

such a scourge to infantile life generally, and for much general sickness as well. About the time of my arrival the Borough Council took steps to reclaim that portion of the swamp which was contained within the town boundary, consisting of about 200 acres, a hill standing where the recreation-ground is now situated being utilised for the purpose of filling in. Up till 1900 nothing effectual was done towards the reclamation of the swamp, consisting of about 2,800 acres. Several schemes were at different times suggested and some were put in hand, but either they were not followed up or were ineffectual. When the harbour-works were initiated the Engineer, Mr. Goodall, was instructed to prepare a scheme for the reclamation of the swamp, and on his suggestion much work was done, the *raison d'être* of which it is difficult for the non-professional mind to grasp; but the work was never completed, and no benefit resulted from the expenditure of capital.

In February, 1900, terms were concluded with a syndicate for the reclamation of the portion of the swamp extending to the south of Napier as far as Awatoto, and westward as far as Meeanee, consisting of about 1,800 acres. The remaining portions, consisting of about 1,000 acres, were left in abeyance for the present, no active steps being taken for their reclamation. The reclamation of the northern portion of the swamp is being carried out—first, by means of sand-pumps, which are employed in digging water-ways and channels and pumping the sand and silt from the bottom on to the land, thus deepening the one and raising the other; secondly, during floods and freshes leading the silt-carrying waters on to the low-lying lands, there inducing a deposit of mud and sand. The result has been, up to date, that about 700 acres of land have been reclaimed, 500 acres of which have been brought into cultivation, and the swamp as a swamp has ceased to exist. This land has been reclaimed to a depth of from 1 ft. to 7 ft., and is of the richest description. Large quantities of asparagus and other vegetables, as well as good crops of lucerne hay, are being produced on the land that has been brought under cultivation. To prevent the flooding of the land that is being reclaimed, a bank was constructed from Awatoto to Meeanee at the level of the flood of 1897, the highest on record in Hawkes' Bay. This bank cannot fail to have a beneficial effect on the reclamation of the remaining portion of the swamp. The bank will hold the silt-laden water in flood-times, and favour the deposition of the silt upon the ooze, thus raising the land and hastening the work of reclamation. When the land of the swamp is fully reclaimed it is proposed to devote about 20 acres of a portion adjacent to Napier to be utilised as a park; another portion will be cut up into building-sites of a fair area of from 1- to 2-acre sections. The balance of the land will be devoted to market-gardens and dairy-farms. The immediate result of this reclamation will be to relieve the congestion on Scinde Island, which is fast becoming acute. Open spaces are quickly disappearing altogether or contracting in size over both the hills and flats of Napier; and without some outlet such as this, as the population of Napier increased, the lungs of the 640 acres that comprise Scinde Island would soon become a negligible quantity. Unproductive land is generally unhealthy, as instance the Campagna round Rome; the sandy plains of Holland; Lincolnshire in England, which enjoyed a similar evil repute before efficient drainage was brought about by skilful engineers and the cultivation of the soil became possible. Much the same kind of work as was done in Lincolnshire has been, and is being done with the swamp round Napier; and I feel confident that equal benefit will result when the land is fully reclaimed and the whole of it brought under cultivation. Les Landes on the western coast of France is still another instance of unproductive land being unhealthy. Pellagra and other diseases were prevalent in the locality till the reclamation outlined and commenced by Remontier had advanced. The diseases then prevalent have receded with the advance of reclamation and cultivation, and when the work is completed we confidently prophesy that malaria and pellagra, which were the scourges of these districts, will have passed into history. "Cultivation" and "sanitation" are convertible terms, husbandry and disease are sworn foes, and the pursuit of agriculture is generally the pursuit of health. As stated by the late Dr. Vivian Poore, "the cultivator of the soil must always be the right-hand man of the sanitarian."

I am indebted to Mr. C. D. Kennedy, the engineer of the syndicate, for his trouble in accompanying me over the ground, and the clearness of his description of the details of the work.

*Clive, Meeanee, and Taradale.*—The two first-named townships have progressed slightly since last year. Some old ramshackle buildings have been pulled down and replaced with better structures. The last-named is budding into a fairly large township and is with its suburb, Greenmeadows, becoming of some importance. Many sections have been taken up during the last year, and comfortable residences built on them. Nearly every house has its artesian well, and the water is of good quality for drinking and household purposes. There is no public water-supply, nor is there any need of it with the excellent individual supply. It will be some years before a drainage system will be needed, and at present many of the residents and the owner of one of the hotels have provided themselves with septic tanks. Taradale, Meeanee, and Greenmeadows will share with Napier the benefits of the reclamation of the swamp.

*Havelock* is in *statu quo*. The water and drainage scheme is still in abeyance, the local authority, the Hawke's Bay County Council, having taken no steps towards striking a rate to provide the means for these desirable ends.

*Hastings Borough* (population, 3,650).—During the past year more houses situated within the sewer area have been connected, and the connections of some others which were of faulty construction have been brought up to date. There are still too many pan-closets within the sewer area, but they are gradually being replaced by water-closets. There has been no extension of the sewer during the past year, and its extension in some places is urgently needed. I have represented this to the Council, and will do so again. The sanitation of the outskirts of the borough where the expense of sewers will not be justified for some time to come is needing attention, and I propose advising the Borough Council upon this matter at an early date. I regret to have to report that there is a great deal within the sewered area of the borough that will claim my attention during the coming year.