

two fences are made the one on the weather side may be more open ; they should be about 7 ft. apart. When the accumulation of sand has covered up these fences others should be erected on top of but a little to the windward of them.

#### PLANTING MARRAM.

Marram for transplanting should be obtained from plants that are not more than two years old. A hole is made by simply pushing a spade into the sand and pressing it backwards and forwards until a wedge-shaped hole is made. A bunch of marram-stems is then inserted to a depth of about 8 in. and the hole filled up by pressure of the foot on the sand. There should be not fewer than five stems of marram in



A NEWLY MADE MARRAM PLANTATION ON THE NEW ZEALAND COAST.

Planted 2 ft. by 2 ft. Rows crossways to prevailing wind.

a bunch, and each stem should have two rooted joints. Near the sea the bunches of marram should be planted not more than 2 ft. apart, but inland this distance may be increased to 3 ft. Care must be taken not to have the marram in lines that are parallel with the direction of the prevailing wind. Plants should be exposed as little as possible before planting, and the best time to plant is wet weather. Autumn, winter, and spring are the only seasons in which planting may be done. On sand with an even surface the bunches of marram may be planted by using a plough.

#### PLANTING OF TREES.

The planting of trees is done only on the landward side of the fore-dune, and in places where the sand is bare it must be previously planted with marram. The best trees for New Zealand coastal dunes are *Pinus radiata (insignis)*, *Cupressus macrocarpa*, *Pinus muricata*, *Pinus*