

38. Was it done according to law?—That is a legal question which I cannot answer. He made the embankment across a kind of blind gully.

39. Do you attribute the flooding of the other side of the river to any extent to that embankment?—Not the slightest. The principal overflow is before you come to the embankment. Mr. Stevenson made an embankment 200 or 300 feet in length to save his own little property, but it did no good to the rest of his neighbours.

40. If the owners on the opposite side were to do what Mr. Stevenson did, would it have the effect of relieving them to any extent?—It would relieve Shand's, Rennie's, and other farms on west side.

41. *Mr. Baigent.*] Was not last year almost unprecedented for floods?—Yes; the Taieri comes down in great flood once in every seven or eight years. They grow splendid wheat and corn from Outram to Blackie's, and then comes a year of famine.

42. *Mr. Murray.*] Are you aware that the proprietors on the west bank opposed Mr. Stevenson?—I heard they quarrelled about it; but whether they went to law I do not know.

43. They seemed to consider that his putting up that embankment would injure their properties?—They seemed to think so.

44. Without cutting a channel, but simply mounding the space on each side, would that not suffice to take the waters into the Waipori Lake?—That would not be effectual, in my opinion. Of course you cannot put an embankment of sufficient length. You cannot put them ten chains away; and when you get them ten chains from the bank, they are so low. The low river bed is 27·80 only; and when you get three-quarters of a mile from the river it is 27·40 only. Here the beautiful cultivated land is below the river bed. The current is so enormously powerful at West Taieri bridge, and one mile downwards, that it will carry away anything. It has carried stones five tons weight several feet from the bridge. You cannot tell what the river would do. It has such a power and such a rapid declension that you cannot tell what it would do. It is a very bad case; that is the fact of the matter.

45. *Mr. Burns.*] Do you recollect the distance of the gorge from the wooden bridge down to the sea?—About six miles.

46. Do you think that anything could be done there in the way of alleviating the matter?—It could be done, but you would have to spend hundreds of thousands of pounds. It is quite beyond the power of man to do it.

47. Are you aware whether any public money has been spent on this embankment?—I do not think so; they may have had subsidies.

48. Supposing public money was spent, would you consider it was profitably spent?—No; the fact of the matter is that the settlers have been just like children, throwing away good money. They spend thousands, and floods come down and take all away; they do more harm than good.

REPORT ON THE FLOODS IN THE TAIERI PLAIN.

MR. J. T. THOMSON to the SECRETARY for LANDS and WORKS, Dunedin.

SIR,—

Dunedin, 5th April, 1870.

I have the honor to acknowledge the receipt of your letter, dated 20th January last, enclosing a resolution of a public meeting held at Outram in reference to the floods that affect the Taieri Plain, and requesting me to report thereon.

2. In compliance therewith, as a first step to obtain correct data on which to found an opinion, I requested Mr. Assistant-Surveyor Johnston to take levels in various directions, which now having been completed, I am enabled to do so.

3. I visited the district last week and viewed the area subject to inundation on both sides and across the plain, and I find that, during great floods, about 54 square miles are subject to be covered with water. While the various settlers whom I visited had designs to ward off the floods from their own lands, I found that they had none to do the same office to their neighbours; nor was it difficult to see that, with these confined ideas, no general good could be effected, for such isolated attempts would only result in saving one proprietor to the equal injury of another; any measure, therefore, that can be supported, will require to be on a wider basis. To this end it will be necessary to take a general glance at the district and the river basins. The principal cause of the inundations is the River Taieri, but Waipori and Silver Streams add their quota to the damage, more particularly the latter as affecting the properties sought to be reclaimed by the meeting of settlers above stated.

4. The general characteristics of the Taieri River may be given as follows:—The distance from its mouth to its source is only 38 miles, but its very meandering course measures 120 miles; its feeders are principally in the Lammerlaw, 3,820 feet; Roughridge, 3,350 feet; Mount Ida, 5,498 feet; and Rock and Pillar Mountains, 4,675 feet above the level of the sea. In the first 30 miles of its course, it descends 2,620 feet, where it debouches on the Maniototo Plains; thence 20 miles brings it to the Maniototo Lake, 986 feet above the sea level, the descent being 214 feet; thence 50 miles brings it to the Gorge at Outram, where it debouches on the Taieri Plain, the descent being 962 feet.

5. The Taieri River has therefore all characteristics of a mountain torrent. The same remark is applicable to the Silver Stream and Waipori, but whose minor basins do not call for particular description.

6. In a colony exact meteorological observations in sufficient quantity and in various parts of the country are not to be obtained; and, were it not for the labours of the Rev. Dr. Burns, D.D., who kept a register in Dunedin in the early times of the settlement, we would be entirely without them. I find from his register and the subsequent official one that floods occurred at the following periods:—