courses of these stream-eroded valleys have been invaded by the sea, and we have such excellent examples of drowned valleys as Charteris Bay and Purau.

A special feature of the period following on the decline of volcanic activity was the covering of the surface with a coating of loose, soft, friable, yellowish loam, known as loess. It varies in thickness from a few inches up to more than twenty-five feet, and, being spread far and wide, it forms a notable constituent of the fertile soil for which these hills are famous. Its mode of formation is not quite clear, but it is almost certainly of glacial origin, and was swept over the hills by strong winds from the beds of glacial streams which at one period wandered over the Plains. Miniature dust storms can still be seen during a Nor'-wester, but the storms of former days must have been fiercer, and the loose material at their disposal must have vastly exceeded even that which is furnished by the river beds of the present time. Striking as the scene is now, what must it have been when from every valley of the mountains there issued a stream of ice, deploying fan-like on to the plains, and the peaks and ranges in their vicinity were clad with perpetual snow.

PORT HILLS MAORI NAMES.

By JAS. COWAN.

Te Tihi o Kahukura ("The Crest or Summit of Kahukura")—Castle Rock, on Port Hills, named after the great deity of the South Island tribes, the god whose symbol was the rainbow.

Te Irika o Kahukura ("The uplifting of Kahukura")—On the hills near where the old track went over the hills to Rapaki, so called because a small carved image of Kahukura, the God, was kept here in a sacred place. It was kept on a whata, or wooden platform, and there the priests went to consult the oracle.

Matuku-Takotako—A large cave in the hill face up the Cashmere Valley, not far below the terminus of the tramway line. A very ancient name, evidently brought from Polynesia. It was used by the ancient tribe Ngati-Mamoe, one of whose chiefs was killed there by Ngai-Tahu.

Omikihi also Wai-mokihi ("the place of flax-stick rafts")—The ancient swamp through (or near) which the Heathcote (Opaawaho) ran at the foot of the Cashmere Hills.

Te Pou-o-Tutaemaro—The point at the cutting near Redcliffs, where the hills come down abruptly to the Heathcote Estuary. It means "The Post of Tutae maro," who was an ancient Ngai-Tahu explorer.

Te Kuru—The Cashmere swamp.

Rapanui—Shag Rock, Heathcote Estuary. Interesting because it is one of the native names of Easter Island, in the Eastern Pacific. It has several meanings, one of which may be given as "the root of the land."

Tautinu-Korokio—An ancient Ngati-Mamoe pa which stood on Mount Pleasant, near Major Hornbrook's old place. The name refers to the two plants common here formerly, the heather-like tautilu, and the small plant known as the korokio. There was a good spring of water close by, and this important fact no doubt determined the situation of the Ngati-Mamoe hillmen's village. The pa was captured by the Ngai-Tahu about the end of the seventeenth century. There is, in the folklore of the old Maoris, a "tapu" attached to the site of the ancient pa, and Maoris camping there have been taken mysteriously ill; this was attributed to the mysterious power of the "tapu."

O-kete-upoko—The summit of the hills above Lyttelton, meaning "The Basket of Heads." It was so called from a war incident of ancient times, when the Chief Te Rangi-whakapapa cut off the heads of several of the Ngati-Mamoe people whom he killed here, and, carrying them up the heights, placed them on the summit.