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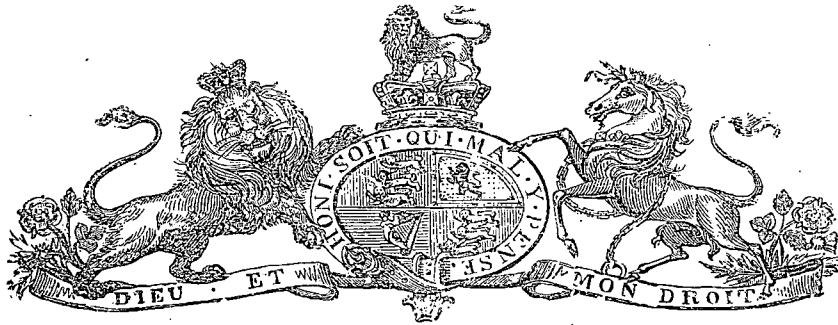
PARLIAMENT OF TASMANIA.

THE MIDLAND WATER BILL AND THE CLYDE
WATER BILL:

REPORT OF SELECT COMMITTEE, WITH MINUTES OF
PROCEEDINGS, EVIDENCE, AND APPENDICES.

Brought up by Mr. Minister of Lands and Works (for Mr. Speaker), September 2,
1898, and ordered by the House of Assembly to be printed.

Cost of printing—£42 15s.



SELECT COMMITTEE appointed, on the 23rd day of June, 1898, to consider and report upon "The Midland Water Bill" and "The Clyde Water Bill."

MEMBERS OF THE COMMITTEE.

MR. SPEAKER.
MR. MACKENZIE.
MR. DUMARESQ.
MR. PAGE.

MR. VON STIEGLITZ.
MR. W. H. T. BROWN.
MR. MINISTER OF LANDS AND WORKS.

DAYS OF MEETING.

Wednesday, July 6; Friday, July 8; Thursday, July 14; Wednesday, July 20; Thursday, July 21; Thursday, July 28; Wednesday, August 10; Friday, August 12; Wednesday, August 17; Friday, August 19; Friday, August 26; Wednesday, August 31; Thursday, September 1; Friday, September 2.

WITNESSES EXAMINED.

Mr. Alfred Mault, C.E.; Mr. Isaac Harris; Mr. James Tolland; Mr. John Madden; Mr. Edward Nicholas;
Mr. Alexander Arthur Reid; Mr. Edward Lewis Archer; Mr. Edward Albert Counsel, Surveyor-General;
Mr. Pierce Logan Butler, Southern Inspector of Roads.

REPORT.

THE Committee appointed to consider the Midland Water Bill and the Clyde Water Bill have examined nine witnesses, and after careful deliberation have arrived at the following conclusions :—

1st. It appears from the evidence that, provided sufficient and effective means are adopted, it will be possible to conserve sufficient water in Lake Sorell and Lake Crescent to supply the present requirements of both the Hamilton and Bothwell Districts, and the proposed new District called the Midland Water District.

2nd. That, in view of the serious loss of life and property that would be caused in the valley of the Clyde by the failure of works constructed to conserve the waters of the two lakes in sufficient quantities for both of the above purposes, it is essential that the works required to supply the Midland District should not be commenced until a survey and estimate of cost have been made by a competent officer of the Public Works Department, upon whose recommendation such works should be carried out under competent supervision.

3rd. That it will be necessary to have a complete estimate made of the extent to which private lands will be submerged in consequence of the increased conservation of water, and the amount of compensation required therefor, the evidence given to your Committee on these points being somewhat contradictory.

4th. That the owners and occupiers of land in the valley of the Clyde having an undoubted prior right to the waters of the two lakes, it should be provided that the water supplied to the Midland Water District shall be by meter, and such supply should be subject to the prior right of the owners and occupiers of land in the valley of the Clyde to a flow of 90,000 cubic yards of water daily, the said flow to be ascertained by meter. It should be provided also, that in the event of the supply of water in the Lakes Sorell and Crescent becoming at any time, in the opinion of the Clyde Water Trust, insufficient to provide for the requirements of both districts, then the flow of water to the Midland District shall be stopped until by an increased supply there is, in the opinion of the Clyde Water Trust, sufficient for the requirements of both districts; and Clause 29 of "The Midland Water Act" should be amended accordingly. For this and for other purposes, provision should be made in both Bills for arbitration in case of any dispute arising between the two Trusts.

5th. That the liability of each Trust should be regulated by the cost of the works necessary to serve the purposes of each Trust.

6th. That, as regards the provisions for the election of Trustees for the two Districts and for other matters of detail, they appear to be generally sufficient for the purposes for which they are intended, except as follows :—

(1.) That as to Clause 3 of "The Clyde Water Bill," your Committee recommend that the number of ordinary Trustees should be four instead of six, and that the four first ordinary Trustees should be Messrs. Edward Nicholas and Alexander Reid, of Bothwell; and Messrs. John Madden and James Tolland, of Hamilton, thus giving equal representation to the two Municipalities and Towns of Bothwell and Hamilton.

(2.) That as to Clause 13 of the same Bill, the rate for properties fronting on the Clyde should be fixed at a maximum of Threepence in the pound of annual value.

These, with other minor Amendments proposed, are shown in the Bills as now reprinted.

With reference to the Schedule to the Midland Water Bill, defining the area of the Water District, a Petition from certain owners and occupiers of land on the River Isis, objecting to the boundaries as defined, is appended hereto. Your Committee see no sufficient reason for the objection raised, but it will be only fair to the Petitioners that further inquiry be made before the boundaries are finally settled.

NICHOLAS J. BROWN.

*Committee Room, House of Assembly,
2nd September, 1898.*

MINUTES OF PROCEEDINGS.

WEDNESDAY, JULY 6, 1898.

The Committee met at 3:15 o'clock.

Members present.—Mr. Speaker, Mr. Minister of Lands and Works, Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Page, and Mr. von Stieglitz.

Mr. Speaker was appointed Chairman.

Ordered, That Mr. Alfred Mault; Mr. Harry Brown, of Ross; Mr. Harris, of Tunbridge; Mr. Reid, of Ratho; Mr. E. Nicholas, of Meadsfield; Mr. Archer, of Bothwell; Mr. Farrell, of Hamilton; Mr. John Madden, of Hamilton; Mr. Tolland, of Hamilton, be summoned to give evidence at times to be hereafter agreed upon by the Committee.

Ordered, That Mr. Mault be summoned for Friday next, at 2:30 o'clock.

The Chairman handed in Petition from 619 landholders and residents of the Districts of Bothwell and Hamilton against the passing of the Midland Water Bill, and the said Petition was read by the Clerk.

Mr. Minister of Lands and Works laid upon the Table Reports by Mr. District Surveyor Counsel, dated January 7, 1888, and April 14, 1888, (Appendices A. and B.), and Plans, Section, and approximate Estimate by Mr. F. A. Cutten, of Lake Sorell Water Supply, dated November 16, 1887, (Appendix C.).

The Committee adjourned till Friday next, at 2:30 o'clock.

FRIDAY, JULY 8, 1898.

The Committee met at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. Minister of Lands and Works, Mr. Dumaresq, Mr. Page, and Mr. von Stieglitz.

The Minutes of last Meeting were read and confirmed.

Mr. Alfred Mault was called in and examined.

Mr. Mault withdrew.

The Committee adjourned *sine die*.

THURSDAY, JULY 14, 1898.

The Committee met at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. Minister of Lands and Works, Mr. Mackenzie, Mr. von Stieglitz.

The Minutes of last Meeting were read and confirmed.

Mr. Isaac Harris was called in and examined.

Mr. Dumaresq and Mr. Page took their seats.

Mr. Harris withdrew.

The Committee adjourned till Wednesday, the 20th instant, at 2:30 o'clock.

WEDNESDAY, JULY 20, 1898.

The Committee met at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. Minister of Lands and Works, Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Page, Mr. von Stieglitz.

The Minutes of last Meeting were read and confirmed.

Mr. James Tolland was called in and examined.

Mr. Tolland withdrew.

Mr. J. Madden was called in and examined.

Mr. Madden withdrew.

The Committee adjourned till 12 o'clock noon to-morrow.

THURSDAY, JULY 21, 1898.

The Committee met at noon.

Members present.—Mr. Speaker (Chairman), Mr. Minister of Lands and Works, Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Mackenzie, Mr. Page, and Mr. von Stieglitz.

The Minutes of last meeting were read and confirmed.

The Chairman handed in letter from Mr. H. F. Chamberlen, informing the Committee that he was too ill to attend and give evidence and giving certain information. (Appendix D.)

Mr. Edward Nicholas, of "Meadsfield," Bothwell, was called in and examined.

Mr. Nicholas withdrew.

At 1 o'clock the Committee adjourned.

The Committee met again at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Mackenzie, Mr. Page, and Mr. von Stieglitz.

Mr. Alexander A. Reid, of "Ratho," Bothwell, was called in and examined.

Mr. Reid withdrew.

Mr. Edward Lewis Archer, of "Norwood," Bothwell, was called in and examined.

Mr. Archer withdrew.

Ordered, That Mr. E. A. Counsel, Surveyor-General, be summoned to attend to be examined to-morrow at 3:15 o'clock.

The Committee adjourned till to-morrow at 2:30 o'clock.

THURSDAY, JULY 28, 1898.

The Committee met at 3 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Mackenzie, Mr. Minister of Lands and Works, Mr. Page, and Mr. von Stieglitz.

The Chairman explained that he had called this Meeting, as the Meeting arranged for Friday last had lapsed for want of a quorum.

The Minutes of last Meeting were read and confirmed.

Mr. E. A. Counsel, Surveyor-General, was called in and examined.

Mr. Counsel withdrew.

The Committee adjourned *sine die*.

WEDNESDAY, AUGUST 10, 1898.

The Committee met at 3 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Mackenzie, Mr. Minister of Lands and Works, and Mr. Page.

Mr. Counsel, Surveyor-General, was recalled and further examined.

The Chairman handed in a letter from the Local Board of Health of Bothwell. (Appendix E.)

Mr. Counsel withdrew.

The Committee adjourned till 2:30 on Friday next.

FRIDAY, AUGUST 12, 1898.

The Committee met at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Minister of Lands and Works, and Mr. Page.

The Minutes of the last two Meetings were read and confirmed.

The Committee deliberated.

The Committee adjourned till Wednesday next, at 2:30 o'clock.

WEDNESDAY AUGUST 17, 1898.

The Committee met at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. Dumaresq, Mr. Mackenzie, and Mr. Minister of Lands and Works.

The Minutes of last Meeting were read and confirmed.

The Committee deliberated.

The Committee adjourned till Friday next, at 2:30 o'clock.

FRIDAY, AUGUST 19, 1898.

The Committee met at 2:30 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Dumaresq, Mr. Mackenzie, Mr. Minister of Lands and Works, and Mr. Page.

The Minutes of last Meeting were read and confirmed.

The Committee deliberated.

The Committee adjourned till Wednesday next at noon.

FRIDAY, AUGUST 26, 1898.

The Committee met at 12 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Mackenzie, Mr. Page, and Mr. Minister of Lands and Works.

The Minutes of last Meeting were read and confirmed.

The Committee deliberated.

Mr. Counsel was recalled and further examined.

Mr. Counsel withdrew.

Mr. Pierce Butler was called in and examined.

Mr. Butler withdrew.

The Committee adjourned till 11 o'clock on Wednesday next.

WEDNESDAY, AUGUST 31, 1898.

The Committee met at 11 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. Mackenzie, Mr. Page, and Mr. Minister of Lands and Works.

The Minutes of the last Meeting were read and confirmed.

The Committee deliberated.

The Committee entered upon the consideration of "The Clyde Water Bill."

Preamble agreed to.

Clauses 1 and 2 agreed to.

Clause 3.

Amendments made:—

Page 2, line 2, after "be," by striking out "Ten," and inserting "Eight."

Page 2, line 4, before "ordinary," by striking out "Six," and inserting "Four."

Clause, as amended, agreed to.

vii

Clause 4.

Amendments made :—

Page 2, line 13, after "following," by striking out "Six," and inserting "Four."

Page 2, line 13, after "Reid," by striking out "*Henry Francis Chamberlen, Edward Louis Archer,*" and inserting "*James Tolland, John Madden.*"

Clause, as amended, agreed to.

Clause 15.

Amendment made, page 2, line 37, after "the," by striking out "continuing," and inserting "Chairman or Acting Chairman of."

Clause, as amended, agreed to.

Clauses 6 to 8 agreed to.

Clause 9.

Amendment made, page 4, line 27, after "compensation," by striking out "Provided also, that no person shall be entitled to claim compensation for any damage he may sustain in consequence of the Trustees maintaining the waters of Lake *Crescent* and Lake *Sorell* at any level within the limits fixed by this Act."

Clause, as amended, agreed to.

Clause 10 disagreed to.

Clause 11 agreed to.

Clause 12.

Amendment made, page 5, line 13, after "from," by inserting "exercising."

Clause, as amended, agreed to.

Clause 13.

Amendment made, page 5, line 32, after "exceed," by striking out "Two," and inserting "Three."

Clause, as amended, agreed to.

Clause 14 agreed to.

Clause 15.

Amendments made :—

Page 6, line 1, after "and," by inserting "a."

Page 6, line 2, after "Rates," by striking out "who," and inserting "either of whom."

Same line, after "be," by striking out "one or more of the," and inserting "a."

Same line, after "Trustee," by striking out "s."

Clause, as amended, agreed to.

Clause 16 agreed to.

Clause 17.

Amendment made, page 6, line 34, after "by," by striking out "one," and inserting "other."

Clause, as amended, agreed to.

Clauses 18 to 21 agreed to.

Clause 22 disagreed to.

Clause 23 agreed to.

At 12:50 the Committee adjourned till 3 o'clock.

The Committee met again at 3 o'clock.

Members present—Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Page, and Mr. Minister of Lands and Works.

The Committee deliberated.

The Committee adjourned till half-past 2 to-morrow.

THURSDAY, SEPTEMBER 1, 1898.

The Committee met at half-past 2 o'clock.

Members present.—Mr. Speaker (Chairman), Mr. W. T. Brown, Mr. Mackenzie, Mr. Page, and Mr. Minister of Lands and Works.

The Minutes of the last Meeting were read and confirmed.

The Committee then entered into consideration of the Midland Water Supply Bill.

Clause 1.

Amendments made :—

Page 1, line 7, after "Landholder," by striking out "extends to," and inserting "means."

Page 1, line 16, after "Waterworks," by striking out "extends to," and inserting "means."

Clause, as amended, agreed to.

Clauses 2 and 3 agreed to.

Clause 4.

Amendments made :—

Page 2, line 34, after "of," by striking out "such," and inserting "any."

Same line, after "at," by striking out "his," and inserting "the."

Clause, as amended, agreed to.

Clauses 5 to 21 agreed to.

Clause 22.

Amendment made, page 6, line 4, after "become," by inserting "s."

Clause, as amended, agreed to.

Clauses 23 to 25 agreed to.

Clause 26.

Amendment made, page 7, line 9, after "question," by striking out "it shall be considered lost," and inserting "The Chairman shall have a casting Vote."

Clauses 27 and 28 agreed to.

Clause 29 disagreed to. (Clause to be re-drafted in accordance with the recommendation in the fourth paragraph of the Committee's report.)

Clauses 30 to 35 agreed to.

Clause 36.

Amendment made, page 8, line 24, after "money," by striking out "not exceeding One thousand pounds," and inserting "authorised by the said Act."

Clause, as amended, agreed to.

Clause 37.

Amendment made, page 8, line 32, after "purposes," by striking out "including a supply for any private water-closet or fixed bath."

Clause, as amended, agreed to.

Clauses 38 to 46 agreed to.

Clause 47.

Amendment made, page 10, line 14, after "Trustees," by striking out "or."

Clause, as amended, agreed to.

Clauses 48 to 50 agreed to.

Clause 51.

Mr. Speaker called the attention of the Committee to a petition from the Members of the existing Clyde Water Trust (Paper No. 30 of Session 1898), and it was agreed that the matter should be again discussed in Committee of the Whole House.

Clause, as read, agreed to.

Clauses 52 to 56 agreed to.

Schedule (1.)

Mr. Speaker called the attention of the Committee to a petition from certain landholders on the River Isis.

Schedule, as read, agreed to.

Schedules (2.) and (3.) agreed to.

The Committee adjourned till half-past 3 to-morrow.

FRIDAY, SEPTEMBER 2, 1898.

The Committee met at half-past 3 o'clock.

Members present.— Mr. Speaker (Chairman), Mr. W. H. T. Brown, Mr. Page, and Mr. Minister of Lands and Works.

The Minutes of the last Meeting were brought up and confirmed.

Draft Report brought up and read the First time.

Paragraphs 1 to 3 agreed to.

Paragraph 4.

A Question was raised, by the Chairman, as to the inclusion of the words "the said flow to be ascertained by meter." It was resolved that the words objected to stand part of the paragraph.

Paragraph, as read, agreed to.

Paragraphs 5 and 6 agreed to.

The Committee adjourned *sine die*.

EVIDENCE.

FRIDAY, 8TH JULY, 1898.

ALFRED MAULT, *called and examined.*

1. *By the Chairman.*—What is your name? Alfred Mault.
2. And you are Secretary to the Central Board of Health? Yes; Engineering Inspector is my proper title.
3. You are aware that the purpose for which this Committee is appointed is to enquire into the provisions of two Bills—the Midland and Clyde Water Bills? Yes.
4. Are you acquainted with the provisions of the Bills generally? Generally, I am. I premise that the Midland Bill has not been altered since last Session of Parliament?
5. No, only one Bill has been printed. You are aware that the first twenty-eight clauses are merely machinery clauses, providing for the election and appointment of Trustees and so on. Coming to Clause 29: that clause reads:—"Notwithstanding anything contained in 'The River Clyde Act,' it shall be lawful for the Trustees to enter upon Lake Sorell, and the bed and shores thereof, and to cause such works to be erected or established in the bed of such Lake, and on the shore thereof, as shall be necessary from time to time to divert the waters thereof, and to divert and appropriate such quantity of the water of the said Lake as shall be required for the purposes of this Act. Provided that the flow of the water of the River Clyde, or of any drain, sluice, or channel constructed under the provisions of 'The River Clyde Act,' is not diminished or affected by any such works." Will you inform the Committee, assuming that the scheme proposed is proved to be practicable, what are the results likely to follow as to providing a permanent water supply, and affording facilities for irrigation to the landholders on the eastern side of the Western Tier? Well, in the first place, I don't exactly see how the works mentioned in that section can be very well carried out without affecting the water supply of the River Clyde.
6. Assuming that they can be carried out, what benefit would be likely to follow? I think the great point the Committee should take care of is to see that such works do not take the upper water from Lake Sorell for the purposes of irrigation, or of water supply on the Midland side, and leave only the lower water to the Bothwell and Hamilton side, because the water supply of the Clyde District, as far as domestic circumstances are concerned, exclusively depends upon Lake Sorell. On the other side the water supply of the district, for irrigation and other purposes, does not depend upon that source, and the Clyde District would not be safeguarded if, instead of being allowed to take the top water of Lake Sorell, they were forced to take the other water.
7. The investigation asked for is more as to the area of land in the Midland District which would be benefited if these works were carried out? I cannot give you information on that point.
8. You don't know what the present supplies are? I know that it is a very insufficient supply, as far as Tunbridge is concerned. Tunbridge is dependent for its supply on the Blackman River.
9. Then, there is a necessity for an improved supply? Certainly there is.
10. In reference to the Clyde water supply, will you tell the Committee of the circumstances under which that Bill was introduced to Parliament during last Session? The Bill was on the same lines as the previous Bill. For some time past the Central Board of Health has directed me—in fact almost from year to year—to proceed to Hamilton and Bothwell, consequent on the outbreaks of typhoid fever and other diseases there. On my first visit my attention was drawn to the very inadequate supply of water the people had according to the existing arrangements for feeding the river from the two lakes. Not only was the supply insufficient, but, from the very inferior quality of the water which arrived in the Clyde, it was evident it bore no comparison with the quality of the water in Lake Sorell. I made an examination of the whole course of the river, including the two lakes. The principal feature of Lake Sorell (as the result of my examination) was that I saw that the only proper method of obtaining a good supply of water for Bothwell and Hamilton was to take a supply from Lake Sorell without making it to pass through Lake Crescent—Lake Sorell being a feeder to Lake Crescent. The overflow water in Lake Sorell is only contaminated by the mud that is raised from the bottom, which mud consists of a chocolate soil which is the bed of the lake, and it gives the lake a permanently tawny colour. From Lake Sorell to Lake Crescent there is the channel of the Interlaken River, which takes the overflow of Lake Sorell to Lake Crescent. What has happened is this: in Lake Sorell the mud is continually stirred up, while in Lake Crescent it is more quiescent; the result has been that the mud held in suspension in Lake Sorell, has been deposited in immense mud-banks in Lake Crescent.
11. By the agitation of the wind? Yes; held in suspension in Sorell by the action of the wind. In Crescent these mud-banks have formed themselves towards the outlet of the lake in the course of years. Every year—perhaps for thousands of years—a crop of reeds grows on these mud-banks and dies, and the consequence is that instead of it being pure yellow mud that comes from Lake Sorell it is slate-coloured, being mud mixed with decayed vegetable matter. It is proposed that the water supply of the Clyde should be improved by getting rid of the mud by taking the water into the Clyde without passing through Lake Crescent. The quantity would also be increased by having proper works to store the rainfall of the winter months for use in the summer months. That is the whole of the first intention that led to the drafting of the Bill.
12. And it was considered necessary in connection with these works to improve the machinery of the Act, to elect new trustees, and to give to trustees the control of the works? Yes, to give them the control of the works. The trustees were first of all nominated—that is in the first Act of Parliament—and they

were a body elected for life. After the death of the first nominees, in the course of time the people living in the upper part of the channel took more interest in the lake than others, and it happened that they got the whole of the Trust into their own hands.

13. You mean in the neighbourhood of Bothwell? Yes; the Bothwell and Hamilton people wanted an equal number of trustees. At first there were three members who belonged to Hamilton and three to Bothwell. Of course, in considering all these matters I had to consider the available supply of water that could be counted upon in dry seasons, and consequently I obtained the whole of the information I could in reference to the matter that could be furnished.

14. Are you aware if the residents in the towns of Bothwell and Hamilton, as well as the landowners along the course of the River Clyde, have suffered inconvenience in consequence of having an insufficient water supply? The towns have suffered a great deal more.

15. More than the landholders? Precisely. I think the inhabitants of the towns have suffered more than the landowners.

16. *By Mr. W. H. T. Brown.*—In what way? In consequence of the bad quality of the water. No proper conservation has been carried on in late years. Droughts have occurred in recent summers, and the Clyde trustees took unadvised measures to get over their difficulty. To get over an immediate difficulty they sacrificed their permanent interest when they took away the sluices between the two lakes.

17. *By the Chairman.*—You say that aggravated the evil? Yes, largely, as has been proved since. Before that water could be kept up to the highest winter level established, which enabled the people to have a supply in an exceptionally dry season. For a long time their water was not conserved properly. Then they came into a summer with very low levels in Lake Sorell, and to get over that immediate difficulty they removed the sluices and deepened the channel, and so lowered the level of Lake Sorell to a point below what it ever was before, and of course they made the water more impure.

18. What is the estimate of the cost of the channel to connect Lake Sorell with the River Clyde direct, Mr. Mault? From £1200 to £1500.

19. That would provide a channel and the necessary conserving works? No; that estimate was made before all these works were done within the last two or three years. When the estimate was made the sluice was in existence.

20. Then, about £1600 would cover the whole cost of the necessary works? Yes, £1600.

21. Would these works have the effect of keeping up the level of Lake Sorell to the level which the trustees were empowered to keep it up to? It would give them the means of doing it.

22. Would it be done without submerging any low-lying lands about Lake Sorell? Quite so; it could be done if the trustees keep within the parliamentary limits.

23. Would that give a sufficient supply of water from Lake Sorell to supply the Bothwell and Hamilton people and also the Midlands? I think it would, if the estimate of the quantity required for the present wants of the Bothwell and Hamilton side is what we have estimated. It would give them 90,000 cubic yards of water a day during a dry season. The works recommended would give them that and would leave a margin. Without at all raising the natural level of Lake Sorell, it would leave over 70,000 cubic yards a day for the Tunbridge side.

24. How much do you say? 90,000 cubic yards for one side, and these works would leave 70,000 cubic yards for the other side. By slightly raising it you would get a much larger supply; but I would not recommend more than five or six inches, if that, at the outside. If that were done then the Midland side as well would get as good a water supply as the other side, even if they were for three months without a drop of rain coming; but if the Midland people would take their water from Lake Crescent they would get frequently three times as much.

25. Why?—is it practicable to supply the lands of the Midland District from Lake Crescent without interfering with the supply given to the Clyde? Yes, an extended amount. They could take 75,000 cubic yards a day from Lake Sorell, and from Lake Crescent they could take three times that quantity, without interfering with the supply.

26. *By Mr. von Stieglitz.*—It is practicable to draw it out of the line? I think it is. In 1861 or later a Parliamentary commission sat on the Water question and Mr. Martelli reported on that subject; his report was referred to the late Mr. Calder, and he said he believed a supply could be taken from the Lakes into the head of the Blackman River at a cost less than would be supposed.

27. *By Mr. Pillinger.*—No; a survey was made, and it was thought it could be taken by a tunnel, but they found they got into the low country too soon? But they could get over that. Did the engineer consider the feasibility of doing without a tunnel?

Mr. Pillinger.—I don't know, but that was the report.

Mr. Mault.—I should have thought it would have been easier to have a large syphon.

Mr. Pillinger.—Yes, that might be feasible.

28. *By Mr. Pillinger.*—As to quality: how do you get over the difficulty of overflow if you take water from Lake Sorell and throw it into the Clyde. How do you get over the difficulty of overflow into the channel also? We can't get away from it, but the evil is minimised. It must come out and you can't get rid of it. Sorell is the bigger lake with the bigger watershed. In dry weather the Clyde could, by the proposed channel, take all the water from it without any going through Crescent. This would prevent the evil of polluting the water with mud from the mud-banks—for the worst of the evil is caused by the scouring of these banks when the water is low. The new works would prevent Crescent water getting into the Clyde, except by overflow—that is except when the water is high, and the mud-banks covered, and there would be no scour. In winter time, when Lake Crescent is quite full of water, it is not so bad. It is in the summer, when the mud-banks are exposed, and scour, that the evil is done.

29. Where did you test the quality of the water, Mr. Mault? All the way down. Last summer I spent my holidays there, and during ten days I kept testing the water of the two lakes all the time and in every way. The Lake Sorell water I found to get perfectly limpid and pure after a time, and the clay fell entirely to the bottom. The Lake Crescent water I found did not; it was a mixture of soil and vegetable matter of the same specific gravity as water, and consequently did not fall to the bottom.

30. Then that water is not good for irrigation purposes? Yes. That would no be a disadvantage; but you have to look at the supply of water for domestic purposes. The difference between Hamilton and Bothwell on one side and Tunbridge on the other is, that to get the water to Bothwell you have only the river channel, and you have no means of purifying it; but for Tunbridge, if you could get it away by a tunnel, as proposed, you would have the means of entirely purifying it; you can get absolutely pure water without filtration on one side, and you can't on the other.

31. You know the area of Lake Sorell? Yes.

32. And you know the inhabitants of Bothwell and Hamilton? Yes, I know them generally.

33. What are they in number? I should say there are about 1300 in the valley all the way down.

34. How much water does it take to supply 1300 inhabitants? Oh, comparatively little; say 80,000 gallons a day.

35. What quantity would you have to draw from Lake Sorell to supply the inhabitants without irrigation? I have very carefully measured from the latest plan the marked area of the two lakes. I find the area of water in Lake Sorell is 20·35 square miles; that in Lake Crescent is 6·7 square miles. Generally speaking 13,000 acres in the one, and in the other 4300 acres.

36. How much water would have to be drawn from Lake Crescent to supply the inhabitants of Hamilton and Bothwell—I mean for domestic supply? Only for domestic use, 80,000 gallons a day.

37. Yes. I will ask you also what quantity would be required to irrigate, say 3000 acres of land? I must look at my former Clyde Report, if you will excuse me. In my Clyde Report I gave the figures; that will show that I have slightly understated the area of the lake as regards the question of water, but everything else holds good still. To irrigate 3000 acres so as to represent a rainfall of 4 inches a month, would take 54,000 cubic yards a day.

38. *By the Chairman.*—As to the area of Lake Crescent? I have already stated that it is 4300 acres.

39. You are acquainted with the Clyde River between Lake Crescent and Bothwell? Yes.

40. Do you not think that in six months of the year, at all events, it would not be required to draw from Lake Crescent at all? Not for six months.

41. For how many months? I don't think that at any time a fortnight after heavy rain you could depend upon a constant supply from any of the feeders.

42. Not during the winter months? Not during the winter months. The last time I was there there was very little water running in them, and now I am told they are all dry again; and there is this misfortune, that a great many of those little tributaries are brackish, and especially so between Bothwell and Hamilton some very brackish tributaries come in there and would affect it. While the Clyde water is getting from Bothwell to Hamilton the quantity of chlorine in it is more than doubled.

43. You speak of its being desirable only to draw the top water from Lake Sorell, is that so?—Is the water not always in motion?—Could you draw off the top water without drawing the general water? I believe a great benefit would be that there is considerable difference in the water. There is a great deal more mud in the bottom water than in the top, and it is such palpable mud that within five minutes after you draw it it begins to deposit.

44. Yes, and there is clay also there sometimes? Yes. I understand that in addition to the evidence I am now giving you would wish me to give the reporter an analysis as to the quality of the water for domestic supply.

The Chairman: Yes, we shall be glad if you will give us that.

45. Then you are of opinion, from an examination of the two lakes, that there would be a sufficient supply for both sides, the eastern and the western sides? Quite so; with proper supervision there would.

46. *By Mr. W. H. T. Brown.*—You say that under a proper conservation system Bothwell would get about 90,000 cubic yards of water per diem? That is correct, calculating for the supply of the inhabitants, and also to irrigate 2700 acres of land now there.

47. If the water were properly conserved, in your opinion would it not be making that supply an assured one? Yes.

48. Throughout all the year? Yes; it should be made an assured supply through all the year.

49. If properly conserved would the supply be more than that? I think the probability is it would. The estimates I have got here are based on the assumption that not a drop of rain falls during three months, and that during that time the maximum of evaporation was taking place. That never happens there, as the returns of the rainfall show.

50. You spoke of the tributaries—there is one running into Lake Sorell all the year? Yes, all the year.

51. Have you any idea of the effect? Yes.

52. Is it very bad for the water? Yes; it is the best water running into the Lake.

53. Have you ever seen the tier on the western side or on the eastern side—have you been along there at all? Yes, I have not been right along, but for some distance.

54. Of course you are aware that all the water district extends a long way down from the top of Lake Crescent, and all the lower portion of the district does not get any water at all? I cannot say that—I can't understand why you can't contour there.

55. But, even allowing you to have known the country, as you come down into the lower level we are on the higher one,—that is the object of tapping the other lake to distribute the water? I have not examined the country with a view to settle that question at all.

56. Would not the conserving of the water in the two lakes make the water from both capable of supplying the district if conserved during the year? Well, there is no doubt about that; if you could keep up the level on both lakes you would obtain a good supply, and you would improve the quality of the water. The worst quality of water that comes through Lake Crescent is when the mud-banks are bare.

57. By conservation would you not be able to keep the water purer than it is now? I think with you that it would benefit by preventing the scour from taking place.

58. Conserving would be of benefit to the water? I think it would.

59. You say that the tributaries in the low parts are of a salt nature? Yes, a great many of them are.

60. Further down? They are almost all alike from Bothwell to Hamilton, mostly brackish.

61. *By Mr. von Stieglitz.*—How do you propose to take the top water of Lake Sorell for the Clyde side, and the lower water for the Midland side—you speak of that? The simplest means would be by taking the supply through Lake Crescent for one side, and keeping the supply from Lake Sorell for the other.

62. *By Mr. Pillinger.*—Would it not be possible to tap Lake Sorell at a lower depth? The simplest way would be to do as I say. You would then get sufficient water to irrigate, in the driest season, at least 10,000 acres. You would get that by going to Lake Crescent, where you would get the water for one side. If you decide both to take your supply directly from Lake Sorell, arrangements will have to be made that the Clyde water will be the first charge upon the water of the lake, and the other the second. If the water sinks below Clyde wants, then the other would be stopped.

63. *By Mr. von Stieglitz.*—What you say is that you would take it from the surface? In a very dry season what would have to be done would be this. Sluices would be opened so as to allow 90,000 cubic yards of water to go one way, and 75,000 yards to go the other way, but both would get the top water. The proposition made originally was to raise the level of Lake Sorell considerably, and take the water from that for the Midland side, leaving the Clyde people with only the water that passed through Lake Crescent.

64. *By the Chairman.*—Which would be worse than nothing? Yes, which would be worse than nothing.

65. *By Mr. Pillinger.*—Would you not tap Lake Sorell at a lower level and take the lower water? We should provide for drawing as low as needful, but if we should be drawing from the top, and you draw away from the lower level, you will diminish the supply. If there were plenty of water you could of course take it at any depth, but you must provide that the joint Trust arrange that the Clyde shall always have 90,000 yards. If that quantity were made certain there would be no necessity for working the top or bottom water separately.

66. *By Mr. von Stieglitz.*—Would you describe the working of a syphon? It is a pipe laid to follow the contour, that is the vertical contour, of the hills, and having a very small engine power at the top, just sufficient to keep the pipe clear of air. The engine power is only required in case of the syphon breaking down at any time.

67. How can the syphon work without an engine? It won't work at all unless you get rid of the air that will collect in the pipe; there would be no disability about it if you had a sufficient level below.

68. And that will work up to from twenty to thirty feet? Yes. Without engine power it won't work up to more than 25 feet certainly, with engine power it will.

69. *By the Chairman.*—In your opinion would it be possible for both districts to be supplied with their requirements in the matter of water as proposed by you with two separate Trusts, one for the Clyde and one for the Midland? It could be done, but it would be a very undesirable arrangement, and would be likely to cause considerable friction between the two. It would be better to have one joint Trust that should absolutely control the whole.

70. What would be the proportion of advantage, and therefore the corresponding liability in your opinion—of course it would have to be subject to correction. What would be the proportion of advantage and consequent fair distribution of liability for the increased works required,—what would be the proportion for the Clyde people, who would entirely engineer the water supply—a half or a third, or what? The first division should be on these lines:—The works required for the control of the water in the two districts would include such works as would be required for raising the level of Lake Sorell, should it be determined to raise it a few inches, also the sluices between the two lakes and the sluices at the outlet of Lake Crescent. That should be all done at the joint expense of the two sides by common Trustees. Then I should say that the works connected with forming a special channel from Lake Sorell should be borne by the Clyde side, and the works required for the tunnel should belong to Tunbridge.

71. *By W. H. T. Brown.*—Each side, then, would keep its own works in repair? Yes.

72. *By the Chairman.*—You know that a project has been spoken of from time to time to raise the level of the water considerably above the ordinary winter level, some two or three feet, I think. Do you think that practicable? It would be practicable.

73. What would be the approximate cost? It would be costly, but I could not make a guess at the cost, having never sufficiently examined the ground. It would have to be exceedingly well done, and to be beyond all supposition of failure. If any defect did occur the effect would be wonderfully disastrous all round. In June, 1891, thirteen inches of water fell in three days, with the result of enormously taxing the storage capacity of the lake and made it run over. The result was a flood all down the river, which carried away the Hamilton bridge, the Bothwell bridge, and an enormous quantity of property. If that occurred without any superelevation of the water-level, what would occur if the lake had two feet more water that could escape? As I said before, I am certain that you have plenty of water there without doing anything of the sort. The average rainfall during the time records were kept up there was over 42 inches—a very large quantity. The storage capacity of the lake is set down at one and three-quarters of a million cubic yards for every inch in depth, and there is a tremendous fetch of wind across where the Interlaken comes in. I have seen considerable waves coming in there. If the water-level was raised it would have to be well done.

74. *By Mr. W. H. T. Brown.*—At how much higher could the water be conserved without any artificial works excepting at the outlet? I think you might go nine inches. I speak from recollection. You might go nine inches, but I recommend you don't go more than six inches.

75. What amount of water would that give? Nine inches would give you about sixteen million cubic yards.

76. *By the Chairman.*—In addition to the great risk which would attach to this proposal to dam the water up, can you give the Committee any idea of the work that would be submerged? I don't think, much; I think, very little. Unfortunately the trustees allowed Mr. Kermode in years gone by to cut a channel. That was a great mistake.

Witness withdrew.

THURSDAY, 14TH JULY, 1898.

ISAAC HARRIS, *called and examined.*

77. *By the Chairman.*—What is your name? Isaac Harris.

78. And you reside at Tunbridge? Yes.

79. How long have you resided there—how many years? Seven years, Sir.

80. You are aware that the business of this Committee is to enquire into the Bill called the Midland Water Bill? Yes, I am, Sir.

81. And are you acquainted with the provisions of the bill? Yes.

82. Will you inform the Committee generally as to the benefit expected to be conferred on the people in the Midland Water District if that bill is passed,—I mean if the water were made available generally, what would be the benefit to the people? The benefit would be very great to the people of Tunbridge, there is not the least doubt of that, as well as to the people of Bothwell. The water during the last two seasons has been very scarce indeed; in fact, water has been conveyed there by trains. If the bill passes it will be a great benefit to the inhabitants of the district.

83. You mean if the water were conserved during winter at Lake Sorell, and made available for use in summer? Yes, Sir, that would be a great benefit.

84. What number of people are there on the eastern side of the Western Tier who would be benefited by the supply of water—what number do you think, I don't mean accurately, but approximately—say what number of people would you suppose? Well, I could not say as to the number. There are so many people in the district; it is an extensive district. If you could convey the water into the Blackman River, the number would be very considerable, and the distance would be very considerable that the water would traverse.

85. What extent of land would be likely to be irrigated by this water? As regards that there is an unlimited quantity of land that could be irrigated—I should say many thousands of acres.

86. You have suffered much in that district during the last two or three years owing to want of water? Yes, Sir. There is no district in any part of Tasmania that has suffered more from want of water—I mean as regards animals or individuals.

87. What is the present source of supply? The Blackman River, and the supply is very limited at present.

88. Can you inform the Committee of any way of providing for a supply in the Blackman River from any source at or near where it takes its rise, by the erection of dams or other works—any means by which the Blackman River could be supplied with water without tapping Lake Sorell? I am not aware of any; the Blackman is supplied now from two or three outlets from the Tiers; that is the chief supply it has, and they connect near Tunbridge.

89. And much of the supply is obtained from the low levels there? Yes; it comes chiefly out of the Tiers from sources such as springs and such like; it comes out of the Tiers where there is a large rainfall that gives a large amount of water in winter.

90. And all these small streams come in near the level of the Tunbridge township? Yes, Sir, near that level.

91. *By Mr. McKenzie.*—What is the rainfall in that district? Well, I don't know if a record has been taken lately; some years ago there was one, but it was where there was less rainfall than at any other part. The record was for five years at Mona Vale.

92. This land that you speak of that could be irrigated—is it good agricultural land? Yes, very good agricultural land.

93. What would it grow? Well, it is mostly very good wheat country. With plenty of water it could grow anything. It is first class land, but there is not sufficient rainfall or available water to enable it to be cultivated.

94. There is not sufficient rainfall to make it profitable to cultivate it? No, I myself have some of it. It is very good land, but I never took a handful off it owing to want of water for two seasons.

95. It would run into thousands of acres, you say? Yes, thousands of acres could be cultivated if there were water, but there is no water.

96. Do you know anything about the lake where they propose to take the water—is the supply low there? Yes, it is lower now than I ever saw it, and I have known it from 1870.

97. Supposing the lake were dammed, would it be likely to injure the surrounding property? Not without it was dammed over the banks above its level.

98. Suppose you wanted to bring the water to Tunbridge, you would have to raise the level, would you not? Yes, but the hatch would prevent the water from destroying the properties. The only damage ever I knew complained of was on the occasion of the water crossing the Lake Road some years ago, and then it could have been easily prevented. The Road Trust then complained. I don't think it damaged much any other property. At that time the water had to be reserved, because there was half as much more water used in Bothwell then than there is at the present time.

99. Do you know the Bothwell district? Yes, Sir.

100. Is the water supply short there? Yes, but it is not bad at the present time; there are several creeks running into it at different points. I have known it for 28 years.

101. Would the present proposals injure the Bothwell supply? I don't think it would. There is sufficient water there to supply both Bothwell and Tunbridge. There are from 16,000 to 17,000 acres of water there which I know is not less than from 5 to 6-ft. deep, that is in Lake Sorell and Crescent. There is no chance of the water escaping from the lake excepting it were to rise 4 or 5 feet to get over the silt which has formed at outlet of Crescent Lake.

102. Is that water reserved in any way? No, it is not reserved in any way now, it has had to run its own course for about twelve months from Lake Sorell.

103. The water has never been dry there? No. Lake Sorell at the present time has at least 5 or 5½ feet of water over the whole of it.

104. It has been supplying the Bothwell district? Yes, it has been supplying the Bothwell district, but I don't think they need it. During the winter months in February, I visited the hatch that preserves the water, and I found the supply considerable. On 15th February, 1897, I visited it, and I found it in the same state up to August in the same year. I visited the lower part of the lake with Mr. Mault, and I called his attention at the time to the quantity of water that was running out from one lake to the other.

105. Could they increase the supply of water there, or conserve it at a moderate expense; would that increase it? Yes, they could, and at a very moderate cost, they could indeed.

106. *By Mr. Pillinger.*—You have visited the lake during the twelve months occasionally? Yes, about once a fortnight.

107. Have you been to the outlet where it flows into the Clyde during the year? Yes, as late as yesterday.

108. Was there more water then running into the Clyde than was necessary? Not from the lake. The hatch has been put down for the first time, about three or four weeks ago.

109. Up to that time was there no attempt to preserve the water? Not up to about seventeen months ago.

110. In what condition is the bottom of river at the lake where it flows from Lake Crescent? In bad condition, I should say for 16 or 17 chains of artificial drain cut from the lake to the river. The river itself is fairly clear since it was cleaned out for 2 chains some time ago, and there is a good bottom for that distance; it then begins gradually to silt up. For 272 yards there it varies from $4\frac{1}{2}$ to 5 feet of silt. The drain itself, the artificially cut drain, has a good bottom—a gravel bottom—but it has from 4 feet to $4\frac{1}{2}$ feet of silt along its length.

111. That is, outside the lake? Yes. When I had occasion to visit the river in 1872, or so far back, it was a nice river of water, now it is altered.

112. That is, the Clyde River? Yes, the Clyde River.

(Plans were here produced, and the witness explained the position of the cuttings and hatch, showing the points at which they were silted up. The water had to rise over 4 feet or 5 feet of silt before it could get out of the hatch.)

113. *By Mr. von Stieglitz.*—Would the water run out if that were removed? Yes. It would want to rise from 6 feet to 8 feet at the present time before it could pass down the channel. The water has been drained away. During the last twelve months there has been a stream of water running out of the higher lake into the lower that should have been conserved. From my knowledge I think there are quite enough creeks to supply the Clyde and the Bothwell people. If you want it I can give the names of the creeks.

114. *By the Chairman.*—Please do so? The first creek on the south side would be the Denison Creek; the second would be called the Legs of Man Creek; they both run into the Clyde. Another small creek is Bully's Creek; that is a very small one. The other two are very large creeks.

115. *By Mr. von Stieglitz.*—Do they run all the year? Not in a dry season; in a moderate season there is water all the year. On the northern side there is Weasel Plains Creek, and on the same side a creek known as Black Snag Creek. Another small creek joins that before it runs into the Clyde called Scrummy's Marsh Creek. All these creeks empty into the Clyde River between Bothwell and Lake Crescent.

116. *By Mr. Pillinger.*—Is the water in those creeks good? Yes, all very good water. The only creek that is at all brackish is the Dennison Creek; the others all have very good water.

117. You say there is plenty of water in Lake Crescent? Yes, and very good water: it has more water than the upper lake in depth.

118. Is Lake Crescent far from its winter level now? Not more than 1 ft. 6 in. about 3 rods from the embankment from its winter level now. At the outlet from Lake Sorell to Lake Crescent there is $52\frac{1}{2}$ chains of artificial cutting connecting the two lakes.

119. How much water could you get there, and how could you get it out of Lake Crescent? Well, you would have to remove the silt, and some stone would have to be taken from the river near the hatch. If that were done you could take from $2\frac{1}{2}$ to 3 feet of water out of Lake Crescent. There is quite 6 feet of water or over in Lake Crescent. By deepening you could take any amount out. The stone could be easily removed.

120. Suppose that a tunnel was going into Lake Sorell to serve the other side of the Western Tier, what depth of water could you take from Lake Sorell? Well, it would be according to where the tunnel was put in. You could, at the present time, take quite 3 feet of water from Lake Sorell, and you would leave 3 feet more there then.

121. You think 3 feet could be taken now? Yes.

122. And you could take 3 feet out of the other lake? Yes.

123. You have never known a drier season than this, have you? No; and I never saw the lake lower.

124. And all that water is left there yet? Yes; all that water is left in Lake Crescent yet, because the silt has accumulated there. It has never been cleaned out, and it has settled and formed itself into a sort of vegetable matter at entrance of River Clyde.

125. You say that all this year and last year the water has been running out to waste? I visited the hatch, as I said, on 15th February, 1897, and till the end of August the water continued running at the same rate. Mr. Mault and I went along and I called his attention to it; he said they would have to have a hatch there. I gave him an estimate some months later, in January; I saw the Committee of the Clyde Water Trust; I saw them at the bridge, I think it was in January, and they had some alteration made then to the hatch, but the water has never been reserved since that time until last month. Now the hatch is put down there is from $1\frac{1}{2}$ inches to 2 inches of water passing there.

126. Where was the new hatch put? It was in the Clyde, at the outlet of Lake Crescent, at the junction of the two Lakes at Interlaken; the wood-work of the old hatch is there now; it is nearly 21 years since the hatch was first taken out. They took no care of that hatch whatever.

127. *By Mr. von Stieglitz.*—I would like to know about this water wasting. You think a lot of water could have been conserved last winter if the hatch had been properly looked after? I do, Sir. If

there had been a hatch the water could have been reserved in Lake Sorell, but having no hatch it ran to waste, and there is not quite 6 feet where formerly they had 7 or 8 feet. When the hatch was there the water in Lake Sorell used to be reserved, and if there was fear of an overflow they used to open the hatch. At the time I was in Bothwell district we used to wash all the sheep in the Clyde, and all we had to do was to go and open the hatch to get a big supply of water down—that is why we required so much more water than there is now in the Bothwell district.

128. *By the Chairman.*—Did not Mr. Kermode get the hatch taken away on more than one occasion because he complained of the water being dammed back on his property? No, not that I am aware of.

129. It has been stated that he either got the hatch taken away or threatened to do it? Yes, he might have threatened.

130. There was some difficulty, was there not? Yes, there was some difficulty, but that was by reserving too much water. You can cause an overflow by keeping the hatch down.

131. Is it within your knowledge that Mr. Kermode, in protecting his interest, has interfered with the Clyde Water Trust, and prevented them from reserving too much water in Lake Sorell? He may have done so.

132. Has he threatened a law suit? He may have done so.

133. I understand you could raise the lake to a level three feet more than it is at present by putting a hatch at that end, if it were not for his objection? Yes, it could be raised. It would not affect Mr. Kermode at all.

134. But you have heard that he threatened a law suit? Yes, I have heard so.

135. *By Mr. von Stieglitz.*—How long is it since you saw the water running from Lake Sorell into Lake Crescent as you said? It was in last February.

136. It has not since been running? No, it has not been running since.

137. Would it be feasible to raise the water in Lake Crescent on that side? It could be done, but it would cost a large amount of money, and only the Tunbridge people would benefit by it.

(Witness described on the plan the position of the lands on the eastern side, and how the water would affect them if the proposed tunnel were put in from the head of Lake Sorell).

138. *By Mr. Pillinger.*—You could put the water into the Tunbridge country from Lake Crescent? Yes.

139. *By Mr. von Stieglitz.*—As a practical man, do you think there is equally good water in both lakes?—which is the best? I don't think there is so much difference: it is all much alike.

140. Is not some of it brackish? Well, there is some hardness from some of the water which comes from a few acres of swamp land, and that goes into the lake: of course that goes into consumption from the lake. I think the water from one lake is nearly equal in quality to that from the other. It is beautiful water at the present time. It was only yesterday that I was there, and I took particular notice of the water.

141. *By the Chairman.*—When both lakes are full, the water is of equal quality? I think so, provided it is kept off the swamps. At the present time at the junction of Lake Crescent are several bodies of dead animals,—some sheep and a bullock or a steer: they have gone into the river, and got bogged there. The Bothwell people would get part of that water.

142. *By Mr. Machenzie.*—You say about February you were there? Yes, I was there then.

143. Did you notice what the stoppage was?—was it from silt, and could it be cleared out? Yes, it could be cleared out for about 52 to 53 or to 55 chains. The whole of the watercourse would have to be cleared out.

144. Was there plenty of water in Lake Sorell then to draw from? Yes, there was from 5 ft. to 5½ ft. there, I have reason to know.

145. Then, you mean that if the channel had been deepened there would be a good supply, and it means clearing for from 52 to 55 chains? Yes, I think if it were deepened there would be plenty of water. I am sure it could be done, if the silt were dug out so as to allow the water to be carried out there would be a good supply. If the channel were cleared the whole way up to the other lake you would then get the water from Lake Sorell to Lake Crescent.

146. Would there then be 2 ft. of water available? Oh, yes—more.

147. *By the Chairman.*—Suppose some effectual means were adopted for damming the water back, you say it would not interfere with Mr. Kermode's property. What effect would it have on the road? No effect at all, because, although it might be over its level you could allow the water to go down the Clyde River.

148. Would you carry protection works along the bank? Yes; there is only one place that overflows, that is for about 150 to 200 yards; that overflows into the swamp.

149. And that would require a dam? Yes. There is also another place further down where the water would come across the road. It has only come across once or twice this seven years.

150. Are you aware of the fact that Mr. Mault has recommended cutting a channel from a point on Lake Sorell to let the water into the Clyde (point shown on plan)—as a practical man what do you think? I don't think it is any better than what you have now. The present channel has a good bottom if it was kept clear; at the level it is now you do away with the advantage of it; it has also been growing over with vegetable matter which goes into the Clyde. If there was a new channel it would be a very sluggish channel. A twentieth part of the money it would cost would be enough to dam the water at Lake Sorell, and the work would be small in comparison to the length of the channel. Then for that Mr. Kermode would want compensation, as it would do a lot of damage.

151. The supposition is that if the water were conserved with this one channel it would injure Mr. Kermode's land—would it? It would go across his land and injure it.

152. But that would not injure his land? Well, I think it would; the channel would have to twist about so, and it would have to go into the lagoon, and then from the lagoon into the river, and it would be a very extensive work. Now, it would take little to clear the silt out of the present channel, and you would have any amount of water. There could be another two feet at least of water taken out of Lake Sorell at a cost of £100. I should be very glad to take a contract at that amount to do the work.

153. *By Mr. Mackenzie.*—About these creeks, do you know them yourself? Yes, I know them.
154. Did you take water out of them yourself? Yes.
155. Was it drinkable water?—was it nice? Oh yes, it was very good water. I have stopped often to drink when I saw it in the summer months, when I was carting wool and bark, and so on.
156. And all these creeks were drinkable excepting one? Yes, all except one, and I did not know it to be very bad until it got very low down.
157. *By Mr. von Stieglitz.*—What sort of bottom is it in Lake Sorell, mud or rock? In some parts it is a sandy, and in some parts a rocky bottom.
158. You have not seen any mud? No; there is a sort of drift near the sandy part of the shore. I have never seen any mud, not at the outlet side, however.
159. Has Lake Crescent the same bottom? Yes, the majority of it is, I think.
160. *By the Chairman.*—I suppose some plan such as you indicate was agreed upon: do you think it would be practicable for the two districts to work amicably under one Trust, supposing the control of the scheme and all arrangements were put under one joint trust? Yes; I think it would be practicable.
161. Do you think it would be better than two separate Trusts? Yes; I think it would work under one Trust. It would cause some dissatisfaction if there were two separate Trusts, and perhaps they would agree better as one. Of course, what I would advise would be two separate hatches, one here and one here (pointing out the places on plan). That would reserve the water in Lake Sorell; then, when you got too much and there was danger of overflow, raise the lower hatch and let it go down the river.
162. Don't you see it would be necessary to have both hatches under one control? Yes, both hatches should be under one control.
163. If there were two bodies would there not be constant friction? Yes, I think there might be friction occasionally over the water. I think it would be better to have the whole under one body.
- Witness withdrew.

WEDNESDAY, 20TH JULY, 1898.

JAMES TOLLAND, *called and examined.*

164. *By the Chairman.*—What is your name? James Tolland.
165. And you reside at Hamilton? Yes.
166. How long have you been resident there? For 3½ years.
167. In the township of Hamilton? Yes.
168. You have known the district for how long? About 18 years.
169. You are aware that the object of this enquiry is to inform the House of Assembly as to the provisions of the two bills, one the River Clyde Water Bill and the other the Midland Water Bill? Yes.
170. You are the owner of a mill, I believe? Yes.
171. Will you inform the Committee as to the available water supply during the last few years for the township of Hamilton and the neighbourhood—I mean as to the quantity and so on? During the last three years I have had a deal to do with the water to get a supply, such as damming it and so on.
172. And you can speak as to the quantity? Well, I am using the water almost daily, and am well able to speak as to the supply of water that has come down the river during the last three years.
173. What is about the average quantity that has been running down during the summer time within the last two years? Well, during the summer—you don't want me to give it in gallons, I suppose?
174. No, give us the average? During the summer I always have a difficulty in getting a flow of water 3 feet wide by 6 inches deep.
175. That is what you require for running your mill? Yes, for running the mill, Sir.
176. What number of people are there approximately in the township of Hamilton? A little over 300, I think, Sir.
177. Will you inform the Committee as to what the views of the residents in Hamilton are in regard to the proposal to divert some of the water from Lake Sorell, which is the source of the river Clyde? Well, the view of the people of Hamilton is simply this—they wonder how the idea can be entertained, and don't see where the water is to spare for the use of any other district.
178. They require an increase of supply rather than a diminution? Most undoubtedly. It is well known what the people of Hamilton have had to suffer from sickness due to the reduction of the water supply.
179. Can you give information as to illnesses caused by the loss of water? Oh, yes; typhoid, for instance. We had, the summer before last, at least 30 cases, which were attributed to the use of water out of the Clyde. The water is of a very muddy, impure character, and if we have any diminution of the supply it will make it worse, I should think. I can give you the exact flow of water in the river at the present time, or at least during the last day or two. You see this is the greatest flow we have had during this winter, and it runs through a space of about 4 feet 8 inches wide by 1 foot deep. That is the entire flow in the river at the present time.
180. Is that more or less than you have had before? That is more than we have had for many months. The flow of that is at the rate of about two miles an hour.
181. That is at the present time? At the present time, Sir. That measurement was taken recently. Mr. Farrell took it two or three days ago, at my request. He is Superintendent of Police at Hamilton.
182. *By Mr. Page.*—And that is the only supply of water you have? Yes, that is the only supply.
183. Do you know anything of the source of the Clyde? No, Sir, I have not been up to the source of the Clyde.

184. Are you acquainted with the provisions of the Bill for securing a sufficient water supply for the use of Bothwell and Hamilton? I have read them, Sir.

185. Will you give us your views as to whether you think that will effect the purpose you desire? I think, generally, it will. I think there should be better representation. The number of Trustees should be increased, so that Hamilton should have a better voice in it. At present we have no Trustees at Hamilton.

186. There are to be six ordinary Trustees. Are these men mentioned in the Bill all Bothwell men? Yes. That should be provided for.

187. Besides the six Trustees, you have the Warden of Bothwell, who will be *ex officio* a member, with one Councillor, and the Warden of Hamilton, with one Councillor? We think we should have two, besides the Warden and the Councillor.

188. Have you had opportunities of obtaining the views of the people of Hamilton generally? Yes, the people have been talking of it ever since it was first spoken of.

189. And what is the general opinion of the Bill? The people think it will be a very cruel thing to reduce the supply of water running through the township.

190. I am not speaking of the Midland Water Bill, but this one, the Clyde Water Bill—do you think this desirable? Yes, I think the people are very well satisfied with this Bill.

191. What do you tell us is the opinion of the people with regard to a special rate: would they be willing to pay a special rate for the improvement of their supply of water—of course this cannot be done without expense. This bill provides for the construction of necessary waterworks; Section 9 provides that the Trustees shall have power to construct, repair, alter, or remove dams, sluices, channels, and so on, and all that could not be done without expense? I know, and I have not heard any objection on the part of the people to rate themselves for the Trust to do it.

192. They would be willing to contribute a suitable rate? I think so; at least I have not heard any objection.

193. To what amount would they be willing to contribute? I am not able to say, Sir.

194. Section 13 of the Clyde Water Bill provides for levying a rate which shall not in any one year exceed Two Pence in the Pound on the annual value of property in the towns as shown by the Assessment Roll—would the people, do you think, be willing to contribute the maximum rate for a good supply of water? Well, I am scarcely in a position to say; I think that they would, because they have suffered severely in consequence of the bad water supply.

195. *By Mr. Machenzie.*—You said you had been living about Hamilton for some years? Yes, for 3½ years.

196. During your residence there has the water in the Clyde ever ceased to run? No, Sir, it has not quite ceased to run.

197. Was it lower this summer than last summer? Yes, and it has been during the last summer gradually getting less.

198. Have the inhabitants complained of the shortness of water for some time past? Not for domestic purposes—the river has never been sufficiently low for that, but the complaint has been as to the bad state of the water, the bad quality of it, in consequence of the river being so low. I can tell you what has been the very lowest flow. After I have dammed every drop of water in the river there would only be in my troughs about 3 inches depth of water. I had lately to send corn away to the mill at Clarendon to have it ground for my customers, and when I tell you I only require 8 horse-power to drive my mill you will see how small the quantity of water has been.

199. Do you know if it could be increased from the Lakes? No, I have not been to the Lakes, and I don't know.

200. Have the inhabitants of Hamilton done anything to try to increase the supply? No, not to my knowledge.

201. You know nothing about the sources of the Clyde River? No.

202. *By Mr. Pillinger.*—You are the owner of a mill, you say? Yes.

203. Are there any other mills on the river? Yes, Mr. Chamberlen's mill at Bothwell.

204. There are two mills on the river? Yes, two.

205. What flow of water does it take to work your mill? It is eight horse-power.

206. What is the flow in the shoots required to work that properly? My shoot is 1 foot deep by 3 feet wide. I have to fill it to within 3 inches of the top to work the mill.

207. That is 9 inches deep, then, by 3 feet wide? Yes.

208. Is there any head, or is the water simply running? It is running into a high-breast water-wheel.

209. You could not tell me how much water it would take to work it in a year,—you know we have a reservoir 17,000 acres in extent,—can you tell me how much of that water it would take to work your mill? No, I am not prepared to say,—not without some calculation.

210. How many inhabitants are there at Hamilton? About three hundred.

211. And they require a domestic supply? Yes, that is all, excepting a few who do a little irrigating. This little stream, it took me a long time to irrigate four or five acres of land with it.

212. That was in summer? Yes, in the summer months.

213. What has been your experience in the last three years of the winter months?—was the river ever flooded? No, we have never had a flood. One time, I can't say the month, we had the river pretty high: there was a lot of water there. The river is supplied by creeks. There is the Hollow Tree Creek for instance; but when the Clyde gets up like that she is always down again in a day or two. The fact of our having a hatch in the Clyde will prevent floods. They have had them in the past.

214. Do you know the streams running into the Clyde between Hamilton and Bothwell? No, excepting one creek that runs there—the Hollow Tree.

215. Is that dry? Yes, it is dry in summer, but never in winter.

216. You say you measured the river the other day? Yes, it was 4 feet 8 inches wide by 1 foot deep.

217. Were you aware the hatch was down then? No, I was not aware, I don't know anything about that. I did not know the state of affairs at the lakes.

218. I just ask you, because we have evidence that the hatch was down? I did not know.

219. You don't know Mr. Chamberlen's mill. I understand you have never been there. Does it take the same amount of water as your own? Yes, it is just about the same sized mill as mine. It is at Bothwell. You see I might not quite understand it, because he works differently to me. I work a high-breast wheel and he works an undershot wheel. I can't say positively as to his. His mill should require about the same power as mine would do, at all events.

220. You can't say anything about the population of Bothwell? No, Sir, I can't.

221. *By Mr. Dumaresq.*—You said the inhabitants of Hamilton said it would be a great shame if the other people were allowed to take the water? Yes, Sir.

222. You then say you know nothing about the water at the lakes? No, Sir, I could not speak positively. It appears to me that the water has been running out of these lakes; all the rainfall seems to have come down the Clyde.

223. There is 6 feet of water at the lakes now? Yes, but when you run it all out how will you fill it again.

224. We were told the other day that there were 4 feet of water at the lakes when you were so short. Do you know that? No, Sir, I don't.

225. And you did not know that there were a lot of dead animals in the lakes? Where, Sir?

226. In the two lakes. So that the condition of the water in the river might not have been owing to the shortness of water, so much as to the presence of offensive matter in the lake? Yes. I know it is very muddy water that is in the river in summer.

227. *By Mr. Pillinger.*—Is that not on account of its being used for irrigation? It might be. I can only tell you I have stood on the banks when I could smell the mud.

228. *By Mr. von Stieglitz.*—Is it the same at Bothwell? I have heard people say that it was worse at Bothwell.

229. I understand it is proposed to have one Trust for the two water schemes; how would that work? Well, in the amalgamated Trusts I am afraid there would be friction, the quantity of water is so limited.

230. Is it limited? Well, where are you going to get it from?

231. You have heard it spoken of, I presume: in your opinion, should there be one Trust or two? Yes, I have heard it spoken of, but I have always been under the impression that there would be two separate Trusts.

232. I understand at the present time there is a Clyde Water Trust? Yes.

233. Have you approached that Trust to see if they could give you a better supply of water? Yes.

234. And what was the reply? Always that they could not spare any more water.

235. *By Mr. W. H. T. Brown.*—You said you had never been at the Lakes? No, Sir, I have not.

236. Then you have not the slightest conception of the area of Lakes Sorell or Crescent? No, I have not, never having seen it.

237. Nor of the water-shed? No; none at all.

238. Then, you only speak of the quantity of water running down the river from your own experience as a mill-owner? That's it, Sir; from having collected it, and observed the water being so low at the time.

239. Would it not be possible for sufficient water to be conserved there to give you enough? Undoubtedly.

240. If expert opinion said it could be done, there would be no objection raised in your district? That it can be done?

241. Yes. If expert opinion said that sufficient water could be got there, more than you would require, which could be used to supply somebody else, would there be any objection? As far as I am concerned I would not object, and I don't think the inhabitants would; I am inclined to think not, myself. I don't know, I can't tell about that, but sometimes you get parties to handle a matter and it does not come right. I am afraid experts get wrong sometimes when they make calculations. They will calculate and say that a certain quantity of water will irrigate a certain quantity of land, but when you put it on it takes more.

242. But, if expert opinion said a certain quantity of water could be conserved in the lakes, that would give you an ample supply of water, what then? Well, it is this way. We don't know what the limit of the scheme would be. There would be no difficulty in increasing the quantity of water if you can get a greater watershed. You would get more water, but then one district must take away some of the water we want, and we must have ours. The difficulty with us is, that instead of our doing with the water supply we have now, it is very necessary that it should be increased for us for our own district.

243. Just so; and if expert opinion said that it would be increased, and give you a permanent and ample supply of water, leaving a good share for a district having none at all, would your district have any objection? Well, Sir, I can scarcely answer for the district. As far as I am concerned, I would not go against it. Of course I would not like to say what the district thinks of it. I would like to say this, that I should think the district would not object if it could be clearly shown that a supply can be obtained; if that can be thoroughly and conclusively shown to them, I think they would not object. I would like all the gentlemen present to see that we are not speaking against this water scheme in any dog-in-the-manger way. We are only protecting ourselves.

244. *By Mr. Pillinger.*—Have you ever paid a water rate? Yes, I have; one penny in the pound.

245. When? Well, as a matter of fact, mine is not paid yet. It is the small amount of 4s. 6d., but it has been overlooked.

246. *By Mr. W. H. T. Brown.*—I thought you did not know about the Lake Country? I don't; I would have gone up, but I have had trouble that prevented me.

247. *By the Chairman.*—What is the annual value of the property in Hamilton per annum rental—the average; would you say it would be £12 or £15, more or less? I would not like to say.

248. Do you think it would exceed £20? I don't think it would.

249. Suppose the annual value is £20, that, at sixpence in the pound, would be ten shillings for a good supply of water for each property. Do you think the inhabitants would willingly pay as much as that for an improved supply of water? I can't say, Sir.

250. You believe a great many of the people would: what would you yourself think of it, an increased rate for an improved supply of water? Well, I would willingly pay it.

251. As to the tributaries of the Clyde which you have spoken of, do you know if they are all winter streams, or do they run dry in the summer time? They are chiefly winter streams, I think.

252. Storm-water? Yes.

253. *By Mr. von Stieglitz.*—Although you have not been yourself at the Lakes, I presume you have seen someone who has been there: have you heard that the water was running out of Lake Sorell into Lake Crescent? No, I have not heard anyone say.

Witness withdrew.

JOHN MADDEN, *called and examined.*

254. *By the Chairman.*—What is your name? John Madden.

255. And you reside at Hamilton? Yes.

256. How long have you resided there? All my life, except, I think, for about three years.

257. You know the enquiry being made by this Committee is as to a proposal made, first of all, to provide a supply of water in the Clyde under the provisions of the Clyde Water Bill, and further as to a proposal to divert some of the water from Lake Sorell to the Midland district? Yes.

258. Do you know the provisions of the two Bills? Yes, roughly I do.

259. You know the Clyde Water Bill best, I think? Yes.

260. Will you state to the Committee what the flow of water in the Clyde there has been during the last three years? It has been very small indeed.

261. Not sufficient for the people of Hamilton? Not nearly sufficient, and the water is almost stagnant during summer weather. There is hardly enough in the river now to prevent the sheep from walking dry footed from the neighbouring stations.

262. In addition to the property you have in Hamilton, have you any other property? Yes; I lately bought a great portion of what had been the late Joseph Clarke's estate.

263. With a frontage on the river? Yes, with a frontage of five or six miles on the river.

264. Are you likely to use water for carrying on work on that land? It is quite possible. That is what I had in view. I meant to improve that property by using part of it for hop-growing; there is 100 acres in one block alone that I would like to irrigate.

265. Would the present supply give you water enough for that purpose? No; I would not get any unless there was a better supply there than during the last two years.

266. Can you inform the Committee as to the state of the health of the people consequent on the bad supply of water? Well, we had an outbreak of typhoid fever, in one case; there were from eighteen to twenty people down with it.

267. What is the population? From 150 to 200, I suppose.

268. All dependent on the supply of water from the Clyde? All dependent on that, yes.

269. Have you any knowledge of the disposition of the residents of Hamilton to pay a special rate for an improved supply of water. You know, under the provisions of the Bill that the Clyde Water Trust would have power to levy a rate of two-pence on the annual value of the properties fronting on the Clyde, and sixpence in the pound on the annual value of township properties? Yes.

270. What would be the disposition of the inhabitants as to paying the rate? I think they would be willing to provide the money if they were sure they would get a better supply.

271. *By Mr. Page.*—Have you any suggestion to make in reference to the Bill? No, I have no suggestion to make. My experience is that the flow of water in the Clyde is simply diminishing.

272. Mr. Tollard, before you came in, mentioned that the people of Hamilton are not satisfied as to the proposition in the Bill for representation; can you give us any information on that point? Well, at present Hamilton is not represented.

273. There is the Warden and one Councillor from each place, and there are six men who are ordinary Trustees, Messrs. so and so. They have only got four named in the Bill; they want two more. Would you be satisfied with the Warden and one Councillor, and two other representatives? How many are there?

274. The Warden and one Councillor from Bothwell, as against the Warden and one Councillor from Hamilton, and four others; they would not necessarily be Hamilton or Bothwell men? Of course, what I think is that both Hamilton and Bothwell ought to be fairly represented, say five from each. You see, if Bothwell has the larger voting power, if elected on the voices, it would not be fair.

275. *By the Chairman.*—You think Hamilton has quite an equal interest with Bothwell? Yes, I think she has quite an equal interest with Bothwell.

276. *By Mr. Mackenzie.*—Do you know anything about the Lakes? No; I have never visited them, and I can give no information as to that. During the last two years the river has not reached bank high; it has not had a swell in it. There are rivulets running into the river. There would be a small supply coming out of the lake.

277. You speak of having land capable of being irrigated: would you have sufficient water for that? Yes, we would if you speak of twenty years ago when the water was running fully. In the last few years there has been no chance of getting sufficient water out of it.

278. Is there any other land in the neighbourhood that could be irrigated? Yes, of course there is Mr. Brock's property. He has a lot of blocks fronting on the river; a lot of that could be irrigated.

279. Has not the Clyde Water Trust been in existence some years? Yes.

280. You say the township of Hamilton has been short of water, and that the inhabitants have suffered in consequence of scarceness and so on? Yes.

281. Has the Trust made any effort to obtain a better supply? They say they have, but that they can't get any increased supply.

282. And they had full control of the sources of the Clyde? I believe so.
283. *By Mr. Pillinger.*—Do you know the Clyde between Bothwell and Hamilton, what streams run into it? Well, the Hollow Tree Creek runs into it just below my property.
284. Is that a winter or a summer stream? There is very little water in it in summer.
285. Are there any others? Yes, there are one or two small ones near Ibbottvale.
286. Are they winter or summer streams? Yes, one is a small summer stream, others have water in winter—storm water only.
287. Are there other streams? There are other small streams, but in a very dry winter none would be running.
288. In respect to Mr. Brock's property being irrigated from the Clyde, would not that be better done from the River Derwent? No, it would be better done from the Clyde.
289. Or from the Ouse? Yes, some might be better irrigated from the Ouse, but not the land I speak of. That would be irrigated from the Clyde.
290. How far is Hamilton from the Derwent, two or three miles isn't it? Yes.
291. Has there not been a scheme proposed for irrigation to be carried out from the Ouse? Yes, but not in the portion of the district I speak of.
292. Sometimes you have great difficulty there in getting water for irrigation? Yes.
293. You said you had purchased some land recently with four or five miles frontage along the Clyde? Yes, four or five miles.
294. Do you, then, use the river as a fence? Yes, it is used as a fence, in places portion fenced.
295. You don't know anything about the Lakes? No, I don't know anything about the Lakes. I know that last year there was not sufficient water running in the Clyde to keep the Hamilton mill going; the miller had to cart it out to get it ground. My wheat was blocked there.
296. *By Mr. von Stieglitz.*—It has been mentioned that the two Trusts might work together—would that be feasible? I am very much afraid it would not.
297. *By the Chairman.*—What, approximately, would be the extent of land belonging to Mr. Brock fronting on the Clyde, that could be irrigated from the Clyde? About 200 acres.
298. Between Bothwell and the Derwent? Yes; the lowlands lie between Hamilton and the mountains that come between.
299. The Red Hills? Yes, the Red Hills.
300. What would be the annual value of the land in the Hamilton township? In what way—do you mean rent?
301. Yes—what is the highest annual value? It is difficult to say. One rent I know is £50 a year; that is used as a store. I have a private residence the annual value of which is about £35 a year.
302. Would the average annual value of the property be about £20 a year? No, not so much. I should say about from £12 to £15.
303. You are aware that provision is made in the Bill for a rate of 6d. in the pound on township properties—do you think the residents would cheerfully pay a rate of 6d. in the pound? That would take some considering.
304. You are doubtful about it? Yes, I am very doubtful, when I come to think about it. Of course a good supply of water is worth a good deal, but as to whether the bulk of the residents would agree to pay such a rate I am doubtful.
305. The tributaries of the river, you say, are chiefly storm-waters? Yes, chiefly storm-waters. The witness withdrew.

THURSDAY, 21ST JULY, 1898.

MR. EDWARD NICHOLAS, *called and examined.*

306. *By the Chairman.*—Your name is Edward Nicholas? Yes.
307. And you reside at Bothwell? Yes.
308. You are the Chairman of the Clyde Water Trust? Yes, Sir.
309. Have you seen a copy of the Bill which has been introduced for the purpose of increasing the powers of the Trust, and have you seen a copy of the Midland Water Bill? Yes, I have.
310. And a copy of the proposed Midland Water Bill? Yes, I have seen that also.
311. You know generally the provisions of both Bills? Yes, I think so.
312. Will you inform the Committee how long the Clyde Water Trust has been in existence? Well, Sir, the Clyde Water Trust has been in existence since 1869.
313. What have their funds been derived from? The funds have been derived from a penny rate upon the annual value of all property in the Districts of Bothwell and Hamilton, excepting the two townships.
314. All property fronting on the Clyde? Yes, all property fronting on the Clyde, with the exception of the two townships. They have been exempt.
315. What particular difficulties have the Clyde Trust had to deal with in recent years in connection with the supply of water? Well, the difficulties have been very great, Sir, the difficulties have been very great indeed.
316. Has the supply been sufficient? The supply has not been sufficient, for the last four years particularly so.
317. And have the Clyde Water Trust taken any steps to improve the supply? Yes, they have.
318. What have they done? They dammed the water back. Three years ago we built a new dam at Lake Crescent, at the intake of the Clyde.
319. Is that there [indicating spot on plan produced]? Yes.

320. Would you inform the Committee of anything that has been done higher up to keep the water back in Lake Sorell [indicating spot on plan]? We had a dam there some years ago, but it has fallen into disrepair, and it has not been repaired for 8 or 9 years.

321. Had you any difficulty in repairing the dam when it was there?—I mean from the adjoining owners of land? Yes, we had very great complaints from Mr. Kermode.

322. Have you been prevented in any way from doing anything further in connection with that dam by any action on the part of adjoining owners? Yes, we have. We decided not to erect that dam again, upon consideration of Mr. Kermode threatening the Clyde Trust with an action for flooding his land.

323. It is in evidence before the Committee that Lake Sorell can be raised nine inches above winter level without flooding any land, that is, without doing any damage worth speaking of. From your knowledge of the locality do you agree with that opinion? Decidedly not. It could not be raised nine inches above its ordinary winter level without doing great damage.

324. Without doing great damage? No, not without doing great damage; and I have known this district for 40 years.

325. Would you inform the Committee of the state of these Lakes Sorell and Crescent as regards the water retained in them? Well, my last visit to Lake Sorell was on the 23rd February last. I visited the lakes to see if it was possible to get any more water from them to supply the Clyde with.

326. What did you find? Well, I found, Sir, that the flow of water from Lake Sorell to Lake Crescent was only about two inches; and at the hatch outlet dam at Lake Crescent [indicating the spot on the plan] there were only about four inches of water against the hatch at that time. That was in last February.

327. And was that the only reason that the Trust had taken no further steps to conserve the water in Lake Sorell—what you told us just now, that you were threatened with an action on the part of the owners of adjoining land? Yes, quite so. We were in continual trouble and turmoil with Mr. Kermode. A few years back, when the hatch was at Interlaken, the water, as he said, was sent back on his land, and it was said also that the one at Lake Crescent would likewise flood the Great Lake Road. I had a complaint also from Mr. Keach—a very severe one.

328. Who was Mr. Keach? What position did he hold? He used to bring sheep to shear from the other side of Lake Sorell, up The Steppes way. He said he had to drive his sheep up to their middles in water across this road.

329. I meant to ask you is Mr. Keach the chairman of a road trust or a member of a road trust? Oh, no, nothing of that sort.

330. Did any member of a road trust make any similar complaint? No, only Mr. Kermode.

331. You are aware that one of the provisions—the object, I should say—of the Midland Water Bill, is to divert the water from Lake Sorell down to what is called the Midland Water District. It is shown within these red lines [indicating spot on plan]? Yes.

332. Are you aware of that proposal? Yes, I am aware of that.

333. In your opinion could any work be constructed here [indicating spot on plan] which would have the effect of conserving in Lake Sorell a sufficient body of water to serve the Clyde valley and the reasonable requirements of that area of land? I believe it is possible to conserve sufficient water in these two lakes to serve both of these districts by embanking the lake $2\frac{1}{2}$ to 3 feet in places.

334. At any reasonable cost? At any reasonable cost, because the fact is that the township of Bothwell and the town of Hamilton, and all the land included in the two districts, have been suffering from a shortness of water for the last four years. This is the fourth year, at any rate, that we have not had half enough water in the Clyde for our own use.

335. *By Mr. Page.*—That is, for domestic purposes you mean, not for irrigation? Oh, irrigation is out of the question; I mean for domestic purposes only. We have been drawing a little water off the open race, and if it had not been for this, I don't know what they would have done in the district during the past four years. The supply of water has been by no means sufficient. Therefore, I say that the water in Lakes Sorell and Crescent is on the average only barely sufficient for the two districts, and in a dry season it is not sufficient. We have a capital dam built at the Clyde, and that hatch is down during the winter and spring months, and has been for years to keep the water back for the summer; and yet, when it has been raised, in about November or December, at any rate, the supply soon runs out, and it falls. I cannot see, therefore, how in the face of that a supply can be taken from the northern end of the lake to water all that country.

336. *By the Chairman.*—Without doing damage to the Clyde valley? The Clyde would be soon dried up; it would be dried up by Christmas time if water is taken for that district and for the other districts; I am positive of that.

337. If there were an authority established to regulate the outflow, having ample powers to regulate the outflow from the two lakes, do you think that would make any difference?—if the water in the lake were conserved in winter, and the outflow better regulated, do you think that would meet the purpose? It could not be more conserved than what it is. That would make no difference. I will guarantee to say that it will take two real wet seasons to fill up these lakes to their ordinary winter level, and the hatch shall be down all the time.

338. Is that owing to the small watershed, or the small amount of rainfall? The watershed is not large—26,740 acres; 12,300 acres being occupied by the lake itself.

339. Then, in your opinion the watershed is too small to enable a very large quantity of water to be conserved for this district? Yes, too small; in fact, I believe if these lakes are drained much lower, if they get much lower than what they are now, that they would never fill up again.

340. Supposing the Committee and Parliament take a different view, Mr. Nicholas, and propose to provide for the conservation of water there, and to recommend a joint trust to the control of the matters connected with it, do you think it would be practicable to have a joint trust to control both districts? No; it would be a very bad partnership.

341. You don't think it would work well? No, I do not. It would be a very bad partnership indeed. The point is, there is not the water. If there was sufficient water we would say nothing about it. The district of Bothwell would say nothing about it if there was sufficient water for the two districts.

They would say, take it and welcome. But seeing the fix we have been in for the last three or four years, and that in an ordinary wet season we have just barely sufficient water for irrigation, and for the supply of the inhabitants, it would not do at all.

342. I think we have it in evidence that the area of land under irrigation in the Bothwell district is 1200 acres, is that so? There are nearly 2000 acres, and there is a quantity of additional land to be irrigated if the supply were better. I may mention that Mr. Denistoun Wood, residing on his own estate, contemplates irrigating about 2000 acres if he can get the water. Of course, it is a very simple matter if he can get the water.

343. 2000 acres?—and is there any more irrigable land in the district? Yes, there is Mr. Archer's, at Norwood; he could irrigate 500 or 600 acres with a better supply; and Mr. Chamberlen, Thorpe Mill.

344. And next to him, who is there? Then comes Mr. M'Dowall; but he could not irrigate any more.

345. Is there any more land lower down the river? Well, at Bothwell. By rights the water should be laid on to that township.

346. But I am speaking of land available for irrigation? No.

347. There is not much more beyond what you mentioned? No, there is not. I might mention that on one estate called Sherwood, now my property, there was £1500 spent by its late proprietor in making a tunnel, stone fluming from it, brick drains, and other work, at a cost of £1500; and yet these last two summers I have not had one inch of water in that tunnel, and have in consequence been unable to irrigate from 150 to 200 acres of land—the best paddocks on the Clyde.

348. During the last two years? During the last two years—the last two summers—there has not been sufficient water coming through the tunnel to irrigate 200 acres of land—there has not been an inch of water coming through.

349. *By Mr. Page.*—Have you anything to suggest to us on this Bill?—will that give you what you want for improving the water supply—the Clyde Water Bill? Well, I don't know that that will improve matters at all, with so very small a supply, giving the Trust power to increase the rate.

350. Still, will there be any objection on the part of the people to the increased rate? Well, I am afraid there will. I have not heard what is the proposed increased rate. A penny rate we have levied since 1869.

351. The maximum is 2d. in the pound on the annual value of all properties outside the township, and 6d. on all properties in the township? Yes.

352. *By the Chairman.*—It runs into a penny rate now, and that is collected only from you on the Clyde? Yes, Sir.

353. That penny rate enables you to make a good substantial dam, and pay a caretaker to look after the place? Yes, Sir; and we levy that rate about every third year.

354. *By Mr. von Stieglitz.*—How much does that amount to in the year? It amounts to about £46 or £47.

355. *By Mr. Pillinger.*—That is spread over three years? Yes.

356. *By Mr. Machenzie.*—So, Mr. Nicholas, the water cannot be raised 9 inches above winter level without flooding the adjoining country? No, Sir; it is impossible to raise those Lakes above their ordinary winter level without the water going for miles.

357. And what is the difference between the summer and the winter level? Oh, well, the difference between it this summer and at the present minute is considerable. It is lower now than it was in February. I was up there then.

358. But would it be inches or feet lower? It would be feet.

359. Well, how do you account for the reduction: is the water running away? Partly, and owing to the want of rainfall.

360. It has not been put into the Lake, and then run off? No, certainly not, except for domestic purposes.

361. The Lake never had the water in it this year? It has never had the water in it for four years.

362. Then it has been somewhat below its ordinary winter level for some four years? Yes, Sir; from Interlaken Bridge to the narrowest water in Lake Sorrell is 800 yards at this present minute.

363. *By Mr. W. H. T. Brown.*—What is the actual depth of water in the Lake—what I mean to say is, the actual depth at the narrowest water in Lake Sorrell at its outlet into Lake Crescent? There is 700 or 800 yards of a dry sandbank.

364. *By Mr. Machenzie.*—But I want the perpendicular depth of water: you have said that you cannot raise the water nine inches above winter level without flooding the adjoining land: now I wanted to know what has been the height of the water in the Lake this summer? Yes, well, the highest mark this summer has been below its ordinary winter level by $3\frac{1}{2}$ feet.

365. *By Mr. von Stieglitz.*—How many feet do you suppose? Well, our hatch at Lake Crescent is 3 feet 9 inches high, and there is only about four inches of water out of it now: that will give you an idea.

366. *By Mr. Pillinger.*—Was the water ever at the top of that hatch? It has been at the top of it in flood-time. I admit that, on different occasions, it has been level with the top of the dam, but not for some years.

367. *By Mr. Machenzie.*—You said you visited the lake in February last, and you said also there was very little water running on the race? About two inches of water.

368. Was the race silted up? In places from the Bridge through to Lake Crescent.

369. Then the mud had accumulated at this hatch? At the Clyde Hatch the mud accumulates.

370. *By Mr. Pillinger.*—Did you visit the lake last on the 23rd February last? Yes, I did.

371. And you found two inches of water running from Lake Sorrell to Lake Crescent? Yes; but from Lake Crescent into the Clyde there was about four inches running under our hatch.

372. What work did you do then, or did you do any? Yes. I could see plainly enough that the only way to get the little water down the Clyde would be to take the hatch sluice-gate up altogether and try and deepen the channel. And I agreed with a man there and then on the spot, and he sank it from 18 inches to 20 inches till he came to bluestone rock, when he said he could not get any deeper.

373. That was 20 inches or more water you took off Lake Crescent? Well, I can't say that. A little came from Lake Sorell.

374. You say that there were only two inches running into Lake Crescent with which to irrigate that 1200 acres? It might have been dry for several days before I got up there; no land was irrigated last season on the Clyde.

375. But you got 20 inches of water off Lake Crescent? You cannot reckon the water by inches in that way. The quantity of water that we drew out would be in the channel from the hatch to the lake, because that is very deep. The channel from the hatch into the lake is deep.

376. Well, there was nothing certainly to prevent you getting the mud out? No.

377. You went on to Lake Sorell, and you saw the water from Lake Sorell running into Lake Crescent, and you say that the hatch there has not been used for how many years? Well, for 8 or 9 years.

378. More than that, is it not? I don't think so.

379. Is it not 14 or 15 years? It is not 14 or 15 years since it was first built.

380. If you can, Mr. Nicholas, would you tell us what did you do when Mr. Kermode gave you notice to lower the water? He said he would bring an action against us if we did not lift the hatch, and we did so.

381. You lifted the Lake Crescent hatch? The hatch would be at Interlaken at that time, and the dam would be there.

382. Is it not the Lake Crescent dam you mean by that at Interlaken? That dam would be in force then at Lake Sorell.

383. I don't expect to recall the particulars to your memory, but I believe there was a gate there, which generally had a padlock on it. Now, did Mr. Kermode order his bullock-driver to get his bullocks out and pull the gate away? I could not say that; but he did not pull the gates away.

384. Now, when Mr. Kermode gave you this notice did you ever take any pains to ascertain whether he would suffer any damage or not? No; I cannot say that we did. We did not go and inspect.

385. Well, when you were up in February, you say there were two inches of water running from Lake Sorell into Lake Crescent. Now, did you try to ascertain what further amount of water could be got from Lake Sorell by deepening the outlet? Well, I walked from the bridge at Interlaken House, and followed the Interlaken River to where it joins Lake Crescent, and took particular notice of it; and my observations were that there was no fall between the two lakes beyond a few inches.

386. Have you ever drawn from Lake Crescent? (No answer.)

387. Have you ever been there when the water has been not running out of Lake Sorell into Lake Crescent? No; I have never been there when it was not so.

388. You would not know of a great bank of sand washed up there? Above the bridge at Interlaken there is a quantity of sand.

389. Did not you say it is 400 or 500 yards back from the outlet into Lake Crescent? Yes; but there does not appear to be any drift of sand or silt up from the mouth of Lake Sorell.

390. *By Mr. Mackenzie.*—Which is, naturally, the bottom lake? Yes. I don't think you will get any fall; certainly you will not get a foot.

391. But the natural fall is 1 foot 10 inches? I certainly should not think that it has that fall.

392. Yes. Now you have said that it will take two wet seasons to fill the lakes? Yes, and two good ones too, flooding seasons.

393. Do you know anything personally about the watershed? Personally.

394. Or do you only gather that from Mr. Mault's report? Do you know the mountains? I know something personally, and also from Mr. Mault's reports.

395. Do you know the mountains in the district? Yes.

396. Do you know Mt. Franklin? I don't think it drains into Lake Sorell.

397. Or the Cradle Hill? At any rate the watershed is very small, according to Mr. Mault's report.

398. Do you know anything of a permanent river that runs into Lake Sorell at the northern end? You don't call it a river, I hope. In winter time, when any little creek is in flood, it might be called a river.

399. Do you not know that this river comes right away from what is called the Mouths of the Plains? That is the only outlet into Lake Sorell, and that is dry in the summer. It is only a straggling creek.

400. *By Mr. Pillinger.*—There is one thing I would like to ask you. You say you don't think there is water enough in these lakes to serve both districts? I do, and will swear to it.

401. Yes, but you have stated differently before, when you gave evidence before a Select Committee of the House in 1888. You remember giving evidence on that Committee? Yes.

402. And saying, in answer to Question 59, that, if certain works were carried out, there would be ample water for both districts? Oh, yes. But they failed to carry out that work. The seasons were very different in 1888, and before that time, the rainfall being regular and certain, so that the Lakes kept fairly full and stood the drain on them to supply the Bothwell and Hamilton Districts; but since that date it has been very light and uncertain owing, in my opinion, a great deal to the quantity of live timber that has been destroyed by ringbarking in the vicinity of the Lakes; and as we all know by destroying the forests the rainfall is greatly affected in that region, therefore I am certain the low shores of the Lake should be embanked at least 2½ feet, and not tapped, as by doing so Lake Crescent would run almost dry, while the slight fall from Lake Sorell to Lake Crescent would not allow sufficient water to be got from Lake Sorell to supply Bothwell and Hamilton.

403. We failed then because we could not get permission to carry out the works. What I want to know from you is, if these works are carried out, will there be a sufficient supply?

404. *The Chairman.*—It is not exactly in the same position.

405. *By Mr. Pillinger.*—You make the same statement now as you did then in 1888? Yes, and I will stick to it. If that is carried out we will be well satisfied, and a good dam is built.

406. *By Mr. von Stieglitz.*—When you were at Lake Sorell last February, how was the water then as compared with the winter level? I presume you have a mark? We had a mark fixed many years ago, but I suppose it got washed away, or was not attended to, so I know nothing further about it. We tried our level best to keep the waters of the lake from flooding the adjoining country, that is from overflowing the Great Lake road and the adjoining country.

407. How much lower is the water now, or in February, say, from what you call the winter level? Well, I should say $3\frac{1}{2}$ feet.

408. You mention in your evidence that some one made a tunnel: is that up from one of these Lakes? Oh, no, that is on property which I own. A tunnel was put through the hill 120 yards in length, which, with the other works, cost £1500, and these past two seasons I have been unable to get any water through it for the purpose of irrigating the 200 acres of my best land situated on the Clyde.

409. Do you know a bluff called Miller's Bluff, and the stream by which it is connected with Lake Sorell? Yes.

410. What is the distance from the Bluff to the Lake by that stream? Well, I can't say.

411. *By Mr. W. H. T. Brown.*—About 7 or 8 miles. Do you suppose it to be about 7 or 8 miles? Yes, I was going to say about 6 miles.

412. *By Mr. Brown.*—If the work is carried out as is proposed by these two Bills, you are quite satisfied that there will be enough water to supply the two districts? Yes, if the Lakes are embanked up to their winter level.

413. Are you satisfied that these Bills are the same Bills you gave evidence on 10 years ago? I suppose so.

414. *By the Chairman.*—The evidence you gave on a former occasion, and that you give now, as to the sufficiency of water in these Lakes to serve both districts, apply to a proposal to raise Lake Sorell how much? $2\frac{1}{2}$ feet above ordinary winter level.

415. Would that endanger the road that passes along there between the two Lakes?—would it necessitate any alteration in that? Of course it would. It would require that road to be raised for about half a mile.

416. *By Mr. Pillinger.*—But what you say is, that there is sufficient watershed, and rainfall in the Lake district to supply both places under certain circumstances? I don't think I said so.

417. You said so, and you emphasized it? I said if the Lakes were embanked.

418. If you were to tap these lakes in their present state without embanking them, you would drain them right out? I will guarantee that is so.

419. But there will be a water-supply that will fill them? That I am not prepared to say. If some of the proposed works were carried out, Lake Crescent would be turned into a marsh or a swamp.

420. Do you state that the present water supply would be quite sufficient to supply both Bothwell and Hamilton if what is proposed to be done is carried out? It has not been sufficient during the last four or five years; but if the shores of the lake are embanked, and there is thus enough water stored, we will not object.

421. *By Mr. von Stieglitz.*—What height would the road require to be raised? The road would have to be risen in proportion to the height the water is raised.

422. I think the road was not made when Mr. Ker mode made these complaints—since then there has been a metal road made which has raised the road 18 inches, I think: at that time it was not the same? Yes.

423. *By Mr. Pillinger.*—I don't think the water has been over since that? No, but the road has sunk down a lot, the water crossing it a foot deep.

424. I know the time he complained the road was not there? It is many years since, Mr. Pillinger, you travelled that way.

425. *Mr. Pillinger.*—Oh, no; I go up there every holiday, and have been there frequently.

AFTERNOON SITTING.

MR. ALEXANDER ARTHUR REID, *called in and examined.*

426. *By the Chairman.*—Your name, Mr. Reid? Alexander Arthur Reid.

427. You reside? At Bothwell.

428. Have you seen copies of the proposed Clyde Water Bill and the Midland Water Bill which are the subject of inquiry by this Committee? I have just looked at them.

429. You know generally something of the provisions of the Bills? Yes.

430. Of the Clyde Water Bill at all events? Yes.

431. Can you inform the Committee what the condition of the Clyde has been as long as you have known it? Well, lately, during the last few years, it has been less and less a stream, and last year it was very short of water. The miller was constantly complaining that there was not enough water; and as to irrigation, I suppose not more than half the land could be irrigated last year.

432. We have a letter in evidence this morning from Mr. Chamberlen stating that he suffered in his mill at Bothwell from the shortness of water. Can you give the Committee any information confirming Mr. Chamberlen's statements? Yes. I am sure that the water supply for the mill has been very short, from what I have seen of it and the complaints I have heard. I know that it was not possible to work his mill for a long time only at intervals.

433. As to water for irrigation, how has that been affected? Well, in my own case—I can speak for myself—we had a very poor supply. I could only water about half my paddocks; I had to let the others go. I know of other cases that were in the same way. We had a flush of water at the first go off.

434. Early in the summer? Yes, early in the summer.

435. Are you a member of the Clyde Water Trust, Mr. Reid? Yes, I am.

436. What steps did the Clyde Water Trust take to try and get a proper supply of water? Well, they deepened the channel both ways at the hatch.

437. That is, Interlaken? No, at the other hatch at Lake Crescent; and when they found they did not get enough water they tried deepening Lake Sorell a short way from the channel into the lake to get more water.

438. But did you take any steps to conserve the water previously—the winter water, I mean? Oh, yes. We have always had a caretaker there, and his duty is to conserve the water.

439. At Interlaken? No, at Lake Crescent. His duty is to conserve the water there at Lake Crescent.

440. But is not the supply in Lake Crescent dependent on the supply from Lake Sorell? Quite so; but for the past few months—I think from January—little, if anything, has come from Lake Sorell; it has been almost dry; but at the beginning of the season we had some rain, and we had it lowered in order to try and get some more water.

441. The race lowered? The outlet at the hatch lowered.

442. Was it not at Lake Sorell that you conserved the winter water for use in summer;—that you can most effectually conserve the water there for use in the summer? That was at Lake Sorell; but there has not been a hatch there for some time past. But Mr. Kermode has complained of the water keeping up too high. He complained, saying that it was flooding his land, and threatened us with an action if it went too high.

443. Is that what prevented the Clyde Water Trust from conserving water from Lake Sorell? That is why, Sir.

444. You know the Lakes pretty well, I presume, Mr. Reid? Oh, yes. I was up there last month, and I am sure they are lower now than they have ever been.

445. From your knowledge of the watershed, and the size and depth of Lake Crescent and Lake Sorell, do you think that a sufficient amount of water could be conserved in both of them to serve both the Clyde people and the Midland Water district, on the eastern side of the Western Tier. Do you think a sufficient supply of water could be conserved in ordinary winters in Lakes Sorell and Crescent to serve the Midland Water District as well as your own? Certainly not.

446. How do the residents of the Clyde feel generally in regard to the matter—how do they view the proposal to take a supply from Lake Sorell to the Midland district? I think they are rather against it; they are frightened they won't have a sufficient supply for themselves. The water has been very bad lately, and they are afraid it will be worse, especially in view of what Mr. Mault says, that the Tunbridge people will have the best of the water. They think they will have the dregs, so to speak.

447. But supposing this Committee and Parliament thought it well to have a joint Trust to regulate these matters so that both the Midland Water district and the residents in the Clyde valley should be fairly and equitably treated in regard to the Clyde water—do you think it would be practicable to have a joint Trust to regulate the water supply of both parties? I think it could not be done, it would hardly be possible with the conflicting interests; besides it would be rather inconvenient to bring the members of Trust so far; it would be a long way to travel.

448. What number of people do you suppose would be affected by a good or bad supply of water from the Clyde, quite apart from landowners? How many residents are there? There are Hamilton and Bothwell—at a rough guess I should say about 700 or 800 at least.

449. In the two towns? Yes, if not more.

450. Have the two townships ever suffered from the want of water? Undoubtedly they have. There has been a very poor stream, and the water has been very bad lately. They have had some typhoid there of recent years, more than ever known before. In fact it was considered a very healthy place until recent years, and this has been put down to the water. I cannot say that it was due to the water, but that was what was stated.

451. Are you aware that one of the provisions in the Clyde Water Bill is to enable the Trustees to levy a rate of 2*d.* in the pound on the annual value of land fronting on the Clyde, and 6*d.* on the annual value of lands in the two townships of Bothwell and Hamilton? Yes, I have heard so.

452. In your opinion, would the inhabitants of the town of Bothwell be willing to pay 6*d.* in the £ if it would be necessary in order to obtain a sufficient supply of water? I could not say whether the people in the two townships would be willing to do so, but I think the landholders would be willing enough to pay the 2*d.* rate if they could get a sufficient supply for irrigation. I think the people in the townships might be willing to pay the 6*d.* rate if they could get a good supply, but I cannot speak positively on that point.

453. *By Mr. Mackenzie.*—Do you know what is the amount of rainfall they have in the Lake District, at Lakes Crescent and Sorell. No, I don't know. I think it would have been of great assistance if the rain gauge had been kept there.

454. Is it a small or a very large rainfall? I think a fair amount of rain falls in ordinary years, but recently it has been very short.

455. During the winter time is there very much water in the Clyde running to Hamilton? There has not been much during the last two years.

456. In the winter time I speak of? There is a good deal then. We used to have an outlet in this hatch, and the water used to flow over at times after rain.

457. Flow over where? At Lake Crescent. Since that we have had it dammed.

458. In damming Lake Crescent do you injure private property? Well, I cannot say whether it is all private property, but Mr. Kermode complained.

459. How much more water could you conserve in the lake without injury to adjoining stations? How much more water?

460. How much more water in perpendicular height? I could not say.

461. How much higher would Lake Sorell be before it overflowed its bank? Lake Crescent you mean.

462. No, Lake Sorell, that runs into Lake Crescent? There is no hatch there at present from Lake Sorell.

463. There has been one? There has been one, years ago.

464. Do you know how much water you could conserve in Lake Sorell without injury to property by the overflowing of its banks? Not very much.

465. How much could it be raised above its ordinary level? I think not more than a foot above its ordinary level. In fact if it were raised a few inches only a portion of the surrounding country would be inundated. It is very flat, the parts on the western side.

466. Would it be an extensive undertaking to prevent that overflow? I should think it would, myself.

467. To form a bank along the shore? I think there would be a great deal of embankment required, and another thing, it would want to be made very strong. Anyone can imagine that with a quantity of water, if the water got away, what a terrible amount of damage would be done down in the valley. I should think it would be a very serious thing if anything of the kind happened.

468. You said, Mr. Reid, about the distance between the two Water Trusts, that it would be difficult for them to meet. Is there no central place where they could meet? I suppose the most central place would be the lake itself.

469. *By the Chairman.*—At Interlaken? Yes, at Interlaken.

470. *By Mr. Mackenzie.*—There is no township there? No; a boarding-place. I mentioned that it was a good long way.

471. Could not the Trust be formed of residents in the neighbourhood of the lakes, who would have joint interests? I don't think they would represent Bothwell and Hamilton.

472. There is some land on the side of the river that might be irrigated, Mr. Reid? On the banks of the Clyde?

473. Yes. Is there much? I think there must be a good extent. On one estate alone there is somewhere about 2000 acres, I have been told. I know it is a large tract of land.

474. Two thousand acres. Has any of this land ever been irrigated? I think they irrigated it once, years ago, but it was not continued, I suppose, on account of the lack of water.

475. When the water supply was so short at Hamilton, did you take any steps to increase it? We looked to the hatch as well as possible, and, as I said before, we lowered the outlet to try and get more water from the lake, and we got all we could get; and owing to the want of rain we could not get any more.

476. Was the drain silted up, or the channel? The channel had silted up, and we had that cleared out for a certain distance.

477. Last summer? Yes.

478. And, notwithstanding this, you were short? Yes, we were very short.

479. *By Mr. Dumaresq.*—How long did the extra quantity last? We got a little more water for a few days.

480. Do you know how much? A few inches. I don't exactly know the depth. For about 30 inches I think it was lowered.

481. Into the lake? Into the lake.

482. You could not have taken out any more? No, we could not take any more.

483. But in ordinary times do you think there would be sufficient water, if the lakes were kept up to the winter level, to supply the wants of the two districts? Not without damming.

484. Not if they were full? No, certainly not, if they were full.

485. The water was very bad at Hamilton, you say. Was there not irrigation going on above that town? Yes, there was.

486. I suppose that flowing over irrigation paddocks does not tend to improve the water? I suppose not.

487. Do you know of any difference in the waters of Lake Sorell and Lake Crescent? I do, after reading Mr. Mault's report.

488. *By Mr. von Stieglitz.*—Have you seen Lake Sorell when it was quite full? I have seen it when it was fairly full, but not recently.

489. Have you ever seen it flood any place? No, I don't think I have.

490. What is the greatest height you have seen it, as compared with the present level: what perpendicular height do you think that would be? I understand you have seen it this summer? Yes. I think quite two feet; more than two feet, I think.

491. From the highest to the lowest? Yes. It is out 70 yards from the shore, having receded so much. Of course I may be wrong; but that is my opinion.

492. *By Mr. W. H. T. Brown.*—Have any steps been taken by the Trust to conserve the water in Lake Sorell by keeping the hatch in order between the two Lakes? Not while I have been in the Trust.

493. How many years have you been in the Trust? Since 1891.

494. Then no surplus water—that is, winter water—has ever been conserved during your term in Lake Sorell? Not during my term.

495. You say that Mr. Kermode used to complain, when there was a hatch there, about water flowing over his land? Yes.

496. Do you know if anybody ever made any inquiry at the time that he said his land was flooded? I think this was before I was in the Trust.

497. Well, have you any recollection of anyone saying that they had gone to inspect the flooded country, as had been represented by Mr. Kermode? I could not say; but I am almost sure that Mr. Chamberlen did. He used to go up generally.

498. Then, you could not tell the Committee whether it was Crown land or purchased land that was submerged? I could not say.

499. Do you think, from your knowledge of the lakes,—you have been there—that, with a proper conservation of water in these two lakes,—a good head of water, properly conserved,—that there would be

sufficient water to supply these two districts as provided for in the Bills? If there was a dam made three feet high I should think there would be.

500. Do you think there would be sufficient water for the two districts? I should think so, if the lake were three feet above the ordinary level.

501. How much water do you assume Lake Sorell would hold when filled up to winter level? I am afraid that is beyond my calculation.

502. *By the Chairman.*—How many feet, or inches, is Lake Sorell now below its ordinary winter level? About two feet.

503. *By Mr. W. H. T. Brown.*—Do you think it would require five feet more of water in that lake, properly conserved, to supply these two districts with water properly? It would require that from the Clyde.

504. Have you any idea of the amount of water in one inch depth of that lake? It is a very large area, you know: I did see it in Mr. Mault's report, but I am not sure now.

505. You have seen Mr. Mault's Report then? Yes.

506. In his Report Mr. Mault states that if sufficient water were conserved to raise the lake nine inches only above winter level, there would be an ample supply for these two districts, and that no land of consequence would be flooded—do you agree with that opinion? No, I do not. I fancy it would flood the surrounding country; but he may have had more opportunities of seeing its probable effect.

507. He went as an expert, you know? Yes, I know; but it is very low-lying, and I should think nine inches above winter level would flood a great deal.

508. If a large area of land was submerged, and that land was Crown land, there would not be much injury done? No, I suppose not, but Mr. Kermode would not have complained if it were Crown land. I think there is a great deal of Mr. Kermode's land there.

509. I thought, perhaps, you might have known something about the submerged land; I always understood it was Crown land—have you had any complaints lately? We have had no recent complaints from Mr. Kermode.

510. *By the Chairman.*—Not since you have been on the Trust? No, not since then that I remember.

511. Mr. Kermode would have no power to prevent the Trust keeping the water up to winter level? I don't think so.

512. Still, you don't think that would be sufficient water to supply the districts? No.

513. *By Mr. Pillinger.*—How do you ascertain the winter level? There is the waste upon the dam.

514. Is there any mark? No.

515. There is no positive way of knowing the winter level? No, that has not been fixed; it has never been fixed since I went into the Trust. I only go by what they thought was the winter level.

516. I understand the level was much higher before this Bill was passed—do you remember anything about that? No, I do not.

517. *By the Chairman.*—Do you know anything of the tributaries of the Clyde, Mr. Reid, besides the source from which it comes, Lakes Sorell and Crescent? I know there are several flowing into it, and I think a good deal of the water goes in a good deal below the lake.

518. Are they constantly-running streams? For the most part.

519. Or do they carry flood-waters only? They carry flood-waters, or run for a considerable time in wet weather.

520. How many do you know of south of Lake Crescent? About three creeks, I think.

521. Do they affect the supply to any great extent? They would in winter time, when there is a lot of rain.

522. But not in the summer? No, in the summer they would not affect it.

EDWARD LEWIS ARCHER, *called in and examined.*

523. *By the Chairman.*—Your name, Mr. Archer? Edward Lewis Archer.

524. You reside? At Bothwell.

525. Are you a member of the Clyde Water Trust? Yes, and have been for about 4½ years.

526. Do you know generally the provisions of the two Bills that this Committee is now considering—the Clyde Water Bill and the Midland Water Bill? Yes, Sir, I believe so.

527. Have you found, in the performance of your duties as a member of the Clyde Trust, that you require some more extended powers to enable you to deal with the water supply? Yes, we have.

528. Do you think the Bill, as it is now proposed, will be sufficient for the purpose? That is, the Clyde Water Bill.

529. The Clyde Water Bill? I do.

530. How many residents are there in the town of Bothwell, approximately, I mean? About 500; that would be in the town and district.

531. I mean in the township only? Oh, about 350 in the township.

532. Have they been much affected suffering from the want of water in the Clyde during recent years? Yes, Sir, much, especially during the last two years.

533. From your knowledge of the opinions of the residents in the township, do you think they would be willing to pay up to 6d. in the £, as provided for in the Clyde Water Bill, if they had a sufficient supply of water? I believe they would be quite willing to pay up to that amount, provided they had a sufficient supply.

534. Have you seen Mr. Mault's report on the water supply of the Clyde? Yes.

535. You are aware that he has made a proposition as to cutting a channel from Lake Sorell to connect with the Clyde—what do you think of that proposal? I think that is the only way that we will get a fair and pure supply of water.

536. If that were done, could you dam Lake Crescent up altogether, and take the whole of the supply of the Clyde from Lake Sorell? We could dam it up, and intercept any overflow above winter level that would have to go down the Clyde.

537. Why, is that low-lying land? Not very low; but there is a difference, not a very great difference.

538. Have you often seen the Lakes Sorell and Crescent recently? Yes.

539. When did you see them last? About a fortnight ago.

540. Can you inform the Committee as to the state they were in at that time? You saw them, then? Yes. They were lower than I ever knew them. I am quite sure that both lakes are a foot lower than I ever knew them before.

541. And the Clyde Water Trust has not been able to do anything effectual to remedy that state of affairs? No, Sir.

542. Why have you not done something to conserve the water in Lake Sorell so as to give a better supply? Because we were waiting to know the fate of the new Bill now before the House. With regard to the other—Lake Crescent—it is useless to do anything, because we simply drain the water from the mud.

543. From Lake Crescent? From Lake Crescent.

544. What quantity of land do you suppose to be irrigable in the vicinity of Bothwell in addition to that already irrigated? How much additional land could be irrigated? I consider about 3000 acres additional.

545. *By Mr. Page.*—You speak of “the only way to afford a pure supply of water.” Is there a difference in the purity of the water in the two lakes? Yes, there is some difference, according to Mr. Mault.

546. That is to say, Sorell is purer than Crescent? Yes.

547. *By Mr. Mackenzie.*—You don’t approve of them getting the water from Lake Sorell into Lake Crescent and then into the Clyde? No.

548. You want to tap Lake Sorell quite independent? Yes.

549. How much more water can you conserve in Lake Sorell without flooding the surrounding district. More than there is at present—up to the ordinary height of the winter level? Very little more, without it overflowing on to the surrounding land.

550. Feet or inches? Inches, I should say, certainly.

551. Do you know anything about the rainfall of the district? No, Sir.

552. Have you a full supply at Hamilton in the winter time? (No answer.)

553. *By the Chairman.*—Bothwell? In ordinary winter we have; but this year the Clyde is almost dry.

554. You very seldom hear of it being flooded? Very seldom. The river has not overflowed its banks for 23 months.

555. How much land has been under irrigation do you know, Mr. Archer, along the banks of the river? About 1200 acres.

556. That has been actually irrigated? Yes.

557. In irrigating that was the supply from Lake Sorell greater than it has been of late years? I think so.

558. Did it prevent a sufficient supply for other purposes at that time when you were using the water for irrigation—was there sufficient for other purposes as well? At that time, yes.

559. How long is it since the land was irrigated? It is about two years since the land was properly irrigated, but occasional times since the water has passed over it, but not in sufficient quantities to irrigate it thoroughly.

560. Why? Because we have not had the supply.

561. *By Mr. Pillinger.*—Did I understand you to say that you approved of taking your supply direct from Lake Sorell? Yes.

562. What do you propose, then, to do with Lake Crescent, a body of 5000 acres of water? I don’t know what is best to be done with it, but we think that our river would be better without it, for the water in it is impure.

563. Would it not be very much better to take the water from Lake Sorell and the overflow from Lake Crescent into it? Yes, but it would give us purer water than at present.

564. Would it not be simply mixing them? Yes, but it would be the top of the water only, which is purer.

565. And would you let it lay there so as to get the top of the water only? Yes; I don’t care what would be done with the remainder.

566. Would that not be a rather selfish proceeding; that is, to have this enormous reservoir—there is not another like it in the Colony—lying idle? (Query, no answer.)

567. What depth of water did you think there was in Lake Crescent when you saw it last? I have no idea.

568. There is a great spread of clear water there? Yes, there is a great spread of water, but I don’t say about it being clear.

569. Do you know anything about Toom’s Lake? No.

570. Supposing the Committee decide that there is sufficient water there to supply both districts, have you any opinion to offer how they would be better worked for the protection of the Bothwell district? No, Sir, I have no idea. I don’t think, from what little I know of it, that sufficient water could be conserved without an enormous outlay.

571. But, supposing that is done, how would you treat it as far as the Trusts are concerned—would you have the one Trust? I never thought over it; I cannot say.

572. You say there are 1200 acres of land that would be irrigated if there was a sufficient supply—have you any idea how much water it will take to irrigate that? No, I could not tell you.

573. How long is it since there were floods in the Clyde?—do you remember? Yes, I can remember them, but I cannot tell you the dates of them. This much I know, that the Clyde has never overflowed its banks for 23 months.

574. The Clyde River has very high banks, has it not? No; up above where I live the banks are exceptionally low.

575. *By Mr. von Steiglitz.*—Have you been to Lake Sorell in the summer? Yes.

576. This summer? Yes.

577. What time were you there? About a fortnight ago.

578. In the summer, I mean? I have seen it on an average twice a month.

579. Did you see it last February? Yes.

580. Was the water running out of Lake Sorell then? No.

581. Have you seen the lake pretty full? Yes.

582. Have you seen it overflowing on to the marshes? Yes.

583. What is the difference, do you think, between that level and the present level? Two feet six inches.

584. Lake Crescent has a muddy bottom? Yes.

585. Are there any rushes visible near the shores now? No; the rushes at the edge are all dead.

586. Where the hatch is going out of Lake Crescent, what sort of a place is that?—is it a boggy flat? Mud all round.

587. Would it take very much to drain Lake Crescent completely dry so that the mud might be drawn off? I don't know, Sir.

588. What sort of a place is it there?—is it a flat country? Yes, mostly flat country for a considerable distance from the lake.

589. What fall do you think there would be from the hatch, say about half a mile away? I could not form an estimate, Sir.

590. Is there a considerable fall there? Does the water fall very quickly that gets away from the hatch? Yes.

591. Can you give us any idea of the depth of water in Lake Crescent? No, Sir; I have never been out on the water.

592. Where the hatch is, is it all muddy? Not just where the hatch is. It is rocky there.

593. Do you know what distance the rocky bottom extends—does it extend down the water-channel? Yes, a good distance.

594. What distance? About 100 yards; it is all rocky, more or less; the rocks are 100 yards from the hatch.

595. There is a good fall? Yes.

596. *By Mr. W. H. T. Brown.*—Did you ever notice the water being impure in Lake Crescent until this last year? Yes.

597. You always considered it to be impure? No. When the lake is full the water is very much better than when it is low.

598. What made you think that, when the waters of the two lakes are practically identical in position? Mr. Mault attributes the comparative impurity of the water in Lake Crescent at the present time to the undue lowering of the water. But if the water were properly conserved you would have a purer and better supply, would you not? Yes.

599. Then there would be no reason, if the water were properly conserved, to tap Lake Crescent at all; there would be no reason to go up to Lake Sorell. You could go on drawing your water as at the present time? That is provided Lake Sorell kept up to such a height that we could get pure water from it.

600. That is what I mean. You would get a better and more wholesome supply of water? Yes.

601. And, if the water were conserved, there would be enough to supply the two districts? I don't know about that.

602. Not even if it was kept up to what is called the winter level? If it were kept up to that it might be.

603. You don't think that, if the water were kept up to the winter level in both lakes, there would be enough to keep you both going during the summer months? No, I don't.

604. Do you know how many tributaries run into the lake? The principal one is the Mountain River, running into the lake at the northern end.

605. Have you seen that this summer? Yes.

606. Is it running? Yes, just running. It is very small.

607. Have you ever seen it in the winter time? No, never.

608. Then you have no idea what the watershed of that river is—what is the length of that river? I don't know.

609. Have you any recollection of Mr. Kermode complaining—or were you in the Trust at the time—of the flood-waters injuring his property? Yes; just after I joined the Trust we had a complaint.

610. How many years is that ago? About $4\frac{1}{2}$ years.

611. Did you visit the locality? I didn't, but I believe other members did.

612. Did they make any inquiry as to whether the land flooded was Crown land or private property? I don't know.

613. You don't know? No.

614. Do you think Mr. Mault would be correct when he says that the lake should be raised 9 inches above winter level, whatever that is? I don't know what the winter level is.

615. He seems to have established a winter level, and thinks that 9 inches more water could be conserved in it without doing any damage to the surrounding properties? I don't know what winter level is.

616. *By the Chairman.*—Do you know anything of this part of the country enclosed in the red lines [indicating spot on the plan], the proposed Midland Water District? Only a little, by passing through it along the road.

617. Can you estimate the number of people there who would benefit by a supply of water? It is a very small number in proportion to those who would benefit by the water going the other way. The proportion is about seven to one.

618. You reckon that seven persons in the Clyde valley would benefit as against one in the Midland district? Yes.

619. Do you know anything of the tributaries below Lake Crescent—how many tributaries are there? Only two small creeks.

620. Are they storm-water channels or constant water streams? One of them is a storm-water channel, and the other one runs the greater part of the year.

THURSDAY, 28TH JULY.

EDWARD ALBERT COUNSEL, *called and examined.*

621. *By the Chairman.*—Your name is? Edward Albert Counsel.

622. You are Surveyor-General and Secretary for Lands? Yes.

623. You know that the object of this Committee is to enquire into the provisions of two Bills; viz., the Clyde Water Bill and the Midland Water Bill? Yes.

624. Do you know the general provisions of those Bills? Yes.

625. And you know Lakes Sorell and Crescent, the two lakes to be dealt with? Yes.

626. Will you please give the Committee any information you have as to the proposed mode of dealing with the waters of Lake Sorell and Lake Crescent? Yes. This is a plan I have prepared from a recent inspection of the country. The plan shows Lake Sorell; the land coloured green is submerged.

627. This land is now a swamp; that is, the land shown on the south side of Lake Sorell? Yes.

628. Does this plan also show the land that would be submerged if the level of Lake Sorell was raised to any extent? No; this plan only shows the land that has been submerged owing to the water being backed up by a dam put at the outlet of Lake Sorell.

629. There was an outlet there previously? Yes, there must have been some outlet there, because years ago this land was not submerged.

630. What we want to know is, assuming that a certain quantity of land was submerged from the level of the lake being raised from a foot to three feet above the river water-level, what quantity of land would be submerged under those circumstances: how much private land and how much Crown land? If the lake were raised 1 foot 9 inches or 2 feet, assuming the embankment to be raised 2 feet round the lake, as much more land would probably be submerged as is shown on this plan.

631. And is that private or Crown land to which you refer? It is partly private and partly Crown land, as shown on the plan.

632. And what would be the acreage? Well, there is 305 acres, 185 acres, and 177 acres; in all, 667 acres.

633. Then, of this 667 acres, 305 acres only are Crown lands? Yes, that is so.

634. Would the balance be rendered quite useless for pastoral purposes if the level of the lake were raised? Yes, I think so.

635. Yes; then that land, together with some small areas shown on the plan would be rendered valueless for pastoral purposes if the level of the lake were raised over the ordinary winter level? I think so.

636. *By Mr. Brown.*—If the lake were raised 1 foot 9 inches over the ordinary water level? Yes.

637. *By Mr. Pillinger.*—What would 9 inches do, Mr. Counsel? I am unprepared to say, without reference to my map.

638. Could you indicate on the plan you have produced the course of the cutting proposed by Mr. Mault to run the water direct into Lake Crescent? No, it is not shown here.

639. But you know the proposal made by Mr. Mault—you know the general scope of the proposal is to run a watercourse direct from Lake Sorell into the Clyde—that was proposed by Mr. Mault in his report? No, I don't know particulars.

640. *By Mr. Page.*—This is the proposal—"That a channel be cut from Lake Sorell to the Clyde, capable of delivering 90,000 cubic yards of water a day, and that in dry weather no water be admitted into the Clyde but by this channel." You know that proposal was made? Yes, I believe it was.

641. *By Mr. Pillinger.*—Do you think that is practicable? It might be done by banking up the lake; it is not practicable without that; there is not sufficient water.

642. Would not the banking up of the lake be likely to damage the Great Lake road? I think not, if the progress of the water were stopped, as suggested, in one or two places on the lake.

643. *By the Chairman.*—Do you know anything of the land on the eastern side of the Western Tier: if the supply of water were taken from Lake Sorell, as proposed, can you inform the Committee as to the quantity of land suitable for cultivation or irrigation? Yes, some of the land—about from 25,000 to 30,000 acres—might be irrigated; some of it is good land and some of it excellent land; it is about 2000 feet below the lake approximately.

644. At a lower level than Bothwell? Yes, I believe it is.

645. *By Mr. Page.*—Would it be possible to make improvements to these banks where the submergence took place? I think so, and I don't think it would be very costly.

646. Are these plans where the overflow is shown?—is the bank there lower than at other places? Yes.

647. Can you tell us the value of the private land that would be submerged? Yes; I think it is worth about 30s. an acre.

648. *By Mr. Machenzie.*—Does that plan show all the land that would be injured by the raising of the Lake?—is there nothing on the east side? No, there is no land on the east side of the lake that has been covered hitherto.

649. Do you know what the probable cost of the improvements would be if the bank were raised a foot or so? Speaking generally, I should say from £200 to £300. There would be 17½ chains to block up.

650. What quantity of water is there in the lake? Lake Sorell contour surveys showed an area of 12,600 acres, with an average depth of from 8 feet to 9 feet.

651. Do you know the area of country that supplies this lake—I mean the catchment area or watershed? I should think it is about 20,000 acres.

652. Is the rainfall good there? I have no record of it, but I should say it is about 15 inches.

653. *By Mr. von Stieglitz.*—Does the 20,000 acres you mention include the lake? No, that is the catchment area.

654. *By Mr. Mackenzie.*—You know the Clyde River and the rivers running into it: are there any tributaries worth speaking of? There are no important tributaries.

655. Then, the Clyde would have to depend on these lakes for a supply of water? Yes, mainly.

656. Have you been to the lake this year? No.

657. You know it has been an exceptionally dry season? Yes.

658. You don't know the condition of the lake this year? No. I have been there a good many times in summer in different years, and there was always a good supply of water there.

659. Oh, you have been there in summer? Yes, a good many times. When I took soundings it was in summer. I went over both Lakes, and from what I saw of the water in the lakes there is always a good supply.

660. Suppose an improvement was proposed so as to conserve three or four feet of water, could that be done? It would be very costly, because it would stretch over a large area. There is a considerable part of the boundary portion of the lake where the land is low-lying.

661. Then you could not tell if it would be easy to do so. Would the supply to the lake necessitate a bank any higher than a 2-ft. bank? I don't think so; not for ordinary purposes.

662. Could you, by artificial means, raise the lake more than 2 ft.? I think from 1 ft. 9 in. to 2 ft.

663. *By Mr. Pilling.*—Think over that answer of yours about the amount of the catchment area; do you say it is 20,000 acres? I think about that, speaking at the moment; I should like to think it over again.

664. When you were there did you examine the dam at the mouth of Lake Crescent at all? Yes.

665. How was it constructed? Just by broken rubble; there was no masonry work.

666. And when the water gets to the top of the silt does it run out? Yes, it runs over. The channel must be cut lower to get a supply of water to Bothwell.

667. If that were done, how much more could they draw? Well, I think about three feet more by deepening the channel.

668. Would it be possible to draw more from Lake Sorell? You would not affect Lake Sorell. There is about 1 foot 10 inches difference in the level between them.

669. Could it be made so as to draw more water from Lake Sorell to Lake Crescent. The difference is 1 foot 10 inches, is it not? Yes; it could.

670. Have you been to Lake Sorell recently? No, not for a few years.

671. Did you notice when you were there last that it had silted up more since your previous visit? No.

672. Can you give the rainfall? No; it is about 15 inches, I think, at Ross; Hobart about 12 inches, and Launceston 23 inches. It should be, I think, from 15 to 20 inches.

673. *By Mr. Dumaesq.*—You say Lake Crescent channel could be lowered about how much? About 2 feet.

674. Well, naturally, as Lake Sorell runs into Lake Crescent that could be lowered correspondingly, could it not? Yes, by deepening the channel, that is at the Clyde outlet.

675. And, naturally, you would get more water? Yes.

676. *By Mr. W. H. T. Brown.*—If the Clyde were supplied by a drain that could be cut direct from Lake Sorell, would that take the water out of the same level as they get it now? Yes, possibly.

677. If there were a new canal, would that take all the water from the same level that they can get out of it now? It could be so made.

678. When you were at the dam last, did the dam itself appear water-tight? Yes; up to a certain height.

679. About how far? I can't say as to what height.

680. Would not the water permeate through the rubble work you spoke of? Yes, to some extent.

681. Then, notwithstanding that the dam was shut down, the water would pass out? Yes, when the lake was full.

682. *By Mr. von Stieglitz.*—Would not this swampy land, if drained, be good cattle country for grazing? No, I don't think so.

683. For what reason? It is very boggy; it would not allow cattle to go on it.

684. Is there any river running into Lake Sorell? Yes, a large stream on the north shore.

685. Do you know what the length of it is? I could not say without reference to the plans.

686. What do you think? I should say 7 or 8 miles.

687. Would these embankments have to be very strong—what sort would you propose? They would have to be strong. I should think fascines weighted down, so that they would bed in the mud, would hold sufficiently. There is no force of water there.

688. *By Mr. W. H. T. Brown.*—All the swamped country is soft, squashy country, is it not? Yes.

689. It would not carry cattle? No; generally boggy country.

690. *By Mr. Mackenzie.*—If it were drained would it not be of use? It would be the same as the average soil of the district, but it would be difficult to drain, that is, the soakage merely would make it catch water from the lake.

691. *By Mr. von Stieglitz.*—There is water lying on it without the lake being deepened? It is impossible to say now, but it is likely the surrounding country will always carry a proportion of water.

692. There is, generally, water on it? As far as I know, yes.

693. On the other swamps is there generally water? Yes, more or less.

694. Could cattle be taken on it? No; cattle would not go on the swampy land near the lake.

695. That being made swamp through the water being raised artificially, would that make it useful? It would be impossible to say where it might leak out.

696. *By Mr. Pillinger.*—Did you ever see Lake Sorell before Mr. Kermode cut a drain to the lake country? No, I can't remember when that was done; I think it was before I saw it.

697. Was that drain not cut to take the water off that very land that was submerged? It was to drain Crown Lagoon, as shown on chart.

698. *By Mr. W. H. T. Brown.*—After it was drained did he not apply to have the land sold, and he purchased it? Yes, but that was afterwards. (Witness described the distance and drain connection between the two lakes on the plan which were not shown on the chart.) The drain was not effectual because the water soaked in from the lake.

699. *By Mr. Pillinger.*—How did you fix the winter level of the lakes? From the information I could get from the water-marks on the banks.

700. *By Mr. von Stieglitz.*—Did you place any permanent marks to mark the water-level? Yes, I made some marks on the bridge between the two lakes.

701. Could you get this chart extended so as to include the two lakes? Yes.

702. We might have it showing the connection of the two lakes? Yes.

703. *By Mr. W. H. T. Brown.*—Is there any land there that is alienated that originally was below high water-mark? Yes, I think so.

704. Where would it be? Some of it is along the south-west side of the lake.

705. You are of opinion that some of the land was originally below the present high water-level of the lake? Yes.

[Witness withdrew.]

WEDNESDAY, 10TH AUGUST.

EDWARD ALBERT COUNSEL, *recalled and examined.*

706. *By Mr. Pillinger.*—Are you prepared now to produce the map you promised? Yes; it was sent down to the House two or three days ago.

707. On this plan you have marked the weirs, what do they represent? They are what Mr. Cutten suggested.

708. Do they represent dams? No, they are weirs, Sir, for the water to pass over.

709. To what height would they raise the water in Lake Sorell? Mr. Cutten's scheme was to raise the water 3 feet above ordinary summer level.

710. But you have a proposal to raise it 1 foot 8 inches, have you not? That is what I suggested,—speaking from memory. I remember that I said the portion spoken of would have to be raised 1 foot 8 inches for about 17½ chains in a number of places.

711. Have you any idea what the cost of raising the bank for that 17½ chains would be? It would be an inexpensive work. I think £200 or £300 would cover it.

712. How much land would that submerge? I think if that were done, there would be something like 500 or 600 acres submerged.

713. Crown and private lands? Yes, Crown and private—about 320 acres would be Crown lands.

714. What private property would be submerged? There would be about 250 acres or 200 acres—I am speaking from memory.

715. What would be the value of that land? About thirty shillings an acres. It is land which at the present time is practically useless.

716. And that would give 1 foot more water, or 1 foot 8 inches more than they have now? Yes, that is my calculation.

717. You could not tell about how much water that would be? There were about 514 billions of gallons of water at the time I took my soundings.

718. More than they have in the lake now? No, that was the whole contents of the lake at that time.

719. *By the Chairman.*—You mean if you took that quantity of water away you would drain the lake altogether? Yes.

720. *By Mr. Pillinger.*—I want to know how much water the raising by 1 foot 8 inches would contain? Well, it is 12,600 acres surface, that could be easily calculated.

721. You say the lake can be raised 1 foot 8 inches with 17 chains of dam, and that would give 1 foot more water than there is in Lake Sorell now, by damaging about 200 acres of private land? Yes, that is correct—speaking from memory.

722. *By Mr. Machenzie.*—And that is valued at? Thirty shillings an acre, that is, for private property. There is a question you asked me about the catchment area. I have looked it up, and as far as I can judge from the place it is from 30,000 to 35,000 acres.

723. Mountainous country, is it? Yes, a portion of it.

724. *By Mr. Pillinger.*—Do you include the catchment area of Lake Crescent in that? Yes, both lakes are included.

725. *By the Chairman.*—Do you know anything of the difference in the quantity of water in the lake during the last summer as compared with its state when you saw it last? No.

726. The last time you saw it was when? About ten years ago.

727. You know there have been three very dry seasons since then? Yes.

728. Then, in your opinion, would it, or would it not, take a long time with the limited watershed to replenish the lake up to the state it was in when you saw it last? Well, I don't think it would take so very long. I take it that if the supply coming into it was never stopped, but was running all the time, it would not take long.

729. We have it in evidence that Lake Sorell never was known to be so low as it has been during last summer. The Committee would like to know how long it would be before it would be replenished and brought to its former state, say, so many wet seasons? I think that one wet season should replenish the lake.

[The witness withdrew.]

FRIDAY, 26TH AUGUST, 1898.

EDWARD ALBERT COUNSEL *recalled, and further examined.*

730. *By Mr. Pillinger.*—I believe you have been to the Lakes recently, Mr. Counsel? Yes, I have visited them since my last evidence, and have made a memorandum on the subject.

731. Will you read it, please? Witness read the following:—

Hobart, August 26th, 1898.

MEMO. *re* Lakes Sorell and Crescent Water Supply.

I HAVE visited Lakes Sorell and Crescent since the Select Parliamentary Committee last met on the proposed water supply for the Midland District.

I find that the water at Interlaken Bridge is two inches lower than when I took the soundings of these lakes in January, 1888. It, however, appears to me that there is a considerable area now dry along the shore of Lake Crescent which was covered with water in 1888.

I cannot account for this circumstance, except that the first heavy fall of rain after last summer's exceptionally long drought has not thoroughly soaked into the ground, and consequently that a larger quantity of water than usual has run into the lakes.

The openings where embankments would be required to raise Lake Sorell 1 foot 8 inches as previously suggested appear to be the same as formerly. The total chainage taken from my sketch plan already supplied to the Committee is 24 chains, not 17½ as mentioned by me from memory in my previous evidence. The estimate of cost of such embankments will be supplied, I believe, by Mr. P. L. Butler, Southern Inspector of Public Works, who accompanied me on my recent visit to the lakes. It will, I believe, be less than the amount suggested by me.

There would, I estimate, be some 450 acres of private land now practically useless that would be still in a similar swampy condition if the proposed embankments were made, and some 400 or 500 acres of Crown land.

The catchment area, including the surface of the lakes, has been estimated at 50,000 acres, and the recorded rainfall at Great Lake for the year 1894 is 33.22. The record is not kept at Sorell; it was higher than the Great Lake is now years ago. If the whole of the rainfall could be drawn into the lakes—which cover a surface area of some 17,000 acres—it would increase the depth thereof to 5 feet 4.7 inches after allowing one-third on the whole for evaporation. This is, of course, impracticable; nor is it practicable, so far as I am aware, to ascertain even approximately what the loss from soakage would be on the area named. It would depend on many unknown quantities. But the figures I have quoted go to show that the quantity of water received by the two lakes is considerable. On the other hand, the rate at which the water is *now* being drawn from the lakes through the Clyde dam towards Bothwell is 15 inches per year. The flood-gate was shut down at the time of my visit, but the water percolating through the dam and running down the Clyde channel was 2 feet 1 inch deep.

The two lakes are connected by a channel about three-quarters of a mile in length, and some 6 or 7 feet wide. There were 6 inches of water at the entrance at the time of my inspection. The fall between the lakes is about 1 foot 8 inches.

E. A. COUNSEL, *Surveyor-General.*

732. Did you estimate the value of the land? Yes; it would be about thirty shillings per acre if it had been drained years ago, but it is useless now, being covered with water. It would not be much improved by draining now, it would remain useless still; it is very low land.

733. Was the water running from Lake Sorell into Lake Crescent when you were there? Yes. There were 6 inches of water just at the entrance of channel, and below that there was about 3 feet 6 inches in depth. It runs rapidly for some distance, and then becomes sluggish.

734. What is the width of the channel? About 6 feet wide.

735. And it was going down into Lake Crescent? Yes. I may say that I asked the people living there, and they say it is lower now than it has ever been. I took measurements from my old record on the bridge, and I find it is 2 inches lower. The people there think it is a lot lower, but that is correct by my measurement.

736. *By the Chairman.*—Have you any information to give the Committee as to the road—as to the way in which the road running along the isthmus between the two lakes would be affected by the damming of the water? It would not affect the road at all. It would not come up to the road.

737. *By Mr. Mackenzie.*—Did I understand you that the water was 2 inches lower than in January, 1888, or January, 1898? I meant January, 1888. I have not been there for ten years.

738. Did it appear to you as if there had been any more water in the lake lately or since you last saw it, or was that the normal condition of it? I believe there had been a very considerable quantity of water in the lake, but it was barely running at one time into Lake Crescent.

739. Then, the last rains had increased the depth? Yes.

740. Did you find out how much lower it had been? No, I could not ascertain.

741. You say the water was running from Lake Sorell into Lake Crescent? Yes.

742. *By Mr. Pillinger.*—And there was 3 feet available at the flood-gate? Yes, 3 feet 3 inches.

743. *By Mr. Mackenzie.*—And all the artificial means used for conserving the water had been deficient? Yes, they were not effective, they could not stop the water from escaping. The gate was right down, and there was the breadth of a log down to the bottom of the channel from the gate.

744. *By Mr. W. H. T. Brown.*—Then, the log would stand up above the bottom of the outlet? Yes.

745. How much? Nearly a foot, as nearly as I could measure it, 8 inches.

746. *By Mr. Mackenzie.*—You spoke of an embankment 1 foot 8 inches to raise Lake Sorell: would that be above the present level? Yes.

747. And that would be 24 chains long? Yes.

748. Have you made an estimate of the cost? No, I left that to the officer of the Public Works Department, Mr. Butler, who was with me.

749. From your experience, would it be expensive? No, it could be constructed of quite inexpensive material, which is just at hand.

Witness withdrew.

PIERCE L. BUTLER, *called and examined.*

750. *By the Chairman.*—Your name? Pierce Logan Butler.
751. What are you, an officer of the Public Works Department? I am Southern Inspector of Roads.
752. You have recently visited Lake Sorell and Lake Crescent? Yes.
753. Have you made an estimate of the works required for damming back the water from Lake Sorell? Yes.
754. What is the estimate? Approximately there would be 2000 yards of bank, costing £135.
755. Give us the total cost? Oh, the whole work would cost £200, including the sluice-gate.
756. *By Mr. Pillinger.*—Can you give us any information about the water which was running between the two lakes? Yes; by the accommodation house there was about 1 foot 8 inches of water. That was the lowest found in the channel itself from Lake Sorell to Lake Crescent.
757. Were you down at the Clyde? Yes. There was 1 foot 8 inches of water on the western side of the sluice-gate, and 3 feet 3 inches on the lake side. That would be the level of the lake. The sluice-gate was down at the time, but it allowed the water to come through.
758. How did the water escape? Well, the gate was not perfect, and allowed it to escape.
759. What was the dam like, leaking or sound? It was leaking; the water was coming through the loose rubble-wall by which it was backed up.
760. Was there as much water running out from the Clyde as was coming from Lake Crescent? Just about the same quantity.
761. Did you estimate the cost of a dam at the Clyde? Yes; it would cost £50, including the wall to make it perfectly secure.
762. That is the place where the dam is leaking? Yes, that is the place.
763. Did you make any valuation of the land? No, I did not.
764. *By Mr. Mackenzie.*—You say there is 1 foot 8 inches in depth of water running out of Lake Sorell? Yes, 1 foot 8 inches running from Lake Sorell to Lake Crescent.
765. You mean 1 foot 8 inches in depth? Yes.
766. How wide? 4 feet wide.
767. Do you mean that is the average width? Yes.
768. In the average width the depth was 1 foot 8 inches? Yes, that was the lowest depth.
769. What state were the embankments in—was it having any effect in conserving the waters of the lake the old work that was there? Lake Sorell is in a state of nature, there are no embankments.
770. What length of embankments would be required on Lake Sorell to conserve the water? Twenty-four chains altogether.
771. You estimate the cost at £135, that is for the banks to be made up? Yes.
772. Did the total of £200, which you estimate, include all the works that would be required at Lake Sorell? Yes.
773. Is any of that required to keep the channel between the two lakes open? No, that is not required.
774. *By Mr. W. H. T. Brown.*—In conserving the water in Lake Sorell, what do you propose to build the embankments of? Of materials at hand round the lake.
775. Stone, or what? No, there is good gravel and peat, good binding soil.
776. Would that bring up the level to protect the country each side of it? Yes, that would make the level higher, and would protect against the effect of wind on the lake.
777. Yes, from the overflow waters and probable effect of wind on the lake? Yes.
778. And that is your estimate of cost? Yes.
779. And from the actual work you would do the lake would never overflow? No.
780. *By the Chairman.*—Do you assure the Committee that, in your opinion, the work you speak of—the mere throwing up of material available on the spot—would be sufficient, is that so? Yes.
781. And that would stand against the wash of the water in a high wind? Oh, yes.
782. Is there not a long stretch to be made good in places? No, where the embankments are required is mostly in sheltered spots. There is only one place where there is much of a gap.
- Witness withdrew.

APPENDIX A.

King-street, Sandy Bay, 7th January, 1888.

SIR,

In obedience to your instructions to ascertain and report upon the extent of land that would be submerged in the vicinity of Lakes Crescent and Sorell in connection with the carrying out of Mr. Cutten's plan of proposed tunnel from the latter lake, &c., I have the honour to furnish you with the following information:—

It will be seen from the accompanying plan that there are approximately 390 acres that have been submerged at some time in the past, and I have no doubt that such submersion was caused principally by the action of the Bothwell Water Trust in damming the water back from the head of the Clyde River at Lake Crescent.

This opinion is substantially corroborated by the facts ascertained in connection with the eastern boundary of Lot 504, and on the section adjoining same on the south, and fronting on Lake Sorell.—(*Vide* plan, on which it is shown that there is one continuous line of swampy marsh extending for over 1½ miles along the lake, and embracing 177 acres or thereabouts.) As said swamp is boggy and impassable, there can be little doubt as to its having been formed subsequent to the date of survey, and as it contains considerably more water than the swamp marked on the 2560-acre block purchased by Learmonth and Pitcairn, it follows that the former was submerged at a lower level than the latter, and therefore at an earlier period.

Along the border of the lake, on the east of Lot 504, there is a natural bank formed, (say half a chain in width), and a similar bank is conspicuous along a portion of the eastern boundary of the 2560-acre section. Where not broken away, this bank is from about 1 foot 3 inches to 1 foot 8 inches above the water-level at the time soundings of these lakes were taken.

The cost of repairing the several gaps in the narrow banks, which amount to about 25 chains, should be less than £150, in order to afford at least 1 foot 3 inches more water than Lake Sorell contained at the time of sounding.

The "Crown Swamp" has evidently not been materially interfered with, as the area from the recent survey is slightly less than that originally set down. I find that the said survey—made with a prismatic compass—very nearly agrees with the original surveys round the swamp, but that it does not coincide so well with the one made by Mr. Wedge at a later date. It may, however, be taken as fairly representing this and the other swamps, the smaller of which swamps has been sketched in from personal inspection, and have been all more or less damaged by submersion from the lake water, and would, in its original state, be worth about £3 per acre.

The average surface of "Crown Swamp" which was not covered with water at the time of my visit is almost one foot higher than the lake level I have adopted in my Report, whilst the 185-acre swamp is still lower than the former, and the one in Lot 504 is very nearly six inches above the said level of the lake.

To raise the lake 3 feet, as proposed by Mr. Cutten, would be a somewhat costly undertaking, owing to the low-lying country round the south-western portion of Lake Sorell (indicated on the plan), where it would be necessary to raise an embankment about six miles in length and 1 foot 9 inches in height, independently of what I have suggested. This would not be a very formidable piece of work but for the boggy nature of the land along the shore of the lake where it would be required.

In conclusion, I would respectfully suggest the consideration of deepening the tunnel, say 18 inches, as an alternative to the scheme proposed, and one that may commend itself to your deliberation.

I have the honour to be,

Sir,

Your very obedient Servant,

*The Honourable the Minister of Lands
and Works, Hobart.*

E. A. COUNSEL, *District Surveyor.*

APPENDIX B.

King-street, Sandy Bay, 14th April, 1888.

SIR,

In obedience to your instructions that soundings be taken of Lakes Sorell and Crescent, and that a report be made upon the depth of water and generally upon the advantages of the neighbourhood as a sanatorium or summer resort for visitors, and in view of irrigation from these lakes, I have the honour to furnish the following information:—

Commencing with Lake Sorell, a fine sheet of water situated in the County of Somerset, on the Western Tier, towards the south end of the range, and about 14 miles from the Main Line Railway Station at Tunbridge.

It will be seen from the tracing attached, showing the result of the soundings taken by me, that this lake contains a large body of water, which is of excellent quality. This lake is fed principally by a large creek coming into it about midway along the north shore, and is doubtless a large natural basin formed in the rock, and as the rock is near the surface in the locality there is therefore comparatively little absorption. From certain indications about the lake, it would appear that this rock, which is of basaltic structure, is resting on a sandstone bed at no great depth from the surface.

The scheme for irrigating the lower land in the vicinity of Tunbridge (one of the worst watered districts in the country) from this lake is quite feasible, and is one that would confer an inestimable benefit upon the inhabitants of the place, who at the time of my visit to the lakes were positively in a deplorable condition for the want of wholesome water for even domestic purposes.

I believe this country might be supplied with water by effecting an outlet at the southern end of Lake Crescent, and thus take the water into the head of Blackman's River—*vide* district plan; but probably the scheme proposed would be less costly.

I was informed when in the locality that a Mr. Cutten, of the Public Works Department, had been engaged taking levels and preparing information for the Government on the subject of irrigation from these lakes, and I therefore concluded that he had gone into the whole question more fully than my instructions would have justified me in doing.

It will be observed from a note on the tracing herewith that the present water-level at Interlaken is 2 feet 8 inches below the bed of the bridge, and that this level is 1 foot 10 inches below the winter level, measured as accurately as the winter mark would allow.

I spent some time in examining lands said to have been damaged by the action of the Bothwell Water Trust in unnecessarily heading the water back and submerging a large area. This is to some extent true, as there are several places on the Interlaken estate where the natural pasture has been destroyed by submersion (during a portion of the year), and no doubt from the same cause the well known disease in stock called "fluke" has been considerably increased. It is impossible to estimate the extent of land so affected with any degree of accuracy, owing to the fact that certain areas appear to have been reserved, and that the portions subject to the overflow of water are of very irregular formations. Such portions were quite dry at the time of my inspection, with few exceptions, and in my opinion the lake water could be backed up another foot without causing any serious damage to property.

The dam across the Clyde River at Lake Crescent is about 1½ chains in length, and was originally constructed principally with large stones, and in a rough-and-ready fashion. The flood-gate is about 4 feet in width, and is much the worse for wear. If this gate were made as wide again and a race cut to carry away the flood-water when it rose to a certain level, or if a weir were constructed across the River, it would meet all local complaints.

As a sanatorium or summer resort for visitors the Lake Country possesses the advantages of an excellent climate, splendid water, and attractive scenery, with genial occupation for the angler and sportsman during the summer months, as it is now known that English trout abound in "The Great Lake"; and as the splendid Californian trout have been imported to Lake Sorell recently, there is every reason to believe that this may in time become a favourite fishing-place. The distance from the Railway at Tunbridge to Interlaken (at Lake Sorell), is, (as stated), about 14 miles, and the road, with the exception of a heavy pull up the "Western Tier," extending for about 3 miles, is a very good one, and nearly level all the way.

Interlaken may be approached from Oatlands, *via* Waverley, but there is only a bush track for the greater portion of the way. The rise on this route is much more gradual than on the road from Tunbridge, whilst the distance is about two miles further.

There are several picturesque spots within easy reach of Interlaken. Of these, Laycock's Lake, (surrounded by mountains), is said to be very beautiful, but is almost unknown. The surrounding country is clearly visible, and a distant view may be obtained of the hills round Launceston, Maria Island, and Mount Wellington, from the top of the Man's Head, distant from Lake Crescent about two miles. It may be reached on horseback.

Woods' or Laycock's Lake is about 12 miles from Lake Sorell in a westerly direction, and the road leading to it is in good condition for the first 10 miles. This road joins the one from Bothwell to the Great Lake at about 22 miles from the township. The distance from the junction of these roads to the turn-off is about five miles, and it is about as far again to Arthur's Lakes from this point. The Great Lake is about nine miles beyond the said turn-off, and is distant from Lake Sorell about 35 miles. Although I have never had occasion to travel this road beyond Interlaken, I am informed on good authority that it is a good buggy road, and passes over easy country the whole of the way, with one slight exception at the "Alma Tier."

Through the enterprise of Mr. Algernon Page a building is being erected at Interlaken for the improvement of accommodation; but much more is required in this way, as well as better facilities for accomplishing the journey, and regular mail communication, if it is intended to make it a favourite resort.

I have, &c.

E. A. COUNSEL, *District Surveyor.*

The Honourable E. N. C. BRADDON,
Minister of Lands and Works, Hobart.

APPENDIX C.

Hobart, 16th May, 1887.

SIR,

IN accordance with your instructions of the 28th ultimo, I beg to report that I have examined Lake Sorell for the purpose of ascertaining the practicability and approximate cost of obtaining water for the irrigation of the country in the neighbourhood of Salt-Pans Plains, Tunbridge, &c.

I herewith enclose plans, section, and estimate of a proposed canal and tunnel through a low saddle in the Western Tier, at the north-east end of the lake.

It will be necessary to raise the lake three feet by means of small weirs at the present outlets, viz., Kemp's and Interlaken Canals. This will give about 15,000 acres of water three feet deep, without lowering the lake beyond its present level for irrigation purposes, a body sufficient to irrigate over 30,000 acres of land. At the intake of the proposed canal the water is only fifteen inches deep in the lake five chains from the shore. This will necessitate an open timber box for two hundred feet, the bottom being of sand, and a cut channel liable to silt up. Sluice-gates to regulate supply are provided for at the intake; also timber protection for mouth of tunnel. Plenty of good timber can be got on the ground.

The present plan merely proposes to tap the water of the lake and lead it through to the east side of the Tier, then letting it find its way into the various creeks and water-courses and finally into the Blackman River.

I estimate the total cost of this work at £3400.

I am, Sir,

Your obedient Servant,

H. CUTTEN.

The Engineer-in-Chief, Hobart.

Estimate of Approximate Cost of Tunnel from Lake Sorell.

		£	s.	d.
Tunnel, 6 ft. by 4 ft.	504 lin. yards at 80s.	2016	0	0
Canal, 3 ft. base, slopes 1 to 1.....	6764 cub. yards at 2s. 6d.	845	10	0
Ditches	34 chains at 20s.	34	0	0
Sluice at intake .....	...	20	0	0
Open box (timber) at intake	200 feet at 5s.	50	0	0
Timber protection at delivery .....	...	50	0	0
Masonry .....	...	5	0	0
Raising roads at Kemp's and Interlaken Canals, &c.....	10 chains at £5	50	0	0
Two weirs at £10 .....	...	20	0	0
Supervision .....	...	150	0	0
Contingencies .....	...	159	10	0
		3400	0	0
For improving dam and floodgate at Clyde, and deepening channel for benefit of Clyde River Water Trust.....	...	100	0	0
		<u>£3500</u>	<u>0</u>	<u>0</u>

APPENDIX D.

To the Chairman of Committee on the River Clyde Water Bill.

DEAR SIR,

I AM prevented by illness from attending the Meeting to give evidence on the River Clyde Water Bill. I wish to state that owing to the drought the last two seasons I have been unable to work my mill at proper speed, only doing two bags of flour per day, instead of eight to ten bags. All the summer months mill was shut down for want of water. This spring (November) until the middle of May I had to shut down for want of water. I have about 60 acres of splendid land which I have always irrigated, but the last two seasons have not been able to do so, which is a great loss to me, as I fatten a lot of stock other years.

I reckoned my loss the first of grists, 2000 bushels of wheat that went to Hobart instead of mill. This year I have lost the grinding of 4000 bushels. Total loss for two seasons, £225; and loss by not being able to irrigate, £100.

We, as Trustees under the Clyde Water Trust, have always conserved the waters in Lakes Sorell and Crescent, as it is to our benefit to have a good supply, but as we cannot control the elements, our lakes have suffered by it.

I am,

Yours truly,

H. F. CHAMBERLEN.

APPENDIX E.

THE WATER SUPPLY OF BOTHWELL AND HAMILTON.

From the Local Board of Health, Bothwell,

to A. MAULT, Esq., Secretary to the Central Board of Health, Hobart.

DEAR SIR,

It is of the most vital importance that a pure stream of water is kept in the Clyde for its seventy-two miles of length to supply the inhabitants along its banks, numbering some 1200 people, with water for human consumption, which in any ordinary dry season is far from being fulfilled,—in fact this last summer the river was scarcely running. The water, unless boiled or filtered, was totally unfit for drinking purposes—*vide* the number of typhoid cases in Hamilton. Bothwell certainly escaped with few cases. This impure state of the water does not matter for irrigation purposes, but when we get a summer like last there is very little available for such purpose; even the flour-mills at Bothwell and Hamilton were idle three parts of the time owing to the low state of the river. We would also remind you that we view with alarm the action the Tunbridge people are taking relative to having a share of Lake Sorell, against which scheme every soul on the Clyde will protest to the utmost. If such a thing was carried out the river would be dry by Christmas. Look at the vested interests on the Clyde! Are they to be ruined in favour of two or three people about Tunbridge who want the water for irrigation purposes and their own benefit?

Should the Government carry out their plan of seven or eight years ago, when they proposed raising the water in the two lakes by two or three feet by embankments on the low shores, and also building two substantial dams, and having a caretaker over them, and allowing the free use of the water in the summer months only, and then shutting the hatches down for the rest of the year, it is possible the supply would be sufficient for both parties; but even then it is doubtful if it would last more than one season, as it is a question, in the event of draining those lakes to a low state, it would take two very wet seasons to replenish them to their usual level.

We would like to see the new Draft Bill of the Clyde River Trust, when it is intended to call all the inhabitants of Bothwell together to discuss the same.

The Board of Health approves of your Report, providing the cost does not exceed the amount named in your Report.

I have the honour to be,

Sir,

Your obedient Servant,

Bothwell, 5th July, 1897.

ALFRED IBBOTT, Warden.

APPENDIX F.

THE RIVER CLYDE.

To the Honourable the President and the Members of the Central Board of Health.

GENTLEMEN,

DURING last summer the condition of the water in the River Clyde, which is the source of the supply of the inhabitants of Hamilton, was a matter of serious concern both as regarded its quantity and its quality. This concern was increased by the occurrence of a fatal case of typhoid fever in the month of January. With the notification of this death, the Secretary to the Local Board of Health wrote—"The water supply of the township is, from the late dry weather, very bad. The Clyde has almost ceased running, and portions of the stream are said to be very offensive." On receipt of this information instructions were sent to obtain a sample of the water for analysis. The sample was taken by the Superintendent of Police on the 30th of January, and was submitted to Mr. Ward, the Government Analyst. The following is his report:—"The sample of water taken from the Clyde, at Hamilton, has been analysed, with results as follows:—

Free Ammonia	0.32 parts in a million
Albumenoid Ammonia	0.54 " "
Nitrogen as Nitrates	none
Chlorine in Chlorides	3.8 grains in a gallon
Total solid matters	14.0 " "

"This water is undoubtedly contaminated with sewage, and is consequently totally unfit for drinking purposes." This report was communicated to the Local Board of Hamilton, but as the Clyde was the only source from which the inhabitants could be supplied, the sanitary authority could do no more than recommend that the water should be boiled and filtered before use. On the matter being reported to you, you instructed me to inspect the river, and I have the honour to submit to you the following report of the inspection:—

1. The River Clyde drains a comparatively narrow basin. As a river, bearing this name, it takes its origin in Lake Crescent, which in turn is supplied by Lake Sorell with the greater part of its water. Lake Sorell is chiefly replenished with the drainage from the rainfall of the hills and marshes to the northward of it as far as the hill called Molly York's Nightcap. From this point, which is the real source of the river, to its confluence with the

Derwent below Hamilton, it runs a course of about 76 miles, of which about 62 are below its outlet from Lake Crescent. The whole of the upper part of this course, and much of the lower part, lies in the greenstone formation, the rest being in the upper coal measures. There are but few affluents, and they are unimportant, and seem mostly to be dry in summer.

2. The inspection of the river began at Hamilton on the 12th March. Through the greater part of the township a mill-race runs between the houses and the river, in position such as in ordinary weather to take whatever drainage may flow from the town. As the inhabitants are forbidden to take water from this race, its pollution should not make much difference, but practically it must be impossible to prevent people taking this water. They are not likely to pass it on their way to farther and lower watering places, especially as it is a running stream at times, when the river is a series of apparently stagnant waterholes. All through the township the river channel is much obstructed with willow trees, the roots and branches of which back up the water and cause the apparent stagnation. The river was very low, but the water pretty clear. I roughly estimated that at the time about 230 cubic feet a minute were passing in it, and 200 in the mill-race.

3. The river in the neighbourhood of Hamilton, for a length of about ten miles, was carefully examined. Outside the town there was no apparent source of pollution, except a few dead rabbits floating in the water. Only a very little water was coming down the affluent rivulets, but when a little rain falls I can imagine that the bodies of the poisoned rabbits left on the runs might materially affect the quality of the small quantity of water in the river. In the town there was no visible drainage or soakage going into the river or the mill-race, as there had been a long spell of dry weather; but in wet weather there must be some, especially from the houses, stables, and piggeries, at and between Cleland's and Langdon's Inns, which drain into a water channel in the valley which runs into the mill-race. There was a drain also at Bailey's that required cleansing. But for the moment, there was nothing found to account for the pollution shown by the analysis to exist in the water which had been taken from the river, and not the mill-race.

4. Between Hamilton and Bothwell, especially in the neighbourhood of the latter town, there is a considerable extent of land irrigated by water taken from the river. From evidence taken before a Parliamentary Committee last year, from 900 to 1200 acres are now laid out for irrigation. It is said to be all grass land, and the water used upon it is more likely to be purified by the process than polluted. The water in the river is raised by dams so as to flow through the irrigation channels; and in the township there are two water-mills. On the 14th and 15th March, the water was turbid and of a slaty colour, and from a rough guaging about 350 cubic feet of water were passing in a minute. From the town itself at that time no drainage was passing into the river; but there was a small fellmongery, carried on by Mr. Bowden, on Mr. White's land close to the river. The skins were steeped in a stone tank, from which the water was in dry weather allowed to run into a waterhole close to the stream. The water in this hole was very offensive, and must eventually pollute the river. The wool was also occasionally washed in the river. It was arranged with the local authorities that this source of pollution should be removed; but its nature and extent were at no time such as would account for the pollution of the river water at Hamilton.

5. On the 25th March two samples of water were obtained from the river; No. 1 from *above*, where the water is usually taken by the carts which supply Bothwell, and No. 2 from *below*, and the following is Mr. Ward's report upon their constitution:—

	No. 1.	No. 2.
"Free Ammonia.....	0.10	0.11 parts in a million
Albumenoid Ammonia.....	1.14	1.00 " "
Nitrogen in Nitrates.....	0.07	0.06 " "
Chlorine in Chlorides	1.35	1.35 grains in a gallon
Total solid matter	12.50	12.50 " "

Both these waters are exceedingly foul and unfit for consumption. They also contain an excessive proportion of iron." It will be seen that this water is worse than that taken seven weeks before from Hamilton. The very large quantity of albumenoid ammonia in comparison with the chlorine pointed to a vegetable source for the organic impurity. But the quantity of free ammonia is too high for it to be probable that pollution is entirely vegetable.

6. The river was next seen in the neighbourhood of Lake Crescent. It was yet more turbid than at Bothwell, and it was roughly estimated that about 450 cubic feet of water were passing in a minute. At the outlet from Lake Crescent there is a badly constructed rubble stone dam, allowing water to pass everywhere as well as by the sluice. This sluice was fully open, and, from the evidence given before the Parliamentary Committee last year, it appears that it had been kept thus open for many months. The consequence was that the surface of the lake was four or five feet below its usual level, and great banks of black and fetid mud were exposed. Some years ago a channel some four or five yards wide was cut through this mud to allow more water to get to the sluice. This channel was in part obstructed by branches, which, when at the surface of the water, stopped the slight current sufficiently to cause it to be covered with a thick scum. The black mud is composed in all probability by the deposit of clay washed from some of the borders of the Lake, and that brought by the Interlaken River from Lake Sorell. On this deposit, in the neighbourhood of the outlet, immense beds of reeds grow and decay annually, mix with the mud, which is of such a consistency that great quantities of it are scoured away when the water is so low, and give it the slaty colour noticed at Bothwell, and still more marked here. When the Lake is full the scour does not take place, and consequently the water all down the river is more limpid than when seen in March.

7. It is to be regretted that it was impracticable to obtain a sample of the water while in this condition, as a constable could not be spared to take one before the 5th April. Three days previous to this, His Worship the Warden of Bothwell, in writing to me, said that a marked change for the better was perceptible. When the water arrived I noticed that it appeared much cleaner than it did on the 15th March, when the total solids certainly were more than 14 grains to the gallon. The following is Mr. Ward's analysis of the water:—

"Free Ammonia.....	0.027 parts in a million.
Albumenoid Ammonia	1.48 " "
Nitrogen as Nitrates.....	none
Chlorine in Chlorides.....	1.20 grains in a gallon
Total solids	14.00 " "

This water is loaded with vegetable matter, living and dead, much of which deposits on standing." This is the worst river water of which I have seen an analysis in Tasmania. It contains fourteen times more albumenoid ammonia than is permissible in any water used for human consumption. What the amount of its pollution was during the summer, and before the perceptible change for the better took place, it is impossible to say. Fortunately for the inhabitants of the towns below, it is at all times greatly improved by its aeration in its twenty miles course over a stony and rapidly falling bed.

8. Lake Sorell was first inspected on the 16th March. It was very low—from the marks on the banks seemingly about four feet below its normal level. I was told that it had greatly fallen within the last week or two before the above date. It is said to be always tawny in colour, but with the fresh breeze that was blowing, which apparently caused a washing up from the bottom, it was of a full yellow clay colour. A great part of its bed is said to be composed of clay. On many portions of the banks covered with blocks of greenstone, these stones were merely lying on the clay, into which a stick could be pushed down between them to a considerable depth. The Interlaken Rivulet was the only visible connection between Lakes Sorell and Crescent. There is a sluice-frame fixed in it, over-

which the water was passing, and there was no apparent leakage either below or beside the sluice, and therefore an opportunity was given of sufficiently accurately gauging the stream. On Saturday, with the breeze from the northwards, about 180 cubic feet a minute were passing, and on Sunday, which was calm, about 164. As before mentioned, the gaugings taken on the River Clyde were rough approximations, but it is very remarkable that there should be such great difference between the inflow by the Interlaken into Lake Crescent on the Saturday, and the outflow by the Clyde on the Friday. The former was certainly not more than half the latter, consequently Lake Crescent was falling more quickly than Lake Sorell, or there is underground communication. At about a mile and three quarters west of the Interlaken, Mr. Kermode, about the year 1868, cut a channel between the two lakes, but the surface of the water in Lake Sorell had fallen below the level of the bottom of the trench, the mud of which was cracked and dry, as if no water had passed for a considerable time. A man named Tom Sullivan, who had known the Lakes for 30 years, had never seen the water so low.

9. On the 31st March (that is, six days earlier than the date of the taking of the sample from Lake Crescent), Mr. Sutton, of the *Interlaken Hotel*, sent me a sample of the water from Lake Sorell, unfiltered, but taken from before the hotel. The following is Mr. Ward's report of its analysis:—

"The sample of water taken from Lake Sorell forwarded by you has been examined, with results as follow:—

" Free Ammonia.....	0.02 parts in a million
Albumenoid Ammonia.....	1.11 " "
Nitrogen as Nitrates.....	0.03 " "
Chlorine in Chlorides	1.00 grains in a gallon
Total solid matter.....	18.00 " "

"This water is loaded with vegetable matter, much of which is in suspension, and deposits in company with some of the clayey matter after long standing." This water is totally unfit for human consumption. It is not so bad as that taken from Lake Crescent nearly a week later, but it is evident that the undue lowering of the water in the lake had injuriously affected its quality. I confess that I was surprised to learn that there was so great a dosage of organic matter in it, as there is nothing visible in Lake Sorell at all comparable to the mud and reed-beds of Lake Crescent to account for the pollution. But the large quantity of albumenoid ammonia, without any correspondingly large quantity of free ammonia or chlorine, shew that there must be large deposits of decaying vegetable matter in the bed of the Lake itself, for an analysis made of the water of its principal feeder show that the impurity is not brought down by the stream.

10. To determine whether the impurity of the water of the lakes and of the river was due to the exceptional lowness of the water, samples were taken in the month of July, at a time when it was thought that the immediate effect of the great rainfall of June had passed, and the analyses gave the following results:—

	Lake Sorell.	Lake Crescent.	Clyde at Bothwell.	Clyde at Hamilton.
" Free Ammonia, parts in a million	0.02	0.01	0.02	0.02
Albumenoid Ammonia "	0.64	0.62	0.24	0.52
Nitrogen as Nitrates "	0.01	0.01	0.016	traces
Chlorine in Chlorides, grains in a gallon	0.70	0.60	1.90	4.30
Total solids "	13.00	13.00	11.00	17.50

"The waters of the two lakes are practically identical in composition, and (as shewn by the composition of the river which flows from them) deposit much of the vegetable impurity in their downward course" to Bothwell. The water at Hamilton, after its still further aeration by its flow over its rocky bed from Bothwell, should be better instead of worse. But it will be noted that the quantity of chlorine, which had augmented at Bothwell, has so much further augmented at Hamilton as to make the other altered feature of the composition of the water at the latter place—the increased quantity of albumenoid ammonia—a matter of great importance. Taken by itself it might be the result of brackish water derived from affluent, but in connection with ammonia it requires serious attention. Dr. Parkes, in his "Practical Hygiene," says that "it may be taken as an indication of dangerous contamination" when the increased quantity of chlorine is accompanied by increased quantity of ammonia. Dr. Wanklyn also regards the concurrent presence of such quantities of chlorine and ammonia as are above given in the analysis of Hamilton water as a sign of pollution by animal matter. As I have before remarked, whatever sewage comes from Hamilton is received by the mill-race, which falls into the river far below where the sample of water was taken. The question therefore arises—whence is the animal impurity derived? This should be inquired into. Can it be from dead rabbits? The practical outcome of the various analyses is that the water in the Clyde at Hamilton is not fit for use without boiling, but I cannot help thinking that further inquiry will show that much of the present pollution is preventible, as it must take place below Bothwell.

11. To define as accurately as practicable without a special survey the area of the watershed draining into the Lakes, and to make further observations on the quality of the water, I paid another visit to them in August. Lake Sorell was then about 30 inches higher than when I had previously seen it, and the water was much more limpid, but still of a decided tawny or clayey colour. By the Interlaken River and Mr. Kermode's drain about 1250 cubic feet of water a minute were passing into Lake Crescent, the greater part of which was brought into Lake Sorell by the stream that is locally called the Mountain River. This small river is the outlet for the rainfall of most of the country north of the lake, stretching from the north side of Molly York's Cap round its western and southern flanks and through the Four-mile Marsh. In wet weather a considerable volume of water comes down the stream, and it is never dry in summer. When seen on the 10th August its crystal clearness was in marked contrast to the tawny colour of the lake, and its quantity was sufficient to make a large patch of transparently pure water round its mouth like a sheet of glass let into opaque earthenware. A sample of the water was taken, and the following is Mr. Ward's analysis of it:—

" Free Ammonia.....	0.01 part in a gallon.
Albumenoid Ammonia	0.10 " "
Nitrogen as Nitrates.....	None.
Chlorine as Chlorides.....	0.30 grains in a gallon.
Total solids.....	2.50 " "

Except for the quantity of albumenoid ammonia this would be a remarkably pure water, and the quantity of that ammonia is easily accounted for by the fact that the stream runs through marshes and forest. And the almost complete absence of nitrogen in other forms and of chlorine makes this quantity of albumenoid ammonia of less consequence.

12. Lake Crescent was very full and overflowing the marshes on its borders; the sluice-gate at the outlet of the Clyde was closed and the water was running over its top, which had been decreased in height. A great deal of water was also escaping through the weir, although it had been repaired since my former visit. About 700 cubic feet of water a minute were flowing out of the lake, and as this quantity was greatly less than the inflow, the banks were every day being more and more flooded.

13. Samples of water were again taken from both lakes, and the following is Mr. Ward's report upon their analysis:—

	Lake Sorell.	Clyde Outlet.
"Free Ammonia.....parts in a million...	0·015	0·040
Albumenoid Ammonia. " " ...	0·580	0·920
Nitrogen in Nitrates.... " " ...	traces	0·110
Chlorine in Chlorides...grains in a gallon...	0·7	0·9
Total solid matter " " ...	12·0	8·5

"The gradual accumulation of impurity in solution is well shewn by this series" (including the Mountain River), "the diminished solid matter at the outlet being due to the smaller amount of matter in suspension."

14. As the Clyde has thus been traced to its rise, and the quality of its water frequently tested at different points, this quality will be better understood by the following summary, beginning from its source and going down stream:—

Date of taking samples.	Free Ammonia.	Albumenoid Ammonia.	Nitrogen in Nitrates.	Chlorine in Chlorides.	Total solids.
	Parts in a million.			Grains in a gallon.	
Mountain River.... August 10	0·010	0·100	none	0·30	2·50
Lake Sorell March 31	0·020	1·110	0·030	1·00	18·00
Ditto July	0·020	0·640	0·010	0·07	13·00
Ditto August 11	0·015	0·580	traces	0·07	12·00
Lake Crescent April 5	0·027	1·480	none	1·20	14·00
Ditto July	0·010	0·620	0·010	0·06	13·00
Ditto August 11	0·040	0·920	0·110	0·90	8·50
Clyde, at Bothwell March 25	0·100	1·140	0·070	1·35	12·50
Ditto March 25	0·110	1·000	0·060	1·35	12·50
Ditto July	0·020	0·240	0·016	1·90	11·00
Clyde, at Hamilton Jan. 31	0·320	0·540	none	3·80	14·00
Ditto July	0·020	0·520	traces	4·30	17·50
Dr. Parke's limit of impurity in usable water	0·050	0·100	1·129	3·00	30·00

15. These analyses establish the following points:—(1) That the quality of the water in the lakes is never very good; (2) that this quality is greatly deteriorated when the water is low; (3) that the quality of the water of Lake Crescent is worse than that of Lake Sorell; (4) that the quality of the water is much improved by its flow down its rocky channel to Bothwell. The consideration of the second and third of these points must make it evident that any work done at the lakes which will make the Clyde supply more dependent upon Lake Crescent than it now is, and drawing that supply at a lower level, can only result in deteriorating still more the quality of the water. As this question of the quality of the water does not appear to have been within the scope of the inquiry made by the Parliamentary Committee, I beg to call serious attention to it, and to make some suggestions.

16. To understand the suggestions, the following facts must be borne in mind:—The area of the watershed basin draining into Lake Sorell is 61 square miles, or 39,040 acres, of which 12,300 acres are occupied by the lake itself, and 26,740 acres by land. As the greater part of this surrounding land is mountainous, and as no part of it is more than eight miles from the lake, it may be taken for granted that a considerable proportion of the rain that falls finds its way into the lake, and at a comparatively short time from its fall. Captain Shortt's rainfall returns from the lake begin with 1889, and I have not been able to get any earlier information. From the first January this year to the 31st July rain fell on 65 days, and to a depth of 26·88 inches. Of this more than half fell in thirteen days in the month of June. Of course the greater part of such a rainfall could not be retained in the lake, so the country all down the course of the Clyde was deeply flooded. The real question to be considered is, therefore, not so much the quantity of rain that falls, as the period in which it falls, and the quantity of it that can be stored. As the lake is more than 2000 feet above the sea level, there is in all probability enough rainfall during the nine months of the year to keep the level of the lake up to what the River Clyde Act calls its "highest ordinary winter level." The storage capacity is therefore only of vital importance during three months. If the "highest ordinary winter level" be taken from the evident waterworks on the banks, it will probably be found to be 51 inches above the top of the sill of the sluice-frame at the Interlaken River. The Act provides that the water in the lake is not to be maintained higher than within three inches of this level. As the analyses show that the more the water recedes from this level the more it deteriorates in quality, arrangements should be made to prevent it from ever falling lower than 18 inches below this maximum level.

17. But the Parliamentary Committee of last session recommended that, to enable water to be taken by a tunnel from Lake Sorell to irrigate the land eastward of the Tiers, the level of the water of the lake should be raised three feet, and the outlet by the Interlaken lowered thirty inches. The result of this arrangement would be that the eastern plains would get the top water for irrigation, and the Bothwell and Hamilton people the bottom water for drinking. I am sure the Committee did not know that this lowering of the Interlaken outlet would, especially if accompanied by a lowering of the outlet of the Clyde from Lake Crescent, render the water of the river during dry seasons utterly unfit for human consumption all down its valley, and thus vitally affect both Bothwell and Hamilton. I therefore respectfully but urgently recommend that this part of the scheme be abandoned. It will also probably be found that the cost of raising the level of the surface of Lake Sorell by three feet is not only impracticable on account of cost, but undesirable on account of danger. Immensely strong embankments would have to be raised to resist the wash of the water in the northerly and north-westerly gales that sweep the lake. And in case of accident to the embankment and sluices, the whole valley would suffer to an extent incomparably greater than under any flood that can now take place.

18. I therefore assume that the water, from economical motives, will not be raised much above the legal maximum fixed in the River Clyde Act, and, from sanitary motives, will not be allowed to fall more than 18 inches below it. Within these limits of level Lake Sorell will hold 30 million cubic yards of water, and this reserve may be all that can be counted on for three months. In that period it is probable that the evaporation from the lake would be 14 million cubic yards, leaving 16 millions to be disposed of. The Clyde has certainly the first claim upon this water. There are towns and mills and irrigated lands on its banks, and if the mill-power be taken as the gauge of water requirements, it will be found that 8 million cubic yards will give the 20 horse-power needed to work the Chamberlen's mill at Bothwell for the period of 90 days, and will furnish all other requirements, including the irrigation of 2700 acres with a quarter of an inch of water a day. Therefore, whatever works are constructed, they should be so designed as to make the provision of this eight million cubic yards for the Clyde during every or any three months of the year a first charge on the water in Lake Sorell, to be taken without lowering its surface more than 18 inches below the maximum fixed by the Act. When this provision is secured the surplus might be diverted to other uses, and that surplus, if a spell of 90 days' drought occurred, would irrigate an equal area of 2700 acres in.

any other locality. For every inch the water was raised above the maximum fixed by the Act, about 555 more acres would be irrigated during the period named. So if the level were raised nine inches, as it probably might be without danger, nearly 8000 acres could be irrigated eastwards of the Tier.

19. But if the water for irrigation of the eastern plains could be taken from Lake Crescent, there need be no limit to the depth at which it should be drawn, provided that a channel be made for the Clyde supply directly from Lake Sorell to the river. This would have to be about 4000 yards long, and would probably cost from £1200 to £1500. I have been told that surveys have been made in past times that showed the practicability of draining Lake Crescent towards the head-waters of the Blackman River or Mill Brook, and an incidental remark in the late Mr. Calder's report on irrigation (Parliamentary Papers, 1863) seems to confirm this. If so, water could be had for 20,000 acres of land. This arrangement, without interfering with the quantity, would improve the quality of the water in the Clyde.

20. The object I have in view is to secure for the inhabitants of the valley of the Clyde a sufficient supply of water of as good a quality as possible, and the following is a summary of my recommendations :—

- (1.) That the provisions of the River Clyde Act with respect to keeping up the water in Lake Sorell to "highest ordinary winter level" be carried out, and the necessary works for doing so be constructed.
- (2.) That a channel be cut from Lake Sorell to the Clyde capable of delivering 90,000 cubic yards of water a day, and that during dry weather no water be admitted into the Clyde but by this channel (this would necessitate the construction of a proper weir at the outlet from Lake Crescent).
- (3.) That if water be taken from Lake Sorell for irrigation purposes, such water be not taken until provision be made for the above-mentioned 90,000 cubic yards a day, nor from a depth of more than 18 inches below the "highest ordinary winter level;" and
- (4.) That after the cutting of the above-mentioned channel any quantity of water be allowed to be taken from Lake Crescent for irrigation purposes.

The above works, so far as they relate to the Clyde valley, would ensure a continual supply for domestic purposes, mill power, and irrigation, and would be well worth the expenditure of the necessary money. With respect to mill power and irrigation, the certainty of having always an ample supply of water would be worth such small additional rating as would be required.

I have the honour to remain,
Mr. President and Gentlemen,
Your obedient Servant,

A. MAULT, *Engineering Inspector.*

Hobart, 9th September, 1889.

APPENDIX G.

*To the Honourable the Speaker and Members of the House of Assembly
of Tasmania, in Parliament assembled.*

The humble Petition of the undersigned Residents in the neighbourhood of the River Isis,

RESPECTFULLY SHEWETH :

1. That your Petitioners have been informed that a Bill has been introduced for the purpose of providing a supply of Water from Lake Sorell for irrigation, and for domestic and other purposes, in the Midland Water District.
2. That the properties occupied by your Petitioners are included in the Water District as defined by the said Bill.
3. That, in the opinion of your Petitioners, the northern boundary of the Water District is fixed too far north, and the Water District includes properties twenty miles distant from Tunbridge.
4. That the properties occupied by your Petitioners are well watered by the River Isis, and they will obtain no benefit from the proposed scheme.
5. That, if such properties are included in the Water District, they will have to pay heavy water rates, for which they will receive no compensating advantage, but, on the contrary, they and all other properties through which the Isis flows will be very seriously damaged by any additional water.

Your Petitioners therefore respectfully pray—

1. That, if the Bill be passed, the District be re-defined so as to exclude the northern portion of the District.
2. And that the Midland Water Trust be restrained from turning any of the proposed water into the River Isis or any tributary thereof.

And your Petitioners will ever pray.

CHARLES HEADLAM.
MARGUERITE CONNELL.
ROBERT BAYLES, (*Trustee Auburn Estate*).
HENRY TOWNS.
WM. M. FARRAR.

[61 VICT.]

*Midland Water Supply.***As amended by Select Committee.**



A

B I L L

TO

Provide a supply of Water from Lake *Sorell* A.D. 1897.
for Irrigation, and for domestic and other
purposes, in the *Midland Water District*.

BE it enacted by His Excellency the Governor of *Tasmania*, by
and with the advice and consent of the Legislative Council and House
of Assembly, in Parliament assembled, as follows :—

- 1** In this Act, unless the context otherwise determines— Interpretation.
- 5 “District” means “The *Midland Water District*” as herein
after defined :
- “Landholder” [extends to]* and includes the owner or occupier * (means) 
of any property situate within the District whose name is
on the Assessment Roll :
- 10 “Assessment Roll” means any Assessment Roll made of pro-
perties situate in the District, and in force for the time
being in the District or any portion thereof :
- “Property” shall mean lands and buildings :
- “Rate” shall mean a Rate duly made under and for the
15 purposes of this Act :
- “Waterworks” [extends to]* and includes all reservoirs, wells, * (means) 
cisterns, tanks, aqueducts, tunnels, feeders, drains, channels,
- [Bill 15.]

* * The words proposed to be struck out are enclosed in brackets [] ; those to be
inserted, in parentheses ().

A.D. 1897.

cuts, floodgates, sluices, conduits, filter, troughs, dams, embankments, pumps, culverts, pipes, pipe-breaks, engines, buildings, and other works of what kind soever which are from time to time necessary or used for effecting the purposes of this Act :

5

“Minister” shall mean the Minister of Lands and Works for the time being.

District defined.
Schedule (1.)

2 The area of land included within the limits defined and set forth in Schedule (1.) is hereby declared to be the *Midland Water District*.

First election of
Trustees.

3 It shall be lawful for the Governor in Council at any time after 10 the passing of this Act, by Notice in the *Gazette*, to direct that on a day and at an hour and place therein named there shall be held within the District an Election of Five Landholders of the District to be the Trustees of the District for the purposes of this Act ; and such Election shall be held accordingly, and the Trustees then elected shall hold office 15 until they retire from office in the manner hereinafter provided.

Election to be
before person
appointed.

4—(1.) Every such Notice shall be published in Three consecutive numbers of the *Gazette*, and shall direct that the Election to be held thereunder shall be held before the person therein appointed Returning Officer for the purpose of such election ; and nominations of persons 20 for election as Trustees shall be forwarded to and be received by such Returning Officer Seven clear days before the day appointed for holding the Election pursuant to such Notice, and the Returning Officer shall thereupon provide and do all things necessary for holding such Election pursuant to this Act.

25

Period within
which election to
be held.

(2.) The date fixed by such Notice for holding the Election therein directed to be held shall not be less than Fifteen nor more than Thirty days after the date of the first publication of the Notice.

Expenses of first
election.

(3.) All expenses of and incidental to the first Election of the Trustees of the District shall be certified under the hand of the Returning 30 Officer, and shall be paid in the first instance out of the Consolidated Revenue Fund by warrant under the hand of the Governor directed to the Treasurer, and shall be repaid by the Trustees to the Treasurer out of [such] (any) moneys at [his] (the) disposal of the Trustees within Six months after the Election.

35



Returning Officer
to notify result to
Minister.

5—(1.) At every Election of Trustees held in pursuance of any such Notice as aforesaid, the person therein appointed Returning Officer for the purposes of the Election to be held thereunder shall preside at such Election, and shall have a casting vote in addition to his vote as a Landholder ; and such Returning Officer shall, within Three days 40 after such Election, prepare, or cause to be prepared, and sign, and forward to the Minister a notification in writing of the names and places of residence of every person elected at such Election as a Trustee of the District.

(2.) The Minister upon receipt of such notification shall cause to be 45 published in the *Gazette* the names of the persons elected at such Election as Trustees of the District, and shall also cause written Notice of his Election, and of the time and place of the first meeting of the Trustees, to be served personally upon every person so elected, or to be left at his usual place of abode, or transmitted to him by 50 post.

[61 VICT.]

Midland Water Supply.

6 Subject to the provisions hereinafter contained, every Trustee shall hold office for a period of Two years, and shall retire in rotation as hereinafter provided.

A.D. 1897.

Trustee to hold office for Two years.

7 An Election of Trustees shall be held within the District in the 5 month of *April* in the second year after the year in which the first Election of Trustees shall be held under this Act, and in the same month in every subsequent year, for the purpose of electing the requisite number of persons to fill the vacancies caused by the retirement of Trustees in accordance with the provisions of this Act, and the Trustees shall fix a day in the month of *April* in every such subsequent year as aforesaid, and shall also fix an hour of the day between Ten of the clock in the forenoon and Four of the clock in the afternoon, and a place within such District for holding such Annual Election of Trustees, and shall publish once in the 15 *Gazette* and at least twice in a public newspaper published or circulated in the District, and shall also cause to be posted up in the Office of the Trustees and at every Police Office, Police Station, and Post Office in such District, Ten clear days at least before the day of holding the Election, notice of the date and time and place of such Election.

Annual Election to be held in District.

8 At every Election of Trustees held under this Act every Landholder shall have a number of votes proportioned to the annual value of the property within the District occupied by him, according to the scale mentioned and set forth in "The Rural Voting Act, 1884;" and the word "Elector" as used in the said Act shall, for the purposes of 25 this Act, mean and include a Landholder under this Act.

Scale of votes.

48 Vict. No. 26.

9 Every person whose name appears on the Assessment Roll comprising the property within the said Water District as the owner or occupier of any property situate within the District shall, except as hereinafter provided, be entitled to vote as a Landholder of the District at any Election of Trustees held under this Act; but in any case in which a change of ownership or occupation of any property within the District has taken place since the publication of such Assessment Roll, the person who has become the owner or occupier, as the case may be, of such property may send to the Chairman of the Trustees, Fourteen days 35 before the day of election a notification of such change of ownership or occupation, and a claim to vote at such Election as the owner or occupier of such property, and the Chairman or the Trustee appointed as hereinafter provided to preside at such Election, on being satisfied of such change of ownership or occupation, shall permit such person to vote at 40 such Election in the place of the person whose name appears on such Assessment Roll as the owner or occupier, as the case may be, of such property.

Change of occupation.

10—(1.) On the day fixed for holding the first Annual Election of Trustees after the first Election of Trustees, Two Trustees shall retire 45 from office; and on the day fixed for holding the second Annual Election of Trustees, Three Trustees shall retire from office; and on the day fixed for holding the Annual Election of Trustees in every subsequent year, every Trustee who was elected at the Annual Election of Trustees held in the Second preceding year shall retire from office.

Retirement of Trustees.

50 (2.) The persons elected as the first Trustees of the District shall decide by lot among themselves which of them shall retire from office

A.D. 1897.

on the day fixed for the first Annual Election of Trustees of the District.

(3.) The retiring Trustees shall hold office until their successors are duly elected.

(4.) Every Trustee retiring from office shall, if qualified, be eligible for re-election.

Time prescribed for election may be extended.

11—(1.) In case the Trustees neglect or omit in any year to fix the day, place, and hour for holding any Annual Election of Trustees, or in case any such Election is not held upon any day appointed for that purpose in the month of *April* in any year in pursuance of this Act, the Governor in Council may extend the time for the Election of Trustees to any day to be fixed in manner hereinbefore provided before the Thirtieth day of *June* in any year.

(2.) In case no Election of Trustees is held in any year in manner hereinbefore directed, the Trustees then in office shall continue in office until the day which may be fixed in the month of *April* in the succeeding year for the Annual Election of Trustees, or until the Election of new Trustees, and so from time to time.

(3.) If no Election of Trustees shall be held in such succeeding year; it shall be lawful for the Governor in Council, upon the petition of any number of Landholders not less than Seven, to fix a day, hour, and place for holding an Election of Trustees, and notice thereof shall be published by the Minister in the manner hereinbefore provided in respect of the Annual Election of Trustees

Nomination of candidates for election.

12 The Trustees shall, in and by every notice of the time and place fixed for any Annual Election of Trustees, appoint a day for the reception of nominations as hereinafter mentioned, not less than Five days nor more than Seven days before the days fixed for such Annual Election, and the Chairman of the Trustees shall, during the Three days immediately preceding the day so appointed, and up to Four of the clock in the afternoon of such day, receive nominations of Landholders qualified to be elected as Trustees for election at such Annual Election.

List of candidates to be published.

13 The Trustees shall cause a list of the Candidates nominated for election to be published in at least Two consecutive numbers of a public newspaper published or circulating in the District, and shall also cause such list to be posted up in the Office of the Trustees and at every Police Office, Police Station, and Post Office in the District not less than Three clear days before the day fixed for such Annual Election; and none but persons so nominated shall be capable of being elected.

Form of nomination.

14 Every nomination of a candidate for election as a Trustee shall be in writing, and shall be signed by at least Two Landholders entitled to vote at such election of Trustees; and no such nomination shall contain the names of more candidates than the number of Trustees to be elected; and with such nomination there shall be delivered to the Chairman the written consent of such candidate or candidates to such nomination: and no nomination shall be received or recognised in the absence of such written consent; and every such nomination and consent may be in writing or printed, or partly written and partly printed, in the form in the Schedule (2.). Provided that no female shall be nominated or eligible to sit or act as a Trustee.

Schedule (2.)

[61 VICT.]

Midland Water Supply.

- 15** Every Election of Trustees shall be by ballot, and the Chairman of the Trustees shall, except as hereinafter provided, preside at every such election; and in the event of the Chairman being a candidate at any such election, or being unable from any cause to preside at such Election, the Trustees shall appoint another Trustee to preside at such Election; and all Ballot-papers used at any Election shall be signed or stamped on the back thereof by the Chairman or the Trustee presiding thereat. A.D. 1897.
Election to be by ballot and held before Chairman.
- 16** If no greater number of persons are nominated for election, as provided in this Act, than the number of Trustees to be elected, the Chairman shall, after the expiration of the time fixed for receiving nominations of candidates, declare, without any Poll being had, the persons so nominated to be elected as Trustees, and the persons so declared to be elected shall thenceforth be Trustees of the District. Mode of proceeding if no more persons nominated than Trustees to be elected!
- 17** It shall be lawful for the Trustees to appoint in every year Polling-places in the District, and also to appoint any officers requisite for the purpose of the Annual Election of Trustees, and to do all other necessary things preliminary or incidental to every such Annual Election. Polling-places.
- 18** Wherever and whenever Polling-places are appointed as hereinafter provided, the Trustees, previously to the day fixed for the Annual Election, shall fix a time for commencing and closing the Poll, if any, for such Election; and every such Poll shall remain open for Two hours at least; and every Landholder is hereby empowered to give, and shall, if he votes, give the number of votes to which he is entitled to any number of persons not exceeding the number of Trustees then to be elected; and every such Election of Trustees shall be finished in One day without any adjournment whatsoever. Election of Trustees.
- 19** Every person duly qualified, and duly elected or appointed as hereinafter provided to the office of Trustee, shall, if he accepts such office, make and subscribe before a Justice of the Peace a Declaration in the form of the Schedule (3.) within One month after notice of his election or appointment has been served on him personally, or left at his usual place of abode, or been transmitted to him by post; and every Declaration shall be delivered by the Trustee who has made the same, at the first meeting of the Trustees thereafter at which he is present, to the Chairman of the Trustees. How Trustees to accept office.
Schedule (3.)
- 20** If any person elected or appointed a Trustee under this Act refuses or fails to accept such office, and to make and subscribe such Declaration as aforesaid within such time as aforesaid, his place shall thereupon be declared vacant, and shall be filled up by a fresh election or appointment. Refusal or failure to accept office.
- 21** If any Trustee is absent from Three consecutive Meetings of the Trustees extending over a period not less than Three months, after having had notice of the intention to hold such Meetings, and without leave of absence granted to him by the Trustees, he shall cease to be a Trustee unless his absence was caused by sickness; and the Trustees shall in any such case declare his place to be vacant, and the same shall be vacant accordingly. Trustee absent from Three consecutive Meetings to vacate office.

A.D. 1897.

Provides for
death, &c. of
Trustees during
period of office.



22 If at any time during the period for which he was elected any Trustee dies or departs from *Tasmania* and remains absent therefrom for the space of Three months, or ceases to be a Landholder, or resigns, or refuses, or from any cause whatsoever become(s) incapable or unfit to act as a Trustee, of if his place is declared vacant, it shall be lawful for the 5 surviving or continuing Trustees, and they are hereby required, within Thirty days, subject as hereinafter provided, to appoint some fit and proper person, being a landholder, to act in conjunction with such surviving or continuing Trustees in the place and stead of such first-mentioned Trustee. 10

Provided nevertheless, that whenever any Trustee's place becomes vacant from any of the causes herein mentioned, the Chairman of the Trustees shall forthwith give notice thereof in Two consecutive numbers of a public newspaper published or circulated in the District; and the Trustees shall not for a period of Fourteen days after such notice proceed 15 to fill up such vacancy; and if before the expiration of such period of Fourteen days a requisition in writing signed by any number of the Landholders, not less than Seven, is presented to the Trustees requiring an election to be held to supply such vacancy, the Trustees shall not appoint a new Trustee, but an election shall be held to supply the 20 vacancy as aforesaid; and every such election shall be conducted in the same manner in every respect as the Annual Election of Trustees; and every Trustee appointed or elected to fill any such vacancy shall retain his place as a Trustee so long only as his predecessor would have retained the same if no vacancy had occurred. 25

Election and
appointment of
Trustees to be
published.

23 Forthwith after every Annual Election of Trustees, the Chairman or Trustee presiding at the Election shall cause to be published in the *Gazette* the names and places of residence of every Trustee elected; and the Chairman of the Trustees shall cause to be published in the *Gazette* the names and places of residence of every Trustee 30 appointed, and shall also cause notice in writing of his election or appointment to be served personally on, or left at the usual place of abode of, or transmitted by post to, every person so elected or appointed.

Quorum of
Trustees.

24 All acts and proceedings relating to this Act which are directed 35 to be had or done by the Trustees, and all the powers and authorities vested in them generally, shall and may be had, done, and exercised by the major part of the Trustees present at any meeting of the Trustees, the whole number present not being less than Three; and any such Three Trustees shall form a quorum. 40

Election of
Chairman of
Trustees.

25—(1.) The Trustees shall, at their first Meeting held after the first Election of Trustees, and at their first Meeting held after each Annual Election of Trustees, by the majority of votes of the Trustees present, elect one of their body to be Chairman for the ensuing year; and if at any such Meeting there is an equality of votes in the election 45 of Chairman it shall be decided by lot which of the Trustees having an equal number of votes shall be the Chairman; and such Chairman shall preside at all Meetings of the Trustees at which he is present; and if at any Meeting of Trustees the Chairman is not present one of the Trustees present shall be elected Chairman of such Meeting by the 50 majority of votes of the Trustees present thereat.

(2.) In case the Chairman shall die, or by writing under his hand delivered by him to the Trustees at any Meeting of Trustees, or to the

[61 Vict.]

Midland Water Supply.

Secretary of the Trustees, resign his office of Chairman, or cease to be a Trustee, the Trustees present at the Meeting next after the occurrence of such vacancy shall choose one of their body to be Chairman, and the Chairman so chosen shall continue in office until the next Annual Meeting for the election of Trustees. A.D. 1897.

26 At all Meetings of Trustees all the Trustees present shall vote, save where it is herein otherwise provided, and the questions there considered shall be decided by open voting and by the majority present; and if there is an equal division of votes upon any question, [it shall be considered lost] (the Chairman shall have a casting vote). Equal division of votes.

27 No Trustee shall vote upon any matter in which such Trustee directly, by himself or his partners, has any pecuniary interest; and any Trustee who knowingly offends against this Section shall, on conviction, forfeit and pay for every such offence a sum not exceeding Fifty Pounds. Trustee not to vote where he is pecuniarily interested.

28 All orders and proceedings of the Trustees, together with the names of the Trustees present at every Meeting, shall be entered in a book to be kept by the Trustees for that purpose, and be signed by the Chairman of the Meeting at which such orders or proceedings are, from time to time, confirmed; and such orders and proceedings so entered and signed by the Chairman of such Meeting shall be deemed to be original orders and proceedings. Orders and proceedings of Trustees to be recorded.

[29] Notwithstanding anything contained in "The River *Clyde* Act," it shall be lawful for the Trustees to enter upon Lake *Sorell*, and the bed and shores thereof, and to cause such works to be erected or established in the bed of such Lake, and on the shore thereof, as shall be necessary from time to time to divert the waters thereof, and to divert and appropriate such quantity of the water of the said Lake as shall be required for the purposes of this Act. Power to erect works and divert waters of Lake *Sorell*.
33 Vict. No. 34.

30 Provided that the flow of the water of the River *Clyde*, or of any drain, sluice, or channel constructed under the provisions of "The River *Clyde* Act," is not diminished or affected by any such works.] (Clause to be re-drafted in accordance with recommendation No. 4 of the Select Committee's Report.)

30 The Trustees are hereby empowered to purchase any land which they may consider to be necessary for the purposes of this Act, and which they may think proper to purchase; and for the purpose of facilitating and effectuating any such purchase *The Lands Clauses Act* shall be incorporated with this Act. Purchase of land.
21 Vict. No. 11.

31 For the purposes of this Act it shall be lawful for the Trustees to enter upon any land and to take levels of the same, and to set out such parts of such land as the Trustees think necessary, and to dig, cut, trench, and break up the soil of such land, and to remove all earth, stone, trees, or other things dug or obtained out of the same, and to use such materials in the construction and upholding of the works authorised by this Act. Entry on land.

32 Prior to the first entry upon any land by the Trustees for the purposes of this Act, not less than Seven days' notice of the intention of the Trustees to enter shall be given by the Trustees to the owner and occupier, if any; but no notice shall be necessary previous to any subsequent entry by the Trustees upon such land for the purposes of this Act. Trustees to give notice prior to first entry upon land.

A.D. 1897.

Construction of
works.

33 It shall be lawful for the Trustees from time to time to make, construct, lay down, maintain, alter, or discontinue such works upon any land as the Trustees think necessary for the purposes of this Act.

Breaking up
streets or roads.

(Proviso to be added to preserve control of Road Trustees over any road or street over or under which works may be constructed.)

34 The Trustees may from time to time open and break up the soil and pavement of any streets or roads within the District or other road through which it may be expedient to convey water for the purposes of this Act; and may open and break up any sewers, drains, or tunnels within or under any such street or road, and lay down and place therein or thereunder pipes, service pipes, and other works and engines, and from time to time repair, alter, or remove the same, and do all other acts which the Trustees from time to time deem necessary for supplying water to the inhabitants of the District and any part beyond the District whereunto the Trustees may be required to bring the same.

Trustees may
make and levy
Rate.

35 For the purpose of raising the necessary funds for carrying out the several objects of this Act, it shall be lawful for the Trustees, at 15 yearly, half-yearly, or such other periods as they may see fit, to make and levy a Rate upon the occupiers of all property within the District. Provided, that such Rate shall not in any one year exceed One Shilling in the Pound upon the annual value of such property as ascertained by the Assessment Roll in force for the time being in the 20 District.

Power to borrow
money.

36 It shall be lawful for the Trustees, for the purposes of this Act, to borrow under the provisions of "The Local Bodies Loans Act," and every Amendment thereof, any sum or sums of money [not exceeding One thousand Pounds] (authorised by the said Act). 25.

Supply of water.



37 The Trustees shall, at the request of the owner or occupier of any house situate within the District, the outer boundary of which property is within Fifty feet of any main or other pipe, furnish to such person within such house by means of communication by pipes and other necessary appliances, to be provided, laid down, and maintained by the Trustees at the cost of such person, a sufficient supply of water for his domestic purposes, [including a supply for any private water-closet or fixed bath,] but shall not be liable for any unforeseen or unavoidable interruption to such supply. 30.

Supply beyond
the boundary of
Water District.

38 The Trustees may cause pipes to be laid down and water brought to any part beyond the boundary of the District whereunto the Trustees are required by the owners or occupiers of houses in any such part, on payment of the expense of providing and laying down such pipes: Provided that no such requisition shall be binding on the Trustees unless such owner or occupier shall execute an agreement binding himself to take such supply of water for Three successive years at least, and on such terms for the payment of the same as may be agreed on. 35.

Other than
domestic
purposes.

39 The Trustees may, if they see fit, furnish to any person a supply of water for irrigation, or steam engines, or working machines or apparatus, or for horses or cattle, or stables, or for any trade, manufacture, or business, or for any other purpose not domestic; such supplies to be so furnished at such charges and upon such conditions as may be agreed upon between the Trustees and the person desiring the same: Provided that the charge for the same, as far as possible, shall be uniform to all 40. 45. 50.

[61 VICT.]

Midland Water Supply.

persons in the same circumstances and requiring the same extent of A.D. 1897.
supply.

40 The Trustees shall, from time to time, appoint a Treasurer and also a Collector of Rates, who may be Trustees, and may, from
5 time to time, appoint and employ such Surveyors and other Officers as the Trustees think necessary and proper; and, from time to time, may remove any of such Officers, and appoint others in the room of such as are so removed, or as may die, resign, or discontinue their offices, and may, out of the moneys at the disposal of the Trustees
10 under this Act, pay such salaries and allowances to the said Officers respectively as the Trustees think reasonable: Provided, that nothing herein contained shall prevent the same person from being appointed to hold more than one of such offices at the same time if the Trustees so think fit; and all the provisions of *The Rural Municipalities Act*,
15 1865, relating to *Officers and their Accountability* shall be applicable to such Treasurer, Collector, and other officers, and shall be incorporated with this Act.

Power to appoint
Officers.

48 Vict. No. 28.

41 The Trustees shall cause books to be provided and kept, and true
and regular accounts to be entered therein of all sums of money received
20 and paid under the authority of this Act, and of the several purposes for which such sums of money have been received and paid, which books shall at all reasonable times be open to the inspection of any Trustee or landowner, or of holder of any Debenture issued by the Trustees, without fee or reward; and the persons aforesaid, or any of
25 them, may take copies of or extracts from the said books, without paying anything for the same; and any person having the custody of the said books who does not, on the reasonable demand of any person as aforesaid, permit him to inspect the said books, or to take such copies or extracts as aforesaid, shall, for every such offence, incur a penalty not
30 exceeding Five Pounds.

Trustees to keep
accounts of
receipts and
disbursements.

42 All moneys received by the Treasurer of the Trustees shall be
paid by him monthly into some one of the public banks of this Colony
to the account of the Trustees of the District; and no part of such
moneys shall be drawn out of such bank except by cheque signed by
35 the Treasurer and countersigned by one of the Trustees.

Moneys received
to be paid into
bank.

43 The Trustees shall, before the end of the second week in the month
of *March* in each year, cause the accounts of the Trustees up to and
including the last day of *February* next preceding to be balanced, and
also cause a full and true statement and account to be drawn out of the
40 amount of all Rates made and levied, and of all moneys received and expended during the preceding year, and also of all debts then owing by and to the Trustees, and such statement and account shall be signed by the Chairman and not less than Two Trustees.

Statement and
account to be
annually
prepared.

44 The accounts of the Trustees mentioned hereinbefore shall be
45 subject and liable to all the provisions of "The Audit Act, 1888," in the same manner as the accounts of Trustees of Road Districts are now subject and liable; and the statement and account hereinbefore mentioned shall be forwarded to the Auditor-General during the month of *March* in every year; and such statement and account, with the
50 report of the said Auditor-General thereon, shall be published in the *Gazette* as soon as may be after the same have been audited.

Audit of accounts.
52 Vict. No. 43.

[Bill 15.]

A.D. 1897.

Appropriation.

45 All moneys whatsoever levied, received, or recovered under the authority of this Act shall be at the sole and absolute disposal of the Trustees, to be by them applied in such manner as they see fit in carrying out and effectuating the purposes of this Act, and to no other purpose.

5

Wasting water.

46 If any person neglects to keep the pipes and other apparatus by means of which his premises are supplied with water in good repair, or by neglect in any way allows water to run to waste, or uses water laid on only for domestic purposes in other ways without special arrangements, every such person shall be liable to a penalty not exceeding Five 10 Pounds for each offence.

Obstructing
Trustees.

47 If any person wilfully obstructs, hinders, or interrupts, or causes or procures to be obstructed, hindered, or interrupted, the Trustees, or any person duly employed or authorised by the Trustees, [or] in the exercise of any power or authority vested in the Trustees or any of the 15 persons aforesaid by this Act, or threatens or assaults, or uses improper or abusive language to any of the persons aforesaid whilst in the performance or execution of his duty under this Act, every such person shall for any such offence, if not otherwise specially provided for, incur a penalty not exceeding Twenty Pounds:

20

Provided, that no proceeding for the recovery of any such penalty, nor the payment thereof, shall be a bar to any action at Law by any of the persons aforesaid for or in respect of any such assault as aforesaid, but every such action may be commenced and proceeded with as if this Act had not been passed, any Law or usage to the contrary notwithstanding.

25

By-Laws.

By-laws.

48 The Trustees shall have power from time to time to make, alter, modify, amend, or repeal By-laws for the following purposes:—

For regulating the charges, terms, and conditions upon which water shall be supplied in the cases provided for by Section 30 Thirty-nine of this Act:

For regulating the description of pipes and other apparatus by means of which water may be laid on, distributed, or supplied from the waterworks, and for prohibiting the use of any other description of pipes or apparatus:

35

For preventing injury to the waterworks:

For regulating all or any matters and things whatsoever connected with the water to be supplied by means of the waterworks:

And otherwise for the better effectuating any of the purposes of this Act in any manner not otherwise sufficiently provided for. 40 And to provide that any such By-law may be enforced by cutting off the pipe or turning off the water, or by such pecuniary penalty, not exceeding in any case the sum of Ten Pounds, as the Trustees think proper.

Subject to the provisions of this Act, the provisions of Section One 45 hundred of *The Rural Municipalities Act*, 1865, shall be applicable to the By-laws made under this Act.

Offences to be
dealt with
summarily.
19 Vict. No. 8.

49 All offences against this Act or any By-law made hereunder shall be heard and determined in a summary way by any Two Justices of the Peace in the mode prescribed by *The Magistrates* 50

[61 VICT.]

Midland Water Supply.

Summary Procedure Act; and any person convicted of any offence **A.D. 1897.**
against this Act may appeal against the conviction in the mode
prescribed by *The Appeals Regulation Act*.

19 Vict. No. 10.

50 All penalties received by virtue of this Act shall be paid to the **Appropriation of**
Treasurer of the Trustees, and shall form part of the moneys at the **penalties.**
disposal of the Trustees for the purposes of this Act.

51 No action shall lie against any person for anything done in **Persons acting**
pursuance of this Act unless notice in writing of such action, and of **under Act entitled**
the cause thereof, is given to the defendant One month at least before **to notice of**
10 the commencement of the action, and such action is commenced within **action.**
Three months after the cause of action has accrued; and in any such
action the defendant may plead the general issue, and give this Act
and the special matter in evidence; and no plaintiff shall recover in
any such action if tender of sufficient amends has been made before
15 such action brought, or if a sufficient sum of money has been paid into
Court by or on behalf of the defendant after such action brought,
together with the costs incurred up to that time; and if a verdict
passes for the defendant, or if the plaintiff becomes nonsuit or discontinues
such action, or if upon demurrer or otherwise judgment is given against
20 the plaintiff, the defendant shall recover his full costs as between
attorney and client, and have the like remedy for recovering the same
as any defendant has by law in other cases; and though a verdict is
given for the plaintiff in any such action, such plaintiff shall not have
costs against the defendant unless the Judge before whom the case is
25 tried certifies his approbation of the action and the verdict obtained
thereupon.

52 The Trustees shall specially assess properties for the purpose of **Special assess-**
this Act situate in the District within Three months after the first **ment of**
election of Trustees. **properties.**

Poll to be taken.

30 **53** Notwithstanding anything hereinbefore contained, the Trustees **Poll of owners**
shall not proceed to construct or perform any of the works aforesaid **and occupiers to**
until and after a poll has been taken of the owners and occupiers of **be taken.**
property within the Water District, and if at such poll one-third of the
aggregate number of votes to which the owners and occupiers of pro-
35 perty within the District are entitled as hereinafter mentioned shall be
recorded against the construction of such works as aforesaid, the Trus-
tees shall not proceed to construct the same; and at the taking of such
poll every person who desires to vote shall be entitled to as many votes
as the number of votes to which such person appears by the Assessment
40 Roll prepared in accordance with the provisions of this Act to be entitled
on the same scale of voting as applies to Municipalities.

54 When the Trustees shall decide to take a poll of the owners and **Notice of poll to**
occupiers as aforesaid, they shall cause a notice of such poll to be **be published.**
inserted not less than Three times in the newspapers published daily
45 in the City of *Launceston*, and in two consecutive numbers of the
Gazette; and such notice shall contain the following particulars:—

- I. The time and place of such election:
- II. The works proposed to be constructed or performed by the
Trustees:
- 50** III. The estimated cost of such works.

A.D. 1897.

Proceedings to
be had as upon
election of
Councillors.

Provisions of
29 Vict. No. 8
as to Rates to
apply.

55 Subject to the foregoing provisions, upon the taking of any poll as aforesaid all proceedings shall be had and taken as nearly as may be as upon an election of Councillors as the case may require.

56 Where the same is not repugnant to the provisions of this Act, all the provisions of the Act 29 Vict. No. 8 relating to the making of 5 Assessment, the appeal therefrom, the making of Rates and their enforcement, shall apply to and be incorporated with this Act.

SCHEDULE.

(1.)

MIDLAND WATER DISTRICT.

Commencing at the north angle of 1000 acres located to William Kermode on the Blackman's River, thence by the north-east, south-east, and part of the south-west boundary of that location, by the south-east boundary of 2030 acres granted to G. W. Cartwright and Robert Pitcairn, by the north-east, south-east, and east boundaries of 3150 acres granted to Robert Pitcairn and Thomas Brown to the southern boundary of the Parish of Gibbs, by that boundary southerly and westerly to York Rivulet, by that rivulet southerly to the south-west boundary of 606 acres purchased by W. Kimberley, by that boundary and by part of the south-east boundary of 1338 acres purchased by G. Butler and R. Pitcairn to the Antil Ponds Rivulet, by that rivulet to the south-east boundary of 2000 acres located to R. Harrison, by that boundary and by the south boundary of that land to Blackman's River, by that river southerly to the north boundary of 215 acres purchased by C. Headlam, by that boundary and by part of the east boundary of 2498 acres purchased by J. W. Agnew, by the south and by part of the west boundary of 2980 acres purchased by J. J. R. and A. T. Pillinger, by the north boundary of 320 acres granted to G. C. Clarke and by a continued westerly line to the east boundary of 1650 acres purchased by J. J. R. and A. T. Pillinger, by part of that boundary and by the east boundary of 920 acres purchased by the same, by the south-east and north-east boundaries of Lot 109 leased by W. A. Kermode to Flood's Creek, by that creek easterly to the north-west boundary of 8100 acres granted to G. C. Clarke, by that boundary and by the north-west boundary of 642 acres purchased by G. C. Clarke, by part of the south-west boundary of 1000 acres located to J. Wright, by part of the south-west and north-west boundaries of 4840 acres granted to G. C. Clarke, by the south-west and by part of the north-west boundary of 2000 acres also granted to G. C. Clarke, by the north-east boundary of 640 acres purchased by Joseph Bayles to the River Isis, by that river south-westerly to the south-west boundary of 343 acres purchased by J. Bayles, Jun., by that boundary and by the south-west, north-west, and north-east boundaries of 1700 acres purchased by Joseph Bayles, by the south-east boundary of 638 acres granted to G. C. Clarke and A. Morrison to the River Isis aforesaid, by that river after crossing the same to the north-west boundary of 360 acres located to J. O'Connell, by the north-west and north-east boundaries of that location, by part of the north-west and by the north-east boundary of 1400 acres located to Richard Downward, by part of the north-west and by the north-east and south-east boundaries of 2000 acres located to Bassett Dickson, by the north-east and south-east boundaries of 2000 acres located to Alfred Stephen, by the south-west boundaries of 1000 acres and 2000 acres located to G. C. Clarke and J. Batman respectively, by the north-west, south-west and south-east boundaries of 1002 acres purchased by Samuel Horton, by the south-west and south-east boundaries of 410 acres granted to Thomas Parramore, by the north-east and south-east boundaries of 1082 acres granted to John Roberts, by the south boundary of 2062 acres granted to C. Swanston and J. Allport to the Blackman's River aforesaid, and thence by that river north-easterly after crossing the same to the point of commencement.

Midland Water Supply.

(2.)

WE, the undersigned Landholders of the Midland Water District, do hereby nominate,
[stating Christian Name and Surname] of [and state occupation] as a fit
and proper person for election as Trustee of the said Water District.

<i>Surname and Christian Name of Landholder.</i>	<i>Place of Residence.</i>

(3.)

A.B.

A.B.

[62 VICT.]

*Clyde Water.***As amended by Select Committee.**

A

B I L L

TO

Make better provision for securing a suffi- A.D. 1898.
 cient flow of good Water in the River
Clyde for the use of the Inhabitants of
 the Towns of *Bothwell* and *Hamilton*, and
 for other purposes.

WHEREAS it is expedient to make better provision for securing a PREAMBLE.
 sufficient flow of good Water in the River *Clyde* for all purposes :

Be it therefore enacted by His Excellency the Governor of *Tasmania*,
 by and with the advice and consent of the Legislative Council and
 5 House of Assembly, in Parliament assembled, as follows :—

1 This Act may be cited as “The *Clyde Water Act*, 1897.”

Short title.

Repeal.

2 “The River *Clyde Act*” is hereby repealed, except as to acts Repeal of
 already done ; and all dams and works constructed under the said 33 Vict. No. 34.
 Act shall be deemed to have been constructed by the Trustees under Saving as to acts,
 10 this Act, and all property vested in Trustees under the said Act shall &c. done.
 be deemed to be vested in the Trustees under this Act.

[Bill 4.]

* * The words proposed to be struck out are enclosed in brackets [] ; those to be
 inserted, in parentheses ().

A.D. 1898.

*Trustees.*How Trustees
appointed and
elected.

3 For the purpose of carrying out the provisions of this Act, there shall be **[Ten] (Eight)** Trustees appointed and elected as hereinafter provided; that is to say—

- i. **[Six] (Four)** ordinary Trustees appointed by this Act, and their successors to be elected as hereinafter provided; 5
- ii. The Warden for the time being of the Rural Municipality of *Bothwell* and one of the Councillors of such Municipality;
- iii. The Warden for the time being of the Rural Municipality of *Hamilton* and one of the Councillors of such Municipality.

The Trustees so appointed and elected shall for all purposes be 10 called “the Trustees of the River *Clyde*,” and shall have and exercise all the powers conferred by this Act.

Appointment and
retirement of
Trustees.

4 The following **[Six] (Four)** persons shall be the first “ordinary Trustees of the River *Clyde*,” that is to say,—

Edward Nicholas, 15
Alexander Arthur Reid,
[Henry Francis Chamberlen,
Edward Lewis Archer,]
(James Tolland, 20
John Madden.)

The ordinary Trustees shall, subject to the provisions of this Act, hold office for a period of Three years.

In the month of *April* in the year One thousand nine hundred, and in every succeeding year, Two of the ordinary Trustees shall retire from office, and the ordinary Trustees appointed by this Act shall determine 25 by lot amongst themselves which of them shall retire in the year One thousand nine hundred and in the Two succeeding years, and thereafter the Two Trustees being longest in office shall retire.

Every Trustee going out of office shall if qualified be eligible for re-election. 30

In case any of the ordinary Trustees die, resign, or cease to reside within Ten miles of any part of the banks of the River *Clyde*, then the place of such Trustee shall be deemed to be vacant, and in every such case a new Trustee shall be elected to supply such vacancy; and such new Trustee shall hold office for so long only as the vacating 35 Member would have held the same if no vacancy had occurred.

New Trustee to
be elected at a
meeting of
Ratepayers.

5 Every ordinary Trustee shall be elected by the persons liable to be rated under the provisions of this Act; and upon any vacancy occurring amongst the said Trustees, the **[continuing] (Chairman or Acting Chairman of)** Trustees shall forthwith fix a time and place for 40 holding a meeting of such persons for the purpose of electing a new Trustee, and shall give notice of the time and place for holding such meeting in the *Gazette* and in a newspaper published in *Hobart* Fourteen days before such meeting.

Election how
conducted.

6 Every such election of an ordinary Trustee shall be conducted in 45 the same manner, as nearly as may be, as elections of Road Trustees are directed to be conducted under “The Roads Act, 1884.”

Municipal
Council of
Bothwell and
Hamilton to each
elect a Trustee.

7—(1.) The Municipal Council of the Rural Municipality of *Bothwell* shall, in each year, elect one of its Members to be a Trustee of the River *Clyde* for the ensuing year, who shall hold office until his 50 successor is elected.

(2.) The Municipal Council of the Rural Municipality of *Hamilton* shall, in each year, elect one of its Members to be a Trustee of the

[62 VICT.]

Clyde Water.

River *Clyde* for the ensuing year, who shall hold office until his A.D. 1898. successor is elected.

(3.) If any Trustee elected by either of such Municipal Councils ceases, by effluxion of time or otherwise, to be a Member of the
5 Municipal Council that elected him, he shall also cease to be a Trustee of the River *Clyde*, and such Municipal Council shall elect one of its Members to be a Trustee in his place; and the Member so elected shall be a Trustee for the unexpired portion of the time during which the person in whose place he has been elected would have been a
10 Trustee.

8 The Trustees shall hold such Meetings as may be necessary for the transaction of business, and for properly executing its powers and duties under this Act. Meetings of Board.

The Trustees shall from time to time make regulations with respect
15 to the summoning, notice, place, management, and adjournment of their Meetings, and generally with respect to the transaction and management of their business. Regulations.

No business shall be transacted at such Meetings unless at least
Five Trustees are present. Quorum.

20 The Trustees shall annually elect one of their Members to be Chairman of the Trustees for the ensuing year, who shall hold office until his successor is elected, and if the Chairman is absent from any Meeting at the time appointed for holding it, the Trustees present shall appoint one of their number to act as Chairman thereat. Chairman.

25 The names of the Trustees present shall be recorded, and so shall the names of those voting on each question when a division is called for, in manner to show whether each vote given was for or against the question. Names to be recorded.

Every question at a Meeting shall be decided by a majority of the
30 votes of the Trustees present and voting on the question; and in case of an equal division of votes the Chairman shall have a second or casting vote. Voting.

The first Meeting of the Trustees shall be held at such place and time as the person who was the last Chairman of the *Clyde Water Trust*
35 under the Act hereby repealed shall by written notice to every Trustee appoint. First meeting.

Powers of Trustees.

9 The Trustees shall, for the purposes of this Act, have and exercise the following powers and authorities :— Powers of Trustees.

i. To repair, alter, reconstruct, or remove the said dams and
40 works :

ii. To construct, repair, alter, and remove such dams, sluices, embankments, or other works on the River *Clyde* or on the River *Interlachen* (which connects Lake *Crescent* with Lake *Sorell*), or on the banks of the said Lakes, as the
45 Trustees deem necessary :

iii. To construct, repair, alter, and remove such channels, sluices, and other works as may be required to convey water directly from Lake *Sorell* to the River *Clyde*, as the Trustees deem necessary :

50 iv. To construct, repair, alter, and remove such Waterworks as the Trustees may from time to time deem necessary for supplying the inhabitants of *Bothwell* and *Hamilton* with water for domestic and other purposes :

A.D. 1898.

- v. To enter, or cause their servants or workmen to enter, upon any land on either side of the River *Clyde* or the River *Interlachen* or of Lake *Sorell* or Lake *Crescent* for the purpose of constructing, repairing, altering, or removing any dam, channel, sluice, embankment, or other work by this Act authorised to be constructed, repaired, altered, or removed :
- vi. To remove soil, and to place stone, bricks, wood, or other materials in, upon, or beneath any land within One hundred feet of any dam, channel, sluice, embankment, or 10 other work constructed, or at any time about to be constructed, under the provisions of this Act :
- vii. To fix the Rates to be paid for the use of the waters of the River *Clyde* and of Lakes *Sorell* and *Crescent* for irrigation, motive power, domestic use, and other purposes, and 15 the conditions of such use :
- viii. To recover damages and penalties :
- ix. To borrow money on security of the Rates :
- x. To enter into any necessary contracts :

Provided, that the owner of any land so entered upon shall be entitled 20 to compensation from the Trustees for all loss or injury he may sustain by reason of the construction of any dam, channel, sluice, embankment, or work, in part or in whole, upon his land ; and also for any other injury he may sustain by reason of the exercise by the Trustees of any of the powers vested in them by virtue of this Act, and such com- 25 pensation shall be ascertained and determined in the mode prescribed by *The Lands Clauses Act* in cases of disputed compensation.

[Provided also, that no person shall be entitled to claim compensation for any damage he may sustain in consequence of the Trustees maintaining the waters of Lake *Crescent* and Lake *Sorell* at any level 30 within the limits fixed by this Act.]

[Level at which Lake waters may be kept.]
(See recommendation No. 4 of Committee's Report).
Power to make By-laws.

[10 It shall not be lawful for the said Trustees to cause the Water in Lake *Crescent* or Lake *Sorell* to be maintained under the authority of this Act at a higher level than Nine inches above highest ordinary winter level of such Water.] 35

11 It shall be lawful for the Trustees from time to time to make By-laws, and by any subsequent By-law to vary or rescind such By-laws, for any of the following purposes :—

To prevent the fouling or obstruction of the Rivers *Clyde* and *Interlachen*, and any channels or sluices made by the Trustees, or the Waters of the said Rivers, or channels or sluices, or of Lake *Sorell* or Lake *Crescent* :

To regulate the use of the Waters of the River *Clyde* and of Lakes *Sorell* and *Crescent* for irrigation or other purposes :

To fix penalties for any breach of any By-law :

45

Not to be repugnant to Law.

To be certified by Attorney or Solicitor-General.

No By-law to be made by the Trustees shall be repugnant to this Act, or to the general spirit and intendment of the Laws in force in this Colony, nor shall be of any force or effect until it has been certified by the Attorney-General or Solicitor-General not to be repugnant to this Act, or to the general spirit and intendment of the Laws in force in 50 this Colony.

Every By-law made by the Trustees under this Act shall be published in the *Hobart Gazette* and laid before both Houses of Par-

[62 VICT.]

Clyde Water.

liament within Fourteen days after the publication thereof if then A.D. 1898.
sitting, and if not sitting then within Fourteen days after the next
meeting of Parliament.

12 Every person who is guilty of any of the following offences Offences.
shall, for every such offence, incur a penalty not exceeding Fifty
Pounds, in addition to the cost of repairing and making good any
damage done by any of the acts mentioned :—

- i. Wilfully destroying or injuring any dam, sluice-gate, channel,
or embankment or work constructed under the said recited
Act, or which may hereafter be constructed under the
provisions of this Act :
- ii. Making any sluice or cutting, or doing any work or act
whereby the Trustees may be prevented from (exercising)
or interfered with in the exercise of the powers and rights
conferred upon them by this Act :
- iii. Doing any act or constructing any work which by this Act
the Trustees are empowered to do or construct, or which
will, without the consent in writing of the Trustees,
abstract Water from Rivers *Clyde* or *Interlachen* or Lakes
Sorell and *Crescent* for any other purpose than for domestic
use or for stock within the area liable to be rated under
this Act.

Rate.

13 For the purpose of raising the necessary funds for carrying out
the several objects of this Act, it shall be lawful for the Trustees from
time to time to make and levy a Rate upon the annual value of all
properties (not situate in the Towns of *Bothwell* and *Hamilton*),
fronting on the River *Clyde* which have been rated under the
repealed Act, and upon the annual value of all properties situate in
the Towns of *Bothwell* and *Hamilton* as ascertained by the Assessment
Rolls in force for the Rural Municipalities of *Bothwell* and *Hamilton*
relating to such properties: Provided that such Rate shall not in any
one year exceed [Two] (Three) Pence in the Pound upon the annual
value of the properties fronting on the River *Clyde*, and Sixpence in the
Pound upon the annual value of all properties situate in the said Towns.

14 Upon the making of any such Rate, a notice signed by not less
than Three Trustees, specifying the amount in the Pound of the Rate,
the period for which the same is made, and at what times the same is
payable, shall be published in the *Gazette*; and upon any such notice
being so published the Rate therein mentioned shall be payable and paid
at the times specified in such notice by the persons liable to pay the
same, according to the annual value of the property as shown by the
Assessment Roll; and it shall not be necessary in any such notice to
set forth the names of the persons liable to the payment of the Rate,
or the sums which, according to such Rate, such persons are liable to
pay, or any other particulars than are hereinbefore in that behalf
mentioned.

All the provisions of Part III. of "The Roads Act, 1884," relating
to *Road Rates*, except Sections Fifty-six and Fifty-seven, shall be
incorporated herewith, and shall apply to every Rate made and levied
under the provisions of this Act.

A.D. 1898.

Power to appoint
Officers.

15 The Trustees shall, from time to time, appoint a Treasurer and (a) Collector of Rates [who] (either of whom) may be [one or more of the] (a) Trustee[s], and may, from time to time, appoint and employ such Surveyors and other Officers as the Trustees think necessary and proper; and, from time to time, may remove any of such Officers, and appoint 5 others in the room of such as are so removed, or as may die, resign, or discontinue their offices; and may, out of the moneys at the disposal of the Trustees under this Act, pay such salaries and allowances to the said Officers respectively as the Trustees think reasonable: Provided, that nothing herein contained shall prevent the same person from being 10 appointed to hold more than one of such offices at the same time if the Trustees so think fit; and all the provisions of Part III. of "The Roads Act, 1884," relating to *Officers and their Accountability* shall be applicable to such Treasurer, Collector, and other officers, and shall be incorporated with this Act.

15

Trustees to keep
accounts of
receipts and
disbursements.

16 The Trustees shall cause books to be provided and kept, and true and regular accounts to be entered therein of all sums of money received and paid under the authority of this Act, and of the several purposes for which such sums of money have been received and paid, which books shall at all reasonable times be open to the inspection of any 20 Trustee or ratepayer or any holder of any Debenture issued by the Trustees or any mortgagee or transferee or other creditor of the Trustees, without fee or reward; and the persons aforesaid, or any of them, may take copies of or extracts from the said books without paying anything for the same; and any person having the custody of the said books who 25 does not, on the reasonable demand of any person as aforesaid, permit him to inspect the said books, or to take such copies or extracts as aforesaid, shall, for every such offence, incur a penalty not exceeding Five Pounds.

Moneys received
to be paid into
bank.

17 All moneys received by the Treasurer of the Trustees shall be 30 paid by him monthly into some one of the public banks of this Colony to the account of the Trustees; and no part of such moneys shall be drawn out of such bank except by cheque signed by the Treasurer and countersigned by one (other) of the Trustees.

Statement and
account to be
annually prepared.

18 The Trustees shall, before the end of the second week in the month 35 of *March* in each year, cause the accounts of the Trustees up to and including the last day of *February* next preceding to be balanced, and also cause a full and true statement and account to be drawn out of the amount of all rates made and levied, and of all moneys received and expended during the preceding year, and also of all debts then owing 40 by and to the Trustees, and such statement and account shall be signed by the Chairman and not less than Two Trustees.

Audit of accounts.
52 Vict. No. 43.

19 The accounts of the Trustees shall be subject and liable to all the provisions of "The Audit Act, 1888," in the same manner as the accounts of Trustees of Road Districts are now subject and liable; and 45 the statement and account hereinbefore mentioned shall be forwarded to the Auditor-General during the month of *March* in every year; and such statement and account, with the report of the said Auditor-General thereon, shall be published in the *Gazette* as soon as may be after the same have been audited.

50

Appropriation.

20 All moneys whatsoever levied, received, or recovered under the authority of this Act shall be at the sole and absolute disposal of the

[62 VICT.]

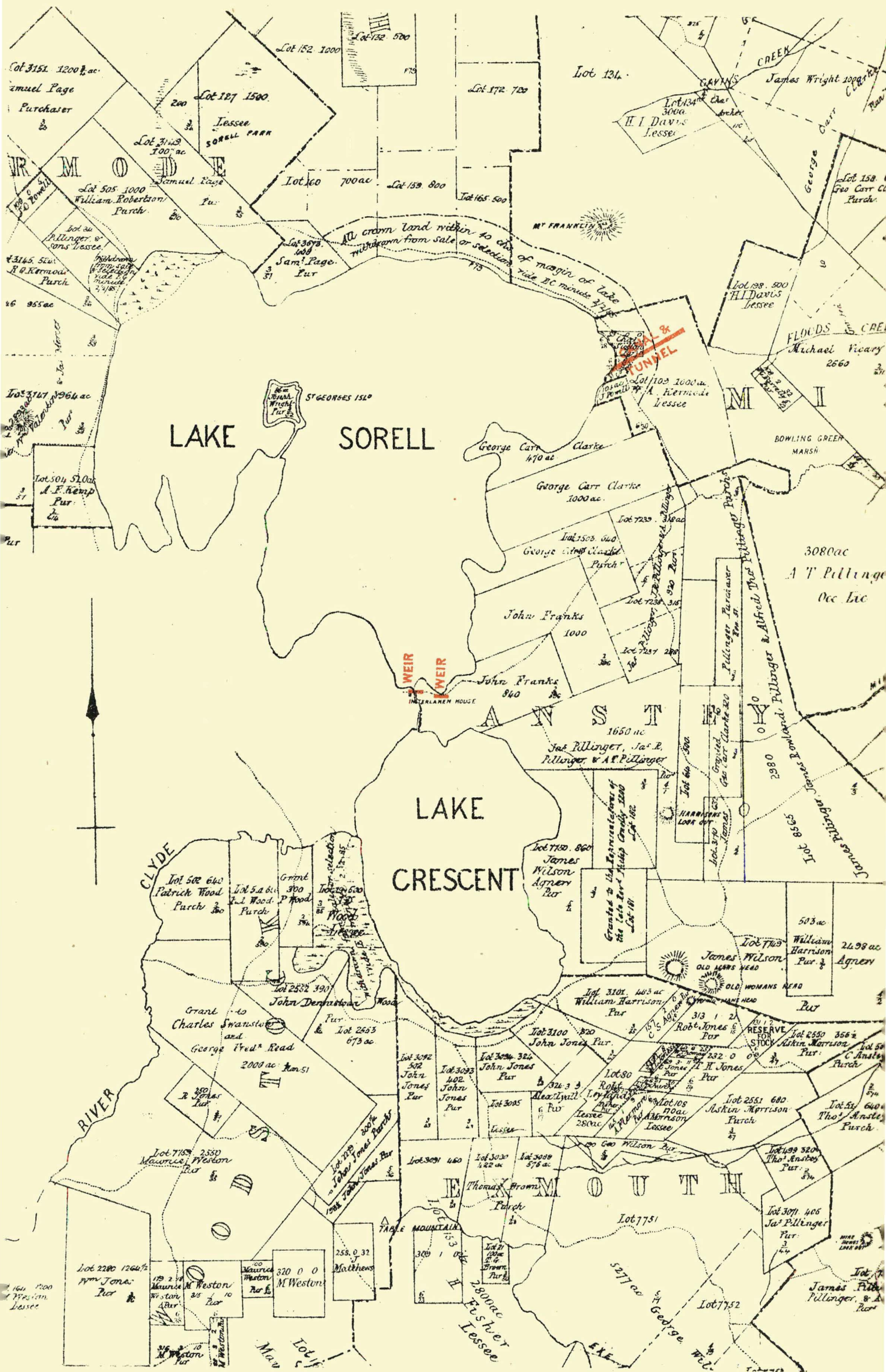
Clyde Water.

Trustees, to be by them applied in such manner as they see fit in A.D. 1898.
 carrying out and effectuating the purposes of this Act, and to no other
 purpose. —

21 It shall be lawful for the Trustees for the time being of any Bank Savings Banks
 5 for Savings in *Tasmania*, now established or hereafter to be established, may invest in
 to advance and lend to the Trustees under this Act, upon the security such loans.
 of the Debentures to be issued by the Trustees under "The Local 45 Vict. No. 16.
 Bodies Loans Act" or any Amendment thereof, the whole or any part
 of the sum which such Trustees are authorised to borrow under this
 10 Act, anything in the Act of Council of the 12th *Victoria*, No. 1, to
 the contrary notwithstanding.

[22 Any Trustees having trust money in their hands which it is [Trustees may
 their duty to invest at interest, shall be at liberty, at their discretion, invest in such
 to invest the same, or any part thereof, upon the security of the loans.]
 15 Debentures to be issued by the Trustees as aforesaid, anything in the
 instrument creating the trust to the contrary notwithstanding.]

23 All offences against this Act shall be heard and determined in a summary way by any Two Justices of the Peace in the mode prescribed Offences to be
 by *The Magistrates Summary Procedure Act*; and any person dealt with sum-
 20 convicted of any offence against this Act may appeal against the marily.
 conviction in the mode prescribed by *The Appeals Regulation Act*. 19 Vict. No. 8.
 19 Vict. No. 10



Scale-6 Chains-Inch



Scales { Horizontal-6 Chains } 1 Inch
 { Vertical-30 Feet }