

advanced far enough to enable any conclusion to be arrived at, the very severe winter weather lately experienced completely putting a stop to outside work. During the past year the survey on the line of race to conduct water from the Taieri River near the Styx junction round the Maniototo country to the Hogburn on the road to Naseby, has been completed. Directly the season had advanced sufficiently a survey was made of a reservoir-site in the locality known as the Great Moss Swamp, and several minor storage-reservoir sites have been explored. An excellent site for a dam exists near the junction of the Styx with the Taieri, but, as the land above the site is fit for agricultural purposes, and is at present held and used for those purposes, and as considerable mining operations are still being carried out higher up the river, it is questionable whether it would be practicable to construct a dam at this place, so that recourse would have to be made to the several minor storage reservoirs above referred to. It will be impossible to form reservoirs on any creek or river below where mining operations are being carried out as the silt and other *débris* resulting would speedily fill them up and render them useless. It is on this account that many promising sources of supply are rendered quite useless. Owing to the very small rainfall in Central Otago, particularly at the time of the year when irrigation is required, the normal flow in the creeks and rivers situated at places which enable their waters to be conducted on to the lands to be irrigated is too small to be of any practical value; it is therefore absolutely necessary to rely solely upon storage. Before any works can be put in hand for irrigation purposes it will be necessary for some agricultural experts—say, officers of the Agricultural Department—to be appointed to examine the country and say definitely which areas are likely to derive any benefit by being irrigated. This is a matter quite outside an engineer's function. There are large areas of land in Central Otago which no amount of water would benefit, and there are also areas of open shingly character over which it would be impossible to conduct broad irrigation, so that it is absolutely necessary, before any works are put in hand, to have an authoritative report upon the suitability of the land proposed to be irrigated. It has been suggested that the tailing-water from the mining claims could be made use of; but such a scheme can only be adopted with extreme caution, as the large amount of silt carried by such water would be deposited upon the land and would in many cases utterly destroy its fertile qualities—for it must be borne in mind that this silt is of quite a different nature from the silt usually carried by rivers and deposited during floods, as the latter contains a very large percentage of vegetable humus washed off the surface of the land by rain-water.

PUBLIC BUILDINGS.

AUCKLAND DISTRICT.

Departmental Buildings.

Auckland.—A large addition is being erected on the allotment recently purchased on the Albert Street frontage, which will provide for Departments now renting offices outside these buildings. It should be completed this year. Agricultural Department: Additions to this building are in hand. Health Department: Repairs and renovations have been carried out.

Te Kuiti.—A new office building is about half-erected in this rising centre. A residence for the Stock Inspector is being built.

Courthouses.

Auckland, Supreme.—Additional doors are being erected at front entrance to prevent draught, and general repairs are being effected.

Auckland, District.—Ventilation has been improved; general repairs done; further land taken for new Law Courts.

Hamilton, District.—Grounds set in good order; minor repairs done.

Thames, District.—Some furniture has been provided.

Raglan, Kawhia, and Te Kuiti.—New Courthouses have been built by contract at each of these places.

Whangarei.—Considerable additions have been erected.

Te Awamutu, Waihi, Kawakawa, Kohukohu, Onehunga, Te Aroha, Papakura, Otorohanga, Rotorua, Paeroa, Mercer, Otahuhu, Helensville, Tauranga.—Repairs, painting, draining, furniture, &c., have been attended to.

Gaols.

Mount Eden.—The erection of the central block, including the chapel and offices, is now approaching completion, and should be available shortly for use.

Hospitals.

Auckland Mental Hospital.—Repairs to chapel and female-side roofs have been made; a morgue and butcher's shop erected.

Taumarunui Cottage Hospital.—This building is now just on completion.

Police-stations.

Auckland, Central.—Sergeant's quarters rebuilt and enlarged; gymnasium erected; repairs done.

Newmarket.—A new brick station is being erected, and is nearly complete.

Raglan, Kihikihi, Karangahake, and Taupo.—New stations have been erected at each.

Taupo.—A land-plan survey of the reserve has been made.

Papakura.—Additions and renovations have been carried out,