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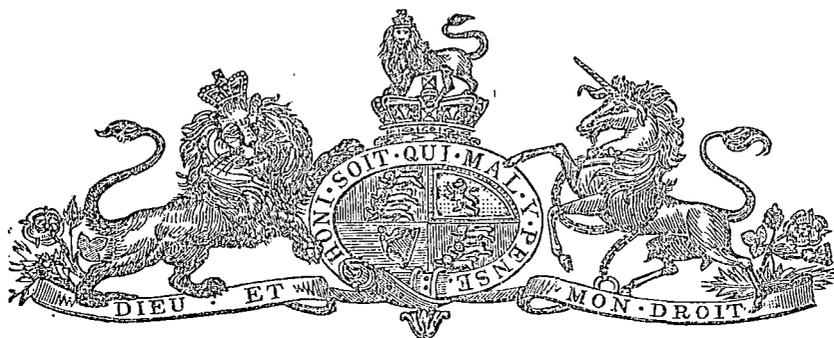
PARLIAMENT OF TASMANIA.

THE MOUNT LYELL MINING AND RAILWAY
COMPANY, LIMITED:

EASEMENT AND LEASES OF LAND REQUIRED.

Presented to both Houses of Parliament by His Excellency's Command.

Cost of printing—£2.



THE MOUNT LYELL MINING AND RAILWAY COMPANY,
LIMITED.

Club Chambers, Collins-street, Hobart, 31st August, 1896.

SIR,

Easement and Leases of Land required by the Mt. Lyell M. & R. Co., Limited.

REFERRING to interviews with which you have favoured me on the above subject, I now have the honour to enclose herewith for your perusal a Report which has been prepared by Mr. Robert Sticht, the Metallurgist in charge of the Smelting Works, addressed to the Chairman and Board of Directors of the Company. You will observe that Mr. Sticht very clearly indicates that it is absolutely essential for the successful working of the Mine and Railway that the Company should possess secure occupation of the various lots of land specified.

I am desired by the Board to express their thanks to you and your colleagues in the Ministry for the appreciation which you have shown of the importance of the Company's large and expensive undertaking, and to say that they confidently hope to receive your continued assistance in bringing to a successful issue an enterprise which must produce such beneficial results to Tasmania.

I have, &c.

NICHOLAS J. BROWN.

The Honorable A. T. PILLINGER, Minister of Lands and Works.

*Reduction Works, Penghana, Tasmania,
1st August, 1896.*

GENTLEMEN,

I HAVE the honor of submitting the following report for the information of the Honorable the Minister of Lands respecting the additional land which it is advisable for the Company to acquire for use in connection with our present and prospective smelting operations.

Remembering the exceptional size and value of the ore body on which these operations are based, and the years of activity and the magnitude of plant and requirements which they guarantee, it is necessary to look forward to and provide for the time when our present holding of land in the Queen River Valley will prove wholly inadequate and cramped. It is safe to predict that such a time would come well within eighteen months of the present day. In fact, owing to the greatly disturbed, broken up, rugged, and precipitous grounds covered by these holdings, it has been necessary even now to go outside of their boundary lines with important buildings, &c. in order to find ground level enough or low enough for the requirements of the various plants, or for the sake of getting materials wanted for construction purposes, such as clay for bricks, stone for foundations, timber for buildings, &c. The choice of locality in each case was determined by technical suitability alone, and every care and consideration was given to the disposition of the various parts of the plants so as to bring them all as close together as possible under the circumstances, for the cost of transportation between them was a very vital item of expense, especially as transportation is being done by rail along tortuous lines and over exceptional gradients.

The plan shows our present holdings, and also the land recommended for acquisition.

Our present holdings consist of the machinery site leases and a limestone and a freestone lease, for which latter leases we have already applied within the reserve. The former are made up of nine five-acre machinery site leases, numbered 54-92, 56-92, 57-92, 58-92, 59-92, 5-93, 6-93, 7-93, and 16-93. With the exception of Nos. 16-93 and 58-92, every one of these has some necessary part of our smelting plant built or placed upon it in the natural connection with all the rest, which the purely engineering requirements demanded.

The topography of this ground is so very rough that there is no possibility of enlargements of the present plant ever being placed anywhere upon it, except contiguous to the present buildings.

You will note that the converter building lies partly outside of Leases 7-93 and 54-92. In order to get a proper amount of room for the slag dump of this part of the plant, and also so as to have a suitable quarry, the only place in this neighbourhood where anything approaching the nature of building stone crops out being just in front of this plant, I would recommend acquiring the two additional sections marked "K 5-acre machinery site lease" and "L 5-acre machinery site lease" on the plan. The converter slag dump will eventually extend up and down the gully of the East Fork of the Queen River and cover these two sections, also the one marked "J 5-acre machinery site lease." These three new sections, in conjunction with "M 5-acre machinery site lease," are also, as far as they include the flank of the hills forming the north bank of the Fork, our next available source of fuel, containing some 7000 to 10,000 tons available immediately. Sections mentioned also cover our present water supply for the smelters and that for the converters, and are therefore an absolute necessity to us.

Section "N 5-acre machinery site lease" is covered by the right-of-way of the railway in part, as is also Section "O 5-acre machinery site lease." The present shops for repairs, etc., being located on our present lease 5-93, the leases marked "N" and "O" should naturally be included in the new land for use and protection of the company.

Section "R 5-acre machinery site lease" is cut by the so-called Abt Siding, and should also be included for protection to the borders of our tram-lines.

Above mentioned Sections J, K, L, M, N, O, and R shall be supplemented by two extremely important Sections, "P" and "Q," of which the former is occupied by part of the brick-making plant, and the latter by the laboratory and assay office, manager's residence, &c.

It has been extremely difficult to get a piece of level ground for any purpose except in the low land of Sections 16-93, N, and O, which, however, is subject to a deluge after every heavy rain, and for this reason unsuitable. Considering the hilly character of the locality in general, all buildings are as closely placed together as convenience and topography could compromise to have them.

Above new sections, it will be noted, square out the lines of our present machinery site leases, and there is no square foot of the additional land in them which will not be tributary in some way to the smelting operations. Aside from them and in addition thereto I would recommend acquiring the following larger tracts of land as tributary to the industry of smelting in one or the other vital respects:—Section "C," about 47 acres M.L., to be taken up on account of timber on same, and for the sake of quartz flux in the south-west corner, also for the slag piles.

It is absolutely necessary to look well ahead into the future for the sake of adequate slag dump accommodation for many years to come, and I venture to say that a great portion of this Section "C" will in time be required for slag dump purposes. The rapidity of growth of the pile of waste slag discarded by even the one smelter now running is something astonishing, being no less than 2000 cubic yards per month of granulated slag, and five smelters would require roughly an acreage of about one acre per annum, with a height of 60 feet of slag if poured solid. As, however, the method of getting rid of the slag by a stream of water is practised, much more space is required, for this removes the slag farther away at once and spreads it more, and thus no less than $2\frac{1}{2}$ acres per year are required for five furnaces.

North of the sections so far referred to we have marked out three eighty-acre sections, this being the chief prospective source of wood fuel in the neighbourhood, and the only direction in which there is any such fuel accessible to any extent. We are now using from 40 to 50 tons of wood per day under boilers and hot blast stoves for one blast furnace only, additional furnaces requiring additional wood in about the same ratio. Thus, the full consumption, which will ere long amount to at least 50,000 tons a year, counsels procuring reliable resources even now.

Section E., 24 acres, M.L. contains storage-houses now in use, and is crossed diagonally by the Abt siding of our tram-line. It has some timber, the Queen River runs through it, and it will be a protection to our main line of railway, as well as suitable for the various railway buildings.

Section B., about $39\frac{1}{2}$ acres, M.L., also serves as a protection to the main line, and is a further

source of fuel, being immediately accessible, and to some extent is already depleted. In fact, the effect of our requirements of fuel is very noticeable in this vicinity, the wood being very wet and making rather poor fuel, so that a great amount of it is required. In spite of the reserves of manuca spoken of we have been unable to get any but an exceedingly limited amount of this wood, the fuel being almost exclusively an inferior kind of swamp gum and so-called "myrtle."

To the south of our present freestone lease 185-93, 20 acres, already applied for by us within the reserve, is section D., 35 acres, M.L. This runs from the freestone lease to the boundary of the Queenstown township, and surrounds the Public Recreation Ground. The northern portion has some timber on it, and will protect the main line, while the southern portion is the seat of our present sawmill, one of our most important adjuncts. The eastern boundary line of this section was chosen running as shown, for the sake of convenience, on the northern portion, and also to protect shutes, buildings, and tramways belonging to the sawmill plant on the southern portion. Obviously it is necessary to surround the sawmill, which, like all our various plants, is on quite unfavourable ground, because no better abounded with a protecting acreage.

There remains only Section "A., 31½ acres (about), M.L.," which is an absolute necessity to us, because it will probably for a long time to come be the source of our Quartz Flux. Smelting cannot be carried out without this flux, and no other available source within reach of our system of Tramways, with convenience, is to be found. The bluffs and cliffs on this Section are all quartzite, and it is undoubted that our quartz quarry and siding will in no remote time extend far into this Section. There is also some immediately accessible wood for fuel on this Section, though much of it has been cut. The lack of this Section would seriously cripple and make expensive our smelting operations, if not stop them altogether. The adjacent limestone lease, which we hold under application, contains no quartz or silica flux.

On the whole, I may say of the extent of the land thus recommended we thought it only cautious and wise to look into the future, so as to further even now the future best interests of our industry, and we have done so in a manner in no wise transgressing, but, on the contrary, only befitting the extent and importance of Mount Lyell and its industry in the prospective welfare of Tasmania. The land is but poorly mineralised, unsuitable for any purpose but such as we shall put it to, and does not even grow any kind of timber of value for shipment. The Queen River Pine Reserves are distant one to two and more miles down the river to the south.

As the plan shows, the boundary lines have been drawn so as to conform to the regulation agreement with the points of the compass, and the whole of the additional land desired reduced to as compact an acreage as possible.

I have the honor to be,

Yours faithfully,

ROBT. STICHT, *Metallurgist.*

*The Chairman and Board of Directors,
The Mount Lyell Mining and Railway Company, Limited.*

*The Mount Lyell Mining and Railway Company, Limited,
26th July, 1896.*

GENTLEMEN,

I HAVE the honor of submitting the following Report for the information of the Honorable the Minister of Lands respecting the additional land required by the Company in the vicinity of the reduction works:—

1. Upon the route of the haulage line and through tramway it is imperative to have sufficient margin for either the duplication of this line or for the construction of the proposed tunnel at such time when the expansion of the Company's smelting operations will inevitably necessitate increased facilities for transit between the mine and the reduction works. In the former case considerable surface work would be involved, and sufficient ground must be retained to permit of all the operations of construction being easily negotiated, without in any way interfering with the working of the existing line. If tunnel operations are adopted, it is most important to retain sufficient ground for the handling and dumping of all excavated materials from the tunnel shafts, as this work will involve the removal of a vast quantity of material, the handling of which might be very costly were this land occupied by other lessees.

2. Regarding the areas immediately surrounding the reduction works, Mr. Sticht requires these for future operations and extensions, and no doubt has fully advised you of their necessity.

3. From Queenstown along the valley of the Queen to the reduction works, Mr. Sticht and myself went fully into requirements, and as the only available sources of limestone and silica fluxes, of which large quantities will be used, are located here, it was decided to recommend the reservation of these supplies. In the course of time a number of sidings and branch lines will be required to deal with the various quarries in operation, and their location will occupy a good deal of this ground. The locomotive and running sheds, fitting and repair shops and foundry, will also be situated on this flat close to the present Lyell-Strahan Road; these buildings will occupy a considerable space, in addition to which substantial storage sheds for coke may have to be erected if it is decided to keep large supplies on hand.

The Queen River is very erratic in its course, and the locality is very restricted for good building sites, and these can only be selected at intervals some distance apart.

I have, &c.

E. CARUS DRIFFIELD, *Superintending Engineer.*

The Chairman and Board of Directors

The Mount Lyell Mining and Railway Company, Limited.