

reservoir will fill twice a year, to the extent of approximately 550,000,000 gallons, the near completion of the dam is greatly appreciated by the miners and farmers of the district.

In connection with this reservoir a portion of the Mount Ida Water-race between the dam and Naseby has been cleaned out and in places enlarged to carry the extra water of twenty-five Government sluice-heads from the dam.

The reservoir site recommended in my general report on water-conservation for irrigation of the northern portion of the Ida Valley (Parliamentary Paper C.—4, 1897) having been rendered useless for the purpose by the construction of the embankment of the extension of the Central Otago Railway to Poolburn, it is necessary for the advancement of the farming industry in the valley to explore for another reservation, and, on my final inspection of the Eweburn Dam, I purpose examining the gorge lower down, and if the elevation proves sufficient to distribute the water advantageously a dam may be constructed to store a moderate quantity of water.

Water-races, West Coast.

Several applications for subsidies by companies owning or projecting water-races for sluicing purposes having been forwarded to the department, examinations and reports of the Hohonu, Moonlight, Bell Hill, and Virgin Flat have been made, but in each case the applications have been refused, as before they can be considered it must be shown that the proposed work will be for the public good, and not for the profit of companies or individuals who may apply for subsidies for works that are only likely to benefit themselves.

In continuation of the surveys made in connection with pumping the deep levels of Ross Flat by electric transmission of the water-power from the Mikonui River, plans and estimates of the lower scheme have been prepared, and those of the Upper Gorge scheme (Gagliardi's) are in course of preparation for office record.

GENERAL.

That water stored in convenient situations for the use of miners in the South Island, and more especially for irrigation in Central Otago, is urgently needed there can be no doubt; but, as I have before pointed out, the numerous prior rights monopolising the water in all the principal creeks and rivers is a serious drawback in the way of even any moderate system of water-conservation, involving as it will the extinguishment of rights either by purchase or compensation. Still, I am inclined to think that for mutual benefit there are instances in which equitable arrangement may be made so that the owners of existing rights shall receive their granted number of heads of water, and in addition the advantage of a supply from storage in the dry time of year.

That the conditions under which water rights were taken up have not been complied with in many cases I am sure there is little doubt, and after a searching investigation a number of these rights should be cancelled. Speaking generally, it may be well to mention that of the two interests in Central Otago, although both are of great importance, I am of opinion that water is more required for irrigation than mining on the Maniototo Plains and in the Ida Valley.

REPORTS FOR PUBLIC WORKS AND MARINE DEPARTMENT.

In addition to the above works pertaining to the Mines Department, the following reports have been prepared and designs formulated for the Public Works and Marine Departments: Improvements to the entrance of Okarito Lagoon; Port Robinson (Cheviot) landing service, breakwater and wharf; erosion of Wanganui river-bank at Aramoho; and wharf at Maketu, Bay of Plenty.

T. PERHAM, A. M.Inst., C.E.,
Engineer, Water-conservation.

LIST OF MINE-MANAGERS, BATTERY-SUPERINTENDENTS, AND ENGINE-DRIVERS WHO HAVE OBTAINED CERTIFICATES UNDER THE MINING AND COAL-MINES ACTS OF 1886, 1891, 1894, AND 1896, AND "THE INSPECTION OF MACHINERY ACT 1882 AMENDMENT ACT, 1894."

As there have been several inquiries made as to the names of persons who hold certificates as mine-managers and engine-drivers, the annexed is a complete list of those holding certificates at the date of this report, taken from the register:—

THE MINING ACT.

FIRST-CLASS SERVICE CERTIFICATES.

Issued under "The Mining Act, 1886," without Examination.

Adams, H. H., Waiorongomai.	Cornes, C. A., Karangahake.	Glass, W. M., Naseby.
Anderson, P., Thames.	Coutts, J., Thames.	Goldsworthy, J., Waiorongomai.
Andrews, R., Coromandel.	Crawford, T. H., Thames.	Greenish, J., Reefton.
Andrews, T., Thames.	Crowley, C., Reefton.	Greenville, W., Ohinemuri.
Barclay, T. H., Thames.	Cummings, W., Reefton.	Hall, J. P.
Bennett, J., Alexandra.	Davis, J. E., Queenstown.	Hansen, P. C., Thames.
Benney, J., Coromandel.	Davey, C., Ross.	Harris, J., Owen's Reefs.
Black, T., Waiomoi.	Donald, J., Cromwell.	Harrison, R. H., Coromandel.
Bollersley, N., Boatman's.	Dryden, S., Thames.	Hicks, T. B., Thames.
Bradbury, M., Reefton.	Dunlop, T. A., Thames.	Hilton, G. P., Bendigo.
Bray, John, Lyell.	Edwards, J., Skipper's.	Hodge, F., Coromandel.
Burch, W. H., Thames.	Elliott, J., Macetown.	Hollis, W., Thames.
Byrne, J. F., Stafford.	Evans, F., Skipper's.	Hunter, R., Thames.
Cameron, A., Macetown.	Evans, J. H., Skipper's.	James, F., Thames.
Cameron, E., Te Aroha.	Fitzmaurice, R., Reefton.	Jamieson, A., Coromandel.
Chapman, J. A., Dunedin.	Frewen, J. B., Queenstown.	Jenkins, M., Wakatipu.
Clarke, G. S., Thames.	Gavin, T., Te Aroha.	Johnstone, H., Bluespur.
Comer, R., Thames.	Gilbert, J., Reefton.	Julian, J., Boatman's.
Conradson, M., Lyell.	Gilmour, T., Thames.	Kelly, J., Lyell.
Corin, W., Thames.	Giles, G. F., West Wanganui.	Kerr, J., Thames.