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GOVERNMENT GAZETTE  
PROVINCE OF CANTERBURY.

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VOL. XIX.

MONDAY, AUGUST 26, 1872.

No. XLVI.

Provincial Secretary's Office,  
Christchurch, August 22, 1872.

**H**IS Honor the Superintendent directs it to be notified that a Writ for an Election to be held for the return of a person to serve in the Provincial Council as Member for the Mount Cook District, has been returned to him with the endorsement that

CHARLES PERRING, Esq.,

has been duly elected.

WALTER KENNAWAY,  
Provincial Secretary.

Provincial Secretary's Office,  
Christchurch, August 23, 1872.

**H**IS Honor the Superintendent directs it to be notified that he has been pleased to appoint the undermentioned persons to be Managers of the Public Cemetery situate upon Reserve No. 215 (in red), in the Springs District, viz. :—

WALTER LAWRY,  
THOMAS A. PANNETT,  
JAMES GAMMACK,  
JOHN SILVESTER,  
HENRY PANNETT,  
WILLIAM CRAIGHEAD,  
W. H. RULE.

WALTER KENNAWAY,  
Provincial Secretary.

PROCLAMATION.

**W**HEREAS the owners and occupiers of land and householders in the Educational District of Riccarton have failed

within the time limited for that purpose by the Board of Education, to contribute and pay to the Provincial Treasurer the amount fixed by the Board as the contribution of the said district for school purposes :

Now, therefore, I, RICHARD JAMES STRACHAN HARMAN, Deputy-Superintendent of the Province of Canterbury, in pursuance of the powers vested in me, do hereby declare a uniform rate of Sixpence in the £ to be leviable within the said district under the provisions of the seventeenth section of "The Education Ordinance, 1871, Amendment Ordinance, 1872, No. 2," and I do hereby appoint Nicholas Ellis as the person to whom the said rate shall be paid.

Given under my hand at Christchurch, this 23rd day of August, one thousand eight hundred and seventy-two.

R. J. S. HARMAN,  
Deputy-Superintendent.

Provincial Secretary's Office,  
Christchurch, August 23, 1872.

**H**IS Honor the Deputy-Superintendent directs it to be notified that he has been pleased to re-appoint

C. C. BOWEN, Esq.,  
and  
T. W. MAUDE, Esq.,

to be Members of the Board of Education, those gentlemen having retired from the Board under the provisions of the sixth section of "The Education Ordinance, 1871."

WALTER KENNAWAY,  
Provincial Secretary.

VOL. XIX., No. 46.

Public Works Office,  
Christchurch, August 21, 1872.

**H**IS Honor the Superintendent directs the publication of the following Report of the Board of Conservators for the South Waimakariri District, upon the condition of the Protective Works within that district.

WALTER KENNAWAY,  
Secretary for Public Works.

Christchurch,  
December 28, 1871.

TO HIS HONOR THE SUPERINTENDENT,  
Christchurch.

SIR,

I have the honour, by direction of the Board of Conservators for the South Waimakariri District, to report to you upon the present condition both as to efficiency and state of repair of the protective works within the limits of their jurisdiction.

At the date of our last report the following works were in existence :—

- 1st. The upper embankment near Watson's accommodation house, covering the Christchurch and Halswell channels.
- 2nd. The Sandy Knolls bank, covering the Christchurch channel.
- 3rd. A new bank below the last intended to catch any overflow that might flank it.
- 4th. A bank near Mr. McLean's station, covering the low ground at the head of the Styx channel.

These works were all in a satisfactory state of repair, and the Board hoped that, by depending on them, any further considerable outlay might be avoided.

It soon, however, became apparent that some change in the system to be pursued with the river must be adopted.

The works mentioned above, while likely to protect the country liable to inundation from any sudden disaster, were evidently not sufficient to control the action of the river. Neither their position, nor their direction in reference to the general course of the river, tended in any degree to confine the stream to its present bed, and it was evident that unless a very wide space, in addition to its present shingle bed, was abandoned to the river, the stream itself must be attacked and some attempt made to regulate the course of the water within the very wide area of shingle which it was already traversing.

The problem which the Board thus proposed to itself for solution was manifestly one of exceeding difficulty, but the importance of succeeding in the work was increased by the consideration that as long as the course of the stream was wholly uncontrolled no attempt at planting willows or other trees of the same description could be successfully made. All the information which the Board had been able to procure led them to believe that the growth of willows might be of material assistance in protecting the banks of the river. But as no trees could be planted either in or on the borders of the running stream, it was manifest that, if planting were to be attempted, the positions chosen must be protected so that the trees might have time to establish themselves, and both collectively and individually operate in the future as an effectual barrier in the event of the river returning to the channel in which it had heretofore been running.

In order to accomplish the object which they had in view, the Board resolved to erect a bank at right angles to the general course of the stream, resting on the land and running out into the shingle bed. This was accordingly done, the site chosen being about a quarter of a mile higher up the river than the old Sandy Knolls breastwork. The Board calculated that a bank of shingle would easily sustain any weight of water which might collect above it, and that, as long as it was not overtopped, it would remain unimpaired except perhaps at the extreme end towards the centre of the river, where the water, ponded on the upper side of the bank, was compelled to find its outlet.

The Board was not mistaken as to the difficulty of maintaining the river end of the work. A long low boulder groyne, erected at first, answered the purpose successfully for a considerable time, but was at last washed away; the ground was scoured away from beneath it, and as the materials of which it was composed were merely shingle and boulders, it rapidly disappeared when once the work of destruction had commenced.

The Board have now restored the river end of the work by a structure of timber and shingle combined, for the idea of which they are indebted to Mr. William Goodwin, of the Tai Tapu. The boarded frames of which this is composed are admirably adapted to resist either a scour, an overflow, or the pressure of a very heavy body of water; they terminate on a mass of concrete blocks and bags deeply imbedded in the shingle, and the Board have reason to believe that, in its present shape, the work will prove both effective and durable.

Indeed this bank generally has already been subjected to very heavy tests. The fresh of last May was probably higher than any which has been experienced since February, 1868. That of last July was little inferior to the flood of May; but except at the river end as mentioned above the work was wholly uninjured, though the water rose to within one foot of the top of the bank.

Two principal effects are produced by this bank. First, the water being diverted at a very low and dangerous point from the south bank, does not return upon it again until it reaches a point well below the ground most liable to overflow, from which the land continues high and safe against danger of encroachment for a considerable distance. Secondly, the low ground along the whole line of the Sandy Knolls overflow for a length of about two and a half miles, being thus protected from attack by the river, has been rendered available for planting, while, at the same time, the land along the river which was being rapidly washed away has been saved from further encroachment.

No change has taken place at the upper embankment since the date of our last report, and this work is, in every respect, in a most satisfactory condition.

The river end of the embankment near Mr. McLean's has suffered considerably during the last few months; and the work will probably require the careful attention of the Board during the ensuing autumn and winter.

With the exception of certain outworks above the Sandy Knolls river bank, and a small work about half a mile higher up the river, just completed, no other works have been erected by the Board.

In the matter of planting, the Board have used their opportunities to the utmost. By the liberality of Mrs. Deans, of Riccarton, a very large amount of willow cuttings were placed at their disposal, and have been planted, with a very fair measure of success, in front of the three banks protecting the Sandy Knolls overflow, and along the whole line of the river bank at this point, both in the shingle and on the land. The trees and cuttings planted last year have already made a most promising growth, those in the shingle having up to the present time thrown out the strongest shoots.

A commencement of planting has also been made at Mr. McLean's bank, and with similar success.

On the whole, the Board, while deeply sensible of the heavy responsibility resting upon them, are encouraged by the results of their efforts to persevere in the work entrusted to them. That it must be both continuous and costly is only too apparent. The liabilities of the Board in respect of *Debentures*, either already issued or under offer, amount to Seven Thousand Pounds, and works of imperative necessity are under consideration which will largely increase this sum. From the nature of the case it is manifestly impossible for the Board to form an estimate of their probable future liabilities, but they consider that they would be acting improperly were they to attempt to lead the ratepayers to imagine that they see at present the limit of the burden which this work will lay upon them.

The Board entertain great hopes that considerable and appreciable results may hereafter accrue from the planting of the river banks, and they venture even to hope that these results may take a form quite outside of the immediate object with which the planting was undertaken. If the plantations be continued, and the growth be such as may reasonably be looked for, a few years would serve to produce a very considerable area of growing timber. This could not fail to be very valuable in a district such as that where the works have been erected, and the necessity of the adoption of such means may yet prove to have been a source of very great advantage, and may confer a benefit on that part of the country, which will go far to counterbalance the serious difficulty of being compelled to attempt the control of such an unmanageable stream.

I have the honour to be,

Sir,

Your most obedient servant,

R. J. S. HARMAN,

Chairman Board of Conservators for the  
South Waimakariri District.

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CHRISTCHURCH:

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