	19	10
Waimata	1	5	3	1	81	19	1
1911—Kairara	5	5	2	22	323	17	7
Waimata	2	0	0	13	94	5	2
1912—Kairara	0	12	2	13	47	9	3
Waimata	0	9	3	15	39	6	6
1913—Kairara	9	7	3	10	1,064	4	2
Waimata	0	9	0	27	43	5	2

This is what was paid for the gum on the field, and of course does not include working expenses.—P. BROWN.

SIRS,—

Pukenui.

In response to your request, I beg to hand you herewith my statement of matters in connection with lands included in kauri-gum reserves, &c.

There is a vast area of land extending from Waipapakauri as far north as Te Kau that is at present locked up in the kauri-gum reserves that could be thrown open for settlement, as such land is well known to be for the most part non-gum-bearing, and while in some parts a little gum has certainly been found, but not in anything like payable quantities, and these areas if surveyed and thrown open for selection would be readily taken up. There are two sections, Nos. 7 and 8, in this, the Houhora East Survey District, that were surveyed some years ago, before the first operation of the Kauri-gum Industry Act, and which at the time of the creation of kauri-gum reserves in this district were included in the gum reserve. Now, these sections have never contained gum in anything like payable quantities—in fact, on one section gum has never been

found at all. These sections have been applied for at different times by different persons during the last ten years who were desirous of settling on them, but all met with the same reply—viz., that the sections in question were included in the gum reserve and could not be opened for selection. Extending from the southern boundary of the above sections lies a big stretch of swamp land that could with advantage have the reserve lifted and be cut up into useful farms, and which I am sure would be readily taken up, and as this is well known to be non-gum-bearing I would strongly advise the lifting of the reserve both from this and other similar areas that exist in this northern district and which are well suited for settlement.

I would also like to call the attention of the members of the Commission to the amount of destruction and loss caused each year during the summer months by persons setting fires in the swamps regardless of what the consequences may be. Some there are who seem to be possessed with a mania for seeing a blaze, and who would, if they saw a clump of dry scrub or brush, walk out of their way for the sole purpose of firing that scrub, and it is a remarkable thing that, as a rule, those who are so fond of firing in this reckless manner will seldom be found digging where they have fired.

During this summer quite a number of swamps have been fired with disastrous results, one swamp, known as Sugar Swamp, containing, I should say, about 40 acres, was fired some time before Christmas and has been burning ever since, is still burning, and at the present time is practically one living mass of burning ashes. Owing to being drained some years ago this swamp does not carry any surface water, and being on an average shallow, of course quickly dried at the beginning of the summer, and there is no question at all as to the depth the fire has gone. Now, it would be hard to estimate the exact value of the gum that has been burned in this swamp alone, but I should say that it would not be less than £2,000. My estimate is arrived at in this way: During late years some of the swamps that were considered by the old-time digger to be worked out have been found to contain riddlings in more or less quantities which have commanded a good price in the market. These swamps have been worked by means of digging down to the layer that contains the riddlings and then washing this through sieves or other contrivances for saving the chips. By this means thousands of sacks of riddlings have been taken from swamps in different places that were otherwise considered worked out.

Almost joining Sugar Swamp is another much smaller swamp, known as McGrath's Swamp, which is only divided by a narrow sandstone ridge from Sugar Swamp, from which there have been taken from time to time approximately 2,000 sacks of chips, and this is considered by many here to be a low estimate of what has been taken from it. These riddlings have been selling at anything from 15s. to £1 5s. and £1 10s. per cwt. according to the way they were got up or the condition they were placed on the market.

Sugar Swamp, it was well known, contained chips and gum in equal quantity, if not more so, than McGrath's Swamp, only that it was found more difficult to work it owing to the nature of the ground in the swamp.

Not a mile from Sugar Swamp is another, known by the name of Green Basin, which was also fired this summer, and is now practically burned from end to end; and there are many other places that I could mention that are simply burned out through this reckless firing, and I certainly think that an Act should be framed making it a punishable offence. If a Ranger were appointed whose duty it would be to visit each district regularly I feel sure it would be found that quite a number of right-seeing men in each district would be ready to co-operate with him and thereby assist in stopping this practice of indiscriminate firing.

THOMAS B. TAAFFE.

The Secretary and Members of Gum Lands Commission.

16th April, 1914.

I, THE undersigned, having been asked to give a statement with reference to lifting reservations on such land as non-gum-bearing and non-payable gum land, I would strongly recommend lifting reservations of the following blocks—namely: Kaikino Swamp, Opoe Block, Mangonui County; also all the land west of this swamp which is non-gum-bearing; and also big swamp between Stony Creek and Macintosh's, in Otaia Block: this swamp would make a few nice farms when drained. I would not recommend lifting reservations of land north of Ngataki Creek, in Muruwhenua Block, as there is not a sufficient area to be worth while cutting up for settlement.

J. M. REID.

SIR,—

Towai, 30th May, 1914.

According to promise I am sending a few remarks *re* manure experiment.

Up to the present phosphates have given best results. I have had the grass eaten off with one cow since the 19th May. She left the slagged grass in places—evidently it was too rank—but she has got it fairly evenly eaten down now. There is a remarkable difference where no manure was used and the manured part.

Plots 2 and 3: Soil lumpy; good growth; bottom not filled. Plots 3, 4, 5, and 6: Better, but patchy. Plot 7 (lime and super.): Fair growth; but open. Plots 8, 9, and 10: Good growth; bottom well filled. Plots 11 and 12: Top part good sward; bottom part in water; grass very much discoloured, nearly yellow; subsoil on yellow grass pipeclay, which will not let surface water away through it. Plot 13: Lower part very good. Plot 9 (slag and super.) is still ahead. Plot 13 (slag): Second best.

On Wednesday last I went to Mr. May's place at Hupara. I was agreeably surprised at the hay made from it. In the part of stack open it was all *Angustissimus*—no grass. The stalks were a bit coarse, but the leaves were cured beautifully, and it had a nice sweet smell and looked very palatable. I had a high opinion of it as a soil-improver on poor land, and after seeing the hay made from it I would say that it will do for northern gum lands and poor ground what lucerne has done for Marlborough.

I would suggest the following grasses for gum ground: Grasses for poor wet side lands—Yorkshire fog, *Microlaena stipoides*, *Lotus Angustissimus*, also brown-top; for dry hillsides—Danthonia, Waipu brown-top (*Poa Brownii*), *Microlaena stipoides*, *Lotus Angustissimus*.

Yours, &c.,

ARTHUR DAWSON.

The Chairman, Gum Commission.

SIR,—

Central Store, Mangawai, 5th June, 1914.

Herewith you will find the information required in reference to the gum bought. I have given you a fair estimate of same; as regards Hogan's Flat, which I leased, it would be a hard thing to average it per acre: I paid £75 an acre for it, and hope to do well by it. Hoping this will suffice,

Yours, &c.,

HERBERT POOLE.

The Commissioner of Gum Lands.

				Freehold.			Rodney.			Otamatea.		
				£	s.	d.	£	s.	d.	£	s.	d.
1910	...	...	...	87	11	10	147	1	1½	249	16	3
1911	...	...	...	65	4	1	76	5	9	56	4	5
1912	...	...	...	142	14	8	185	15	9	380	5	8
1913	...	...	...	365	0	0	821	15	8	435	0	0
1914	...	...	...	75	0	0	502	16	0	156	7	0

GENTLEMEN,—

Whangapara, Great Barrier, 9th June, 1914.

Yours of 1st June to hand. *Re* the Government gum reserve of 890 acres at Great Barrier Island: The permanent diggers for the past five years on the reserve are three, and the present number is six. Their average earnings will probably be about £1 5s. per week. The settlers do a good bit of digging in their slack time and make good money. I should say about twelve of them dig occasionally, and earn from £2 to £5 per week, according to the strength and experience of the men. The men on the reserve are old and weak, and two of them only earn about 10s. per week.

There is a considerable area of gum land surrounding the reserve—about 4,000 acres—of privately owned land, and although some of this private land is worked by settlers and regular diggers the largest half is closed at present, and has been for some years.

I consider the reserve itself is a fairly well worked-out field, and a digger who was confined to the reserve alone would not make wages, although he could make enough to live on.

The quality of the land is about as poor as it well can be. The western half is coarse grey gravel with in some places a few inches of soil on top, the centre is hard red clay, and the eastern partly pipeclay; the whole covered with stunted tea-tree and fern; and, with the exception of a couple of hundred acres of undulating land in the centre, the rest is extremely precipitous.

If I can be of any further service please command me.

Yours faithfully,

D. N. McMILLAN.

The Royal Commission on Gum Lands, Auckland.

SIRS,—

Okonga, Great Barrier, 9th June, 1914.

Your letter of 4th June duly to hand. *Re* Government reserve: diggers number four at present moment. One of them digging there now is earning his £3 per week on the average, and two others average about £1 per week. There is one who has taken up a piece of land under the Gum-diggers Act: he is earning about £1 10s. per week.

Re buying gum: As I am not buying any, the diggers send their gum to Auckland, and I pack it for them. I have not bought any for the last four or five years. I am sorry I cannot tell you how many diggers there have been for the last five years, as the settlers come there for a month or two and take their gum with them.

As regards the quality of the gum, it is mixed—fair, good, and bad. There is gum on the reserve to last for ten years for ten or twenty men if they liked to work, and they would make good money at the same time.

As for the quality of the land, there are about 300 or 400 acres good land, and the rest is mostly all clay, and some a kind of brown clay, and the rest pipeclay and stony: no black loam soil at all.

This is the best news I can give you, hoping this will be satisfactory to you. I have been living on the reserve a good time, but the last eight years I have not been living on it, so I have told you the news about it.

I remain,

The Royal Commission on Gum Lands.

T. CARLSON.

SIRS,—

Red Hill, Te Kopuru, Northern Wairoa, 13th June 1914.

I have only lived at Red Hill about two and a half years, so I am enclosing a list of gum sent to and sold in Auckland for that time. Most of it was sent to Mr. S. Rawnsley, Auckland. Most of the gum was bought below Te Kopuru, Northern Wairoa, and about £12,000 worth, as near as I can tell, was bought from private lands, and the balance from gum reserves. 1912, £6,300; 1913, £8,520; 1914, £6,960; and 200 sacks in Auckland that I have not had the returns for.

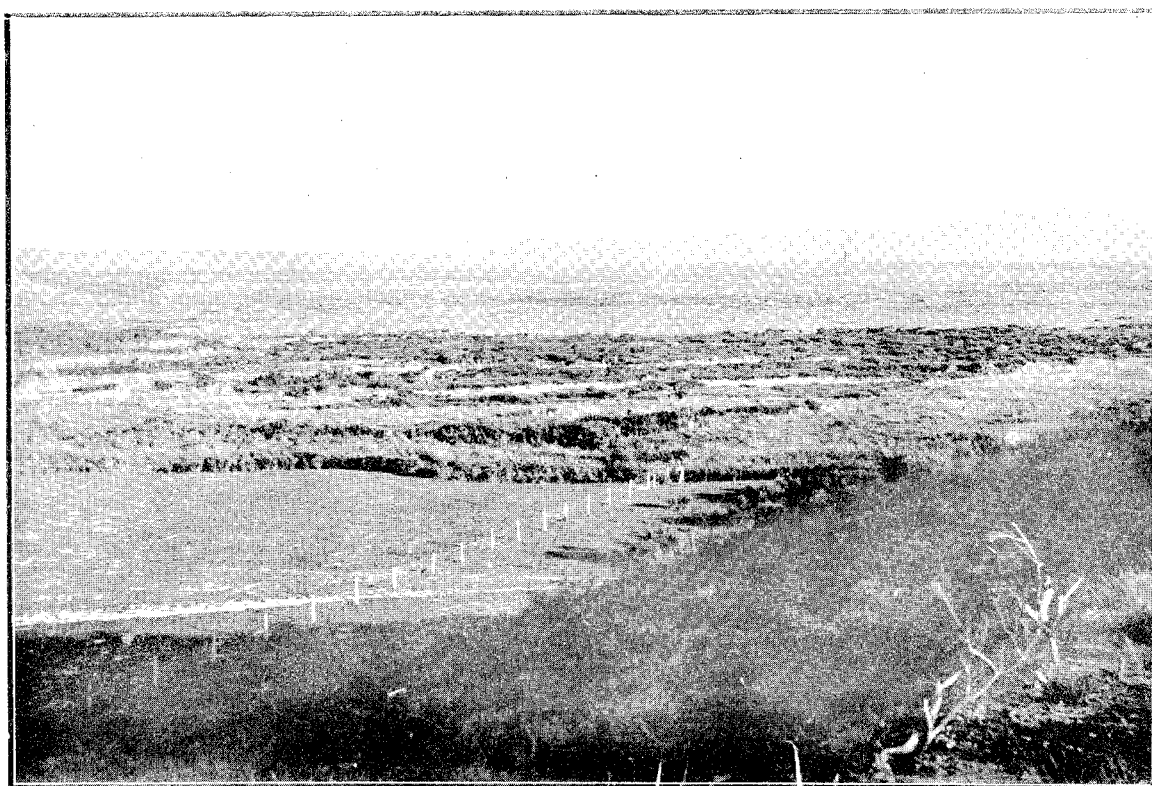
Hoping this will meet your requirements. I am sorry that this was not attended to before, but I was in Auckland.

I remain,

The Royal Commission on Gum Lands.

FRANK MARTINOVICH.

By Authority : JOHN MACKAY, Government Printer, Wellington.—1914.



THE AWANUI FLAT, FROM WAIPAPAKAURI. KAITIA IN BACKGROUND.

