

supply to the miner, were the work performed by a really competent man, much loss and disappointment would be often prevented, and results of a material character might be confidently anticipated.

127. In the construction of works for the conveyance of water to a Gold Field, it must be borne in mind that the material to be operated on must of necessity at some future period become exhausted. This period will be more or less distant according to the character of the mines. Alluvial diggings admitting of ground sluicing will be washed away in a comparatively short time, while quartz-mining will be of a much more permanent character. The miner in bringing water to his claim simply digs a "ditch" or "race" in the earth, where the surface of the ground will permit: and where it will not, he builds rough dry walls to carry the water round precipices, or takes it across the creek or ravine in an aqueduct made of boards, and called a flume. His great aim is to get the largest amount of water, at the greatest altitude, at the least possible expense, and to effect this he well knows his works must be of an inexpensive character. Were canals to be constructed by the Government, they would necessarily be of a more durable nature, and would probably be ten times more costly than what the miners would erect were they doing it for themselves. The interest on money expended in this high-class construction would not allow the water to be sold at a sufficiently moderate rate for mining purposes. As a general rule, it would not pay the ground-sluicer to pay more than one penny for 10,000 gallons of water.

128. Instead of permission granted by the Commissioner, as at present, licenses should be granted for race-cutting, and for the erection of large and permanent dams. These licenses to be only granted by the Mining Department. The principle we would suggest upon which the granting or refusing these licenses should depend is, that an applicant should be entitled to receive a license for as much water as he can profitably use or dispose of without injury to prior rights. The water brought in under such license to remain the property of the licensee until allowed to run to waste into any natural watercourse. We would recommend that no forfeiture should be allowed so long as the rent was paid, but that for any breach of the Regulations a fine should be imposed.

129. After mature consideration, we are unanimously of opinion that waterworks for a Gold Fields' supply should not be undertaken by the Government, and we think that Companies would be formed to construct such works, were proper inducement given in the facilities afforded them of effecting their object. Extended areas for claims in proportion to the amount of capital expended, security of tenure, and a right to dispose of the water at a price to be determined by the Mining Board, should be offered for the encouragement of private parties to supply the necessary capital. This, we confidently think, would have the desired effect; but without a thoroughly good tenure, and other advantages of the character indicated, it is not likely any Company would be found willing to run such enormous risk in the investment of its capital.

WATER-RACES, DAMS, AND RESERVOIRS.

130. Water being an essential element for mining purposes, your Commissioners are of opinion that inducements should be given for cutting races and storing water by means of dams and reservoirs, in the shape of secure tenure, and extra claims awarded according to the amount of capital expended.

131. We recommend that, in addition to the present system of granting water privileges, water licenses should be issued direct from the Mining Department, giving a better tenure than is now done. These licenses should cover the cutting of water-races, occupation of gathering ground, and construction of reservoirs. The applicant should post notice on the ground wanted of his intention to apply to the Warden for a water license; and in his application state the length, width, and depth of the race, the extent of ground required on each side of it, the source of supply, the position and area of the gathering ground, and the amount of water applied for. In the case of reservoirs, he should state the size of embankment, the quantity of water stored, the area of gathering ground, &c. Copies of this application should be posted at the Offices of the Warden and the Mining Registrar.

132. After allowing fourteen days for objections to be lodged, the Warden should hear the applicants and objectors (if any) in Court, and forward the evidence taken, together with his report, to the Mining Department, for the decision of the Minister. The charge for a water license should not be more than £1, and the licensee should be required to register the grant.

133. The owner of every race or reservoir should be compelled to keep it in good order, and prevent leakage or other waste. When he is not using the water in a race, he should (when required to do so by the owner of any subsequent water-right) be obliged to turn out the water at the head of the race. If it can be shown to the satisfaction of the Warden that any race is in bad repair, he should have power to order the water to be turned out at the head of the race until the defective portion was made good.

134. The holder of any water privilege should be allowed to extend or alter the course of his race or the position of the head, in any manner he may deem necessary, providing no other existing right is interfered with, without in any way injuring his title to such water privilege. He should also be allowed to increase the supply of water to the full amount the race will carry, by taking up gathering ground, provided he does not interfere with any existing right.

135. Disregard of the Regulations respecting water supply should be punished by fine and not by forfeiture,—at least so far as the race or reservoir is concerned. These water privileges should be held independent of any claim, and the holder should be allowed to sell the water. The right to the tail water should be vested in the owner of the race until it reaches a natural channel.

Exhaustible
character of
material to be
operated upon

Principle on
which legislation
should be based.

The construction
of water-works
to be left to
private enter-
prise, with
special Govern-
ment encourage-
ment.

Inducement—no
bonus.

Water licenses.

Hearing of
application.

Conditions.

Right to alter
races.

Fines and
forfeiture.