1873.

NEW ZEALAND.

THE GOLD FIELDS OF NEW ZEALAND.

(REPORT ON).

(Return to an Order of the House of Representatives, dated 3rd August, 1869.)

"That it is desirable that the Government should cause to be laid upon the Table of this House, during each Session, a Report embodying a general account of the present condition of the Gold Fields of the Colony, their advancement or otherwise during the preceding year, and their probable prospects; together with particulars showing the average price of provisions during the year on each Gold Field, the rate of wages, estimated population, and such other information as would afford a comprehensive idea of the general condition of the mining interest in the Colony; and that His Excellency be requested to forward a copy of such Report to Her Majesty's Secretary of State for the Colonies." (Mr. W. H. Harrison.)

Mr. C. E. HAUGHTON to the Hon. the COLONIAL SECRETARY.

Wellington, 5th July, 1873.

I have the honor, in accordance with the instructions of the Hon. G. M. Waterhouse, to forward a General Report upon the state and prospects of the Gold Fields, with Appendix containing Reports by the Wardens upon the Districts under their charge, and Statistical Tables.

I have, &c.,

The Hon. the Colonial Secretary, Wellington.

C. E. HAUGHTON.

REPORT.

In presenting the Second General Report upon the Gold Fields of New Zealand, I must express my regret that the difficulties in the way of collecting reliable statistics, which I took occasion last year to remark upon, have not in any way been diminished, and that my efforts to obtain satisfactory returns from the Mine Owners and Managers throughout the Colony have been so feebly responded to as to make the information afforded absolutely useles for statistical purposes.

The facts and statistics herein embodied are drawn almost solely from official sources, and, so far as they go, may be thoroughly relied upon. The reports of the several Gold Fields Wardens, brought up to March 31st, I would specially call attention to; showing as they do very clearly the present condition of every portion of our gold fields; the subject being treated in not a few instances in a very able and comprehensive manner.

Gold.

Under existing circumstances, it has not been found possible to state the exact produce of the gold extracted from quartz and alluvium respectively. The Banks very kindly expressed their readiness to offer any assistance in their power to enable such a return to be compiled, but as in many instances no separate account has been kept of the gold purchased, as to whether it was from quartz or alluvium, a complete return could not be furnished; and no other would be in any way useful. As set forth in my former report, the quantity of gold absolutely raised in any one year cannot be accurately stated, but a very close approximation can be arrived at by the Customs returns, bythe courtesyof the Secretary to that Department placed at my disposal, and printed herewith in Tables Nos. 4, 5, 6. Summarizing these the following data have been arrived at, upon which estimates may be formed:—1871, gold exported, 730,029 oz.; Quarter ending March 31st, 1872, 154,997 oz.; 1872, 445,370 oz.; Quarter ending March 31st, 1873, 194,422 oz.—showing a decrease upon the year 1872 of 284,659 oz., and an increase upon the March quarter of 1873, as compared with the same period of 1872, of 39,425 oz. The large decrease in the yield of gold for the year 1872, as compared with 1871, is to be attributed not so much to any falling off in the yields of the ordinary mines, as to the enormous returns which during the year 1871 were produced by the Caledonian Mine at the Thames, being in three months alone 82,894 oz.

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SILVER.

During the year 1872, 37,064 oz. of silver, valued at £9,900, were exported from Auckland, and during the March quarter of 1873, 14,057 oz., valued at £4,000. This being exclusively the produce of the Thames Gold Fields, the very considerable decrease in the amount exported this year, in comparison with 1872, is only the necessary consequence of the decrease in the yield of gold already referred to.

REVENUE.

Revenue and gold duty for the year 1872 amounted to £111,135 ls. 10d., and for the quarter ending the 31st of March, 1873, to £32,296 l4s.; total, £143,331 l5s. 10d. Complete details of the gold fields revenue in the several mining districts, as brought to charge in the public accounts, will be found in Tables 1, 2, and 3. The falling off in the revenue is partly attributable to the reduction of the gold duty last Session by the legislation of the General Assembly, but more especially, as a matter of course, to the falling off in the return of gold for the year.

The Tables appended, Nos. 1 and 2, show the revenue of the gold fields from all sources, and the gold duty collected in the several Provinces, for the year 1872 and the first quarter of

1873 respectively.

Tables Nos. 3 and 4 form a comparative return of the revenue during the years 1871 and 1872, showing the increase or decrease under each head of revenue, and in respect of each district respectively. The falling off in the revenue in the Province of Nelson and County of Westland during the year 1872, as compared with 1871, may be accounted for by the exceedingly dry summer, which seriously impeded sluicing operations for many months, and in some districts put a stop to mining altogether.

MINING POPULATION.

The number of miners employed during the year ending 31st March, 1873, was 22,335, of which number 3,872 are Chinese. Dividing the value of the total quantity of gold exported amongst the mean number of miners employed in alluvial and quartz mining, it appears that in 1872 the average was per man for the year £77 10s. 3d., while for the year 1871 the average per man was about £101 16s. $5\frac{1}{2}$ d., showing a falling off of £24 6s. $2\frac{1}{2}$ d. per head, a result simply deducible from the falling off in the yield of gold already commented upon. The Chinese miners are chiefly located in the Province of Otago, and confine themselves to alluvial mining; many have left this year for China with a competence realized in a few years; yet from the returns it appears that their number is on the increase; they are generally reported to be a hard-working and orderly class of men, chiefly confining their operations to old and abandoned ground which the European miners have considered worked out.

It will be seen that there is a considerable falling off in the mining population. This decrease is apparently so great that I am inclined to think that the numbers given in my last report must have been overestimated, being probably based upon the census of 1870. Assuming, however, the decrease to be real rather than apparent, I believe it may be attributed principally to the fact that the very high price of labour of all kinds, which lately ruling throughout the Colony, has attracted from the gold fields to other more congenial pursuits a large proportion of the "wages men," many of whom were never "miners" in the true sense of the term, and whose chances of employment during the late stagnation in our great quartz mining field became

exceedingly precarious.

WATER RACES.

There are within the Colony 4,932 miles of water races, carrying 6,776 sluice heads, constructed at an estimated cost of £763,899. Last year the return was 3,595, carrying 7,056 sluice heads, valued at £711,386; but this increased supply over last year is not nearly sufficient to meet the pressing demands of the present workings, either alluvial or quartz. The Wardens' reports show that operations have been suspended for many months, owing to the season being so dry.

In looking through the Wardens' reports, I find that nearly all of them express their opinion that a large increased supply of water is required for the better working of the different districts

under their charge.

Mr. Warden C. Broad, writing from the Nelson South-west Gold Fields, remarks that "some better means will have to be adopted for securing a constant supply of water. The experience of the past summer points to the necessity of constructing reservoirs to fall back upon in dry weather."

Mr. Warden Whiteford, Ahaura, writes: "I avail myself of the opportunity now given me of again bringing under the notice of the Government the urgent necessity of at once proceeding with the formation of one or more large water races in this district, without which this portion of the gold fields can never be properly worked, or afford employment to anything like the population it is capable of supporting." And again: "From the want of some proper water supply in this district, I am quite satisfied that owing to the dry season we have experienced during the last few months, the loss to the country caused by so many miners being idle for weeks at a time, may be estimated at a very large sum."

Mr. Warden FitzGerald, writing from Westland on the same subject, remarks: "The construction of the Waimea Water Race is anxiously looked forward to, and would doubtless draw a much larger population to the district, which it would be well able to maintain." And again: "With regard to water supply, my opinion, and indeed the opinion of every one at all acquainted with the subject, is, that were a race constructed (to carry say from sixty to eighty sluice heads) from the Kanieri Lake to Blue Spur, Big Paddock, and the various terraces such a race would command, the yield of gold in the district would be enormously increased."

The same want of a good water supply seems to be felt in Otago, judging from the following

extracts taken from the Warden's reports:-

Mr. Warden Simpson, Dunstan, Otago, in his report, remarks on certain races which are in course of construction in his district as follows:—"All these races will open up new ground of proved auriferous character to the extent of some hundreds of acres."

It will be seen from these extracts the absolute necessity which is felt by the officers in

charge of mining districts for a large extension of the present system of water supply.

MACHINERY.

The number of engines employed upon 31st March, 1873, in quartz mining was as follows:

—83 steam engines of 1,816 horse-power. In alluvial mining, the number of steam engines employed was eleven, and the aggregate horse-power 259. Nine dredging machines were employed during the year in working the beds of the Shotover and Molyneux Rivers. For the fullest obtainable information respecting the number and description of machinery, see Tables Nos. 14 and 15.

MINING LEASES AND HOLDINGS.

There were in occupation upon the 31st March, 1873, 495 mining leases, covering a total area of 3,255 acres 1 rood 23 perches. In the number are included 75 licensed holdings, covering an area of 499 acres 39 perches. These are all upon the Thames Gold Field, being taken up under "The Gold Mining Districts Act, 1871." Tables Nos. 17 and 21 give in detail the number and extent of mining leases and holdings in the several districts.

AGRICULTURAL LEASES.

Twelve hundred and forty-nine leases, comprising an area of 47,395 acres 9 roods 20 perches, were in occupation on the 31st March, 1873. These leases are almost entirely within the Province of Otago, and the falling off in numbers is accounted for by many of the lessees during the last year having taken advantage of the purchasing clause, and made their leases freehold. Table No. 18 gives the number and extent of agricultural leases within the several mining districts.

MINING COMPANIES.

From the official returns it appears there are 342 companies registered under "The Mining Companies Limited Liability Act, 1865," and amended Acts, having a nominal capital of £4,510,026, and thirty-two under the Joint Stock Act, with a nominal capital of £557,625; three under "The Mining Companies Act, 1872," having a nominal capital of £15,160. (See Table No. 19.)

RATE OF WAGES AND PRICES OF PROVISIONS.

The current rate of wages and average prices of provisions in the several mining districts will be found in Tables 9 and 11. Wages rule exceedingly high in Otago and on the West Coast. In many places, although the means of communication with the ports is greatly improved, yet the price of provisions remains about the same as in my last year's report. The high price of wages in Westland has gone a long way to check mining enterprise, and in some cases to put a stop to the enterprise of companies who were engaged in deep sinking, and who were large employers of labour. Any attempt made to reduce the wages led to a strike on the part of the miners, so that in the end the companies had to cease working, as the miners would hear of no reduction, and the ground was not sufficiently rich to justify the necessary expenditure.

WATER SUPPLY ON THE GOLD FIELDS.

During the last year the construction of two large water races undertaken by the Government under the terms of "The Public Works and Immigration Act, 1871," has been commenced, and two are in course of survey. The following return shows the amount of liability and expenditure up to 30th June, 1873, upon these works, and also the advances to water race companies by way of subsidy under the Acts of 1871 and 1872.

As the construction of the Waimea Race in the County of Westland has been undertaken by the Government since my last report was submitted to Parliament, I may remark that I have every confidence that it will be a work of great public utility. The race will be about sixteen miles long, heading from the Kawhaka Creek, which has a constant supply of water, and it is to be constructed to carry forty sluice heads. The extent of known auriferous country which will be rendered available for mining purposes by this supply will probably not be less than the whole Waimea district, and will give remunerative employment to several hundred men.

MINING LAWS.

"The Gold Mining Districts Act, 1871," which has only been put in force in the Province of Auckland, seems after more than a year's trial to give general satisfaction, to judge from the reports of Wardens Keddell and Fraser.

The following is from the report of Mr. Warden Keddell:—"One decided effect of this Act is to lessen the amount of litigation, the chief incentive to actions for breach of regulations under the Gold Fields Acts being the forfeiture of defendant's interests in favour of the plaintiff."

Mr. Warden Fraser writes on the same subject: "In my last report I stated that I hesitated to give a decided opinion, but that I thought it would work satisfactorily. Twelve months' further experience of the working of the measure enables me to state that it is well adapted for the requirements of this field. Under the Gold Fields Act, every dispute or proceeding could only be dealt with by a suit in the Warden's Court, causing enormous expense for litigation. Under the Gold Mining Districts Act, it is made the business of the Warden, the Inspector, and the other officials to afford such assistance to all engaged in mining enterprises as shall enable them to avoid litigation."

Mr. Warden Fraser further expresses his opinion that the Act is eminently suited for such a gold field as the Thames, where the ground is worked almost exclusively by companies, but does not think it would be suitable for alluvial diggings.

PROSPECTS OF THE GOLD FIELDS.

Whilst the results for the year ending 31st March, 1873, have not been so satisfactory as for the previous year, yet in looking through the Warden's reports good and sound reasons will be found for this depression, and good prospects for the future are held out.

Mr. Warden Keddell (Coromandel) writes as follows on the subject:—"The period of depression has, however, terminated, and for the last two months a decided improvement is noticeable. The yield of gold for the last month was far in excess of any during the past half-year, although the yield for the year is inconsiderably less than that shown in my last report. A great deal of steady work has been done—dead work that will tell in future yields; and several claims are now coming forward with steady returns. The old Kapanga ground, to which I referred in my last report, has within the last few months been occupied by a London Company, called the 'New Zealand Kapanga Gold Mining Company,' with a capital of £100,000, with 20,000 shares, all held in England. Machinery and stores of the value of £16,000 have recently arrived from England, and placed on the ground, and work commenced."

The same Warden attributes the great depression in the year 1872 to over speculation, which was brought on by the reported wealth of the Green Harp Company's reef—a Company

whose proceedings are too well known to require particularizing.

Mr. Warden Fraser reports on the Thames Gold Fields as follows:—"There has been a very prevalent depression in mining affairs during the greater portion of the past year, principally caused by the falling off in the extraordinary yields from the Caledonian Mine. The Cure Company in September crushed one small parcel of two tons of stone which produced 966 oz. of gold. In the same month a crushing of 370 tons yielded 600 oz., and the total yield from the mine, from September, 1872, to January, 1873, amounts to 6,415 oz. of gold from 1,522 tons of quartz." He goes on to state: "Altogether I may say that nothwithstanding the temporary depression which at present prevails, the operations progressing, and the enterprising spirit shown by mine owners in the development of their properties, coupled with the rich prospects of the reefs, convince me that the future of the field will be as prosperous as the past."

The Pumping Association at the Thames have lately got to work, and the result has been the means of draining a number of quartz claims in the neighbourhood, amongst which are comprised the most celebrated upon the field. The following is from the report of the Warden on this Company's plant:—"The engine, which has been erected on a massive stone foundation, works directly over the shaft. The nominal power of the engine is 350 horse-power. The cylinder of this massive machinery is 82 inches in diameter, and the whole is capable of raising fully 10 tons of water per minute." The cost of shaft and machinery has been £40,000 up to the present time.

In the Inangahua, Province of Nelson, the reefs have not turned out as well as was expected when I furnished my last report. At the same time I see no reason to doubt that, in the course of time, when these reefs are thoroughly opened up and proved, they will be found very remunerative; and in this I am borne out by the expression of opinion by the Warden in

his report.

In the alluvial mines of the Middle Island there seems to have been a falling off for the last year, but with a very decided improvement in the returns for the three months ending 31st March, 1873. This falling off, as I gather from the Wardens' reports, is attributable to the great dryness of the season. Mr. Warden Revell reports that "the remarkable dryness of the weather during the past five months has tended considerably towards this depression." Mr. Warden Robinson (Mount Ida) reports:—"The year has on the whole not been a favourable one for mining. It has been unusually dry in all seasons, and the consequence has been a remarkable scarcity of water for sluicingpurposes. This has seriously cramped the energies of the miners." Mr. Warden Carew (Black's) reports: "A scarcity of water has prevailed to an unprecedented extent."

Taking all the circumstances into consideration, a careful perusal of the reports and statistics hereto attached, will, I think, prove that although a considerable depression did undoubtedly exist over a large portion of the gold fields during the year 1872, yet that the depression was temporary, and that the returns for the first quarter of 1873 show a decided revival in all branches of this important industry—a revival which I take leave to think will not be transitory, but which will, under the various most favourable circumstances of the Colony, develop into the permanent prosperity of our mining community.

C. E. HAUGHTON.

WATER SUPPLY UPON THE GOLD FIELDS.

No. 1.—Works Undertaken by the Government.

	Estimated Cost.	Money Expended.	Remarks.
Thames Nelson Creek Waimea Mount Ida	30,466 7 0 61,235 10 2	1,042 4 10	Survey and plans finished.

No. 2.—Companies which have Received Subsidies from Government.

	Amount of Subsidy asked for.	Money Advanced.	Interest Paid.	Refund.		
Hohonui Company Hibernian Company New River Company Arrow River Company	£ s. d. 1,533 6 1 2,000 0 0 3,333 6 8 612 10 0	£ s. d. 1,533 6 1 1,426 14 3 1,892 16 6 612 10 0	£ s. d. 35 6 5 15 11 11 20 13 9 	£ s. d. 183 19 2 		

No. 3.—Companies that have Applied for Subsidies.

	Amount of Sub- sidy asked for.					Remarks.			
Totara and Jones Creek Company Golden Point Company Beaumontand Tuapeka Company Carrick Range Company Caledonian Company Mount Pisgah Company	£ s. 3,484 10 1,000 0 2,000 0 5,000 0	0 0	Nil ,, ,, ,, ,, ,, ,, ,, ,,	Declined by the Company. Particulars not furnished of character of works Ditto. Plans and specifications not lodged. Refused by Government. Further information required.					

APPENDIX TO REPORT ON THE GOLD FIELDS OF NEW ZEALAND.

WARDENS' REPORTS.

AUCKLAND.

No. 1.

His Honor the Superintendent of Auckland to the Hon. the Colonial Secretary.

SIR,— Superintendent's Office, Auckland, 16th April, 1873.

Herewith I have the honor to transmit to you, for presentation to the General Assembly, Reports, with accompanying Returns, for the year ended 31st March ultimo, furnished by Wardens Fraser and Keddell, in respect of the Southern and Northern Divisions, respectively of the Hauraki Gold Mining District, within this Province.

I take occasion to request that in the event of these Reports being printed for the House, you will be good enough to direct a supply of fifty copies to be forwarded to me, for the use of the Provincial Government.

I have, &c.,
T. B. GILLIES,
Superintendent.

The Hon. the Colonial Secretary, Wellington.

Enclosure 1 in No. 1.

REPORT of Mr. Warden KEDDELL upon the NORTH HAURAKI GOLD FIELDS.

General Report on the Northern portion of the Hauraki Gold Mining District, Province of Auckland, for the Year ending 31st March, 1873.

This portion of the Hauraki Gold Mining District, which began the twelve months elapsed since my last Report under such good auspices, has suffered under the reaction consequent on indiscriminate speculation, which, as the history of all gold and more especially all quartz fields will testify, invariably follows sudden rises in mining interests. These periods of depression are common to all gold fields on which property requiring large outlay of money necessitates the co-operation of capitalists, and is more conveniently managed through the medium of limited companies. All claims—good, bad, and indifferent—have been affected. The depression was attributable mainly to injudicious and reckless over-speculation on the part of the too sanguine, and the high-coloured, dishonest representations of mining adventurers, who seized their opportunity, when the public mind was naturally excited by the fortunate issue of genuine discoveries, to float companies ostensibly to work new mines, but really for the most part to take up ground wholly untried, and in many instances unknown to the promoters, except so far as they could be ascertained from carefully prepared plans. While the fever lasted, and indeed until the pioneer claim on the Coromandel Creek (the Green Harp Gold Mining Company) obtained an unenviable notoriety through its sudden collapse, and the exposure of the fraudulent behaviour of some of those who conducted its affairs, large sums of money passed hands in Auckland and elsewhere for Coromandel stocks, but a very small portion found its way to the field, and a still smaller proportion was expended in bona fide mining. Yet the whole of the odium of the disastrous reaction, which set in at once, was cast on the district, and all Coromandel stock was at a discount, and the result was an utter want of confidence in gold mining as an industry, and legitimate speculation in mining.

A very large area of land was taken up under mining licenses during the time of public favour, and no doubt many of these would have followed up the discoveries which in many cases I believe originated them, and were genuine, had not the Green Harp catastrophe suddenly caused an utter withdrawal of faith in anything at Coromandel, save in those fully developed claims whose reputations had been long established, and even these suffered in exchange quotations.

I may here properly refer to the Green Harp Gold Mining Company's Claim, for the decease of this enterprise was the turning point of Coromandel's prosperity, of which I reported so confidently last year. This claim was taken up by a party of miners in the latter part of the year 1870, who worked with great perseverance for many months. After testing many places, they discovered alluvial gold in a blind creek opening on the Coromandel Harbour, and this lead they with great success traced to its parent reef, and they believed it to be the one sought for by Mr. Kevin, an old pioneer of the district, who, through the help of a company, prosecuted a great deal of work on this portion of the field without any good result; Kevin, however, had found enough gold to make it a matter of certainty that a reef did exist in that neighbourhood, and, as from its proximity to the wharf and township, the expenses of working the mine would be much less than on the ranges where the then known workings were, these miners had a great incentive to use their utmost endeavours. After discovering this reef, and driving on it for some time, they excavated a quantity of quartz, 10 tons of which they had crushed at the New Zealand Company's Battery, and it yielded upwards of 100 oz., being at the rate of about 10 oz. to the ton. Soon afterwards they formed themselves into a company, and applied for and obtained a

lease for the ground. After these 10 tons they had no further test of their quartz, and from this time, as indeed throughout, they were very reticent as to anything concerning the mine. One statement they always adhered to, and that was that the 10 tons crushed were taken from the heap, and were not specimens. Of specimens they had shown to many visitors a great quantity was of unusual richness,

and their demeanour generally showed confidence in the mine.

The attention of the mining public was soon drawn to this portion of the field, and all the surrounding ground taken up under lease or miner's right, and great expectations were entertained as to the general crushing of the Green Harp stuff. This time was, however, delayed until a battery was erected on the Company's ground, which was undertaken by the New Zealand Company, and the Directors of the Green Harp stated that owing to the great cost of carting to the upper batteries, they would not put through any more quartz until their battery was started. This event took place in the month of June, 1872, and was celebrated with the utmost \acute{eclat} , and the shares of the Company at this time were apparently hard to be obtained at £10. After the starting of the battery with all possible ceremony, some perhaps unavoidable delays took place before set fairly at work; but after working some days, and many excuses given, the result at last was made public, and it amounted to almost nothing. It is not necessary to refer to the proceedings which followed. Several of the Directors and the Mining Manager were arrested, and the latter brought to trial.

The facts which affect the report of this district are, that while the public were confidently expecting a grand yield of gold from this mine-expectation which rather increased with the delays so plausibly accounted for—the ground surrounding the Green Harp was all taken up by the mining companies all called into existence from the accepted fact of the genuineness of the Green Harp reef. When the result of the crushing was made known, as I have before stated, a complete reaction set in. This affected not only the beach claims, as it should in justice, but all the claims taken up on the other parts of the field; for attention being drawn to this portion of the mining district, a preference was for some time given it over the southern portion, which had up to this been most in favour; for simultaneous with the beach discoveries, the older claims on the Tokatea Range began to give increased returns. Many of these new ventures were from the first change in the public mind abandoned, others gradually fell away, and these have since been forfeited under the Act. Others taken up at this time are still in progress with different degrees of success. The period of depression has, however, terminated, and for the last two months a decided improvement is noticeable. The yield of gold for the last month was far in excess of any during the past half-year, although the yield for the year is considerably less than that shown in my last report. A great deal of steady work has been done—dead work that will tell in future yields—and several claims are now coming forward with steady returns; and I believe the district is in a far healthier state than nine months ago, when to a casual observer affairs appeared more flourishing. Though many companies have disappeared through the Official Agent's Office, and though hundreds of acres of land leased and licensed have been forfeited, the residuum shows signs of a healthy vitality. The older established claims are all in improved positions since last report, and many second-class claims pressing forward on to the first rank, and there has been on the whole sufficient to guarantee the permanence of the district as a gold field. One fact speaks well for the present prosperity—there are no unemployed miners, and especially experienced men are in request at £2 and £2 2s. per week, and provisions are more reasonable than on some other fields where wages may rule higher. Workmen of other classes find ready remunerative employment.

On the Beach, efforts are again being made to work the claims. The Green Harp ground is not at present at work, but I make no doubt it will not be long idle, for I do not wish it to be understood by anything which appears in this report that I desire to give any opinion as to the real worth of this mine. There are many who believe in the reef, and its richness; and the dénouement was so shrouded in mystery that it is quite possible that there is a very valuable reef capable of yielding, not perhaps 10 ounces to the ton, but a very handsome dividend to its proprietors. Among other claims taken up near the harbour was one that attracted considerable attention for some time—the Golconda. This was situate on private land, the township of Wynyardton-a township on paper only, the owners of which had quite forgotten their property until requested to dispose of their interest to this company. These preliminaries were very expensive, but for some time the company was quite successful. A reef was opened up about two feet thick, and yielding about 2 oz. to the ton. A battery was erected, and the works prosecuted under an able manager of long experience. Lately, however, they have lost or got

off the reef.

With respect to new workings undertaken since last report, the first deserving mention is the Coromandel Tunnel Company, which derives title for about 450 acres under an Act of the General Assembly of last Session; one condition of tenure being the construction of a tunnel 4,500 feet in length through the main range, under the Tokatea saddle. The company have set out on the work in a most substantial manner, under the supervision of a manager of great experience from the Colony of Victoria. A great deal depends on the issue of this great undertaking; it will solve the question of the continuity of gold in the reefs cut in the Tokatea, Harbour View, and others 800 feet above the level of the tunnel, though this is not so much a matter of conjecture since the Tokatea reef has been proved so highly auriferous in the lower levels of the claims below it, and upwards of 300 feet below where it was first struck in the Tokatea. The tunnel is now driven about 700 feet in on the Coromandel or western side, and about 250 on the Kennedy Bay. The nature of the country on the last referred to is very obstinate, the stone intensely hard, and rapid progress impossible, every inch requiring powder. On the Coromandol side several lodes have been cut, and those more recently met with show more gold, and payable lodes are expected in the next 300 feet.

A battery on the Kennedy Bay side of the range has been a want long felt. This, however, has now been supplied through the enterprise of a Mr. Bennett, who, at his own cost, constructed one with a tramway about one mile in length, the upper gradients self-acting, and the lower portion mostly worked by horses. This work has been very well and substantially executed, and will prove of the highest value to claims on the eastern watetshed. It leads from the Tokatea saddle to the Waikoromiko Creek, where the battery is in course of erection. The depression I have referred to affected this undertaking, and it was at a standstill for some months—the tramway finished, the site ready for the

machine house, the machinery in part delivered on the field; and it so remained until recently, when the Bismark and French Republic Gold Mining Company (holding ground immediately below the Tokatea, and on the same reef) purchased an interest in the concern, and work has been resumed, and will progress to completion. The race, conveying the water to the battery, which is to be worked by a 15-inch turbine wheel (50 horse-power), is about $3\frac{1}{2}$ miles long. At present the Tokatea Company convey their quartz from their lower levels up the eastern side of the range along a branch tramway of their own construction to the Government tramway, which conveys all quartz at a small rate to the batteries on the Coromandel side.

The old Kapanga ground, to which I referred in my last report, has within the last few months been occupied by a London Company, called "The New Zealand Kapanga Gold Mining Company," with a capital of £100,000, with 20,000 shares, all held in England. Machinery and stores of the value of £15,000 have recently arrived from England and placed on the ground, and work commenced. The plant consists of very valuable and powerful engines for pumping, winding and crushing (50 stamps), 600 feet of both 15 and 16 inch pumps, sufficient to drain the mine 1,000 feet if required. dicular engine shaft is begun, intended to intersect the reef (formerly worked with success by the old company) at about 600 feet from the surface. This is now down about 80 feet, and is of great dimensions (14 feet by 8 feet within timbers). It is intended to open a cross-cut for the reef at 400 feet. From the nature of the works contemplated, the Company cannot expect any return within the next two years, and will probably have to expend £30,000 in erecting their machinery and sinking the shaft. The greatness of the undertaking shows the confidence entertained of ultimate success. The pumping of this large shaft will drain a radius of something like a mile of the surrounding country, which will assist the development of the reefs long known to exist in the neighbourhood. The company has also made a tramway about two miles in length, leading into the Paul's Creek District, for the conveyance of the necessary timber. This work will now be of great assistance to the public in prospecting this portion of the district. A license was applied for in November for a claim about eight miles north of the Tokatea, near Kennedy—entirely new country. The prospectors have to contend with the usual drawbacks to progress in such a country as this—dense, almost impenetrable forest; and it must be remembered that the richest reef must be brought to machinery.

In the Court House Creek, ground untried until lately one claim is showing up your well—the

In the Court House Creek, ground untried until lately, one claim is showing up very well—the Buffalo. They have driven on a very rich though small leader, and it has great promise of success; has

lately sent some very rich parcels to the mill.

In the accompanying returns I have given the statistical information required. With regard to one item—population—I am only able to give numbers approximately. I estimate the population of the district generally at about 3,500, and I have returned the mining population for the year at 900. "The Gold Mining Districts Act, 1871," has now been in force for about fifteen months, and may be considered to be fairly tested. I would desire here to remark on one feature of it, which I think might be altered with advantage, and that is the delay that must take place after a licensed holding is absolutely forfeited (i.e., forfeiture decreed by the Inspector, and the time for appeal to the Warden allowed to pass without notice by the former holders) and the time when it can be again taken up. By the 53rd section of the Act, the Warden must advertise a day on which application may be made, and such day not to be less than one month; and if more than one applicant, a further delay must take place for the sale by auction.

One decided effect of the Act is to lessen the amount of litigation, the chief incentive to actions for breach of regulations under the Gold Fields Acts being the forfeiture of the defendants' interests in favour of the plaintiff. It is possible that the revenue may suffer in some degree, as it is almost impossible for any staff of officials to exercise such an amount of supervision as the old system Under the Gold Mining Districts Act all proceedings for forfeiture must be taken in the name of the Inspector, and a breach of the regulations entails a penalty only; and in fact even the want of a miner's right, which would have been fatal under the Gold Fields Acts, is met by a fine

only.

In conclusion, I beg to report my conviction that this district is well worthy the attention of the mining public; and that when facilities for prospecting, through the formation of roads and tracks now in progress, are improved, I expect a marked change in the progress of the district.

Warden's Office, Coromandel, 31st March, 1873.

I have, &c., JACKSON KEDDELL, Warden.

Enclosure 2 in No. 1.

REPORT of Mr. Warden Fraser upon the South Hauraki Gold Field. General Report on the state of the Hauraki Gold Mining District for the Year ending 31st March, 1873.

Before entering into statements of detail to show the position of the field during the past year, I may make a few remarks upon the working of "The Gold Mining Districts Act, 1871," which was brought into force on the 22nd of January, 1872. In my last report I stated that I hesitated to give a decided opinion, but that I thought it would work satisfactorily. Twelve months further experience of the working of the measure enables me to state that it is well adapted for the requirements of this Under the Gold Fields Act, every dispute or proceeding could only be dealt with by a suit in the Warden's Court, causing enormous expense for litigation. Under the Gold Mining Districts Act, it is made the business of the Warden, the Inspector, and the other officials, to afford such assistance to all engaged in mining enterprises as shall enable them to avoid litigation. In the Warden's office much business is now disposed of which formerly would have come before the Court in a contested suit; and by certain operations as regards the marking out of claims being now more precisely defined than they were by the Gold Fields Act, dispute cannot arise on many of the points which formerly caused litigation. I may say that I believe the working of the Act would have been improved by the changes proposed to be made in the Gold Fields Act introduced into the House of Representatives last Session, but which was withdrawn.

2. The strong approval, however, which I feel bound to give to the Act in respect to its working on the part of this field which has been long open, and which has been so well prospected, I cannot extend to its suitability for land newly opened; and I think that such country should be opened under the Gold Fields Act, or that such amendment of the Gold Mining Districts Act should be made as would render it more suitable to the requirements of new ground. The great objection is the large extent of land (thirty acres) which, under the Gold Mining Districts Act, may be taken up as a claim or under license. The principal object on new ground is to have it efficiently prospected; and ample experience has shown that in no way can this be done so thoroughly as by allowing it to be taken up in claims under miners' rights. In this way an immense amount of driving and sinking is done, and surface leaders are found which conduct to more valuable discoveries. By this means, also, it is found where the erection of expensive and permanent machinery will pay, and claims gradually become amalgamated, till the ground is in portions large enough for extensive operations.

3. For some years past, the Government have been acquiring by purchase from the Native owners the fee-simple of blocks of ground on this peninsula. One of the most extensive purchases has been made during the past year—that of the Hikutaia and Whangamata Blocks. These are situated to the south of the present gold fields, and, in fact, extend up to the boundary of the Ohinemuri Block. In the early part of January last, after a prolonged session, the Native Lands Court gave judgment as to the claims for ownership of these blocks, and immediately thereafter Mr. Mackay commenced negotiations for their purchase. Great expectations had been raised as to this ground, owing to the alleged discovery of a rich reef by a man named Brogan; and as work was slack on the older workings in this quarter, a great number of men were prepared to give the new field a trial. During the time of the negotiations for the purchase of the land, and before the Proclamation was issued annexing it to the goldfield, a good deal of prospecting was done notwithstanding that a number of Natives and two European constables were employed to prevent it, and as the result of that prospecting was not favourable, the number of men who went up to the new ground was much fewer than would have been necessary to give the ground a trial had even moderate prospects been obtained at different places. As it was, several hundred miners were encamped at Hikutaia, on the River Thames, and at Whangamata, on the East Coast, when the ground was declared open, on the 20th of February last. I was instructed by His Honor the Superintendent to proceed to the new field, and open my office last. I was instructed by His Honor the Superintendent to proceed to the new field, and open my office in a building erected by Mr. Mackay on the new township which had been laid off by him at Hikutaia. My duties at Grahamstown and Shortland were discharged during my absence by Mr. Warden Keddell, from Coromandel. Previous to the opening of the field, a claim of thirty acres was marked off for the prospectors at Whangamata. Respecting this claim there has been a large amount of dispute and contradiction, which it is not necessary for me to go into. It was alleged that Thomas Brogan had discovered a rich reef, which he was to share with Messrs. Levy and Goldwater. On representations being made to the Superintendent as to the value of the discovery, he promised that when the land was acquired he would give the prospectors a claim of thirty acres. But Brogan and the others quarrelled; and when the time came to mark out the ground, the man who was supposed to be the discoverer would not point out the reef, nor have anything to do with the claim. The claim was marked out a few days before the field was declared open, on a reef at Whangamata, supposed to be that meant by Brogan. I read the Proclamation opening the field to the miners at Hikutaia on the 20th of February, and remained there till Wednesday, the 26th. On that day, the whole of the men at Whangamata, discouraged by the result of their prospecting, came over to Hikutaia, and with the men at the latter place, who had also been unsuccessful, determined to return to Shortland. I also came down to Shortland, and proceeded to Auckland to inform His Honor the Superintendent how matters stood. authorized by him to return to my duties at Shortland and Grahamstown, to leave a clerk at Hikutaia, and myself to pay visits to that place weekly. Within the last few weeks the clerk has been withdrawn; but in case of any discovery being made, facilities for transacting business would at once be afforded at Hikutaia.

4. I am glad to state that since the return of the men from Whangamata there has been a good deal of prospecting on the outskirts of this field, and on ground near the townships which had formerly been occupied. A good many new claims have been taken up, which I am informed are paying the men who are working them. I fully believe that this renewed energy in prospecting will greatly assist in causing a revival in mining matters generally.

5. The following are the returns of gold from the field, and the estimated quantities of stuff crushed, as furnished by the *Thames Advertiser*. There being no official records of crushings kept, I furnish these as the most authentic obtainable. Amongst the returns are a few from Coromandel:—

Gold Returns for Year ending 31st March, 1873.

Gold	d Returns	for Lear	ending	31st March, 1873.	•
Date.				Stone Crushed.	Results.
1872.				Tons.	Oz.
April 18	•••	•••	•••	7, 149	14, 547
May 15	•••	•••	• •••	8, 142	15,933
June 11	•••	•••	•••	6, 117	9,925
July 9	•••	•••		6,511	12,342
August 8		•••		8,053	12,173
September 3	•••	•••		8,009	12, 147
October 1		•••	•••	8,028	10,504
,, 31		• • •	•••	8, 521	8,883
November 26	•••		•••	7, 595	9,914
1873.					
January 3	•••	•••		11,971	15,682
" 21	•••		•••	3,838	3,384
February 18	•••	•••		7, 206	8, 95 6
March 18	•••	364	•••	7, 364	8 , 646
				00 504	149 096
				98, 504	143, 036

6. There has been a very prevalent depression in mining affairs during the greater portion of the past year, principally caused by the falling off in the extraordinary yields from the Caledonian Mine. Indeed, latterly, the operations of this Company have been suspended, as it was found impossible to sink to lower levels until the Pumping Association's shaft had intersected the reef and drained it. The present depth of the Company's workings is 300 feet. At first an effort was made to continue sinking, but the combined efforts of the mining machinery of the Caledonian and Tookey Mines were insufficient to drain the water. At present, rich prospects are being found in the 70 feet and 100 feet levels of the mine, and no time will be lost in opening the deeper levels, when it shall become possible to recommence operations.

7. Early in the month of August the Cure Mine became prominent for extraordinary yields, and for a long time it maintained the premier position as a gold producer. In September one small parcel of two tons of stone produced 966 ounces of gold. In the same month a crushing of 370 tons yielded 600 ounces, and the total yield from the mine from September, 1872, to January, 1873, amounts to 6,415 ounces of gold from 1,522 tons of quartz. This mine was worked from a depth of about 80 feet below the sea level. The rich quartz from which these returns were principally obtained became exhausted or broken a few months ago, and since then the Company have been engaged in prospecting

their mine towards the surface, working upwards from the same level.

8. The Albion Company, whose shaft was being sunk to intersect the Caledonian reef at a still lower level than the Pumping Association's, have recently been compelled to discontinue operations, a strong stream of water having been met with and the machinery erected being insufficient for drainage. The Pumping Association works will also assist this Company. There are numerous other Companies located on the same line of reef, whose operations have been carried on during the past year with varying success. Amongst others, the Golden Calf, the Central Italy, and the Otago. The latter Company has recently come on a rich reef in the 300 feet level of their mine, and during the present month have had a crushing which yielded an average of 3 oz. 14 dwts. of gold to the ton of stone.

9. The Golden Crown, formerly, one of the richest mines on the field, before the portion of the Caledonian reef striking through it became exhausted, has recently been turning out well. A new reef, evidently one of a system, has been found in the 130 feet level, and has produced a very large quantity of gold, enabling the Company to pay off a balance of £5,000 to the Pumping Association, besides

handsome dividends to the shareholders.

10. The portion of the Thames Gold Field, which has recently become most prominent, is the upper portion of the Moanataiari Creek, where a large number of claims on the Sons of Freedom line of reef have become developed. In this instance a very valuable line of reef has been worked for a very great length, and has proved of immense richness; and by the enterprise of the companies located on its strike, low levels have been opened, which will afford work for many years to come. The lowest level at which the reef is at present opened is in a tunnel driven by the Sons of Freedom Company to a length of 900 feet through very hard country. The cost of this tunnel may be estimated at £2,000, but it opens the reef at a depth of 400 feet from the surface, or 200 feet below the level, which has hitherto been worked with such profit to the Company. A winze or underlie shaft is being sunk on the dip of the reef to meet the main level, and this is now down 150 feet. A similar tunnel is being driven by the Middle Star Company to intersect the same reef at or about the same level. This drive, which has also proved a very costly one, has already reached a length of 650 feet, but will probably have to be carried a further length of 120 feet before it intersects the reef. In both these instances, the shareholders have been relieved from the payment of funds towards the expenses by the profitable

11. The Watchman Company have also intersected the same reef in their main tunnel, which is on rather a higher level than the others; and communication having been formed with the upper level by means of a winze, the mining operations of the company may now be said to have fairly commenced. It was in the Black Angel Mine that the richest run of gold ever found on this line of reef was developed; and during the past year that Company has enjoyed a large share of prosperity, and has contributed materially to the gold returns of the field. The level at which the reef has been worked in this mine is 200 feet higher than that at which it was intersected in the Sons of Freedom tunnel. In the Whau Mine the same lode has been opened, but not worked on to any great extent; and in the Alburnia Mine it has also been discovered at a level 400 feet higher than that of the Sons of Freedom tunnel. From these facts it will be seen that a very large extent of this reef has been operated upon at various levels. It has proved auriferous throughout, and contains belts of golden stone varying in width from 10 to 40 inches. But the reef to which the Alburnia and Whau Companies have devoted their attention is a parallel one belonging to the same system, but locally known as Dixon's reef. This also has been well developed and proved very rich. The Whau Company have driven their main tunnel to intersect this reef a length of 300 feet, but it has not yet come to hand. In sinking a winze from the old level to meet this one, a rich run of gold was met with, and a parcel of 15 tons crushed from this portion of the mine in February yielded 612 ounces of gold. The history of this mine is not without interest. From some cause or another the first Whau Company were unable to make the mine pay. They got into difficulties and the property was sold. It was purchased by the present proprietors, who at once commenced the low level. They were unable to carry on operations in the upper workings owing to the water, but the extended operations of Dixon

present prosperous, with general indications of improvement.

12. There is another system of reefs developed on the flat at Grahamstown, which has assumed great importance. Upon these reefs the Bright Smile, City of London, Queen of the May, and other companies are now carrying on operations at a depth of 200 to 250 feet under the level of the sea, with

profitable results.

13. The Kurunui main tunnel to which I alluded in my last report has proved a most beneficial

work, enabling those companies through whose mines it passes to operate to much greater advantage than they could otherwise do.

14. Altogether, I may say that notwithstanding the temporary depression which at present prevails, the operations progressing, and the enterprising spirit shown by mine owners in the development of their properties, coupled with the rich prospects of the reefs, convince me that the future of the field

will be prosperous as the past.

15. These are the principal workings on the field, and I may now give some details respecting a most important enterprise—namely, the Pumping Association. On this depends in a great measure the future of the gold field, as it is regarded as the test of whether or not the gold will continue in depth. To give an idea of the magnitude of the operations of this company, I will mention a few facts connected therewith. The company, as I previously stated, is an union of four of the leading companies, namely, the Caledonian, Tookey's, Golden Crown, and Imperial Crown. The object was to sink a main shaft through the Imperial Crown Mine, which would intersect the Caledonian reef at a greater depth than had previously been reached. This shaft would of course drain the workings of the other companies, and enable them to continue operations in their own mines. To accomplish this object the Association was formed, and the shaft sunk. The works have been carried on on a scale of magnitude seldom equalled in the Australian Colonies. The shaft have been carried on on a scale of magnitude seldom equalled in the Australian Colonies. The shaft has now reached a depth of 350 feet. Its size is $11\frac{1}{2}$ feet by $6\frac{1}{2}$ feet, inside measurement. In order to raise the water from this shaft, the largest and most powerful mining machinery in these Colonies has been erected. The engine, which has been erected on a massive stone foundation, works directly over the shaft. The nominal power of the engine is 350 horse-power. The cylinder of this massive machinery is 82 inches in diameter, and the length of strake is 10 feet. engine is 350 horse-power. The cylinder of this massive machinery is 82 inches in diameter, and the length of stroke is 10 feet. The pump-pipes are 25 inches in diameter, and the whole is capable of raising fully ten tons of water per minute, when in full work. There are two drawing lifts and one plunger. The lower drawing lift has only newly commenced work, for the company has determined to sink the shaft a further depth of 30 or 40 feet, as it has not yet intersected the reef. The shaft is a splendid and costly piece of work. It is framed with massive kauri timber, measuring 14 inches by 12 inches, and these frames are fixed $3\frac{1}{3}$ feet apart, the intermediate spaces being closely lathed with kauri planks, 9 inches by 2 inches. These frames are supported by hanging bolts from heavy bearers placed at distances of 30 feet apart. It is estimated that up to the present time this shaft has cost £40,000, including, of course, the machinery and plant, and the expenses of erection. The best engineering skill obtainable in the Colonies has been procured by the company. Their operation has been very greatly retarded in consequence of a dangerous gas which apparently exists in the mineral water. Being very much heavier than the common atmosphere, it is extremely difficult to eject it from the mine, and often for days together the sinking of the shaft has to be discontinued. But the United Pumping Association has displayed an amount of enterprise and perseverance which is worthy of all admiration, for, in a great measure, on the success of this enterprise depends the future, I will not say existence but welfare, of the Thames Gold Field. It will, besides accomplishing the purpose of draining the surrounding mines, test the great moot question of gold carrying to great depths under sea level in this field. The operations of the company have already extended to a depth of about 340 feet under

Grahamstown, 3rd March, 1873.

W. FRASER, Warden.

MARLBOROUGH.

No. 2.

Mr. Warden Whitehorn to the Under Secretary for Gold Fields.

Report on the Gold Fields of the Province of Marlborough for the Year ended 31st March, 1873.

Pelorus.-During the past year no improvement has taken place here. I regret to say the population has slightly decreased, the average being not more than about ninety. The unusually dry summer has enabled the miners to work out several portions of the Wakamarina which have been supposed to be very rich; the result has not been so satisfactory as was anticipated, still a very considerable amount of gold has been obtained. No new ground has been opened, but now the river is nearly worked out, the terraces will probably obtain a greater degree of attention. Nearly all of them are known to be more or less gold-bearing, but the anticipation of heavy finds in the river has hitherto almost absorbed the small population, and in consequence nearly the whole workings have been confined to the river.

As has been said in former reports, water is all that is required to make many parts of this gold field highly remunerative, but there are no capitalists among our population to initiate a work of the kind. A few inquiries have lately been made as to the terms on which Government aid could be obtained, but I fear nothing more will be done. The amount of gold produced still gives a high average of

During the year, three applications were made for leases on a line of reef; but after surveying, &c.,

the applications have been withdrawn.

Wairau.—This district is almost deserted. About twenty men are employed in the Onamalutu portion of it only. In my last I mentioned that a party was trying to sink in that locality. much troubled by water, they have bottomed on good gold; but the water is still a great hindrance to They are now trying by a tail race to reduce the labour of pumping.

The prospects obtained are very encouraging, even after the great delay in getting down, and the

men have great hopes of ultimate success.

Another party about two miles further up the river are doing well, having for some weeks past got about 10 oz. per week to party of four.

There is every reason to believe that this district will yet produce a large quantity of gold.

Quartz-reefing is still in abeyance.

Ravenscliff.—A small gold field has been proclaimed at Cape Jackson at the mouth of Queen

Charlotte Sound, where reefs have been found, generally believed to be good. Machinery is just being erected by "The Turner Gold Mining Company, Registered," and in a short time crushing will commence. Several leases have been applied for; and should the Turner Company be successful, this small gold field will be a very busy place, as the reefs are said to be very numerous.

Queen Charlotte Sound.—This is another field proclaimed (in consequence of a reef being found),

which embraces all the Crown land lying between the Queen Charlotte and Pelorus Sounds. Only one lease has as yet been applied for. Good stone has been obtained from the reef, and a trial will

probably be given it as soon as the Turner Company have completed their crushing machinery

At present only a surmise can be made as to the future of these two last-named gold fields, but it is generally believed that the ranges between the Sounds contain many quartz reefs, and should those at present known, and about to be tested, prove payable, there will undoubtedly be a considerable population settle in these localities, and other reefs found.

W. WHITEHORN, Warden.

NELSON.

No. 3.

Mr. Warden Lowther Broad to the Under Secretary for Gold Fields.

Warden's Office, Nelson, 8th April, 1873. SIR. I have the honour to forward herewith the various returns required by you, which, however, you will perceive, are very imperfectly filled up, a result consequent upon the absence of all the books and records at Wangapeka, and also the fact that during the past twelve months little has been doing

in the Wangapeka District.

Quartz mining has come to a standstill, the Culliford's and Doran's Mines not having proved (so far as they were tested) payable. In connection with the last-mentioned mine, a very expensive wire tramway and battery were erected, the former scarcely answering the expectations of the shareholders. The machinery for the battery was made by Mr. Moutray, of Nelson, and is turned out quite as perfect as any that can be imported. It is possible that an arrangement may be made to give this mine a more searching prospecting, and with good machinery at hand it is to be hoped something will be done to try its real value before finally abandoning it. The great expense connected with such an expense connected with such an expense of the wire tramway into working order. undertaking would perhaps be getting the wire tramway into working order.

The number of alluvial miners scattered about the Wangapeka, Sherry, and Paton Districts remains about the same as last year, and I believe they continue to earn remunerative wages.

Although the last twelve months have witnessed utter stagnation in mining progress, I by no means think this state of things will continue. The certainty of always being able to obtain "wages ground" will be sure to attract population, when the excitement attendant upon new rushes calms down; and with an increased population, we may fairly hope that their enterprise will develop the mineral riches which are known to exist in different parts of this district.

I have, &c.,

LOWTHER BROAD, Warden.

The Under Secretary for Gold Fields, Wellington.

No. 4.

Mr. Warden Turnell to the Under Secretary for Gold Fields.

Warden's General Report, Golden Bay District, Nelson Gold Fields, Year ending 31st March, 1873. DURING the past year a considerable number of the mining population have been drawn from this district by the favourable reports from Reefton and Queensland which have appeared from time to time in the public newspapers, and there is a corresponding falling off in the revenue receipts. The deficiency arises chiefly from the fact that the number of miners' rights issued is less by forty-one than the previous year. Fourteen leases have been either surrendered or allowed to lapse, and the amount received for publicans' licenses is £27 10s. less than that of the previous welve months. The total deficiency, in comparison with last annual statement, would appear to be £176 13s. 10d., a fact very much to be regretted, since there is within the district many hundreds of acres of auriferous table lands perfectly valueless for agricultural purposes, but which would prove remunerative to the gold miner if a full supply of water could be obtained at a sufficiently high level to admit of the ground being worked on the hydraulic and ground-sluicing principle. This want can only be supplied by the introduction of large capital. Most of the alluvial claims held under lease, referred to in last report, continue to be worked to profit; two have been surrendered as worked out, but other applications are under consideration.

The unusually dry season proves exceedingly favourable to river work. Several parties are doing remarkably well, both in the Aorere and Slate Rivers. The former is attracting considerable attention: applications for extended claims are daily being made. These rivers cannot be worked during the winter

The Perseverance Company have been steadily at work, but as yet no dividend has been made. A small battery has been erected by Mr. John Ross, and is in full operation; but it being a private undertaking the result is not known. A lead of auriferous quartz has been discovered at Friday Creek, on the Native reserve called "Taitapu." The seam has been mined into for a considerable distance, and very rich specimens have been met with, but in consequence of not being able to secure a lease of the land, and the great cost and difficulty of getting machinery on to the ground, the reef has not been fairly tested. It is expected that the reserve will shortly be proclaimed under "The Gold Fields Districts Act, 1871." The iron ore which abounds in the district has attracted attention; and as it exists in close

proximity to the coal (several additional seams of which have been discovered); a large area has been leased, and it is proposed to form a company and carry on the work on a much larger scale. The drive at the coal mine is progressing slowly, the rock being exceedingly hard; it is expected that the first seam will be reached in a few months. The sample of plumbago referred to in last report has been pronounced of good quality, and it is probable there will be a considerable demand for it. Some Auckland gentlemen have joined in the enterprise, and propose shortly to commence working the lode.

No additional agricultural leases have been granted during the year. Little or nothing has been done to the roads and tracks, which remain in a very bad state. A bridge is very much needed over the River Aorere. Near the junction of Salisbury Creek, there is an excellent site; the cost of erection is estimated at about £500. The track through the Pakawau Bush is in a very bad state, it being almost impassable, and requires immediate attention. The Mud Flat at West Wanganui has been marked out with guide posts by instructions of the Native Commissioner. Several lives have been lost in attempting to cross the flat, which is nearly seven miles by the present route, and can only be crossed at low water. The district has been visited by members of both General and Provincial Governments, and its general condition is now well known.

April, 1873.

H. W. TURNELL, Warden.

STATEMENT showing the amount of Land Revenue received during the Year ending the 31st day of March, 1873.

	,				£	8.	d.
		•••			123	0	0
			•••		15	0	0
•••	• • •		•••				
				•••	105	10	0
	•••		•••	•••	24	5	3
•••			•••		29	10	0
		•••			1	7	0
•••	•••	•••	•••	•••	15	3	0
					£313	15	3
t of)					32	10	0
s Court		•••	•••		43	2	11
					£200	0	
					2000	0	
	 t of)						### ##################################

No. 5.

Mr. Warden GILES to the UNDER SECRETARY for GOLD FIELDS.

Westport, 19th April, 1873.

I have the honor to report as follows on the progress and condition of the District of Buller, including Charleston and Brighton, for the year ending the 31st March ult.:—

I estimate the mining population as under:—

Buller—								Mo. of Miners.
Terraces, b	eaches, and	creeks, no	orth of	${f River}$				260
Addison's,	Shamrock,	and other	places	south	of Buller, as	far as	Totara	350
Charleston	•••				•••	•••		500
Brighton			•••	•••	•••		•••	110
								—
								1.220

I believe that my estimate last year was too low, a circumstance which I account for by supposing that the loss of miners sustained by this district in consequence of the attractions of the Inangahua reefs was magnified, and that I had no means at that time of measuring its true amount. The above estimate is based on the best information I have been able to attain, and, though only approximate, is probably not very far from the truth. The population seems at present pretty steady, and I see no immediate reason to expect any great increase or diminution.

immediate reason to expect any great increase or diminution.

Westport, Charleston, and Brighton.—I have continued to hold Courts at these places, as stated in my last report. My regular Courts are once a week each at Westport and Charleston, and once a month at Brighton. Besides these, there is of course miscellaneous Court business, in the shape of police cases, on other days at Westport. The Court business at Westport, both in the Resident Magistrate's and the Warden's Court, but particularly the former, has considerably increased, as will be seen on a comparison of the statistics forwarded herewith, with those accompanying my last yearly report. The number of cases heard at Charleston has not been so much less than the year before as might have been expected. The amount of business has somewhat declined of late, but it still requires weekly attendance. The monthly Court at Brighton is a great convenience to the residents in that neighbourhood, and the business has hitherto been sufficient, in my opinion, to justify its continuance.

Old Digging Localities.—There is very little to report respecting the old and well-known diggings at the terraces north of the Buller, at Addison's, and the Shamrock lead, and at Charleston and Brighton. At all these places some diminution of population, and some reduction in the amount of gold obtained, have been experienced. It is of course impossible to say how far this process may be carried, but I should think that the old spots above mentioned will continue to be worked for a long time to come. I have made a practice of giving double ground to parties applying for it in all cases

where no manifest objection existed to such a course, and by this means ground is doubtless some-

times worked which would otherwise not be worth taking up.

Beach Claims.—The expectations which were formed twelve months ago as to the value of claims upon the sea-beach have only been partially realized. In the Charleston District, and on the beach between Charleston and the Totara, a good many claims are occupied. The working of them is rendered possible by the races, which have, at a considerable cost of money and labour, been brought down to the beach; and it is only to be regretted that a still larger number of claims are not constantly at work to remunerate the race proprietors for their outlay. The new regulation by which beach claims are made to extend to the sea, will, I think, satisfy the miners, and tend to prevent difficulty. On the south side of the Totara River the beach workings have proved a failure, and a

good deal of time and labour have been apparently thrown away there.

Quartz.—I have nothing to report about quartz reefs since the Lyell and Inangahua were formed into a separate district. There have lately appeared indications of a development of quartz workings nearer the coast, and within the somewhat indefinite boundaries of my district. The principal spot where a discovery of this kind has been made is at the Mokihinui, where it appears that an undoubted quartz reef, of apparently very good auriferous quality, has been found about twenty miles up the river. Some very good specimens from this reef were brought to me in February last, and a lease was applied for by the prospectors. The ground has been lately surveyed, and I believe the surveyor has formed a good opinion of the reef. The country is rough, but I understand a track can be made there. The conveyance of machinery will however probably be a matter of difficulty, as the river itself affords more obstacles than facilities. Other leases have since been applied for, and attention is now so decidedly drawn in that direction that there is little doubt of the reef or reefs in that neighbourhood being thoroughly examined and their value ascertained. Another quartz reef has been discovered and a lease applied for a few miles up the Buller. The specimens which I have seen from this place are much inferior to those from the Mokihinui, but I believe the prospectors have confidence in the value of the reef. Nothing further has been done at the old quartz-reefing claim at the Waimangaroa; but at a little distance thence, at a spot described as situate on the slope of Mount Rochfort, a lease has been obtained for the purpose of working a quartz reef. I have not, however, had any recent information of the progress of this claim.

Westport.—The past twelve months has been a period of calamity and depression to the town of

Westport. Street after street has been washed away by the river and sea encroachments, and the inhabitants have been compelled, at a great loss, to move their houses and places of business to such sites as they could secure, the approach to the new site of the township being then unfinished. The Government buildings are now safely established at the new site, and it seems probable that others will follow either from choice or necessity; but for some time the town is likely to have a very straggling arrangement. There seems to be no particular assignable limit to the further encroachments of the sea and river, and I do not see why the former destruction should not again be repeated if the

river bank is not better protected than has yet been the case.

General Prospects of District.—The general prosperity of the Buller District has undoubtedly been at a low ebb during the last twelve months. The situation of Westport must always give it a full share in the general success of the gold fields, but the opening up of the quartz reefs at the Lyell has not been yet rapid enough to relieve materially the depression of business experienced at the Port of the Buller, whilst most of the supplies to the Inangahua Gold Fields now go by way of the

The principal hopes of renewed commercial activity are now built upon the prospect of a coal trade arising from the extensive seam discovered at the Ngakuwaho. I cannot give any information on this topic of which the Government is not already in possession; but it may be hoped that the development of this branch of industry, together with the gradual and steady progress of the quartz reefs, may at no distant date secure to the Port of Buller some portion of the commerce for which its pre-eminence amongst the harbours of the West Coast so signally adapt it.

The statistical returns accompanying this report will complete the information I have to give

respecting the general state of my district.

The Under Secretary for Gold Fields.

I have, &c., Joseph Giles, Warden and Resident Magistrate.

DISTRICT OF BULLER.—Statistics of Resident Magistrate's and Warden's Offices for the Year ending 31st March, 1873.

	. Westport.		Charleston and Brighton.				
Miners' Rights issued	426	•••	699	•••	1,125		
Business Licenses	235		174	•••	409		
Summonses in Warden's Court	56		72	•••	128		
Applications for Registered Rights	582		983	•••	1,565		
Gold Mining Leases	15	•••	8	•••	23		
Agricultural Leases	19		6		25		

RESIDENT MAGISTRATE'S COURT.

		Westport.	Charleston.	Brighton	.	Total.
No. of Criminal Cases	 	212	 55	 3	•••	270
" Civil Cases	 	4 29	 264	 25		718

	Revenue	•	
	Westport.	Total.	
Fees and Fines of Resident	£ s. d.	and Brighton. \mathfrak{L} s. d.	£ s. d.
Magistrate's Court	556 17 0	. 304 1 6	860 18 6
Provincial Account	1,727 15 3	3,440 10 6	5,168 5 9
Provincial Treasurer	1,010 5 1	1,026 8 6	2,036 13 7
Year ending 31st March, 1871 " " 1872 " " 1873	, , , , , , , , , , , , , , , , , , , ,	l	Duty £7,019 9 0 6,741 18 10 4,348 16 6

No. 6.

Mr. Warden Charles Broad to the Under Secretary for Gold Fields.

Reefton, 12th May, 1873.

I have the honor to forward herewith the various returns called for in your circular of February last. I also append a plan of my district, prepared by Mr. Woolley, the surveyor, to whom both the Government and the public are deeply indebted for the promptitude and energy with which during the past twelvemonths he has cleared off the large array of gold mining and agricultural lease applications which had been awaiting survey. I append also a copy of my report to the Provincial Council, which embodies nearly all the information I could give with reference to the district for the past year. Since that report, Anderson's Claim has had another crushing, 660 tons quartz, yielding 913 oz. of gold; and the Just in Time and the Fiery Cross Claims, at Boatman's, have struck the reef excessively rich, and machinery is in course of erection for the purposes of these claims. The roads constructed last year by the Government have proved of immense service in opening up the country. Several agricultural leases have been applied for along the line of road; the cost of carriage has been reduced, and easy access secured to the rapidly developing reefs between the Lyell and Reefton.

It is most desirable that the rich auriferous country between the Lyell and the Matakitaki should also be made available by the construction of a road. In fact, I know of no work of more importance, not only to my particular district or to the Province of Nelson, but to the Colony generally. The fine agricultural country in the Upper Buller, around Lake Rotoiti, the numerous gullies, creeks, and terraces for miles known to be auriferous, present unequalled inducements for settlement.

I have, &c.,

The Secretary for Gold Fields, Wellington.

CHARLES BROAD, Warden.

WARDEN'S ANNUAL REPORT.—INANGAHUA DISTRICT.

At the date of my last report the district was only in its infancy; so far as Murray Creek was concerned, no crushings had taken place, though very large and extravagant notions had been formed as to the richness of the reefs. This led to'a considerable amount of wild speculation; a large number of leases were applied for in every possible direction; shares in claims not even tested changed hands at high prices; a very large township sprang up, and then people waited for the realization of their expectations. Where such a state of matters existed, everything being at fever heat, it is not to be wondered at that many have been doomed to disappointment. But, on the other hand, the value of the reefs, and the importance of their discovery, have been fully established. The statistics appended will show that the various crushings have yielded an average of over an ounce to the ton, and when it is remembered that considerable difficulty has been experienced in obtaining and placing machinery on the ground, that the long continuance of dry weather has suspended operations, and that in Victoria some 4 or 5 dwts. to the ton has been considered a payable yield, I think the result must be considered as highly satisfactory. And if to this fact be added the quantity of alluvial gold now being obtained in Rainy Creek, Murray Creek, Soldier's Creek, Devil's Creek, Redman's, Painkiller, Lyell Creek, Matakitaki, &c.; the excellent timber through the district; the large deposits of coal, antimony, and other metals; the great quantity of ground available for agriculture, a large quantity of which is under cultivation,—I think it must be conceded that a most valuable tract of country has been opened up by the discovery of the reefs.

The machinery at present erected, and now in full working order, is as under:-

Cost.	Cost.										
£7,000	£7,000			•••	•••		's, fifteen head				
5,000	5,000					n heads, steam	ompany, fifteer	ıg C	Crushir	Westland	2.
5,500	5,500					water	fifteen heads,	any,	s Comp	Anderson'	3.
6,000	6,000					heads, water	mpany, fifteen	ıs Č	Nation	Wealth of	4.
3,000	3,000						en heads, wate				
5,000	5,000					water	ny, ten heads,	mpa	Iope Co	Band of I	6.
5,000	5,000					heads, water	t Company, six	mer	reek Ce	Murray C	7.
4,000	4,000				•••		ıt heads, water	eigl	mpany,	Alpine Co	8.
		_									
40,500	40,500	f					•••		Total		
		_	•••		•••					Mipine Co	0.

To these there will shortly be added machinery at Boatman's Creek, which is being erected jointly by the Just in Time and Fiery Cross Claims, and a small battery which is being erected by Carroll and Cairns, of the Little Wonder Claim, at the Eight-Mile, near the Lyell, when crushing will be carried on for the claims in the vicinity.

It may now be taken for granted that in every case the reef struck at the lower level has turned out to yield the best, and I believe that many of the claims will eventually be worked by main tunnels from Black's Point and Murray Creek; and from the elevation of the present workings, and the disjointed nature of the reefs worked, I think it very probable that the actual main reef has yet to be struck at a much lower level.

Some better means will have to be adopted for securing a constant supply of water, for with the exception of Anderson's, at Black's Point, who have brought in a large race from the Inangahua River, all the other machines have been obliged to suspend operations from time to time in consequence of the dry weather. If, as no doubt eventually will be the case, the majority of machine sites will be at Black's Point, it would be easy to enlarge Anderson's Race to command them all. The experience of the past summer points to the necessity of constructing reservoirs to fall back upon in dry weather.

Alluvial Workings.—Long before the discovery of quartz reefs, alluvial gold has been found in

Alluvial Workings.—Long before the discovery of quartz reefs, alluvial gold has been found in isolated patches throughout the entire district, in many cases water-worn and heavy, in other cases scaly, and closely resembling the gold obtained by the process of ground sluicing in the Province of Otago. The large rush of miners to the district upon the discovery of the quartz reefs, and the consequent necessity of many of them being unable to obtain employment in quartz claims, and the impossibility of prospecting for fresh reefs without funds, led to a new overhaul of abandoned alluvial workings, as well as prospecting for fresh alluvial deposits in the various creeks adjacent to the reefs. Had it not been for the exceptionally dry summer, these efforts would have been crowned with greater success than actually resulted, but with this drawback large quantities of alluvial gold have been brought in and disposed of. Amongst the alluvial claims in the district, there is one worthy of special mention, from the quantity of work done in it. It is situated in Redman's Gully, between Reefton and Boatman's, and is held by W. Lynch and party. They have constructed a tail-race 2,000 feet in length, the depth varying from 6 feet to 14 feet, covered and close lathed, besides bringing in two head-races for the purpose of ground sluicing. There is also a large amount of work done in Soldier's Gully, about a mile south of Reefton, and a great deal of gold is being obtained. At the Lyell some 150 miners are working alluvial ground, and the average yield is about 100 oz. per week; and in the scattered district of the Matakitaki some 100 miners are at work, the average yield being 75 oz. per week.

Fresh Discoveries.—So far as alluvial gold is concerned, I am not aware of any new workings; the miners are principally occupied in workings that were abandoned when the West Coast rush took

place in the various creeks and gullies running into the Inangahua River.

Fresh quartz reefs have, however, been discovered at the Lyell, towards the Eight-Mile Creek, and which bid fair to rival in richness the Little Wonder Claim. This claim was originally taken up by Carroll and Cairns as two men's ordinary claim, and it was subsequently extended to five men's ground. It is really a piece of spare ground adjoining the Alpine Company's lease, and has an excessively rich leader running through it.

RESULT OF CRUSHINGS AT THE MURRAY CREEK REEFS. Subjoined is as accurate a return as can possibly be obtained.

Date.	Na	me of Comp	any.			Tons Crushed.	Yield—oz.
1872, March.	Energetic	•••	•••			10	42
1873, February		•••		•••		297	108
1872, May.	A jax		•••	•••		603	970
"July.	A jax					190	400
" October.	A jax					300	600
" Novembe	er. Ajax	•••		• • •		1,000	606
1873, March 1	. Ajax	•••				300	150
" March 3			•••	•••	•••	500	303
1872, July.	\mathbf{W} estland	•••	•••	•••		80	40
" August.	Golden Fleed			•••		510	86 8
1873, January.	Golden Fleed	ce		•••		683	1,121
1872, October.	Inglewood			•••		27	55
" October.	United Band	of Hope	•••	•••		31	41
" Novembe				•••		526	192
" Decembe	er. Anderson's	•••	•••			515	581
1873, February	y. Anderson's	•••				150	168
" January.	Victoria				•••	317	149
" January.	Wealth of N	ations	•••	•••		120	92
" January.		ations		•••		210	161
", January.	Invincible 1					121	132
	To	tals	•••	•••	•••	6,490	6,779
		Popt	JLATIC	N.			
	1	Locality.				Miners.	Others.
Reefton	•••	•••	•••	•••	•••	100	400
Black's Point	•••		•••		•••	50	75
Murray Creek	Reefs	•••	•••	•••	•••	200	25
Rainy Creek	•••	•••		•••	•••	30	•••
Soldier's and \mathbf{D}				•••		50	•••
Painkiller and	Redman's					60	
Boatman's	•••	•••	• • •	•••		80	20
	_						
Carried for	rward	•••	•••	•••	•••	570	520

	Miners.	Others.					
Brought forward				•••		570	520
Larry's	•••		•••	•••	•••	12	20
Inangahua Valley	•••	•••				20	100
Christy's to Lyell			•••		•••	30	15
Lyell	,	•••				250	100
Upper Buller and Mai	takitaki					150	100
	η	l'otal				1 032	855

The crushings at the Lyell Reefs are as under:-

Date.	Nam	e of Co	mpany.			Tons Crushed.	Yield-oz.
1872, July.	Alpine		•••	•••		51	142
"September.	Alpine			•••		34	56
" October.	Alpine			•••		40	54
" December.	\mathbf{A} l $\hat{\mathbf{p}}$ i \mathbf{n} e	•••	•••	•••	•••	34	50
1873, February.	Alpine		•••			21	25
1872, October.	Little Wonder		• •••	•••		110 }	1,573
1873, January.	Little Wonder		•••	•••	•••	75 ∫	1,070
" March.	Excelsior	•••	•••		•••	119	66
	 .	_					
	Tota	ıls		•••		484	1,966

Since the above return, the Alpine has sent down 300 ounces.

Discovery of Antimony.—Large quantities of antimony ore have been discovered at Boatman's Creek by Mr. Caples, and at Rainy Creek by Mr. Ranft, who intends applying to the Waste Lands Board for a lease. Loose blocks of the ore were found in a gully leading into Deep Creek, and this led to further investigation, resulting in the discovery of the main reef. This metal is valuable in itself, and the adjacent coal would render it a very easy matter to smelt the ore on the spot. Samples of the ore that have been tested yielded from 36:40 to 70 per cent. of antimony, and from half an ounce to one ounce of gold per ton; but there are parts, if separated, that would give a much larger yield of gold. Mr. Ranft has lodged a large parcel of about 50 lbs. in the office at Reefton for public inspection. Some excellent specimens from Boatman's, furnished by Mr. Caples, were forwarded to the Christchurch Exhibition. The ore occurs in nearly all the quartz reefs in the district, and may possibly have something to do with the difficulty that exists in saving gold.

STATISTICS.

Warden's Court.—Number of cases during the year, 102; number of applications under rules, 534; number of applications for gold mining leases, 92. Of the latter applications, 49 have been granted, 19 refused, 18 are still pending, and 6 have been withdrawn. Applicant for agricultural leases, 69, with an area of 4,621 acres, making a total of 9,334 acres applied for since the opening of the district. Number of miners' rights issued, 899; annual business licenses, at £5, 32; half-yearly business licenses, at £3, 251; quarterly business licenses, at £2, 201.

Resident Magistrate's Court.—Number of civil cases heard, 656; criminal cases, 161. Of the

latter, 77 were upon information, and 74 were drunk and disorderly cases. Number of publicans'

licenses issued, 94; accommodation licenses, 29.

Revenue .- Provincial Account Province of Nelson, £2,895 8s. 3d; Provincial Treasurer's Account, £2,005 5s. 2d; R.M. fees and fines, £751 5s. 7d; total, £5,651 19s. Amount of deposits on gold mining leases, £1,840, and on agricultural, £706.

Conclusion.

I have now in conclusion to point out to the Government certain local matters I think deserving of attention.

1. Road through Upper Buller to Lyell and Christy's.—This I think the most important work. The country through which it passes is daily growing into importance, and with a good road the Lyell would be able to draw its supplies from the Nelson settled districts instead of the hazardous and uncertain means of communication by boat as at present, and at a very much cheaper rate.

2. Sale of Reefton Township.—This is a matter urgently desired by the inhabitants, and one that I strongly recommend. There are not at present any rights acquired under the mining rules such as claims, dams, water-races, and which a sale would affect. The people are anxious to have a better tenure to their ground before improving; but as this matter has already been brought by deputation

under the notice of His Honor the Superintendent, it is unnecessary for me to further refer to it.

3. Mining Conference.—The discoveries of payable quartz reefs in the Province are comparatively of a recent date, and that, doubtless, is the reason why the rules relating to quartz claims are so meagre, and to a great extent unadapted for many of the workings. The consent of His Honor to a conference consisting of practical miners on the one hand and the Wardens on the other, to draw up rules relating to quartz, has given the greatest satisfaction, and will no doubt lead to a great deal of good.

4. Exhibition at Christchurch.—A very large and influential committee were appointed to see that the district was fairly represented. A large number of specimens of good auriferous quartz, coal, antimony, and fossils were forwarded, together with a pamphlet descriptive of the district and specimens. A bronze medal was awarded to the committee, and at the request of Dr. Haast and Dr. Hector it was agreed to allow the specimens to be forwarded to the Vienna Exhibition. I trust that some of the vast resources of the Province will thus become better known.

5. Inspectorship of Leases.—The appointment of this officer was no doubt most desirable when this district was first opened out, to prevent at any rate shepherding, and also to prevent ground being taken 3—H. 7.

up for the purposes of speculation merely, but that state of things has now gone by. I think, if it were left to persons desiring ground to made complaints or not as to the condition of leases being complied with, and that then the Warden should hold a preliminary inquiry, and report to His Honor with the evidence taken as to whether there was any locus penitentiæ, that such an inquiry would be far more effective than the casual visit of an Inspector to a lease, dependent entirely for his information from the parties themselves. What will be wanted as the works progress will no doubt be an Inspector of Mines, to see to the safety of the workings, and this would require a practical engineer.

6. Progress of the Place.—The past year has seen the erection of some 200 wooden buildings at Reefton and Black's Point. An Odd Fellows' Hall, Public Hall, Telegraph Office, Court House, steam saw mills, and construction of thirty miles of excellent dray road; the formation of streets; and, last, though not least, the completion by the private enterprise of Mr. Dalton of an excellent wire bridge across the Inangahua, which is at once a convenience to the public and and an ornament to the place.

The Lyell, from being an isolated place with three or four tumbledown-looking buildings perched on the top of a cliff, now begins to assume the pretensions of a township—boasting its local paper, and a fortnightly Court. To insure the permanent prosperity of a district like this, Festina lente must be the motto. I have no doubt that next year the district will continue to show sure but slow progression.

The Under Secretary for Gold Fields, Wellington.

I have, &c., CHARLES BROAD, Warden.

No. 7.

Mr. Warden Whitefoord to the Under Secretary for the Gold Fields.

Warden's Office, Ahaura, Grey District, 12th May, 1873.

I have the honor herewith to forward a copy of a report recently furnished by me to the Provincial Government, Nelson, which contains a full account of the progress and condition of the

district since the date of my last report to you.

I avail myself of the opportunity now given me of again bringing under the notice of the Government the urgent necessity of at once proceeding with the formation of one or more large water races in this district, without which this portion of the gold fields can never be properly worked, or afford employment to anything like the population it is capable of supporting. From the want of some proper water supply in this district, I am quite satisfied that, owing to the dry season we have experienced during the last few months, the loss to the country caused by so many miners being idle for weeks at a time may be estimated at a very large sum.

Attached will be found the returns called for by your circular of the 12th February, 1873.

I have, &c.,

Under Secretary for Gold Fields, Wellington.

CALEB WHITEFOORD, Warden.

Mr. Warden Whitefoord to the Provincial Secretary, Nelson.

Sir.—
Grey District, Warden's Office, Ahaura, 19th April, 1873.

I do myself the honor to submit, for the information of the Government and Provincial Council, the following report upon the condition and prospects of that portion of the Nelson South-West Gold Fields which has been under my charge as Warden for the last twelve months.

In my last yearly report I had to deplore the losses this district had sustained from the ravages of a severe flood, which had been most disastrous in its effects. I have now, I regret to say, to report that the whole district has been suffering from a prolonged drought, which has had a very depressing influence upon the whole community. In many places, the miners have been altogether idle for weeks at a time, utterly unable to do anything for want of water. Parties engaged in sluicing have been those chiefly affected, but almost all have lost considerably by being unable to obtain the necessary amount of water to work their claims regularly. The inhabitants about Nelson Creek, No Town, and Noble's have been the principal sufferers. Owing to this cause, mining and business matters have been less brisk and lively for the last few months than they would otherwise have been; but even under these unfavourable circumstances, the population has been fairly maintained, and many who left about this time last year have returned and set to work again, either in the old claims or in different parts of the district. Fresh ground has also been opened up at Orwell Creek and other places with every appearance of success.

A good deal of prospecting for reefs about the dividing range between the Inangahua and Grey Valleys has been going on for some time past, and at Big River. Anderson and party have done a great deal of work in endeavouring to discover a payable reef. They have not yet succeeded in doing so, and have for the present ceased working; but they intend to prosecute their search when they have

reorganized their party.

The past season, while unfavourable to the miners, has however been a very fair one for the farmers at Totara Flat and elsewhere; and although the crops have been light in places in consequence of the dry weather, the produce has all been gathered in in first-rate order, and a larger quantity of grain, potatoes, &c., have been grown in the district than in any preceding year.

For convenience of comparison, I shall report upon the different mining localities in the same order

I have adopted in my former yearly reports.

North Beach Workings and Razorback.—I do not think there are so many men regularly at work on the beach from Cobden northwards, as when I made my last annual report, but the condition and prospects of those engaged in this description of mining remain pretty much the same as heretofore. Besides extended areas and ordinary claims, there are five gold mining leases, employing forty men and two steam engines, still being worked, the holders of which appear satisfied with their prospects. The ground taken up at the Razorback on a high level, and for which I granted a prospecting claim some

fourteen months ago, turned out very rich, as may be judged from the fact that a share belonging to a poor fellow who was killed in the claim realized at auction £550, and I am given to understand the purchasers of it were repaid their outlay from the returns obtained from the claim in less than three

The fear I expressed that this ground might only prove a "patch," has, I regret to say, been partly realized, and there were only two or three parties besides the prospectors who had payable claims there. No doubt in the ranges in the vicinity will one day, when more thoroughly and systematically prospected, be found many such "patches" as the one now being worked. At present the difficulty of working such places, even when within a short distance of the coast road, is almost insurmountable, owing to the

difficulties to be overcome in transporting provisions, tools, &c., in such a precipitous country.

The quartz claims taken up at the Ten Mile have, after some prospecting, been all abandoned, and I fear there is little chance of their being again worked, at all events for some considerable time. terrace workings along the beaches have paid fairly wherever the men have been able to obtain an adequate supply of water, which is not easily done among the limestone hills, whose formation is fatal

to the erection of dams.

Half-Ounce and Brandy Jack's.—Has supported a large number of men during the past year; and though the old lead is now getting worked out, the surrounding gullies and terraces have been prospected and found payable, and will profitably employ a considerable population for some time to come. Much of the ground that has already been worked in ordinary claims has since been taken up by fresh

parties in extended areas, and under the Leasing Regulations.

At Brandy Jack's Creek a company are at work on a piece of ground some ten acres in extent. The party have gone vigorously to work, and have all their machinery, &c., already erected, together with large water-wheel, pumps, and water race. There is little doubt of their being able (with their appliances) to strike a lead that was lost owing to the former parties who were working in this creek not having sufficiently powerful pumps to keep the water down. If the present party are successful, an extent of ground will be opened up that will give renewed life to this place, which for the last two years has been completely deserted. It will be remembered that Half-Ounce Creek was at one time considered to have been worked out and had been abandoned for some months, when it was again reopened and worked at a lower level by means of water-wheels and pumps; and the appearances in both these creeks (Half-Ounce and Brandy Jack's) are so similar, that I am much mistaken if this place does not before long become of considerable importance. If once a population is attracted here, there are numerous terraces and gullies in the vicinity that will receive some of the attention they deserve at the hands of the miners.

Duffer's Creek .- No material alteration has taken place in the prospects of this place during the past year, and sluicing parties are (when they can obtain a proper supply of water) making good wages. Of course the late drought has operated prejudicially upon the returns from this creek, as indeed it has in all cases where the miners are employed in ground sluicing, which is one of the

features of mining in this locality.

Teviot.—The discovery of gold at this place, which was made some months since, led to much prospecting in the neighbourhood; and although Teviot itself did not turn out as well as was at one time expected, a great deal of substantial good has resulted from the work that has been done there. Attention was drawn to some of the terraces and small creeks in the vicinity, and some of the ground about has turned out very well, and gold has been traced from here nearly up to the boundaries of the lease applied for at Brandy Jack's. The ground about the Teviot will maintain a large population for some time to come, particularly if gold is struck in the lease at Brandy Jack's

Napoleon Hill.—The number of miners finding employment about the Hill has slightly improved within the last few months; indeed at one time during the past year, the place was almost entirely

deserted.

The want of a proper water supply has been much felt here, and in every instance where the miners have had a small quantity of water at a proper level, handsome returns have been the result.

Orwell Creek now presents a very different aspect to what it has done for some time past, new ground having been lately opened up, and found to be of a very payable character. The striking of a fresh lead here is most important; at present there are five claims on gold, and the number is steadily increasing, and there seems every prospect of the lead being traced for about a mile. There are nearly one hundred men on the ground, occupying about thirty claims; and it will not be long before the ground is thoroughly tested, and the value of the discovery ascertained. The tunnels being driven in will in some cases be nearly 1,000 feet long; and the Mining Surveyor, Mr. Lewis, is of opinion that it is not improbable the present lead will be traced up to a point where the old Napoleon lead was lost, in which case it will afford employment to a large number of men. The prospects of the new lead are most encouraging, and those parties who are on gold are going to work to complete extensive shoots (some of them 300 feet in length) to convey wash dirt to the creek; and a water race is in course of construction to bring a proper supply of water for the use of the miners at a level which will enable them to work their claims to better advantage.

Black Water.—At this part of the district the number of miners has slightly increased, and the returns obtained by them have been satisfactory. As there are many sluicing claims here, the men have felt, in common with the rest of the population so employed, the want of water, which has been as

scarce here as elsewhere.

No Town and adjoining Creeks, &c.-I have no change to report in the prospects of No Town and its surroundings, which (as it has done for years past) still maintains a large number of miners and business people. Every description of alluvial mining is carried on about here, and matters present a brisk and lively appearance, considering the unfavourable season just passed.

The track up from the Eleven-Mile Township is in good order, and goods and farm produce are now regularly carted to No Town, and the miners are enabled to obtain their supplies far more reasonably here than in any other part of the district; as a natural consequence they were enabled to obtain good wages from ground that in other places would be lying idle. Fresh ground (though of limited extent) is being constantly opened up about here, and the country for miles round is proved to contain gold in payable quantities. I have no reason to suppose there will be any change in the prosperity of

No Town and its vicinity during the ensuing twelve months.

Moonlight.—This is the only part of the district in which the miners may be said to have benefited by the late dry weather, for they have in consequence been able to work in the bed of the creek to greater advantage than in any preceding year. I regret to say nothing more has been done towards prospecting the quartz reefs in this neighbourhood.

Black Ball.—This creek, after having been deserted, is again attracting attention, and many are of opinion that a small lead has now been struck that will be traced for some distance, and will ultimately lead to something better being discovered. A store having lately been established here, the miners will not be put to such inconvenience as they were formerly subjected to (viz., in having to cross the Grey River to obtain their supplies), and which was, I think, one reason of the place being rather hastily abandoned some time ago. I have been informed by some of the miners here that large seams of coal exist in the neighboushood, but I have not had that the country and therefore

only speak from hearsay. I have, however, no reason to doubt the report made to me.

Bell Hill.—I had hoped I should have been able to state that the large water race which was in course of construction here had been completed, and had brought with its completion a large access to the population. I regret to say such is not the case; the water race has never been properly finished, although a large sum of money has been spent and a great deal of work done. As an instance of the value of ground here, I may state that during the hearing of a suit before me in the Warden's Court between the proprietors of the water race and a party of miners, it was proved in Court that a bona fide offer of £10 per week for one year, payable in advance, was offered for the use of one sluice-head of water. I have before stated (in former reports) that there is a vast extent of payable sluicing ground in this neighbourhood, and a large water race is alone wanting to open up an almost unlimited amount of auriferous country.

Nelson Creek.—Were it not for the hope the inhabitants entertain of the ultimate completion of the Hochstetter Water Race, I think the season we have had would have driven them all away to seek employment elsewhere. The men here have literally done nothing for months, and it is a strong proof of the confidence entertained by them in the ultimate prosperity of this place that only those compelled to leave by sheer necessity have done so. I have been credibly informed that for miles along the proposed course of the Hochstetter Race the ground has been carefully prospected, and found to be of such a character that with a constant supply of water it would yield splendid returns. Nelson Creek has perhaps been more seriously affected by the long drought than any other portion of the gold field, and, as a natural consequence, business and mining matters have been very dull indeed.

field, and, as a natural consequence, business and mining matters have been very dull indeed.

General Remarks.—The necessity for the immediate construction of one or more large water races in this district becomes more and more apparent every year, and I must urge the Government to spare no effort to bring about the formation of the Hochstetter Water Race without losing a day

longer than is absolutely necessary.

The main line of road from the Arnold to Ahaura (now in course of construction) will prove a great boon when finished, and will have a very material effect in reducing the cost of carriage from the port to the various mining centres. I learn with much satisfaction that the stock road from Ahaura to the Amuri will shortly be commenced; and there is no doubt, when this work is finished, almost the whole of the cattle trade on the West Coast will be transacted at Ahaura.

whole of the cattle trade on the West Coast will be transacted at Ahaura.

I would suggest the completion of the following works, which are urgently required—viz., the construction of a pack track from No Town to Bell Hill, and also from the former place to Red Jacks. Neither of these works need be of an expensive character, a rough bush track fit for pack-horses to

travel being all that is needed at present.

The road up Nelson Creek from its junction with the main road requires repairing and continuing up to Hatter's Terrace, and from that place a rough pack track should be taken up the creek for a distance of about four miles. A good foot track from Hatter's Terrace to Callaghan's Creek is very much needed, and one that I should recommend being made at once. A small outlay on the existing Napoleon road from Matthew's to Topsy would enable drays to take stores from Ahaura to the new rush at Orwell Creek, and is a work that is urgently required. It would be a permanent improvement to a road leading to a portion of the district likely to last for many years to come. It is desirable that a foot track be cut from Duffer's Creek to Noble's, as the difficulty in getting to the latter place is very great and sometimes dangerous. I feel certain that if some of the tracks I have recommended were cut through, the country miners would travel about from place to place more than they do at present, and prospecting would follow as a natural consequence, and hence important discoveries would be made.

In a former report I pointed out the necessity of a dray road from Cobden to Coal Creek. I would again draw attention to this matter as a work that should be attended to, as the farmers at Coal Creek have no way of bringing their produce to market except by small boats, which is both tedious

as well as dangerous.

I would again point out the necessity of introducing some measure having for its object the suppression of the nuisance caused to the residents in this district by owners of pigs, goats, &c., allowing these animals to wander at large in the way they are in the habit of doing at present. I trust the year may not be permitted to pass without some good gool buildings being erected at Ahaura, the present structure being wholly unsuited for the purpose required, it being impossible to keep debtors and criminals, lunatics, and females, as completely separate as they should be.

It is desirable that the hospital building should be placed in proper order for the reception of patients needing medical attendance, either temporarily or until such time as they can be forwarded to the district hospital. I believe it is contemplated (should sufficient inducement offer) to bring a race into Ahaura for the purpose of supplying the inhabitants with water for domestic purposes. I hope some encouragement may be given by the Government to the scheme; and I would suggest that a sum of money be placed on the estimates as a bonus to any persons bringing in a permanent water supply to the township.

The extent of ground taken up under the Agricultural Leasing Regulations steadily increases, and I wish it were possible to hold out greater inducements to bona fide settlers on the waste lands of the

Crown, by allowing the rent to be considered as part of purchase money. If this could be arranged, many of the men who leave the district to settle down in one of the adjoining Colonies would no doubt form homes for themselves here.

I forward the usual returns of revenue, &c. The annual report of the Brunner Coal Mine was

posted for your information some days since.

The Provincial Secretary, Nelson.

I have, &c., CALEB WHITEFOORD, Warden.

WESTLAND.

No. 8.

Mr. Warden REVELL to the UNDER SECRETARY for the GOLD FIELDS.

Warden's Office, Greymouth, April, 1873.

In compliance with your circular, dated 12th February, 1873, I have the honor to furnish the

following general report on the district under my charge:

During the past year there is a marked depression visible in mining operations generally throughout the district. Some small patches of new ground have been discovered, but not of any extent or nature to cause a rush, or require special remark. The remarkable dryness of the weather during the The remarkable dryness of the weather during the past five months has tended considerably towards this depression, by the total cessation of all water supply, which is the great mainstay and motive power of all the workings in the district. In many instances miners have been compelled to suspend all operations for the time, and seek other employment, whilst others have abandoned mining pursuits, and entered upon more settled occupations.

will also account in some measure for the great falling off in the number of miners' rights.

In April, 1873, a quartz mining lease was applied for on the Grey Coal Reserve, fronting on the river at the gorge just above Brunnerton, but the applicants abandoned the ground after two months'

trial, the leaders not being gold-bearing.

SIE,-

Many of the rich claims of long standing on the Stoney Leads and South Beach have been fairly wrought out, and the water-wheel and other appliances removed. The North Star Company are still working the deep ground on the lead with the aid of their steam-engine (the only one in use in the

district), and are averaging good returns, but the ground is nearly all wrought.

The Leviathan and Great Extended Water Races have been so seriously affected by the dry weather that they can only supply two or three claims on the lead. The black sand on the sea beach never appears to be wrought out, and always pays good wages when water can be obtained. Great opposition has always been made by the miners to the sale of any of the land along the lead between Greymouth and Paroa, and even to the Teremakau, as they consider the ground sufficiently auriferous to pay for working. A considerable extent of this ground has been taken up for residence areas by the miners and brought into cultivation as gardens, with comfortable cottages erected thereon.

In the New River Sub-District, the Hibernian and New River Water Race Companies are pushing

on vigorously with the construction of their races. The Hibernian Race is six miles in length, and there are 370 chains constructed. The Government have consented to subsidize the company to the extent of one-third of the capital (£6,000) as the works progress; they have received the first advance

on the works, amounting to £1,426 14s. 3d.

The New River Race is a much heavier undertaking, being ten miles in length, with heavy cuttings and expensive flumings to make. The Government have consented to subsidize the company to the extent of one-half the capital (£10,000). They have constructed 350 chains of the race, and received the first instalment of the advance, amounting to £1,872 16s. 6d., in January last.

In the township of Marsden the sections have been sold to the occupier at the upset price, £35 per acre, and a few of the unoccupied sections in good positions realized fair prices. This township is likely to form one of the centres of the district as the different roads through the district branch off at

this point with the trunk road from Hokitika.

A township has also sprung up at Maori Creek, on the New River, about six miles further inland than Marsden, and will form a good centre for that portion of the district consequent on the construction of horse-tracks from them to Maori Gully in one direction, and German Gully in the

Clifton, which was formerly the centre of this locality, has quietly subsided, the storekeepers having all removed, leaving the camp to follow when circumstances will permit. The horse-track from Marsden to Clifton and Maori Creek, is in a very dilapidated condition, no repairs having been effected thereon during the past eighteen months; but I believe it is intended at an early date to form it into a dray road; if so, it will be a great boon to the miners and storekeepers.

In the Arnold Sub-District the population remains steady, and there is a fair return of gold therefrom. Great necessity exists for the construction of a horse-track from Maori Gully to the Stillwater Creek Diggings, where there are about 100 miners at work. It is the intention of the County

authorities to make the track if they can let the contract; payment to be made in land.

Monthly sittings of the Resident Magistrate's and Warden's Courts have been regularly held at Maori Gully for the Arnold District, and at Clifton for that of the New River; an officer of police being stationed at each place, who acts as Clerk of the Court. Clifton being now deserted, will necessitate

the removal of the camp to Maori Creek, and a police station should also be erected at Marsden.

There are only six Chinese working in the district near Clifton. Having on two or three occasions been rather roughly handled and hunted out of the gullies, they have been afraid to settle down; but fortunately the sergeant of police at Maori Gully was able to bring some of the ringleaders before the Court, which appears to have had a wholesome effect, for they now travel from place to place unmolested.

The town of Greymouth is steadily advancing, and properties of all descriptions have an upward tendency; but everything is in a state of uncertainty until the question of the Brunnerton Railway is finally settled.

The Public House Ordinance and Amendment Acts require material alteration—in fact, total repeal, and a new Act passed more suitable to the requirements of a little community. The suppression of dance-houses under the Act has had a good effect, and tended in some measure to reduce the number of unfortunate females who daily paraded the streets, and further stopped the frequent importation of a class of women designated dance-girls.

The statistical returns forwarded herewith show 299 head races, 132 tail races, and 332 dams, duly registered, at the estimated value of £34,744; with mining plant (exclusive of tools) as shown in

Return No. 75, estimated at £1,630; making a total of £35,374.

The population of the district is estimated at 4,220, and is located as follows:—

Greymouth District	•••			•••		2,970
New River	••1	•••	•••	•••	•••	550
\mathbf{Ar} nold	•••	***	•••	• • •		700
			Total			4 220

The revenue for the past year amounts to £28,220 13s. 9d., and is made up as under :-

			£	s.	d.	£	8.	d.
Warden's Department			2,828	3	0			
Resident Magistrate's Department			1,104	8	0			
Publicans' Licenses, paid to County			1,290	0	0			
, p						5,222	11	0
Gold duty Westland, share		•••	3,539	17	7			-
Half-share Customs revenue			19.458		2			
	•••		,			22,998	2	9
						£28,220	13	9

The number of cases disposed of in the Resident Magistrate's and Warden's Courts is—

			Civil.	Criminal.	Wardens.	Total.
Greymouth		•••	 736	44 6	25	•••
New River	•••	•••	 40	14	23	•••
Arnold	•••	•••	 52	23	25	•••
					-	
			828	503	73	1.404

The following number of rights, licenses, and registrations have been issued during the year:-Miners' Rights-694.

Business Licenses—Yearly, 30; Half-yearly, 81; Quarterly, 23.
Registrations—5s., 360; 2s. 6d., 34; 1s., 1,127.
Spirit Licenses—Wholesale, 7; Bottle do., 6; Retail, 7; Retail (Town of Greymouth), 42.
Yearly Conditional Licenses, 22; Half-yearly do. do., 30; Extensions, 7; Transfers, 9. I have, &c., W. H. REVELL, Warden.

The Under Secretary for Gold Fields, Wellington.

No. 9.

Mr. Warden FitzGebald to the Under Secretary for Gold Fields.

Warden's Office, Stafford, 30th April, 1873. Sir,-

I have the honor to report as follows on this gold field, for the period ended 31st March, There are now no whims at work here, owing probably to the great expense incurred through 1873. the excess of water, and the difficulty experienced in obtaining sufficient fall for the tailings, as the

construction of deep tail races, properly secured, involves a very considerable outlay.

During the past year there has been a considerable influx of Chinese into this neighbourhood, who number at the present time 266, mostly located in the vicinity of Stafford, German Gully, and Goldsborough. They have all come from the Otago Gold Fields. and are remarkably peaceable and well-conducted. There has not been much litigation during the last year, the main business being the granting of registration certificates for rights and privileges, which are, as a rule, retained only for brief periods, although they are frequently taken up again by new parties. There have been 1,139 certificates issued during the year—this, of course, including all transfers, &c., &c.

I should estimate the average earnings of the miners to be about £2 per man per week, the scarcity of water seriously interfering with their operations, and the weather has been exceptionally

dry since Christmas, and complaints as a consequence very numerous.

The construction of the Waimea Water Race is anxiously looked forward to, and would doubtless draw a much larger population to the district, which it would be well able to maintain.

The total revenue collected for the year has been £2,529 1s. 6d., exclusive of gold duty. There is nothing else calling for special remark.

I have, &c., G. G. FITZGERALD, Warden.

C. E. Haughton, Esq., Under Secretary for Gold Fields, Wellington.

No. 10.

Mr. Warden FitzGerald to the Under Secretary for Gold Fields.

Warden's Office, Kanieri, 15th April, 1873. SIR,-I have the honor to report as follows on the Kanieri District for the year ended 31st March, 1873. There have been no fresh discoveries of gold of any importance, but mining is being steadily carried on, and the community seems settled and contented. There has been a slight increase in the population, a few miners who formerly worked in the Totara District having removed to the Kanieri in consequence of the stoppage of the deep claims on Jones' Flat. Most of them have found remunerative employment in terrace claims about Woodstock.

About the beginning of November a rush set in to Arch Creek, on the south side of the Hokitika. For some time very little could be ascertained concerning the result of the workings. The majority of the men were shepherding the prospectors. No prospecting claim was, however, applied for, yet gradually the ground was tested, and proved sufficiently auriferous to induce its continued occupation.

At present about one hundred men are employed there, and are earning good wages.

The police estimate the population of the district to be over one thousand souls, located as follows:-

Kanieri		•••	•••	•••	•••	•••		200
Blue Spur		•••	•••	•••				150
Arthur's Town	•••					•••	•••	80
Kanieri River		•••	•••	•••	•••		•••	40
Woodstock	•••			•••	***	•••		350
South Beach	•••	•••	•••		•••	•••		50
Arahura	• • •				•••		• • • •	50
Outlying Gullies				•••	•••	•••		50
Hau Hau		••	•••	•••	•••	•••	•••	50
								1,020

The Maori Reserve Company, I am informed, have at last struck gold; and although only small prospects have been obtained at present, there is every likelihood of the ground being fairly tested, and the shareholders express an opinion that before long the claim will yield them handsome returns for their large preliminary outlay. On March 31st the shaft had been sunk to a depth of 70 feet and drives put in north-west and south-east for a distance of 30 feet each way from the shaft. Washdirt, in which gold could now and then be seen, was struck at 43 feet from the surface, and continued dirt, in which gold could now and then be seen, was struck at 43 feet from the surface, and continued till the shaft was 50 feet down. The number of men employed by the company is 24. Of these sixteen are at work on the mine in three shifts, and the other eight are employed principally in cutting timber for the drives, and for the supply of firewood to the engine. This is of 30 horse-power, and in addition to raising earth from the shaft, works the pumps, of which there are three—one ten-inch and the other two eight-inch, with eight-foot stroke. The ground is, as you are aware, held on lease (50 acres), and the company have laid down a tramway from the shaft to the boundary of the lease, for the purpose of supplying the mine with timber. In the event of this ground answering present expectations, it is probable that extensive workings will be opened in the neighbourhood.

There are several parties prospecting in the interior, but no intelligence has yet been received at this office of the results of their researches except in one instance, where auriferous quartz was reported

this office of the results of their researches, except in one instance, where auriferous quartz was reported as having been found about one mile and a half to the south-west of the Kanieri Lake, near the north bank of the Styx River. The prospectors are now engaged bringing in a race for the purpose of obtaining water-power to crush the stone. The full value of the discovery of this reef cannot be known for some months, but gold can plainly be seen in the casing.

The completion of the Ross and Hokitika Road has already proved of great service to both districts, but some of the carriers continue to use the old route by the beach. It is of very great importance

but some of the carriers continue to use the old route by the beach. It is of very great importance that a branch road should be constructed from the Mahinapua township, on the lake of the same name, to a point on the Ross Road distant from the lake about 50 or 60 chains. If this were done, I believe a great part of the heavy traffic between Hokitika and Ross would pass through the Mahinapua township. By this means water communication would be secured for nearly two-thirds of the distance between Hokitika and Ross; the value of the town lands of Mahinapua would be very largely increased; and the cost of maintenance of the Ross Road very much lessened. The branch line is very short, and there are no engineering difficulties to be encountered. I beg carnestly to call the attention of the Government to this subject.

With regard to the Coal Mining Association in this district, it is merely necessary for me to state that up to the present no very satisfactory results have been obtained. The Government have doubtless got from other sources (especially from Dr. Hector's report) fuller information than it is

in my power to furnish.

With regard to water supply, my opinion, and indeed the opinion of every one at all acquainted with the subject, is, that were a race constructed (to carry, say, from sixty to eighty sluice-heads) from the Kanieri Lake to Blue Spur, Big Paddock, and the various terraces such a race would command, the yield of gold in the district would be enormously increased, and steady remunerative employment be provided for a much larger population than is at present located here. Vast areas of ground are now provided for a much larger population than is at present located here. I lying idle which could then be profitably worked.

A portion of the Kanieri township was sold on 2nd December, 1872, by the Waste Lands Board, much to the satisfaction of the residents; and the improved appearance of the main street, owing to the erection of new buildings on the alienated portions, proves the wisdom of having given a better

tenure of the holdings.

I have &c., G. G. FITZGERALD,

The Under Secretary for the Gold Fields, Wellington.

Warden.

No. 11.

Mr. Warden FITZGERALD to the UNDER SECRETARY for GOLD FIELDS.

Warden's Office, Ross, Westland, 28th April, 1873. Sir. I have the honor to make the following report on the present state of the Totara District. Having only taken charge of the district since the 1st of the present month, I am not as yet in a position to give such a full report as further acquaintance will enable me to furnish. The district at present seems in a languishing state, which is mainly due to the stoppage of all the steam and other deep-sinking claims on Jones' Flat, the principal centre of operations in the district. All of those claims were on payable gold at the time of the stoppage, many of them with known payable bottoms unworked. The great difficulty to be contended with was the large quantity of water found in the underground workings which increased as the ground was opened up. To obviste this found in the underground workings, which increased as the ground was opened up. To obviate this, a drainage engine of 90 horse-power was erected, and maintained by rates levied on all claims within an area defined under "The Gold Mining Claims Drainage Act, 1868." The rates levied on the several claims were very high, owing to the expensive manner of working the engine, which was found several claims were very high, owing to the expensive manner of working the engine, which was found after a time unequal to the labour of draining the ground sufficiently. More than half time the claims were flooded out, and yet obliged to continue paying the rates as when working. This led to the abandonment of a great many of the claims, which threw the burden of maintaining the engine on a few, who were also soon obliged to cease operations. Efforts have since been made several times to reorganize the Drainage Company or form a new one, but without avail, although the shareholders are sanguine of being well repaid for their outlay if the ground could be worked economically. Under the above circumstances the district is at present depending, with a few exceptions, on the sluicing claims, which are scattered in patches over all the known gold-bearing parts.

Owing to the great number thrown out of employment through the stoppage of the Drainage engine, ground which was considered worked out years ago is again being turned over, while in some instances this want of employment has led to prospecting, and the opening up of new ground. There are no claims in the district which can be termed rich, the best paying little more than wages, while the majority are barely supporting. The great drawback in every instance is the high price charged for water, the quantity available being totally inadequate to the demand. This leaves much ground unworked which would yield fair wages with a plentiful and cheap water supply. This want has been most severely felt this summer, the rainfall being less than in any other summer known on the coast. The only water race company in the district—the Totara and Jones' Creek—are at present enlarging their upper race, with the view of taking a larger supply to the west side of Jones' Creek, where

there is an increasing demand.

A company called "The Greenland Water Race Company" have taken out a water right for twelve heads of water, and commenced to cut a race, the supply for which they expect to get from Greenland Hill, and small creeks along the course, which at present empty themselves into the Mikonui River. The race in length will be about seven miles, terminating at Ross, and will take over twelve months to complete. This race will no doubt give considerable employment, as its course is known to command many auriferous terraces.

The Upper Totara diggings are on the increase, and support a population of about 80 miners. The workings consist principally in ground sluicing the beds of creeks and adjacent terraces as far as the present elevation of water will command; but had they a good supply of water at a high elevation, the population would rapidly increase, as the ground is known to be very remunerative. The weekly earnings in that locality are from £3 10s. to £4 a week. There has been a small rush in the vicinity of Lake Mahinapua, and also near Aylmer Lead, but neither of these has turned out to be of any importance. At Donnelly's and Jones' Creek there are about 100 miners, and when water is plentiful the majority make fair wages. At German, Sailor's, Blockade, Clear Water, Robinson's, and Donohue's, deep sinking is carried on with varying success. The claims at Redman's are working at a depth of from 50 to 65 feet. The quantity of water to be contended with is very great, and the machinery erected for pumping is of an expensive nature, being driven by water, the scarcity of which latterly has told severely on that part of the district. A party have lately taken up an extended claim of three acres on Jones' Flat, and intend to sluice the ground by the aid of a turbine wheel. Should this prove a success, there is little doubt that these wheels will come into repute, as the expense of erecting them does not exceed £50.

From causes assigned in the beginning of this report, there has been a considerable exodus of the mining population. On the part of the remaining population there is an increased disposition to settle down. The total acreage of rural and suburban sections disposed of is 1,261 acres; out of that, however,

740 acres have been given over as part payment on public works.

The amount of gold forwarded from Ross to Hokitika during the year has been 22,889 oz. 5 dwts. 21 grs.; value, £87,265 8s. 7d.; thus showing a falling off in the value of £44,829 7s. 5d., as compared with last year.

Gold Fields Revenue Warden's Court, fees and fine	 8				£3,129 59		10 0
Export duty on gold	•••	•••	•••	•••	2,861	0	0
					£6.050	5	10

This total shows a falling off in the revenue for the year of £1,610 13s.

Wages.—Managers, £6 per week; underground captains, £3 10s.; carpenters, £3 10s.; blacksmiths, £4; miners, £3.

Timber.—Caps, 9 feet, £7 10s. per 100; round props, 7 feet, £6 per 100; split props, 1 and 7 feet, £4 10s. per 100; laths, 5 feet, £1 10s. per 100; firewood, £1 per cord; sawn timber, 12s. per 100 feet. Freight.—From Hokitika to Ross, beach road sixteen miles, inland road twenty miles, 150 tons per month, at a cost of £2 10s. per ton.

The population may be estimated as follows:—Male, 1,460; female, 540; total, 2,000.

Warden's Court.—Number of cases, 71; amount sued for £327.

Resident Magistrate's Court.—Number of cases, civil, 451; number of cases, criminal, 129—total,

580; amount sued for, £3,477 1s. $11\frac{1}{2}$ d.

Licenses.—The following number of rights, licenses, registrations, and leases have been issued or applied for and forwarded for consideration:—Miners' rights at £1, 544; business licenses at £5, 45; business licenses at £3, 100; business licenses at £2, 35; registration at 5s., 194; registration at 1s., 394; leases (mining) representing 20 acres 1 rood 4 perches; extended claims 40, representing 74 acres; retail licenses (publicans'), 33; conditional licenses (publicans'), 13; wholesale licenses, 1; bottle licenses, 2.

The above statistics give evidence of the failing prosperity of the district. Nothing, however, in my opinion, is needed to restore it to its prosperous state of former years, but a large and cheap water supply. This the proposed Mikonui Race would provide. This work, if done at all, must be by Government, as the inhabitants of the district have not now the means of doing it themselves. Their faith in the gold-bearing character of the ground is evidenced by the extensive as well as expensive underground workings and steam-engines in which all their capital has been sunk. These are now lying idle and useless for the want of that which they cannot procure—water. The claims of the district have been so strongly urged by petitions and otherwise, to have this race constructed, that it is needless for me to urge the matter any further, save in my official capacity to give it a strong recommendation.

I have, &c.,

The Under Secretary for Gold Fields, Wellington.

G. G. FITZGEBALD, Warden.

No. 12.

Mr. Warden Tizard to the Under Secretary for Gold Fields.

Warden's Office, Okarito, 1st May, 1873.

With reference to your circular memorandum dated 12th February last, I have the honor to submit the following report upon the district under my charge:—During the past year the population has somewhat decreased, a few people having gone to the reefs near the Grey, and to the Australasian Colonies; whilst nothing fresh has been struck in the district sufficiently attractive to induce an influx of miners. The population numbers about 485, distributed as follows:—

			Males.	Females.	Children.	Total.
Okarito			19	14	29	62
North Beach	•••	•••	6	${f 2}$	10	18
Whataroa River			32	•••	•••	32
Saltwater Beach			22	3	3	28
Three Mile Beach			10	${f 2}$	8	20
Five Mile Beach			70	25	33	12 8
Waiho River		•••	14		•••	14
Lake			3		•••	3
Oamarukina			9	•••	•••	9
Waikupakupa River	•••		3	•••	•••	3
Moonlight Beach			5	1	3	9
Gillespie's Beach	•••		60	16	14	90
Cook's River	•••	•••	12	1	1	14
Karangarua	•••	•••	8	1	•••	9
Hunt's Beach	•••		20	3	6	29
Bruce Bay		•••	5	•••		5
Painga			4	•••	•••	4
Southward Bay			8	•••	•••	8
${f Total}$	•••	•••	310	68	107	485

The above numbers include about 230 miners, the remaining males being engaged as miners,

farming, storekeeping, &c.'

The gold reports during the year ending 31st ultimo amounted to 2,960 oz.; whilst there was forwarded overland 2,511 oz., giving a gross product of 5,471 oz. This gives an average of 11.28 oz. per head (485) of population; of 17.64 oz. per male (310); and of 23.78 oz. per miner (230). In the previous year the average per head was 15.6 oz.; per male adult, 23.13; and per miner, 28.84 oz.

previous year the average per head was 15 6 oz.; per male adult, 23 13; and per miner, 28 84 oz.

I am inclined to believe that a question as to the price of gold has led some of the miners to retain a considerable quantity in their hands, only meanwhile selling as much as may be necessary to

pay their expenses.

Although for the past year there appears a lower average of gold than in the former year, the miners have, I believe, been doing better, the expense of getting it having been much less. The working of large claims under heavy expenses was generally brought to a close in the former year; and although the yield of gold was large, a few miners only had good net returns, and a great number of the men were in debt, and some of them remained so even at the closing of the claims. Since then the men working in small parties of three or four have had a better choice of ground, and with small expenses can make a few pounds, whilst, at the same time, there has not been the reason for obtaining credit from the storekeepers which existed when working large claims with expensive appliances, so that business transactions are now on a far more satisfactory basis than formerly, as well to the miners as to the business men. Most of the miners who choose can save money, and, with their affairs on a readymoney basis, are, I believe, more likely to prosper than formerly, when nearly all large parties ran into debt to start an extensive claim, which was expected to give a handsome return in the result, but which, from one cause or another, perhaps scarcely gave small wages, the miners' expenditure meanwhile being based upon the handsome return it was expected to yield. That the miners have some money, is, I think,

4-H. 7.

shown by the number who have gone inland this season prospecting—about sixty men, a large number considering the small population of the district. Whilst the miners are still mostly working the beaches, which have been generally so often turned over, it must be borne in mind that they are satisfied with less wages than formerly, their expenses being also much reduced, water being now lower in price, as well as provisions and other necessaries.

At the Saltwater Beach, about twelve miles north of Okarito, there are only about twenty-two men, including the Little Saltwater Croek Dam party, twelve in number, the remainder generally working as hatters. I regret to say that the water race brought into this beach having been allowed to fall out of repair, some of the shareholders, rather than mend it at the cost of one of them, in the Warden's Court agreed to an order of sale, and it was accordingly sold by auction for about £100, scarcely any one being willing to go to the expense of renewing the extensive and decaying fluming by which the race is carried across the lagoon, and in which a breakdown might occur at any moment. The cost of construction of the race must have approached £2,000, monthly contributed by the shareholders in labour, and the returns have been but small, the evil results of defects of construction having been much increased by bad management. In this case, had the services of a competent engineer been employed in the first instance, much of the loss would have been avoided, and a race provided which would not have been likely to have continually required repairs. The water in the race having failed during the late dry weather, a number of miners dependent on it for water to work their claims have left for the Whataroa River, leaving a few still waiting for rain. One party had been trying to sluice the southern end of the beach with the water of the main lagoon, but with only occasional success, the water being generally too low to work the lead, the beach being rather wide between it and the sea; but the party now contemplate feeding the lagoon by cutting a race from a creek inland. The Little Salt Water Dam party, after eighteen months of labour, of about a dozen men, have at last succeeded in erecting a dam, which has withstood the heavy freshes to which the creek is subject, and are able to sluice the beach in an efficient manner, but would have been able to get through more work had the season not been so very dry. They are workin

That miners should have left the Saltwater Creek to try the Whataroa River I consider as well to their advantage as to that of the district, for I hold a strong opinion that good ground will sooner or later be discovered there. Good gold was found there as early as the end of 1865 or beginning of 1866, and has been again of late years, but not in sufficient quantities to induce men to set in permanently. The gold has been got out of the river beaches, but I feel satisfied that a careful search will discover payable terraces; but the Whataroa being an extensive river bed, a large number of men would but give it a fair prospecting, whilst many of the men who have tried it have not been experienced miners, or otherwise might have met with more success. But there are now about thirty-two men on

it, some of them old miners, and there is a good prospect of something being struck.

Two parties have been working on the beach, between Commissioner's Point and the Little Bluff north of it, but with such poor results that most of the men have left. One party raised the water of the lagoon (which has been dammed), by means of a small water-wheel, high enough to run in their race; but the shortness of water and the poorness of the ground combined have rendered this a poor speculation. The other party raised the water by means of a lift-pump worked by a horse, but the claim has not paid. The small race brought on to the beach south of Okarito has been abandoned,

the supply of water having been too small to make a poor beach payable.

On the Three Mile Beach the race party and the dam party are still working, besides two hatters, and generally do well; but the race party have been short of water. On the Five Mile Beach all the large claims have been worked out or given up—none of the parties now lifting with water, and only one working with horse-power. One or two large claims worked out paid good wages, but the others, as compared to wages, resulted in considerable loss. On the other hand, the small claim, as now worked, generally pays wages, and the miners have been able to save something. The tailings having been mostly run into the lagoon, the edging of it has become covered, and claims can now be worked on it which could not heretofore be touched. Should the river not turn out as well as expected, much new ground will here be worked, and under any circumstances will be in the course of years. The amalgamation of the two races on this beach—the Alpine and the Okarito Company—has greatly contributed to the success of the miners; a plentiful supply of water having been thereby maintained in both races in the driest weather.

A horse-road has been cut from the Totara (Waiko) to Lake Mapouriku by the Road Board. Notwithstanding the small cost (about 5s. per chain), there is not a better track in the district, from the line having been exceedingly well chosen. Arthur and party have now a boat on the lake, and are working in the neighbourhood of McDonald's creek, which runs into it. McDonald and others worked on this creek years ago, but did not make enough to induce them to stay; but then provisions had to be swagged from Canoe Point, on the Okarito River, in a track cut thence to the lake, and they can be taken to any point on it in the boat. At the latest information I received, Arthur and party had but just set in to work, but had a fair prospect of success. Of course the road via the Totara is a long roundabout one, and I am still of opinion that a good road could be obtained direct from the township by striking the Canoe Point track.

Three parties are now working up the Waiho River, on a steep terrace on the bank of the northern branch of the river, just below the gorge, about twelve miles from the beach. The ground, although poor, seems of considerable extent, and from its position, on a false bottom high above the river, very advantageously situate for sluicing, were there a supply of water; but that, I regret to say, is wanting, for the whole available is furnished by three small creeks running over the terrace into the Waiho, in all, about Government heads; and it is moreover stated that these creeks are affected in winter by frost. In the gorge the Waiho runs between high hills in walls of stone, and is unapproachable, precluding a supply of water thence excepting at a large expense. I consider, although contrary to the general opinion, that a supply could be obtained by blasting a race out of the stone, and raising the river bed

by means of a rough stone dam of large proportions, formed by heavily blasting the stone walls, otherwise water would have to be brought a long distance at a very considerable expense. terrace was worked years ago, and has been from time to time since, but has not been considered payable, and only becomes so now by the use of an hydraulic, by means of which the first party of three men setting in obtained about 323 oz. of gold for about seven weeks' labour; and then, of course, at the opening of a claim a considerable allowance must be made for lost time, although this party had the advantage of races already cut, and some facilities in the way of tracks. Should the payable ground prove to extend as far as expected, water will probably be brought on to it, but race property in the district has been hitherto so unprofitable that it is likely to be left to the miners themselves to do it. Meanwhile, the available water might, I think, be used at a higher pressure, and more effectually by the use of iron piping instead of canvas hose.

On the Omaru River three parties are at work bringing in separate races; and as the ground yields good prospects, and is favourably situated for sluicing, good results may be expected. The ground is about five miles up the river, between the two branches, a terrace standing high above the river, and the left-hand branch having a rapid fall enables the miners to bring water on to the ground,

river, and the left-hand branch having a rapid fall enables the miners to bring water on to the ground, with a moderate amount of labour. Ground up this river was worked years ago, but sluicers without hydraulies, and would not then pay; but the improved method of working now adopted will put through so much greater quantity of dirt, as can scarcely fail to make the ground payable.

On the beaches between the Waiko and Gillespie's Beach, the small parties at work have improved their races, so as to ground sluice and work in dry weather; whereas heretofore, dependent on the rain, they have only been able to work in the wet. Of course the results have been greatly increased, and the men are some of the most well to do in the district. On Gillespie's Beach the miners have decreased to about fifty in number. The ground being generally of a poor description, although payable, anything fresh is always likely to induce some miners to abandon this beach. There are two races on the beach, but a large quantity of water is not sold, but the greater part used by the two races on the beach, but a large quantity of water is not sold, but the greater part used by the shareholders. In the dry weather, when the water would have been saleable, there was such a small quantity in the race that none could be spared for sale. The shareholders in the larger race work in two parties of four men each; in the smaller one in four parties of two men each; and it is remarked that the smaller parties are the most successful. However the beach is likely to be worked for years to come, although it is not probable that any rich claims will be opened. Up Arks River, six miners are working the beaches on the river, sometimes washing on a face, and sometimes just fossicking, and generally speaking make small wages, if not more. Part of them, this winter, will go back to the ranges, in the expectation of striking something.

At the Karangarua, North Beach, a party of six are working with the water of a race brought in from about three miles up the river. They have a plentiful supply of water, but rather low, so that it is scarcely available for the whole of the North Beach. The ground has not come up to the expecta-

tions of the party, but has paid wages.

At Hunt's Beach there are about twenty miners, who during the past year have generally earned small wages. Most of the parties have water races for working their claims, one party lifting water by means of a water-wheel.

At Bruce Bay there are about four Europeans engaged in mining as well as four Maoris, but none

of the workings have proved very profitable.

To the southward, during the past year, a good deal of prospecting has been done inland, as far as the head of the Clark (the junction of seven small streams). Also about eight miles up the Lonsborough (stated to be a large river), and on the Haast, to the mouth of the gorge, where brands on a tree were observed, showing that the crew of the "Nugget" cutter prospected there about nine

years ago. In all these parts the colour of gold could be got, but nothing approaching payable.

I regret to say that the water races at the Haast have proved unremunerative, and altogether the prospect in this direction is gloomy; but as I believe there is a good deal of land fit for cattle there is a likelihood of its being stocked on the completion of the tracks South of Bruce Bay, undertaken by the County Government; and a better knowledge of the country will then be obtained through the article energies the head and the stockmen accessionally looking after them, whilst mage through the cattle opening the bush and the stockmen occasionally looking after them, whilst prospectors would obtain their provisions with far greater facility than at present. By some it is considered that the Government should give direct assistance to prospectors by providing funds for provisions; but I think that the assistance would be far more likely to attain its object if given in the shape of a road provided inland, and water-right regulations on a more liberal scale. I think that miners should be able to register at least as much water as they would be likely to use for sluicing if they were purchasing the water from an extended head race company, say, in ordinary parties not less than a head per man. The value of water would then be a handsome premium on prospecting; and it must not be overlooked that some prospectors spend more time, sometimes years, looking for ground and water, than suffice to bring in as long a race as would enable them to register a right under the extended scale.

The tracks round the Bluff, formed by the County Government, have been of great service; but, unfortunately, no provision has been made for keeping them in repair, and parts of them have fallen

into bad, in some instances dangerous, condition.

There are still a large number of public-houses in the district; in all, fourteen licensed houses, or about one to every twenty-two male adults of the population. I believe that, in the present circumstances of the district, the number could with advantage be reduced; and I consider that, were the license fees reduced, that result would be obtained with advantage to all parties. The revenue would not be reduced, and the fewer taking licenses would be perhaps even better able to pay the fees as well as to provide better accommodation than now, whilst at the same time I believe there would be less unnecessary drinking than at present.

From the present prospects of the district, the current year may reasonably be expected to be a perous one.

I have, &c.,

prosperous one.

The Under Secretary for Public Works, Wellington.

EDWARD J. TIZARD, Warden.

OTAGO.

No. 13.

Mr. Warden Willis to the Under Secretary for Gold Fields.

Warden's Office, Dunedin, 13th May, 1873.

I have the honor to enclose herewith the forms, properly filled up, which accompanied your circular letters of the 12th February and 11th March last respectively, and which show the position of the gold field under my charge on the 31st March, 1873.

There is very little to add to my report of the 8th June, 1872, save that I have issued seventeen agricultural lease certificates for 2,260 acres of land; and that the number of miners has slightly increased. One of the quartz-mining companies to which I then alluded has collapsed; but the other is in full working order, and with every prospect of success attending its operations.

No cases have occurred which would have necessitated my holding Warden's Courts during the

The number of miners' rights issued during the same period was 140, and of business licenses, 8. In order that "The Otago Waste Lands Act, 1872," and "The Gold Fields Act, 1866," which contain the same provisions relative to water rights and privileges, may be worked harmoniously, the Waste Land Board has recently appointed several of the Wardens in the Province, including myself, to be District Land Officers, the effect of which will be, that as heretofore all water rights were granted by the Wardens, they will now have to be granted by the Waste Land Board.

I have, &c.,

The Under Secretary for Gold Fields, Wellington.

ALEXANDER WILLIS, Warden.

No. 14.

Mr. Warden Pyke to the Under Secretary for Gold Fields.

Warden's Office, Lawrence, 1st May, 1873. SIR,— I do myself the honor to forward my report on the Tuapeka District of the Otago Gold Fields, for the year ending 31st March, 1873. Speaking generally, I think I may venture to say that never since the discovery of Gabriel's Gully has the Tuapeka District (proper) been in a more flourishing condition. The yield of gold has been in excess of the produce of previous years; land for cultivation is being taken up wherever obtainable; property in the township has greatly increased in value; work is plentiful and labour is scarce. It is difficult to obtain hands for any kind of employment at present.

At the Blue Spur, mining operations continue to be carried on with energy and profit. This

wonderful auriferous deposit has now been constantly wrought for more than ten years to a depth varying from 80 to 230 feet. The bed rock has been found near the centre of the spur, at a depth of 94 feet below the lowest tail-race at present in use, giving a total depth of payable cement of 324 feet. Everything is put through the tail-races, from the grass downwards. The average value of the dirt has been estimated by competent authorities at from 6d. to 1s. 3d. per cubic yard for surface stuff; and at 2s. 6d. to 5s. per cubic yard for bottom stuff, as at present wrought. The underlying old tertiaries contain heavy waterworn gold, and are believed to be even richer than the present workings, so that it will yield handsome returns when wrought, even though expensive machinery should be necessary for crushing the cement.

Since the first sluicing operations on this spur it is estimated that gold to the value of nearly £250,000 has been extracted from the soil; and the quantity of auriferous earth that has been washed away is calculated at 1,740,000 cubic yards. There yet remains to be wrought above present levels 2,460,000 cubic yards, and below those levels 660,000 cubic yards of payable ground.

This estimate (obtained by me from some of the most intelligent claim-owners) does not include ground of inferior quality, but which will no doubt yet be profitably wrought with better appliances, such as hydraulic force can yield, when water becomes cheaper. And when all has been washed down to the bed rock, the tailings, already 50 feet deep at the foot of the spur where the old township once stood, and which are rapidly filling up the entire gully, blocking up the main Tuapeka Creek, and threatening the existence of the lower portion of the town of Lawrence;—these tailings, I say, will be received the contraction of the contraction of the contraction of the superior to the superior to the contraction of the contraction of the superior to the superior t again be wrought with most surprising results, for with existing appliances it is certain that a large quantity of gold is lost. I do not, therefore, think that I overdraw the picture, if I predict that at least half a century will be requisite to fully exhaust the authorization resources of this famous spur, and that gold to the value probably of £2,000,000 still remains buried in its sands.

At present there are about seventy men employed on the various claims at a daily wage of 11s. for eight hours' work, and at this rate the cost of working is estimated at from 6d. to 14d. per cubic I may add here that the current price of water for sluicing is £7 per 100 inches per week

of 48 hours.

A new feature in this portion of my district is the production of gold from the quartz lodes of Gabriel's Gully. The first cake of retorted gold was obtained in December last by "Gabriel's Gully Quartz Mining Company." The following extract from my report (to the Provincial Government) for the quarter ending 31st December, 1872, may be interesting:—"The weight of the cake was 125 ounces (net), and it was the produce of about 500 tons of stone, which yielded (in the gross) 270 ounces of amalgam. The results thus nakedly given require other explanation, in order that the matter may be properly understood. This can best be done by a statement of the cost and gain attendant on the actual crushing, which statement has been placed at my disposal by the manager, Mr. H. L. Squires:

'Amount expended in raising and crushing 500 tons of stone £220 0 0 "Price obtained for produce—125 ounces—valued at £3 15s. per ounce... 468 15 0 "Leaving a profit of, say £248 15

29

"It will be seen from the foregoing that the cost of raising, bringing to the mill, and crushing, averaged a little over eight shillings and ninepence (8s. 9d) per ton—equal to a yield of two pennyweights and eight grains per ton, beyond which all is profit. I think this result one of the most important yet achieved in New Zealand. Our hills and mountains are seamed with auriferous quartz, from Green Island to Mount Aspiring. But as in the alluvium, so in the rock, the gold is scattered over a large surface area; and it is only by economical agencies that satisfactory results can be attained. The Blue Spur, for instance, enormously rich though it be, would not pay to work, were it not for the immense water power brought to bear thereon. It may not, then, be out of place, here, if I briefly describe the modus operandi adopted by the Gabriel's Gully Quartz Mining Company. The "reef or lode" is situated about that way down the western face of the range which divides Wetherstone's from Cochriel's and appeals to the Blue Spure and in manually an appeal of the property of the propert Gabriel's, and opposite to the Blue Spur, and is wrought by an adit, or tunnel, piercing the breast of the mountain at a point several feet below the cap of the reef. A tramway leading from the lode conveys the stone raised to the machine in the gully below, the full trucks descending pulling up the empty. A single line of rails suffices for this purpose. At the meeting point elliptical curves, enable the trucks to pass each other. The machine itself is a ten stamp battery, the stamps being of 60 lbs. weight each, worked by a turbine of new and greatly improved construction. The motive power water—is conveyed in an open race from the Phenix Reservoir to the saddle above the reef, and thence with a fall of 150 feet, in iron pipes to the battery. The reservoir belongs to the company, under lease, and the surplus water is sold at a profit, independently of the water used for crushing purposes. On the first crushing it will be readily understood by practical machinists that a considerable loss occurs through new and unused plates. Still better results have been obtained since the date of my report, and from data possessed I may safely say that the battery will now regularly crush, say, 125 tons per week, at a profit of not less than 10s. per ton. The reef is now from eight to ten feet thick. . . . I may mention here that coarse, unworn gold—semi-crystallized—is found in the boxes. At the first crushing 25 dwts. (one piece over 8 dwts.) occurred, and similar results have since been obtained." The total quantity of stone crushed to March 31st is 1,500 tons, yielding 470 oz. of gold. Twelve days' crushing, from 15th to 27th March gave 244 oz. of amalgam. No portion of the reef has yet been found absolutely barren, and gold seems to be equally distributed over the entire body of stone, 120 feet from North to South, worked to date. The turbine continues to work satisfactorily, and I am assured by the manager that for the last two months not more than 35 inches of water (220 gallons per minute) have been used for driving the full battery of 10 stamps.

The ridge between Gabriel's and Wetherstone's, in which these workings are carried on, is composed of micaceous and talcose slabs, overlaid with clay to a depth of from 3 to 30 feet. The upper rocks are of a deep red colour, and non-pyritous. The underlying rocks are of the ordinary blue tincture, and highly pyritous. Between these two layers there is usually a thin seam of mullock, and the rock faces exhibit indications of slickensides. When the lode occurs in the red slates the lock ground and solve the project of the lock the quartz is much decomposed, and only slightly pyritous; whereas in the blue slates, the lode, like the surrounding rock, is remarkably full of pyrites. Both these slates are traversed with veins of quartz. The general lie of the slates shows a dip to the South at an angle of about 30 degrees, the cleavage planes dipping to the Eastward at about the same angle. The course of the lode is, as usual, North and South, with an underlay to the West. From a general consideration of these and other circumstances, I am inclined to believe there has been a vast slide at some remote geological period, which has precipitated the original crown of the range to its base, leaving between, to the Eastward, the broken-off lower continuation of the lode. It is remarkable that here, as in other parts of Otago, the quartz lodes should have struck far down the side of the range, a fact which adds additional

confirmation of my theory.

Two tunnels have been put in to test this matter, and the extent of the gold-bearing character of the ridge, on both flanks of which coarse gold has been found in the gullies in small runs nearly to the summit. One these, known as Walsh's Gully Tunnel, has been driven 350 feet. Several small leaders have been cut in the excavation. The other is the Clarke's Hill Company. This has been commenced with the view of tunnelling through to Wetherstone's, so as fully to test the range. An application has been made to the Government to subsidize this undertaking, the importance of which can scarcely be exaggerated. Taking into consideration the magnitude and difficulty of the work, I think that a portion of the vote for prospecting would be well expended in rendering assistance thereto.

At Waipiri the quartz workings are just now at a standstill. There is not, however, any reason to doubt that the old O P Q lode would yield handsome returns if wrought economically by the aid of

water power.

At Table Hill the work done has been very considerable, and the claimholders have been most persevering. Here there are two distinct lodes, running parallel—namely, the Oxford reef and the Ocean View reef. The Oxford reef has been worked to a depth of 112 feet, with a lode from

3 to 6 feet broad. It is now abandoned.

On the Ocean View, three claims have been wrought to a depth of 80 feet, on a lode 3 to 6 feet thick. Work is at present suspended, pending the erection of pumps to drain the lower levels, where the water is very heavy. The Alexandra Company are now erecting a turbine to drive five head of stamps, for which they possess ample water privileges. These reefs are perhaps the best defined of any yet discovered in Otago, having almost perpendicular walls with white casing. As at Gabriel's, the upper rocks are red, and contain very little pyrites. At 80 feet the rock changes to a blue pyritous slate, and the quartz is also highly charged with pyrites. At this point the explorations have been stopped. I shall await with much interest the draining of the mines, and the bringing to "grass" for quartz from lower levels. These great faith in the future development of this part of my district. of quartz from lower levels. I have great faith in the future development of this part of my district, and in these reefs in particular.

There is nothing worthy of special mention in connection with the alluvial workings.

During the year ending March 31st, 1873, there has been a steady increase in production of gold from this district. The escort returns show that in the above-named period there have been 37,401 oz.

sent down, as against 32,928 oz. for the year ending March 31st, 1872, being an increase of 4,473 oz. Value of year's produce (estimated at £3 15s. per ounce), £140,254.

I have, &c.,

VINCENT PYKE, Warden.

Note.—The usual returns are appended.—V. P.

The Under Secretary for Gold Fields, Wellington.

No. 15.

Mr. Warden Borton to the Under Secretary for Gold Fields.

Roxburgh, 10th April, 1873. Sir,-I have the honor to report that during the twelve months ended the 31st of March last, the district as a whole has been prosperous; miners have generally obtained remunerative returns for their capital and labour, and the agricultural portion of the population are continually receiving fresh accessions to their ranks. As regards the former class, the same want is felt here as is experienced, I believe, in nearly every other part of the Otago Gold Fields—namely, an increased supply of water. Were this great desideratum supplied, it would be hard to fix a limit to the increase that would take place, both in the population and prosperity of the district. I am glad to be able to state that a quartz lode discovered some time ago at the Fourteen Mile Bush is in a fair way of being thoroughly tested. A company has, I believe, been formed, and a contract let for driving along the supposed line of reef, so as to ascertain its permanency and the richness of the stone. Should these preliminary operations result satisfactorily, quartz mining will become one of the recognized and established industries in this part of the gold field.

The population, as you will notice in the statistical return forwarded herewith, is increasing. Europeans of all classes and ages I estimate at 1,100, and Chinese (chiefly miners) at 250.

The revenue is also on the increase, being something like £1,200 this year as compared with £800 for the previous twelve months. These sums, however, do not represent the whole revenue derived from the district, but only so much as passes through the books of the Receiver of Gold Revenue and Clerk to the Bench. With the spirit licenses, dog taxes, coal leases, &c., added to the above amount, the revenue would probably reach some £1,600 or £1,700 a year.

The Secretary for Gold Fields, Wellington.

J. B. Borton, Warden.

No. 16.

Mr. Warden Robinson to the Under Secretary for Gold Fields.

Warden's Office, Naseby, 1st April, 1873. Sir,-In accordance with instructions, I have the honor to report upon the district under my

charge as Warden for the last year as follows:—

1. The year has, on the whole, not been a favourable one for mining. It has been unusually dry in all seasons, and the consequence has been a remarkable scarcity of water for sluicing purposes. This has seriously cramped the energies of the miners, sluicing being the only method of alluvial mining practised here.

2. By far the most important matter, as affecting mining in this district during the year, has been the initiation of the public works at Naseby. These works consist of a large water race from the upper branches of the Manuherikia River to Naseby, and of a sludge or main tail-race, extending from Naseby for ten miles down the Hogburn Gully. This latter work has been let to one contracting party for £18,000, and they have set to work with an energy which augurs well for the speedy completion of their contract. The head-race will be about sixty miles in length; of this, ten miles have been contracted for, and the works are now in progress. It is expected that other lengths will soon be let out. The whole are being executed according to the plans and under the supervision of Mr. D. L. Simpson, the Provincial Engineer of Otago. The original scheme contemplated the bringing in of a flushing water race from the Little Kyeburn; but after a careful survey, Mr. Simpson decided that it would be best to bring in the large supply from the Manuherikia at once, and the Little Kyeburn flushing water race has therefore not been gone on with.

3. Great expectations have been based on these undertakings, but some time must elapse before the practical benefit can be reaped from them. The sludge channel cannot be completed much under twelve months, and it seems likely that the construction of the great water race will take at the least two years. When completed, it will be a splendid work; and there is every reason to believe that the water race and sludge channel in conjunction will be the means of affording employment for a series of years to a considerable number of miners, and will enable much auriferous land to be worked, which,

without them, would hardly have been got at.

4. Since the levels for the main sludge channel have been known, it has been alleged by some miners, that to command all the ground it will be necessary that it should be made deeper at the Naseby end. The matter has been brought under the attention of the Provincial authorities and the Engineer, and is now under consideration. It is argued by the advocates of the deeper level that it would be a pity to bring up the channel at a certain depth, and then find that it would be advisable to make it deeper, whereas, by a slight modification of the gradient, the required depth could be obtained in the first instance without any very great additional outlay. I refrain from myself passing an opinion on this point, as it is eminently one for professional skill to determine, and will no doubt receive the consideration it deserves.

5. The Mount Ida District has never yet been very famous or fortunate in the matter of quartz reefing. For a while there was some excitement about the reefs at Roughridge and at Macrae's, but one after another the claims were abandoned, and the companies wound up. Lately, however, there has been a sort of revival of the quartz mining interest, in respect of a number of reefs discovered in the Dunback Ranges, Stag Valley. The boundaries of the gold field have been extended to take in the scene of these new discoveries, and much enterprise has been shown by claimholders. there are three batteries of stamps erected, and a large amount of work done; not only in the way of getting out quartz, but in the formation of reservoirs and the cutting of roads. That there exists That there exists quite a network of reefs is evident. It is also a fact that, although not rich, the stone has yielded payable returns for such crushings as have been obtained. It remains now to be seen whether these reefs will pay for continuous working. It is only fair to add that the companies that have already got fairly to work seem very sanguine of success. The reefs at Roughridge, after a long interval of neglect, are about to get another trial, at the hands of a company bearing the well-omened name of "The Energetic." I am given to understand that this company has obtained prospects justifying the regular opening out of a mine and the erection of suitable crushing machinery, and that the necessary arrangements are now in a forward state.

6. The Maerewhenua division of the district has made some advances during the year, but its development has been by no means rapid. The work, for the most part, is still only of a preparatory character. Further portions of races have been constructed; and one race—that known as "The Mosquito"—has been finished, its completion having been made the occasion of some festivity; but still it must be said that the thorough opening up of the Maerewhenua diggings is a thing of the future. The holders of some of the water rights are showing great determination in carrying out works that have proved to be far more difficult and costly than was expected when they were begun. They are full of hope. One party have been at work for the past two years, bringing in a large race from the Kakanui River. They have made nine miles of the race, and have six or seven more to do. This party propose to avail themselves of the assistance of the Government to finish the work. Their race,

when completed, will command a fine extent of good ground for sluicing.

7. With reference to the water of the Kakanui River, an important question has arisen during the year. Besides the party already referred to, there have been two other companies that have applied for and obtained grants of water from the Kakanui. Not content with the grants they held, they made application for additional supplies, more in fact than the stream could possibly have yielded, and this seems to have roused the fears of the owners and occupiers of property down the river, near its mouth, A strong objection was put in on behalf of the owners and occupiers of a flour mill, a fellmongery. and a meat-preserving establishment, near the mouth of the Kakanui, and, after hearing the arguments and a recessary to refuse the applications for additional supplies of water. This refused adduced, I found it necessary to refuse the applications for additional supplies of water. This refusal was considered so significant that one of the companies decided to wind-up its affairs, not deeming it safe, in the face of such opposition as might be expected from the riparian proprietors down stream, to commence their race at all. The other party have their rights under protection, and are, for the present, watching the course of events; not liking to commit themselves to a large expenditure until they can feel sure of being able to carry their enterprise to its completion without clashing with other

and possibly more powerful interests.

8. The several mining centres of Hamilton, Hyde, and Serpentine have not during the past year Their mining population has ar than increase. Macrae's, on presented any matters in connection with mining worth recording. remained about the same, and if anything has suffered diminution, rather than increase. the other hand, has shown signs of improvement, which, although not very noticeable, are yet

satisfactory.

9. No review of the past year would be complete which should omit to notice the improvements in the town of Naseby. The year that has gone by has been especially momentous for Naseby, as it has seen the erection of the town into a municipality, and the starting of the public works, which, it is believed, will place its prosperity on a really sound foundation. Without going into details, I will simply say that the place is evidently growing. New buildings are continually going up. The Presbyterian body have got up the walls of a commodious and substantial church, and the Church of England has funds collected towards the same chieft. Everything denotes confidence the Church of England has funds collected towards the same object. Everything denotes confidence in the permanence of Naseby as a mining centre.

10. In my last report I had to include Hill's Creek and St. Bathan's, of which I had charge during the temporary translation of Mr. Warden Carew to Clyde, to do duty for Mr. Warden Simpson, absent on leave; but as Mr. Carew has since resumed charge of his own district, I must leave him now to report upon those localities. This change will also make a noticeable difference in the tabular

returns.

11. In conclusion, I have to express my satisfaction that, notwithstanding a bad year for mining, the district has continued to hold its own so well; and my earnest hope is, that a more favourable season for water may enable me in my next report to present a more cheerful statement of affairs.

The Under Secretary for Gold Fields, Wellington.

I have, &c., H. W. Robinson, Warden.

No. 17.

Mr. Warden Carew to the Under Secretary for Gold Fields.

SIR,-Warden's Office, Black's, Otago, 24th April, 1873. I have the honor to forward herewith statistical returns for the gold field under my charge, for the year ending the 31st March, and beg to report as follows:—

A scarcity of water has prevailed to an unprecedented extent for at least six months out of the twelve, which in this district, where mining, with barely an exception, is carried on by means of ground sluicing, has been exceedingly detrimental to mining interests. There are several new races in course

of construction, which will increase the supply in the future; but there are now very few streams from which the existing water rights would not absorb the full flow in ordinary seasons. The only means left for making further provision appears to be by the construction of dams and reservoirs; and this, although a costly mode of obtaining water, will no doubt be gradually adopted, for there appears to be no prospect of the value of water decreasing, and the profits derived from water races would justify a considerable expenditure upon works which would be again productive.

Black's No. 1.—In this division of the district the population has been considerably increased by the arrival of a large number of Chinese miners, who have settled down to steady and profitable work. Many of them have been doing remarkably well in working old ground in Black's Flat, while a few have taken advantage of the low state of the Manuherikia to divert portions of that river, and work the bed,

and have been largely remunerated.

St. Bathan's continues to be the most prosperous portion of the district, and it contains some of coest sluicing ground in the Province. That part known as the "Basin" has been in work for the the best sluicing ground in the Province. last eight years, and is still yielding large quantities of gold from claims which will take several more

years of labour to work out.

The St. Bathan's main channel, which was formed about five years ago, partly with Government aid, for the purpose of making provision for want of sufficient fall in the gully to carry away tailings, and into which all tail-races empty, has been lately washed up, producing 200 oz. of gold. There was also a small washing from it some time ago, making in all about £900 worth of gold saved, which in ordinary cases, where tailings are not collected in a second race, would have been lost. The miners who constructed this race, which is considered to be the common property of those discharging tailings into it for the time, having no expectation that so much gold would be collected by it, made no provision for its distribution, and some difficulty has occurred in allotting the proceeds amongst the different

Extensive works are in progress at Muddy Creek, which, when completed, will make that locality of much importance. A large quantity of valuable mining ground is known to be there, and an extensive area, at present unprospected, will in all probability prove auriferous. Hitherto the small quantity of water available has prevented more than a very partial development of that field; but this will shortly be met by a new water race, which is being brought in from a distance of thirty miles. This race is being constructed by a party of six miners, will cost not less than £1,500, and is to be finished in twelve months. Two extensive tail-races, each of which will cost several hundred pounds, are also being proceeded with. It is proposed by some miners, long resident in the district, to construct a main channel up the bed of Muddy Creek, which is now almost choked with an accumulation of tailings from the workings above. This channel is to be three miles in length, and will have to be nearly 40 feet in depth at the upper end, with an average depth of 20 feet. The projectors of this undertaking, six in number, are willing to enter upon its construction provided they obtain a special claim of thirty acres of mining land, under section 12 of "The Gold Fields Act, 1866," and will allow the race to be in general use as an outlet for tailings. The race will pass through a large bulk of tailings and old worked ground, and it is expected that sufficient gold will be collected in constructing

the race to pay the cost of the work.

Welshman's Gully.—The miners here are nearly all old residents of several years, and seem to be as prosperous and contented as those of any mining locality that I know of. Almost every miner is a race proprietor and the holder of a mining lease. They live in good substantial houses, with gardens around them, and the gully presents a general appearance of comfort unusual to see upon a gold field. A new water race is being brought in from the Dunstan Creek, which will add further to the prosperity of this field. There are several excellent seams of lignite here, from which supplies for nearly the

whole district are drawn.

Blackstone and Woolshed Diggings.—The past year, on account of the small rainfall, has been a very unfavourable one for these diggings, and many of the claims have been unworkable from want of water, and had to be protected for suspension from work. There is plenty of ground here which will pay well during the time when water is procurable, and no doubt, when moister weather prevails, there will be a return of prosperity.

German Hill has suffered from the same cause as the places last mentioned. A large population

could be supported here, provided an adequate supply of water could be brought in to it.

Ida Valley.—The auriferous gullies leading into the head of this valley are principally occupied by Chinese miners, who appear to be contented with the result of their labour.

Black's No. 3.—The only deep sinking in the district is being done here. A party of miners have been working for some months at a depth of 120 feet, and have been well paid. The gold found is much coarser than that obtained in sluicing shallower ground. The claim is worked by a horse-whim, and the ground is wet and has to be thickly timbered. The adjoining land was at one time held by a registered company, who sank a shaft 180 feet deep upon a patch of very rich wash-dirt, yielding several ounces per load. When this patch was worked out, a drive was put in for a distance of 100 feet, and a monkey-shaft sunk at the far end, which bottomed at a further depth of 80 feet; but although a drift gravel was met with, it did not contain payable gold, and difficulties occurred which prevented further presenting. This claim was worked beauty timbering and was worked with bired further prospecting. This claim was very wet, required heavy timbering, and was worked with hired labour; and the heavy expenses exhausted the capital of the company, which then ceased operations. There are many experienced practical miners who believe that rich deposits of gold, if not a regular deep lead, would be discovered if a properly organized company, with a sufficient capital, were to make

Drybread.—The water supply here is in the hands of three parties, who work their own ground and use all the water obtainable, instead of, as heretofore, selling water in small heads to any miners who might choose to take up claims. This tends to decrease the number of men who can find occupation; but there is no doubt that gold is obtained at a much less cost by using large quantities of water with few men than upon the old system; it also leads to more steady and systematic working. Nearly £1,000 has been expended here in iron piping to bring water from a height to bear upon the claims

with the full quantity of pressure that can be obtained.

Tinker's.—A new race heading from tributaries of the Chatto Creek, with a right to eight heads of water, is being brought into this field. The length of cutting will be fifteen miles, and the work is so far in progress that it is expected to be completed in six months from this. The water right now belonging to this race was formerly diverted to Black's, but the proprietors, thinking it could be more profitably employed at Tinker's, applied for and obtained the necessary authority to construct a new race. The land here is noted for yielding very large returns. A quantity of stout india-rubber hose or piping has been lately imported here from California to be used for hydraulic mining, but it is questionable whether iron piping is not the most economical and effective material to employ. It is, however, far in advance of canvas hose which is very expensive considering the short time it lasts, and that it is frequently getting out of repair when heavy pressure is required.

Agriculture.—Four blocks of land have been opened in this district for leasing under the Agricultural Lease Regulations, and 1,866 acres have been leased, nearly the whole of which is under cultivation and improvement. There are also a few hundred acres cultivated upon the neighbouring runs. The principal crop grown is oats for horse feed, and potatoes are also grown, but not sufficient for local consumption. The district is very backward in agricultural matters, for sufficient produce is not even raised for home use, although much of the land is very superior, and far better than that in adjoining districts, which would be good markets for a surplus. There is no flour mill within seventy miles of Black's, but a joint stock company is now being formed to supply this great want, and I anticipate that so soon as a mill be once started, that there will be an increased demand for land, and

a great impetus will be given to agricultural settlement.

Gold.—The quantity of gold forwarded by escort during the year is as follows:—

Black's St. Bathan's		•••		•••		Oz. 9,450 4,515
	In all	•••	•••	.,,	•••	13,965

In conclusion, I beg to state that I consider the future prospects of this district as very encouraging. In spite of the unusual shortness of water which has so long prevailed, the miners have done more than hold their own, the existence of almost unlimited areas of auriferous land is more fully confirmed. Improvement in the system and economy of mining is being discovered and adopted, and several reproductive works will be shortly completed. With a return of seasons of average rainfall, it is reasonable to anticipate considerable prosperity.

The Under Secretary for Gold Fields, Wellington.

I have, &c., E. H. CAREW, Warden.

No. 18.

Mr. Warden Simpson to the Under Secretary for Gold Fields.

SIR,-Warden's Office, Clyde, 25th April, 1873. I have the honor to forward, in compliance with your circulars of the 12th February and 11th March, the statistical returns of the Dunstan District for the year ended 31st March, 1873.

From the district, which now only comprehends the sub-districts of Cromwell, Clyde, and Alexandra, there was escorted, during the year, 35,451 oz. of gold, being 3000 oz. in excess of what was escorted from those sub-districts the previous year, a favourable sign when it is observed that the

population has diminished.

The great drawback to the further development of this district, particularly of the alluvial workings, is the small water supply, which has during the last four months been reduced to a minimum. Efforts are being made to allay this evil in the Cromwell District by the construction of the Carrick Water Race, in the Clyde District by that of the Chatto Creek, and in the Alexandra District by that of the Gorge Race, at a total expenditure of not less than £20,000. All those races will open up new ground of proved auriferous character, to the extent of some hundreds of acres. But those races, even taken as they are from what may be considered good sources of supply, would, by a season such as that we have just gone through, be much affected. Such ever-recurring dry seasons, in a district like the Dunstan, should cause attention to be turned to the procuring, by mechanical means, a supply of water from the large rivers. Short, however, as the water supply has been, the alluvial workings have contributed the great proportion of the gold; and of those workings, those at a high elevation, such as the Nevis have yielded the most. In particular, the yield at the Nevis has been greater than for several years.

Quartz Reefing.—During the year great efforts have been made to develop the reefs in this district, but in most cases with indifferent success. Those in the Alexandra District, known as Butcher's and Conroy's, of which much was expected, have been abandoned. Indifferent management Butcher's and Conroy's, of which much was expected, have been abandoned. Indifferent management and too small capital may be assigned as the reasons; for the general opinion is, that those reefs, although not rich, are payable, and will be taken up again. Of the Bendigo reefs only three are now worked—the Lucknow, Aurora, and the Bendigo Company. But for the last three months little or nothing has been done for want of water supply. The difficulty in adopting any other power for crushing is the inconvenience of fuel; but I think that in the case of the Bendigo Company, where the gold-bearing quality is so well ascertained, it would pay to adopt steam. This Company have just recently come on stone quite as rich looking as any they have ever taken out. On the Carrick a great deal of work has been done which has revealed that the reefs there so far are merely fragments of deal of work has been done, which has revealed that the reefs there, so far, are merely fragments of reefs, tossed about in all sorts of positions, by some unknown agency. In consequence, prospecting is a most difficult task. Some miners are of opinion that the main reefs will be found in the locality, while others hold that there are no indications to justify that conclusion, but offer no explanation of how the fragments got to their present location. The following may be put down as the payable reefs

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on the Carrick:-The Heart of Oak, the Star of the East, the Elizabeth, the John Bull, the Young Australian, the Caledonian, and the Colleen Bawn. Of those the two first-mentioned have yielded the most gold. Here again water is the chief motive power, and, as a consequence, work this season has been much retarded. At the Carrick, there is no reason I can see for being so dependent on water,

steam-raising coal being quite convenient to the mines.

The only branch of gold mining remaining to be mentioned is dredging on the Molyneux River. There has been a considerable revolution in the mode of dredging. The constant flow and accumulation of tailings has rendered it impossible to do any good with the spoon dredge. The great object to be attained was, when the wash was reached to keep it from being immediately covered up with tailings. Pneumatic tubes have been tried, and with success; and if sufficient means are adopted for the speedy elevation of the wash, this mode will be generally adopted, particularly in the gorges, where very rich pockets are believed to exist. The advantage of this system is that ocular examination of the river bottom is enabled to be made. Allied to the system of the tubes is the submarine boat, which is also A steam dredge, similar to those used in harbours, is in course of erection, some miners believing that the payable nature of dredging depends entirely on the quantity of stuff to be got through, which no doubt is the case in the more placid reaches of the river, where the gold has got more uniformly distributed; in such places only could such a dredge work. This winter it is expected there will be four or five different sorts of dredges at work in the neighbourhood of Clyde and Alexandra, almost all worked by steam.

Agricultural settlement in this district makes very slow progress, chiefly owing to the very limited area of land suitable, and such as there is depending so much on irrigation, to do which large capital

is required.

I have, &c., W. LAURENCE SIMPSON, Warden.

The Under Secretary for Immigration and Public Works, Gold Fields Branch, Wellington.

No. 19.

Mr. Warden Stratford to the Under Secretary for Gold Fields.

SIR,-Warden's Office, Arrow District, Otago, 31st March, 1873. In compliance with your circular memorandum of the 12th of February last, I have the

honor to report on my district as follows:

1. That the original Warden's District of Arrow, for some years under the charge of Warden Lowther Broad, was annexed to the Queenstown District, and became a division under Warden Beetham's charge in August, 1868. And that on the 24th of July, 1872, it was again classed as a separate district with its original boundaries—viz., on the west by an imaginary line from the junction of the Hayes Creek with Kawarau, along the western shores of Lake Hayes, and from thence north-west to the Coronet Hill; from thence north through Fox Peak to the Canterbury boundary; along that boundary until the source of the Kyrtleburn bears due south; from thence by an imaginary line to the source of the Kyrtleburn; then down the course of the Kyrtleburn to its confluence with the Kawarau; from thence along the south bank of the Kawarau to the starting point. Within these boundaries there are eight distinct mining settlements, which I will detail in order according to their importance—namely, Cardrona, Macetown, Arrow River, Matatapu, Cambrian Flat, south bank of Kawarau, Whitechapel Flat, Bracken's Gully, and Roger's Gully.

The increase of population, more permanent settlement, and the more continual travelling to the out-districts demanded of the Warden at Queenstown, were the principal causes of the reconstitution of the Arrow District. And as the Government has expended during the past six months considerable sums of money in cutting and improving mountain tracks, more especially up the Arrow River; in connecting Macetown with Roger's Gully, in the heart of the northern ranges of Otago; and from the former place to Matatapu, which is daily becoming more favourably known,—I believe the district will become more important every year. The population, though not increasing much, is more settled, and the revenue greater and less fluctuating. Having classified the mining localities, I will briefly report on each. At Cardrona, there are about 100 European and 350 Chinese miners. When the agricultural leaseholders have worked out their ground (their leases having yet two or three years to run), we shall have room, with present prospects, for 50 more Europeans at least. At Macetown the ground is pretty well worked out, but through the liberality of the Provincial Government an opening by way of a track has been made, and the gold is being traced in payable quantities towards the Upper Shotover on the west, and the Motatapu in a north-easterly direction. The population (all told) there is about 300, including 200 Chinese. On the south bank of the Kawarau there are from 90 to 100 European and about 25 to 30 Chinese people. The Cambrian Race Company, with their race of 20 heads (permanent supply), have just commenced sluicing at a point known on the map as Nevis Bluff. This race commands five miles auriferous ground, and I hope to be able to report far more favourably of this locality after the winter has passed. Whitechapel Flat and Crown Terrace are places that have afforded a living to about thirty persons for many years past, and a race recently cut by the Arrow River Water Race Company is now discharging a good flow of water on payable sluicing ground. The quartz reefs of Crown Terrace and Arrowtown, it is believed generally, will be worked when wages are lower, and men are willing to work hard and earn £2 to £3 a week as highest returns. Roger's Gully is comparatively untried—has to be abandoned in the winter; but the Macetown miners speak highly of the prospects in that direction.

Bracken's Gully is a snug isolated basin or pocket of gold for about twenty-five to thirty people, have hitherto had to pack with difficulty their provisions from Arrowtown. The Government who have hitherto had to pack with difficulty their provisions from Arrowtown. track up the Arrow River will obviate this, and render the people more comfortable who have settled I do not anticipate any farther discoveries in that direction, for it has been well tried and The farmers in the district are prospering considerably. The land and climate could not be

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surpassed for wheat growing, and appears to remain in heart for four and five seasons without rest. There are two fine water-power flour mills in the Arrow District, situated only one mile apart, and one mile from Arrowtown. Flour from these mills is sent every season to the different gold fields towns between Arrowtown and Naseby. The farmers are improving their lands and tenements very much, and purchasing their lease areas as soon as by law they are able. They complain of scarcity of labourers, high wages, want of grass for cattle, difficulty in procuring manure for renovating their lands, poor markets, high cartage, long credit, and the unsoundness of the district timber for fencinglands, poor markets, high cartage, long credit, and the unsoundness of the district timber for fencing—yet a majority of them have increased in wealth every year. Some who eight years ago commenced without capital are comparatively wealthy men; and I have not heard of a single instance of insolvency among this class, who, to their credit be it said, have done much by dint of perseverance and industry in making themselves and their children homes; and the Wakatip, Shotover, and Arrow Valleys, as a farming district, is one of the most inviting places for settlement in Otago. Without a doubt, the combined interests of farming and mining will always cause a splendid revenue to the Government—a good field for labour will gradually increase the value of the land, and provide homes for a much larger population when the fever for speedy fortune by gold lottery has abated. In nearly eleven years' experience on the Otago Gold Fields, I have not seen better signs of real prosperity (settlement, and advancement all around) nor more grumbling than I have in this district. and advancement all around), nor more grumbling, than I have in this district.

Arrowtown itself is substantially built. Some of its stone stores have cost in building £1,800, £1,000, and £800. It has its public library with room for one hundred and fifty persons, having a hall, stage, newspaper room, and for books a fourth apartment. There are two churches substantially and expensively built. Private houses (of stone) have been built at a cost of as much as £350 to £400, and almost every resident in the place has his freehold sections, many of which will be shortly used for private houses, when labour is more reasonable. I attribute the signs of prosperity a great deal to the lines of communication made by the Government recently between Arrowtown and the mountain diggings—Matapapu, &c.—together with the success of the farmers in readily disposing of their crops, which have attained a high standing in the market already, so favourable is the climate, the land,

and irrigation to their development.

The Under Secretary for Gold Fields, Wellington.

I have, &c., H. A. Stratford, Warden.

No. 20.

Mr. Warden Beetham to the Under Secretary for Gold Fields.

Warden's Office, Queenstown, 13th April, 1873.

I have the honor to forward herewith my report upon the gold field in my charge, during the

year ending 31st March, 1873.

SIR.-

A portion of the district has, during the past year, been placed under a separate Warden, and I am therefore unable to compare the yield of gold with that of the previous year. The yield for the district of Queenstown, which is under my charge, is, however, as nearly as possible the same as during the year ending 31st March, 1872. Without being able to report any fresh discoveries of importance, I have no hesitation in saying that the district was never in a more prosperous condition than it is at present. The development of the auriferous resources of the district has received a great impetus by the introduction of capital, and by the adoption of a better and more systematic system of working ground, which has been merely scratched over by the ordinary process. Large and important works have been undertaken in various portions of the district, in ground which, although known to be auriferous, has hitherto been wholly untried; and amongst these works I may mention, as perhaps the most important, the New Channel Company, and the endeavour to trace the Arthur's Point Lead.

In other portions of the district, claims which are known to be very valuable, but which have been only partially worked, have been amalgamated, and thrown into companies under the Mining Companies Limited Liability Act, with the view of their more complete and systematic working. Amongst the claims of this class I may indicate those known as Grace and Egar's Dispute. Their claims or mining leases have been amalgamated, and will, I understand, be placed under the control and management of a mining manager—a system which will no doubt result in the ground being thoroughly worked at the least possible outlay. There exists in this district an enormous area of ground, which can only be

profitably worked in a similar manner.

The quartz lodes at Skipper's Creek and the Upper Shotover are being steadily worked. I am

informed that the stone of the Nugget Reef has averaged about 10 dwts. throughout.

The quartz batteries have not, during the summer and autumn been in full work, as the water supply has in consequence of the extreme dryness of the weather, been very inadequate to the requirements of the machinery. I should say that not more than half of the stampers have been used latterly.

The amount of gold escorted during the year ending 31st March, 1873, from Queenstown was

20,746 oz. 9 dwts.

The population of the district, both mining and agricultural, is increasing steadily, and in all parts of the gold field substantial stone buildings are replacing the more temporary class of wooden buildings.

Attached will be found returns showing the price of provisions, value of mining plant, &c.

The Secretary for Gold Fields, Wellington.

I have, &c. R. BEETHAM, Warden.

No. 21.

Mr. Warden Wood to the Under Secretary for Gold Fields.

Warden's Office, Switzers, 21st April, 1873. SIR. I have the honor to enclose herewith statistical returns for the Switzers division of the Otago Gold Fields District.

There is little change to note in this portion of the district since my report in May last. The dryness of the season has retarded mining operations; but I think, on the whole, the workers have done as well as in the preceding year. There is a disposition to go in for agricultural pursuits; and as the Provincial Government have arranged to throw open 2,000 acres for agricultural leases on the Waikaia River near a large bush, and the land being very suitable for agricultural purposes, I expect it will be taken up quickly.

Since my last report, the district has been added to on the west side of the Mataura River from its sources to the Eyre Creek, being the watershed of the Eyre Mountains; but it will not give much facility to mining, as it is situate in the late Province of Southland, and the mouths of the gullies have been purchased under free selection, provided for in the Southland Land Act, and the proprietors naturally object to miners running tailings on their land.

I have, &c.,

JOHN NUGENT WOOD, Warden.

The Under Secretary for Gold Fields, Wellington.

No. 22.

Mr. Warden Wood to the Under Secretary for Gold Fields.

Warden's Office, Switzers, 21st April, 1873. I have the honor to enclose herewith statistical returns for the mining district placed under SIR,-

I have the honor to enclose herewith statistical returns for the mining district placed under my charge in December last, and situate in the late Province of Southland.

Ripuka, situate on "Tai Wea Wea" Bay and east of the mouth of the Waiau River, was opened in 1865 or 1866 as beach workings, which have now extended back into the bush, and are worked by ground sluicing. The place has proved a good field for miners' enterprise, though the miners have had great difficulties to contend against for want of fall for the tailings, and the difficulty of bringing in water for sluicing purposes through a dense bush. During the last two months three water races have been completed, representing about ten heads of water; and a sludge channel to carry off the tailings being nearly finished, I expect that next spring will make a marked difference in the quantity of gold obtained. The population is a settled one, there being over 50 women and 90 children, which is a large proportion to the male population. The land is fertile, and crops of all descriptions do well. The great drawback of the place is the difficulty of getting goods to it, there being no available road even for pack-horses, all goods having to be conveyed in open or half-decked being no available road even for pack-horses, all goods having to be conveyed in open or half-decked boats from Riverton, when an easterly wind and smooth water admit of the passage being made. I believe that the miners as a body are doing well; but all the available water is taken up, and therefore no great increase can be expected to the population, unless capital is brought into the field for the purpose of bringing water from the other side of the ranges. I expect, however, that the east side of the Longwood Ranges will prove remunerative next season, as a few parties are prospecting there, and the bush is being opened up by applicants for sites for saw-mills. A few years ago some very heavy gold was obtained—indeed, the largest nugget I have seen in New Zealand.

I have, &c.,

JOHN NUGENT WOOD, Warden.

The Under Secretary for Gold Fields, Wellington.

STATEMENT showing the REVENUE of the Gold Fields collected in the several Districts, and the Gold Duty of the Colony of New Zealand, for the period from 1st Januar to 31st December, 1872.

PROVINCE OF AUCKLAND.

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mou Fiel	44	80
Net Amount Total Received, Gold Fields including Pub- Revenue. licans' Licenses.	£ 5,899 4,651	10,55(
	900	9
Miscel- laneous.	£ s. 117 7 188 5	138 2 0 14 2 0 805 12 6 10,550 8 9 10,550 8 9
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Withdrawal of Leases.	er 22 22	14
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Timber and other Licenses.	200	80
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Depasturing Licenses and Assessments.	£ 8. 28 10	28 10 6
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Memorial Deposits of Companies.		14
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Fees and Fines, Wardens' Courts.	£ 8. 0 112 1 (22 12 (134 1
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Gold Mining Leases, Rents, and Royalties.	. g	3 3
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ter es, 8, &c.	9.7.0	9 4
Water Races, Sluices, &c.	3,866 0 0 148 17 6 1,364 1 6 909 10 0 34 0 0 38 0 0 2,988 14 9	4,775 10 0 34 0 0 186 17 6 4,347 16 3 116 14 0
	- - -	0
Business Licenses.	i :0	0
- Ba	3. E	34
	400 700	0
Miners' Rights.	9 10	2 10
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Gold Duty received in the Province during the Year, £11,205 6s. 2d.

PROVINCE OF NELSON.	
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Gold Duty received in the Province during the Year, £10,035 3s. 3d.

PROVINCE OF MARLBOROUGH.

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	Blenheim Havelock Waibau	

Gold Duty received in the Province during the Year, £257 3s. 8d.

Norg.-The items marked thus * represent fees on Publicans' Licenses, and are excluded from last column but one, and included in the Total column.

No. 1-continued.

STATEMENT showing the Revenue of the Gold Fields collected in the several Districts, and the Gold Dury of the Colony of New Zealand, for the period from 1st Januar to 31st December, 1872.

COUNTY OF WESTLAND.

Total Received, including Pub- licans' Licenses.	£ 8. d. 1,177 14 6 2,887 16 0 3,225 12 2,676 8 0 7,42 12 0 1,023 5 6	11,875 16 7
Net Amount Gold Fields Revenue.	£ 8. d. 142 8 0 757 14 6 1,956 12 7 1 1578 18 0 352 12 0 630 15 6	7,025 11 7
Miscel- laneous.	£ B. d. 0. 2 14 0 10 16 0 28 3 6 18 0 5 2 0 1 1 12 6	55 9 0
Withdrawal of Leases.	# 8. d 10 0 0 0	10 0 0
Timber and other Licenses.	£ 8. d. 420 0. 1,280 5 0* 1,270 0 0* 1,097 10 0* 390 0 0*	4,850 0 0
Depasturing Licenses and Assessments.	ය සේ : : : : : : : : : : : : : : : : : : :	:
Memorial Deposits of Companies.	-ਾਹ -:::::::::::::::::::::::::::::::::::	:
Survey Fees.	# 8. d. 72 10 6 80 10 0 392 6 6 139 1 6 5 0 0 55 6 0	744 14 6
Fees and Fines, Wardens' Courts.	25 8. d. 25 75 0 47 5 0 79 17 0 8 14 0 8 14 0 19 9 6 19 9 6 6	235 6 6
Registration.	£ 8. d. 23 4. 0 63 18 0 20 17 6 43 7 6 10 6 0	174 0 6
Gold Mining Leases, Rents, and Royalties.	£ 8. d. 511 5 0 0 3 16 0 73 17 0 200 13 1 42 10 0 52 5 5 0 0	3,203 0 0 1,832 0 0 316 15 0 454 6 1
Water Races, Sluices, &c.	£ 8. d. 27 "5 0 101 5 0 57 15 0 113 15 0 16 15 0	316 15 0
Business Licenses.	£ B. d. 20 0 0 226 0 0 433 0 0 608 0 0 1112 0 0	1,832 0 0
Miners' Rights.	£ 8. d. 71 0 0 0 377 0 0 0 558 0 0 0 987 0 0 0 244 0 0 0	3,203 0 0
	HORITIKA KANIERI RORENMOUTH ROSE STAFFORD OKABITO POUNAMU	

Gold Duty received in the County during the Year, £12,595 12s. 11d.

PROVINCE OF OTAGO.

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		_	_	_	_	_	7	_		_	

Gold Duty received in the Province during the Year, £19,709 8s. 7d.

NOTE.-The items marked thus * represent fees on Publican's Licenses, and are excluded from last column but one, and included in the Total column.

C. T. BATKIN, Receiver-General.

STATEMENT showing the Revenue of the Gold Fields collected in the several Districts, and the Gold Dury of the Colony of New Zealand, for the period from 187 showing the Revenue of the Revenue of the Revenue of New Zealand, for the period from

PROVINCE OF AUCKLAND.

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1 Recording	£ 1,486 444 1	1,931 3 0
Net Amount Total Received, Gold Fields including Pub- Revenue. licans' Licenses.	H.	Į
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P. G. M.	d) 44	1,9
Miscel- laneous.	00 G	0
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Withdrawal of Leases.	£ s. d. £ s. d. £ s. d. 48 0 0 1,461 5 2 44 10 0 444 17 10	:
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Timber and other Licenses.	## 8. d. # 4 0	39 4 0
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Fees and Fines Wardens' Courts.	£ s. d. 7 16 0 3 0 0	10 16 0
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Registration	ж 25 2 3 17	28 1
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Gold Mining Leases, Rents, and Royalties.	£ 8. d. 257 12 2 251 6 4	18
	£ 257 251	£ 08
Water Races, Sluices, &c.	-i00	0
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<u>∞</u>	8. d. £ 8. d. £ 8. 0 0 0 16 0	•
Business Licenses.	zi :0	0
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Miners' Rights.	£ 8 1,092 (118 (305
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	SHORTLAND COROMANDEL	
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Gold Duty received in the Province during the Quarter, £4,664 0s. 5d.

PROVINCE OF NELSON.

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Nelson	А	Westport	BRIGHTON AND	CHARLESTON	COBDEN	Анатва	REEFTON	WANGAPBKA		

Gold Duty received in the Province during the Quarter, £3,512 0s. 4d.

PROVINCE OF MARLBOROUGH.

19 0 0

Gold Duty received in the Province during the Quarter, £77 16s. 1d.

NOTE.—The items marked thus * represent fees on Publican's Licenses, and are excluded from last column but one, and included in the Total column.

STATEMENT showing the Revenue of the Gold Fields collected in the several Districts, and the Gold Duty of the Colony of New Zealand, for the period from 18 January to 31st December, 1872. No. 2-continued.

COUNTY OF WESTLAND.

Total Received, including Pub- licans' Licenses.	0000000	8
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Net Amount Gold Fields Revenue.	8. 111 111 133 133	4
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Miscel- laneous.	6 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	27 14
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Withdrawal of Leases.	. d.	0 0
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Timber and other Licenses.	£ 92 70 70 70 70	0,001
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Depasturing Licenses and Assessments.	l .	
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Survey Fees.	£ 8. 448 6 117 2 6 10 3 0	74 18
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Fees and Fines, Wardens' Courts.	8. 2 2 2 7 18 7 19 9 3 9 9 9 9	58 12
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Gold Mining Leases, Rents, and Royalties.	£ 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	122 12
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Water Races, Sluices, &c.	£ 8. 113 0 119 15 0 115 0 31 5	83 0
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Miners' Bights.		
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	HOKI KANI GREY ROSS STAFI OKAFI	

Gold Duty received in the County during the Quarter, £3,618 13s. 8d.

PROVINCE OF OTAGO.

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Gold Duty received in the Province during the Quarter, £8,753 4s. 1d.

C. T. BATKIN, Receiver-General. Norn.—The items marked thus * represent fees on Publicans' Licenses, and are excluded from last column but one, and included in the Total column.

C. T. BATKIN, Receiver-General.

No. 33

COMPARATIVE RETURN of REVENUE derived from the Gold Fields in the several Provinces of New Zealand during the Years 1871 and 1872, showing INCREASE or DECREASE under each head of Revenue.

	Decresse.	લક	528	42	:	:	12	82	214	:	:	:	:	:	:	:
ġ	Increase.	લક	:	;	43	809	:	:	:	:	1,076	:	:	37	341	Net 1,486
OTAGO.	1872.	બ્ર	6,377	1,787	216	8,099	488	393	51	:	3,113	:	47	46	19,709	40,344
	1871.	43	6,905	1,829	173	7,290	200	421	265	:	2,037	:	14	99	19,368	38, 858
	Десгевве.	ભ	:	200	:	:	113	40	:	:	:	:	:	:	3,965	Net 4,083
AND.	Іпстевзе.	сh	180	:	157	88	:	:	353	:	;	:	10	2	:	:
Westland.	1872.	сh	3,203	1,832	317	454	174	235	745	:	:	:	10	55	12,591	19,616
3	1871.	બર	3,023	2,532	160	426	287	275	392	:	:	:	:	48	16,556	23,699
	Decrease.	4 3	94	7	:	:	80	:	:	:	:	:	:	:	:	:
MARLBOROUGH.	Тпстевве.	ಳ	:	:	:	35	÷	34	÷	:	:	:	88	-	24	Net 37
MARLBO	1872.	ભર	111	12	:	35	15	38	:	:	:	20	28	4	257	520
	1871.	બર	181	13	:	:	23	4	:	:	:	20	:	အ	233	483
	Decrease.	ಈ	:	:	43	:	:	11	:	22	:	:	59	:	3,713	Net 1,453
ow.	Іпстевае.	ಚಿ	849	1,311	:	84	285	:	:	:	:	:	:	20	:	
NEIS	Nelson.		4,918	5,206	212	2,080	1,031	292	:	:	:	:	93	176	10,035	24,043
			4,240	3,895	255	1,996	746	303	:	æ	:	:	152	156	13,748	25,496
	Decrease.	ಳಿ	389	54	10	:	243	192	438	178	:	:	:	:	25,056	Net 24,017
	Increase.	ભ	:	:	÷	2,328	:	:	:	:	23	47	14	131	÷	:
Апсктанр.	1872.	બ	4,775	34	187	4,348	111	135	<u>4</u>	324	53	138	14	306	11,205	21,657
	1871.		5,164	88	197	2,020	360	327	483	203	9	16	:	175	36, 261	45,674
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HEADS OF REVENUE.			:	:	:	d Royaltie	:	rts	:	sei	ssments	:	:	÷	:	i
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	Неаль ог		Miners' Rights	Business Licenses	Water Races, Sluices, &c.	Gold Mining Leases, Rents, and Royalties	Registration	Fees and Fines, Wardens' Courts	Survey Fees	Memorial Deposits of Companies	Depasturing Licenses and Assessments	Timber and other Licenses	Withdrawals of Leases	Miscellaneous	Gold Duty	Totals
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No. 4.

COMPARATIVE RETURN of the Total Amounts of Gold Fields Revenue (exclusive of Gold Duty) collected in the several Districts during the Years 1871 and 1872, showing the Increase or Decrease in respect of each District.

Pro	VINCE.		District.	1871.	1872.	Increase.	Decrease.
				£	£	£	£
AUCKLAND			Shortland	8,137	5,899	•••	2,238
	•••		Coromandel	1,276	4,651	3,375	1
Verson			Nelson		27	27	
ILLINOIN	•••	•••	Collingwood	558	374		184
			Westport and Reefton	3,254	7,110	3,856	١
			Brighton and Charleston	3,182	2,648	i	534
			Cobden	803	790		13
			A 7	3,245	2,841	1	404
			777 1	370	104		266
			l agusticiate	336	113		223
			DI. 1		36	36	1
Mabl borou	GН	***		39	74	35	•••
			Wairau	211	134		77
			Havelock		142	•••	30
Westland	•••	•••	Hokitika	172	758	•••	86
			Kanieri	844			
			Greymouth	1,971	1,608		363
			Ross	1,682	1,956	274	•••
			Stafford	1,449	1,579	130	•••
			Okarito	391	353		38
			Pounamu	634	631		3
Otago			Dunedin	82	163	81	
71100	•••	•••	Naseby	1,875	2,209	334	
			Black's and St. Bathan's	1,055	909		146
			Manuherikia	379	413	34	
			Clyde	734	470		264
			Mount Benger	979	1,212	233	
			Cromwell	1,437	1,480	43	
			Queenstown	3,893	4,408	515	
			١,٢	2,355	2,693	338	
] -	5,444	5,241	i .	203
			1 0 1	994	1,152	158	-
				158	285	127	•••
			Orepuki		200		
			Totals	47,939	52,463	9,596	ļ
			Deduct Decreases			5,072	
			Net Increases			4,524	

C. T. BATKIN, Receiver-General.

No. 5. RETURN of the QUANTITY of GOLD EXPORTED from New ZEALAND during the YEAR ended 31st DECEMBER, 1872.

		Produce of			Duri	NG THE	YEAR E	nded 31s	г Десемн	BER, 1872.					
PORT OF		THE GOLD FIELD	s	То	То	_		To	То	Ton	TALS.				
EXPORT.		IN THE PROVINCE OF	F	Great Britain.	New South Wales.	To Victoria.	To China.	United States of America.	Other Places.	Quantity.	Value.				
Auckland		Auckland		Oz. 18,398	Oz. 61,024	Oz. 23,496	Oz	Oz. 1,972	Oz.	Oz. 104,890	£ 369,341				
Picton [Nelson	•••	Marlborough	•••		1,682 326	 49				1,682 375	6,728 1,500				
										2,057	8,228				
Nelson Westport	•••	Nelson 		4,629	5,875	2,300 28,913			8	8,175 33,550 39,939	32,700 134,200 159,756				
Greymouth	•••			4,650	4,974	30,315			•••	81,664	326,656				
Greymouth Hokitika Okarito Lyttelton		Westland 	•••	3,348 3,140 155	•••	24,930 64,592 2,880 40				28,278 67,732 2,880 195	113,112 270,928 11,520 780				
					,				į	99,085	396,340				
Dunedin Invercargill	 	Otago		94,316 	•••	48,180 4,409	5,759 	5,002 		153,265 4,409	613,060 17,636				
			ļ			•				157,674	630,696				
		TOTAL		128,636	73,881	230,104	5,759	6,97 4	16	445,370	1,731,261				

J. HACKWORTH, (for the Secretary and Inspector of Customs).

No. 6.

COMPARATIVE RETURN of the Quantity and Value of Gold Exported from the several Provinces of New Zealand for the Quarters ended 31st March, 1873, and 31st March, 1872.

	_			QUARTER ENDED 3	1st March, 1873.	QUARTER ENDED 31ST MARCH, 1872.			
	Рво	VINCES.		Quantity.	Value.	Quantity.	Value.		
Auckland Marlborough Nelson			•••	 Oz. 53,678 778 32,204	£ 169,087 3,112 128,816	Oz. 32,587 955 27,908	£ 118,382 3,820 111,632		
Westland Otago	•••		•••	 32,409 75,353	$\frac{129,636}{301,412}$	34,484 59,063	137,932 236,252		
Totals				 194,422	732,063	154,997	608,022		

J. HACKWORTH, (for the Secretary and Inspector of Customs).

No. 7.

RETURN of the Quantity and Value of Gold Exported from New Zealand, from 1st April, 1857, to 31st March, 1873.

		DURI	NG HE	QUART	rer en	DED 31	ST MARCE	н, 1873.		RTED S TO THE CEMBER,	FROM NEW	XPORTED ZEALAND THE
_	PRODUCE	d	Vales.				Ìот	ALS.	18		31st M 18	А ж сн, 73.
Ровт ог Ехровт.	OF THE GOLD FIRLDS IN THE PROVINCE OF	To Great Britain.	To New South Wales.	To Victoria.	To China.	To other Places.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Auckland	Auckland	Oz. 8,216	Oz. 13,523	Oz. 31,939	Oz. 	Oz.	Oz. 53,678	£ 169,087	Oz. 734,239	£ 2,563,287	Oz. 787,917	£ 2,732,374
Wellington Picton Nelson	Wellington Marlborough Ditto		 367	 411 			 411 367	1,644 1,468	30 40,606		· ·	120 160,338
Nelson Westport Greymouth	Nelson Ditto Ditto		2,983 3,087	13,765			5,937 13,765 12,502 32,204	3,112 23,748 55,060 50,008 128,816	31,208,168	4 ,784,996	1,240,372	4,913,812
Greymouth Hokitika Okarito	Westland Ditto Ditto	 6,945 	3,166 	5,964 15,502 823		 9 	9,130 22,456 823	36, 5 20 89,824 3,292	1,708,450	6,740,175	1,74 0,859	6,869,811
Dunedin Invercargill	Otago Ditto	55,781 		15,042 1,677			73,676 1,677 75,353	129,636 294,704 6,708 301,412	3,026,755	1,183,845	3,102,108	12,139,868
Totals		70,942	23,126	97,492	2,84 6	16	194,422	732,063	6,718,248	26,084,260	6,912,670	26,816,323

J. Hackworth, (for the Secretary and Inspector of Customs).

No. 8.

TABLE showing the QUANTITY of SILVER EXPORTED during the YEARS 1870, 1871, 1872, and the MARCH QUARTER, 1873.

Produce		DURING THE YEAR 1870.			DURING THE YEAR 1871.			DUBING THE YEAR 1872.				G THE I	ABCH	TOTAL EXPORT TO 31ST MARCH, 1873.	
PRODUCE OF THE GOLD FIELDS IN THE	PORT OF EXPORT.	To Great Britain.	Quantity.	Value.	To Great Britain.	Quantity.	Value.	To Great Britain.	Quantity.	Value.	To Great Britain.	Quantity.	Value.	Quantity.	Value.
PROVINCE OF AUCKLAND.	Auckland	Oz. 37,123	Oz. 37,123	£ 11,380	Oz. 80,272	Oz. 80,273	£ 23,145	Oz. 37,064	Oz. 37,064	£ 9,900	Oz. 14,057	Oz. 14,057	£ 4,000	Oz. 168,516	£ 48,425

No. 9. TABLE showing the Average Rate of Wages per Week for the Year ending 31st March, 1873.

Квилекз.			
Domestic Servants.	£ \$, d. 0 122 0 0 125 0 0 115 0 0 1 1 155 0 0 1	1 10 0 1 0 0 1 0 0 1 10 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Agricultural Labourers.	3 d. 115 0 0	3 0 0 1 10 0 2 0 0 	8818881181 000080000 000000000
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Boys.	# # # # # # # # # # # # # # # # # # #	11000	1100 0100 0100 11220 11220 11000 11000
Labourers.	838 8188 000 000 000 000	2 2 3 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	00000000000000000000000000000000000000
Miners.	# w w w w w w w w w w w w w w w w w w w	4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Carpenter.	8 1 2 2 2 3 3 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4 16 0 4 4 0 0 4 0 0 4 10 0	23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Blacksmith.	66 2 2 2 4 7 7 7 7 7 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1	72 44 44 44 00 00 00 00 00 00 00 00 00 00	22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Stoker.	# # # # # # # # # # # # # # # # # # #	3 : : : 0 :	2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Engine Driver.	# 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 10 0	3 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Engineer.	න්සය ලා දෙකල : ::::00 යුලල	::::4	848 8 000 : : : : 0 : :
Міпілg Мапавет.	£ s. d. £3 10 to £6 £4 to £6 5 0 0	73 47 75 0 :0 0 :0 0 :0 0 :0 0 :0 0 :0 0 :0	0 4 8 4 4 7 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Legal Manager.	2 8. d. 1 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	: :00 : 88	1 0 0 2 0 0 0 6 per cent
General Manager.	£ s. d. 500 00 0 per annum. 	4.0 :::00:	# 4 # 6
Mining District.	nstown organ wood wrt		Go— Dunedin Lawrence Mount Ida Black's Black's Purstan Teriot Queenstown Switzers Orepuke
Min	AUCKLAND— Grahamstow Coromandel MARLBOROUGH Collingwood Wetport Reeffon A hunra	Westland—Greymouth Waimea Kanieri Totara Okarito	OTAGO— Dunedin Lawrence Mount Ida Black's Dunstan Teviot Arrow Queenstown Switzers Orepuke

No. 10.

PRICE of Gold per Ounce in the several Mining Districts during the Year ending 31st March, 1872.

	Mı	ning Di	STRICT.		From	To .		
Auckland—		· · · · · · · · · · · · · · · · · · ·					£ s. d.	£ s. d.
Grahamstown		•••	•••		•••		2 14 6	***
Coromandel		•••		•••	•••		2 11 0	3 1 0
Marlborougu—			•••	•••		1	3 13 6	***
Nelson—						1		
Collingwood	•••		•••	•••			3 13 0	***
Westport	•••	•••	•••	•••	•••		3 15 6	3 19 0
Inangahua	•••	•••	•••	•••			3 17 0	•••
Ahaura	•••	•••	•••	•••			3 17 6	***
Westland-	•••	***		•••			1	
Greymouth		•••					3 15 6	3 17 6
Waimea	•••		•••	•••	•••		3 17 0	•••
Kanieri	•••	•••	•••	•••	•••		3 17 0	•••
Totara	***			•••			3 17 6	•••
Okarito	•••	•••		***	***		3 14 6	•••
Otago-	•••	***					1	
Dunedin		•••					3 15 0	***
Tuapeka	•••	•••	•••	•••	•••		3 15 6	•••
Mount Ida		•••	***	•••	•••		3 15 0	3 16 0
Black's	•••	•••	•••	•••	•••		3 15 0	3 16 0
Dunstan	•••		•••	•••			3 16 0	
Teviot	•••	•••	•••	•••	•••		3 16 0	•••
Queenstown	•••	•••		•••	•••		3 16 0	•••
Arrow	•••	•••	•••	•••	•••		3 16 0	•••
Orepuka			•••	***	•••		3 16 6	•••
Switzers	•••	•••	•••				3 13 0	3 15 6

RETURN showing the Average Prices of Provisions, &c., for the Year ending 31st March, 1873. No. 11.

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WINE.	Per gallon.		0	ဝဆ္မမ္	17 15 15 16	51 51 51 51 51 51 51 51 51 51 51 51 51 5
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TOBACCO.	Per 1b.	ਚਂ :೦೦	0	0000	00000	000000000
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SUGAB.	Per lb.	વે. ક	ø	ည့်ကေလသ	စ် စန္	000000000000000000000000000000000000000
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SALT.	Per 1b.	' 5 :			:	
RICE.	Per lb.	요 :44	9	7000	&& : &	0 70 4 4 4 4 C 70 4 O
Mirk.	Per quart.	.ფ.:ია	12	6 18 14	8 9 8 2 9	စ4ထင်္ကေ <u>မ</u> ြောင်္ကေ
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Рови.	Per 1b.	.a. :gg 5	:	8 0 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	51 8 8 : 8	8 12 12 12 12 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15
						
MUTTON.	Per lb.	ာ့ : ₄₂ စ	48	ယ္ထေထတ	₽ 00 00 00	ಬತ್ತು ಇತ್ತಾಣ ಕಟ್ಟಾ ಇತ್ತಾಣ
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Снвезв.	Per lb.			0,000		· · · · · · · · · · · · · · · · · · ·
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		AUCKLAND—Grahamstown Coromandel	Marlborouge-	Netson— Collingwood Westport Inangahua Ahaura	WESTLAND—Greymouth Waimea Totara Okarito Kanieri	Orago— Dunedin Tuapeka Mount Ida Black's Dunstan Teviot Queenstown Arrow Switzers Orepuka
) Šago	AB.	E PACE	MOHADM.	SUFFICEOS
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No. 12.

NUMBER of Miners Employed during the Year ending 31st March, 1873.

Mining Dis	EDIO:	ALLUVIAI	Miners.	QUARTZ	MINERS.	Тот	Grand	
MINING DIS	TEICT.	European. Chinese		European.	Chinese.	Europeans.	Chinese.	TOTALS.
AUCKLAND MARLBOROUGH NELSON WESTLAND OTAGO		105 4,326 3,841 5,662	 372 3,878	3,100 553 498	•••	3,100 105 4,867 3,841 6,160	 12 372 3,878	3,100 105 4,879 4,213 10,038
Totals		13,934	4,250	4,151	•••	18,073	4,262	22,335

No. 13.

MEAN NUMBER of Miners employed in the several Mining Districts for the Year ending 31st March, 1873.

Wardens' Distri	ICTS ARRANGI	ED	ALLUVIAL	MINERS.	QUARTZ	Miners.	Тотя	ALS.	Grand
ACCORDING TO	Provinces.		Europeans.	Chinese.	Europeans.	Chinese.	Europeans.	Chinese.	TOTAL.
AUCKLAND— Grahamstown Coromandel	•••				2,200 900	···	2,200 900		2,200 900
Totals					3,100		3,100		3,100
Marlborough			105				105		105
Totals	•••		105			•••	105		105
Westland— Greymouth Wangapeka Collingwood Brighton Charleston Inangahua Buller Ahaura Totals Westland— Greymouth Waimea Kanieri Totara Okarito			200 181 110 500 535 600 2,200 4,326 1,073 1,188 600 750 230 3,841	6 266 20 80	 46 497 10 553		200 227 110 500 1,032 610 2,200 4,879 1,073 1,188 600 750 230	 266 20 80	200 227 110 500 1,032 610 2,200 4,879 1,079 1,454 620 830 230
OTAGO— Dunedin Tuapeka Mount Ida Black's Teviot Dunstan Queenstown Arrow Orepuki Switzers			60 1,025 1,030 357 552 950 701 500 130 357	6 600 300 273 217 600 700 650 2 530	3 115 100 220 60 		63 1,140 1,130 357 552 1,170 761 500 130 357	6 600 300 273 217 600 700 650 2 530	69 1,740 1,430 630 769 1,770 1,461 1,150 132 887
Totals	•••		5,662	3,878	498	•••	6,160	3,878	10,038

No. 14.

SUMMARY.

NUMBER of MACHINES employed in ALLUVIAL and QUARTZ MINING for the YEAR ending MARCH, 1873.

	APPROXIMATE VALUE OF ALL MINING	FLANT INGLUDED IN THIS RETURN.	£ 211,325	1,100	87,500	105,189	106,770	511,884
MING		Buddles.	<u> </u> :	:	:	' :	C4	64
Z M		Derricks.	:	:	:	:	:	:
}¤≜r	Pulleys.	To aqidW	:	:	:	:	က	က
ž		.amidW	:	:	-	:	4	<i>1</i> 0
OYED	beels.	Water W	99	:	12	:	13	81
Machinery baployed in Quartz Mining.	.aba	Stamp He	881	:	135	:	209	1,225
INBR	Rechines.	BaideurO	11	:	14	:	23	848
Масв	Steam Engines employed Winding, Grushing, &c.	Aggregate Horse- power.	1,654	:	40	:	122	1,816
	Steam Eng employed Wi Crushing,	Йo.	73	:	61	:	11	86
	.eaninos.	M gairtoff	:	:	:	က	:	က
	ads, Crush- ement.	eH qmat2 O zai	:	:	250	15	χ.	270
		Derricks.	:	:	:	11	-	12
÷	-moO bna r Cradles.	Quicksilve pound	:	:	:	:	124	124
Minin		Dredges.	:	:	:	:	6	6
IN ALLUVIAL MINING		Pumps.	:	14	:	84	279	380
IN AI	.eaoH	Hydraulic	:	H	286	212	292	1,366
PLOYED	neela.	Water W	:	10	51	84	11	175
MACHINERY EMPLOYED	ms, and	Sluices, To Sluice Bo	:	320	5,395	8,642	5,467	19,824
CHIN	Pulleys.	To aqidW	<u> </u>	:	:	22	9	28
M		.emidW	<u> </u>	:	61	35		42
		BailbbuT	:	:		_ :		«o
	Steam Engines employed Winding, Pumping, &c.	Aggregate Horse- power.	i	:	30	247	12	289
	Steam employe Pumj	No.	:	፧	က	7	61	12
	<u></u>		:	:	:	÷	:	
	Mining District.		AUCKLAND	Макльовоген	ELSON	Westland	TAGO	
	Mı		AUCKI	MARLE	NELSON	WESTL	OTAGO	

No. 16. NUMBER of Machines employed in Alitovial and Quartz Mining for the Year ending 31st March, 1873.

	rged per Crushing Cements.	ndo esirT rof noT to zirenQ	Shillings. 12 to 14 8 to 12	:	:		:	22 ::	:			: : 2: : : : : : : : : : : : : : : : :	
Machinery employed in Quartz Mining.	APPROXIMATE VALUE OF ALL MINING	L LANT INCLUDED IN THIS RETURN.	£ 188,325 23,000	211,325	1,100	2,000	35,000	40,500	87,500	1,630 7,259 90,000 4,300	103,189	1,400 7,000 9,500 1,150 5,520 25,000 3,000 3,000 3,000 4,500 50,000	
ARTZ		Buddles.	::	:	:	::	:	::	:	: : : : :	<u>:</u>	:u : : : : : : u	
м Qu	r Pulleys.	to eqitlW	::	:	:	::	:	::	:	::::	:	H : : : : : : : : : : : : : : : : : : :	
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ery ey	ends.	II qma12	770 111	881	:	16 25	. :	94	135	:::::	:	10 30 35 35 69 76	
CHIN	Machines.	gaideurD	::1	11	:	ကက	:	∞ :	14	:::::	:	1 3 3 10 10 28	
MA	Steam Engines employed Windin Crushing, &c. Aggrega Horse No.		1,562 92	1,654	:	::	:	40	40	1111	:	16 54 52	
	Boring Machines. Crushin No.		68	7.3	:	::	:	61 ;	2	11111	:	L L 4 : : : : : : : 70	
	ing Cement. Boring Machines.		::	:	<u>:</u>	::	:	::	:	:::=	1		
	Stamp Heads, Crush- ing Cement.		11] :	:	::	250	::	250	.: : 12	15	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
		Derricks.	: :	:	:	::	:	::	:	:::::::::::::::::::::::::::::::::::::::	11	::::::::::::::::::::::::	
÷	er and Com- Cradles.	Quicksily pound	::	:	:	::	፥	::	:		:	6 100 1 1 1 154	
LININ		Dredges.	::	:	:	::	:	::	:		:	: : : : : : : : : : : : : : : : : : :	
ALLOVIAL MINING.		Pumps.	: :	:	14	::	÷	::	:	24 11 42	84	150 150 255 250 200 16 150 150	
_	c Hose.	IIranbtH	: :	:	1	. 9	100	180	286	50 376 23	451	7 115 110 85 85 1 60 40 40 23 23 20 20 56 56 57	
ED 13	Vlieels.	Water W	::	:	ည	::	40	::1	51	7 3 15 19	44	255 118 17 71	
Machinery employed in	oms, and Boxes.	Sluices, T	: :	:	320	: :	150	5,245	5,395	1,130 6,380 1,036 76	8,622	34 235 170 2,146 111 400 1,574 700 6,467	
ERY I	Pulleys.	o eqidW	::	:	:	::	:	::	:	: :::81 :	23	i ∞ : : : : ∞ : : : • •	
CHIN		.amidW	::	÷	:	::	23	::	67	32 1	34	[H [H] [H] [G] 10	
MA	Machines.	!	<u>:</u> :	:		::	:	:-	7	:::::	:	:::=::::::::	
	1 1 1 1 1 1 1 1		; ;	:	:	::	:	30	30	6 211	217	12	
;	Steam Engines employed Winding, Fumping, &c. Aggregate No. Horse-			:		i i	:	: 60	က	: ۵: ت	9	: : : : : : : : : : : : : : : : : : : :	
	en l		::	•	·!	: : /	~~	\					
19	Mining Districts.		AUCKLAND— Grahamstown Coromandel		Мавлвовотен-	NELSON— Wangapeka Collingwood	Brighton Westport	Charleston Inangahua Ahaura		Westland- Greymouth Walmea Kanieri Totara Okarito		Orlao— Dunedin Tuapeka Mount Ida Black's Teriot Queenstown Arrow Switzer's Oreputi Dunstan	

12—H. 7.

No. 16.

TABLE showing approximately the Number, Description, and Value of the Water Races, Tail Races, Dams, Reservoirs, Ground Sluices, &c., for the Year ending 31st March, 1873.

	PRICE CHARGED FOR WATER PER SLUIGE-HEAD, PROCO		43 ; ;	04	1,440 20s. for 40 inches \$\int \mathbb{E}_2\$ to \mathbb{E}_8\$ for 40 inches. 1,160	950 £3 to £4 for 40 inches. 3,174 £2 for 40 inches. 2,500 £3 per week. 1,500 £6 5s. for 36 inches. 300 £8 to £12 for 40 inches.	122 £2 16s. to £3 for 40 inches. £1 15s. for 16 inches. £4 for 40 inches. 350 £2 10s. for from 80 to100 inches 3,000 15s. to 40s. for 20 to 80 inches. £2 5s. for 40 inches. £2 5s. for 40 inches. £2 14s. for 50 inches.
	GROUND SLUIC	.тыбыт. Интрег.		н	18	<u></u>	E 835 4
	RESERVOIRS.	Approximate Cost.	£ 4,600	:	200	 8,112 200	20 20 3,100 1,500
	RESE	Number.	1	:	:: 80 83 83 83 83 83 83	272 1	31 31 31
1010.	Дам в.	olamixorqqA.	£ 100	50	15	7,040 6,778 7,364 2,125 3,400 3,000	240 2,100 11,350 6,000 3,740 1,710 5,600
MARCH,	A ——	Mumber.	61	63	64 1 10 7 7		11 181 117 117 52 82 22 56 22 56
TEAR CHUING OISU MARCH, 1919	TAIL RACES.	odamizorqqA.	£ 102 	1,700	200	3,363 7,358 16,726 5,280 7,300 2,000	60 20,550 15,500 3,940 16,000 184,000 15,000 15,000
EAK CIII	TAIL	Number.		21	.: 18 14 22 23 34	179 132 466 176 236 37	47,3 21,4 21,4 130,4 104,5 50,2 200,2 80,4 80,4 80,4 80,4 80,4 80,4 80,4 80,4
TOT THE T		Approximate	£ 24,460 3,000	1,500	2400	23,236 2,068 41,934 18,424 33,600 18,000	2,815 45,000 79,000 19,850 60,000 200,000 80,000 19,000 7,000
	WATER RACES.	-Soluice- Seads.	239 25	45	35 58 21 10 10 136	989 387 522 96 250 82	285 285 285 285 285 285 285 40
	WATE	Length in miles.	31 6	16	10 22 43 15 29	265 262 169 41 210 55	40 1,842 815 245 285 283 260 680 300 138 85
		Number.	101 9	22	10 822 60 67 37 53	545 299 414 196 346 87	305 305 208 808 808 70 70 250 87 60
	Mining Districts.		::	::	!!!!!!	: :::::	
			::	: :			
`			::	: :			
			AUCKLAND—Grahamstown	MARLENGTON MARLEOROUGH	Wangapeka Collingwood Brighton Westport Charleston Inangahua	ra DD— nouth iea ri	Orlandin Dunadin Tuapeka Mount Ida Black's Teviot Dunstan Queenstown Arrow Switzer's Orepuki

No. 17.

RETURN of the Number of Mining Leases in force on the 31st March, 1873, the Extent of Ground Leased.

	MINING DISTRICT.										Gross Acres		
Auckland-										Δ.	. в	. P.	
Grahamstown		•••					•••		72	432		16	
Coromandel	٠	•••	•••	•••	•••	•••	•••		17	189	2	39	
Marlborough			•••			•••	•••		5	67	2	30	
Nelson-										İ			
Wangapeka	•••			•••			•••		8	72	2	6	
Collingwood			•••				•••	1	21	157	1		
Westport	•••		•••	•••	•••		•••	i	20	132		10	
Charleston		•••							73	330	0	33	
Brighton		•••							11	51	0	11	
Inangahua	•••	•••	•••	•••	•••				24	204	0	38	
Ahaura	•••	•••	•••		•••	•••			5	27	0	0	
Westland-													
Greymouth									11	174	1	19	
Waimea	•••	•••	•••		•••	•••			3	31	ō		
Totara	•••	•••			•••	•••	•••		10	71		21	
Okarito	•••	•••		•••	A	•••	•••		1	5	0		
Otago													
Tuapeka							•		36	198	1	. 11	
Mount Ida				•••		•••	•••		14	110	3		
Black's	•••	•••	•••	•••	•••	•••	•••		19	122	0		
Dunstan		•••	•••	•••	•••		•••		6	83	3		
Queenstown		•••	•••	•••	•••	•••	•••	•••	60	273	ŏ		
Arrow				•••	•••	•••			3	22	ŏ		
Switzers	•••	•••				•••	•••		1	10	Ŏ		

No. 18.

RETURN of the Number of Agricultural Leases in force on the 31st March, 1873, the Extent of Ground Leased, and Rental per Annum.

Mining District.								GROSS AC	RENTAL PER ANNUM.			
Nelson—								Α.	R. P.	£	8.	d.
Wangapeka			•••				1	20	0 0		10	0
Collingwood	•••	•••	•••	•••	•••	• • • •				Ī .		•
Westport			•••	•••			18	591	2 32	74	¨0	0
Charleston			•••				18	502	1 27	63	12	6
Brighton		•					14	112	3 24	14	12	6
Inangahua and E	Buller		•••				Nil.					
Ahaura and Cob	len	•••		•••	•••		69	2,900	2 31	364	8	9
Westland-						-						
Greymouth		•••			•••		11	174	1 19	35	4	0
Waimea				•••	***		12		13 7	11	7	ŏ
Kanieri	•••	•••	•••	•••		•••	6	29	0 0		16	ŏ
Okarito	•••	•••	•••	•••	•••		. 3	65	0 0	7	0	0
Otago-						1						
Tuapeka			•••				438	18,258	0 36	2,297	0	0
Mount Ida	•••						. 9				10	0
Black's				•••			40	1,866	0 0	233	5	0
Teviot	•••	•••		•••			81	6,003	0 0	750	7	6
Dunstan	•••		•••	•••			63	4,334	0 28	541	15	0
Queenstown	•••	•••		•••			276	13,728	2 16	1,716	2	6
Arrow	•••	•••	•••	•••	•••		153	6,384	0 0	798		6
Dunedin	•••	•••			•••		17	2,260	0 0	282		0
Switzers	***	•••	•••	•••	•••		18	1,067	0 0	133	7	6
Orepuki		•••	•••				2	60	0 0	7	10	0

(For Tables 19 and 20, see following page.)

No. 21.

RETURN of the Number of Licenses under "Gold Mining Districts Act, 1871."

Mining District.	Number.	GROSS ACREAGE.	RENTAL PER ANNUM.
Auckland— Grahamstown	75	A. R. P. 499 0 39	£1,4 65

No. 19.

TABLE showing Number of Gold Mining Companies Registered under "Mining Companies Limited Liability Act, 1865," and Amending Acts, the Joint Stock Companies Act, and "The Mining Companies Act, 1872," upon 31st March, 1873.

Mining District.			Under "Mining Companies Limited Liability Act, 1865," and Amending Acts.				Under Joint Stock Act.			Under "Mining Companies Act, 1872."			
			No.	Nominal Capital.	Paid-up Capital.	No.	Nominal Capital.	Paid-up Capital.	No.	Nominal Capital.	Paid-up Capital.		
AUCKLAND-	<u></u>			£	£		£	£		£	£		
~ .			160	2,891,950	2,258,756	32	557,625	300,153	11	2,000	•••		
Coromandel		•••	75	616,200	300,696						•••		
			}	[,								
MARLBOROUGH	•••	•••	5	43,600	3,469			•••			• 1 •		
Nelson		•••	3	13,700	all.			•••			•••		
Collingwood	•••	•••	3	24,000	10,044			•••		• • • •	•••		
Inangahua	•••		29	570,780	286,284			•••			•••		
Ahaura	•••		1	3,000	180			•••		•••	•••		
Charleston	•••	•••	3	7,400	6,610		•••	•••	1	8,160	7,140		
Westland-						1 1							
Greymouth	•••	•••	2	16,000	10,300] إ					•••		
Kanieri	•••	•••	4	10,536	8,693			•••		•,•	•••		
Totara	•••	•••	4	45,000	42,250		•••	•••		•••	•••		
Otago-													
Dunedin	•••		1	6,000	3,120			•••			•••		
Tuapeka	•••		12	46,975	24,602			•••			•••		
Mount Ida	•••	•••	13	80,220	40,755			***	1	5,000	200		
Blacks	•••		9	45,500	36,137			•••			•••		
Dunstan	•••	•••	15	89,165	42,161			***			•••		
Queenstown	•••	•••	2	9,000	7,500			•••		}	•••		
Switzer's	•••	•••	1	1,000	1,000			•••	l	,	•••		

No. 20.

RETURN of Cases in the Warden's Court, and Costs Awarded, for the Year ending 31st March, 1873.

Mining District.		Number of Mining Disputes	AGGREGATE AMO	OUNT OR VALUE.	Amount of Costs	Cases wherein Judgment has decreed specific Performance.
		ADJUDICATED ON.	Claimed.	Recovered.	AWARDED.	No. Remarks.
AUCKLAND— Coromandel		14	£ s. d.	£ s. d.	£ s. d. 75 15 0	eq.
Grahamstown MARLBOROUGH	•••	61	219 2 2 35 5 0	128 0 10 13 0 0	163 5 0 9 5 0	: :
Nelson Collingwood Westport Reefton Ahaura		3 120 102 77	135 0 0 3,973 16 9 1,545 15 10	120 0 0 263 4 0 353 2 11	205 13 0 203 3 0	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
WESTLAND— Greymouth Waimea Kanieri Totara Okarito		73 151 46 71 16	345 0 0 622 9 6 33 0 0 327 0 0 360 0 0	155 0 0 124 7 0 6 1 0 158 8 6 112 0 0	70 2 6 57 9 0 24 15 0 74 0 0 20 3 0	coes not include "obj
OTAGO— Dunedin Tuapeka Mount Ida Blacks Mount Benger Dunstan Arrow Switzer's		24 49 33 3 81 42 14	182 2 0 1,031 11 2 212 7 4 41 0 0 1,076 18 10 386 1 0 101 0 0	55 5 0 295 5 4 103 12 8 0 1 0 194 11 8 23 1 0 29 0 0	28 9 0 94 5 0 13 9 0 2 12 0 59 13 0 38 1 0 5 1 0	This Return does no Wait

Distance and Habita Distance and Habita Distance	Expenditure. Liabilities. Total	Survey and Construction. Substities Total Material Engineer's Substitutes.	1871–72. 1872–73. Complete.	8. d. £ 8. d. £ 8. d. 22,428 0 0 24,710 0 0 47,138 0 0 48,198 8 10	1,583 6 1,426 14 3 1,426 14 3 1,440 10 2 1,582 16 1,582 16 1,582 10 2 22,500 0 37,500 0 8,000 0 60,000 0 61,235 10 2 484 10 484 10 3,000 0 3,000 0 3,000 0 3,484 10	466 7 0 30,000 0 0 80,000 0 0 30,466 7 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	602 17 9 235 g 6 838 3 3 838 3 8	
Miles. Chains. 1870- Miles. Chains. 1870- 11 70 180 4 65 4 65 16 3 229 17 20 18 60 18	Expenditure.		2. 1872–73.	£ 8. d. £ 8. d. £ 8. d. 714 9 1 165 19 9	811 4 8 195 5 6 484 10 0	466 7 0	0 2,060 9 0 500 0 0	9 232 EE G	
2 		Wiles	Commission	11 70 180 0	4 65 4 86 4 52 16 8 229 0	16	64 44 44 64 64 64 60 11	:	