

FURTHER PAPERS RELATIVE TO WATER SUPPLY ON GOLD FIELDS.

No. 1.

MEMO. FOR HON. W. REEVES *re* WATER SUPPLY MOUNT IDA DISTRICT, OTAGO GOLD FIELDS.

THE peculiar circumstances of the Mount Ida District, which were well known to me, both from personal investigation and official information, induced me to form the opinion that the provisions of the "Public Works and Immigration Act, 1871," with regard to assistance by way of subsidies to works for the supply of water, would fail to meet the difficulties encountered in the development of this important mining district.

Having in view also the various schemes which from time to time had been brought before the Provincial Government and Legislature, in order to prevent an aggregation of the serious evils which threaten the very existence of this gold field as a remunerative field of labour, I deemed it right; having first fully possessed myself of all the information, documentary or otherwise, at my disposal, to request Mr. Warden Robinson to come to Dunedin for the purpose of consultation with me as to the present existing state of things, and the possible remedies suggested upon the spot by experienced miners, and other parties interested. Upon his arrival, after several conversations, I placed before him the following Memo., upon which he favored me with Reports A. and B. appended hereto.

"Memo. for Mr. Warden Robinson.

"The question of water supply to the Mount Ida gold fields district having received the serious attention of the Colonial and Provincial Governments, the information up to this time available is placed in the hands of Mr. Robinson, who with the aid of his immediate personal and local knowledge, will be good enough to advise generally upon the subject; more especially as to the point whether the exceptional circumstances of the district would render the taking advantage of the published regulations with regard to subsidies impracticable or highly inconvenient.

"Dunedin, 15th February, 1872.

C. E. HAUGHTON."

It will be seen upon perusal that these documents are of a very exhaustive character, and deal with the various subjects at issue in a most lucid and precise manner. The papers attached (and upon which Mr. Robinson to some extent bases his reports) comprise the whole correspondence between the various local bodies; miners committees, at intervals constituted; and the Provincial authorities; and also the very valuable reports of Mr. Warden Pyke, and Mr. Barr, Chief Engineer of the Province of Otago, upon the questions specially referred to them; the most important of which would appear to have been the feasibility of a construction of a main sludge channel in order to allow of the disposal of the tailings from the ordinary workings, and the bringing in of a sufficient quantity of water to flush the said channel, and to be available for working at a higher level than is now accessible by the present supply.

In the present Memo. it is not necessary to enter into the question of the physical conformation of the country which necessitates a particular form of mining. It will be sufficient to state that it may be taken as proven that the construction of a main tail race or sludge channel is essentially necessary to the working of the ground already occupied, for the further development of the auriferous deposits, which are known to exist, and that, as a natural sequence to such construction, a supply of flushing water for the channel must be provided. These are works beyond the reach of private enterprise, not so much from the estimated cost, which is not excessive, but from the fact that very grave difficulties lie in the way of fixing the tenure of, and securing the rights of the property when constructed. It would, indeed, be impossible without a special Act of Parliament to provide either for the payment to the proprietors of fair dues by the parties availing themselves of the channel for the discharge of their tailings, or for regulating the maintenance of, and the water supply from the head race. I take it for granted, therefore, that whilst the construction of the works indicated would be of immense and immediate advantage to the district, that such construction is not possible under the regulations which provide for subsidies to registered mining Companies undertaking works for the supply of water with a view to wholesome dividends upon the invested capital. The question then resolves itself into this: Is the case sufficiently urgent to justify the Government in undertaking the works themselves? I am inclined to think that it is so. The Mount Ida gold field now carries a large population, and yields considerable returns of gold, and I have no hesitation in affirming that both would be doubled were a main sludge channel supplied with sufficient flushing water constructed.

Mr. Warden Robinson in his Report A (clause 8) remarks:—"With regard to the scheme for bringing in flushing water in connexion with the main channel, it is important to notice that this is clearly a work that would never be attempted by private enterprise, although it would be of immense advantage to the Hogburn diggings. There would be no way for a company undertaking such a work to make it return a profit. But the effect of a supply of flushing water, especially in connection with a main channel, would be to enable miners to work much good ground that they cannot now get at; to