face of the slab. This necessitates the removal of an additional 18 inches when slab construction is begun. This is done in order to obtain an even surface on which to place the stone, and also to preserve the slope above, which would not be possible if the interval between the excavation and the placing of the slab became at all extended.

The material for the part now under construction is being shot down from the top of the slope to the required position. The placing of the stone backing is finished off by hand, and the concrete shovelled into position. This is shown in Fig. 1, which also shows the sodded slope above and, on the left, the excavation for the slab piled on the berm, which material will be removed later with the next shovel cut. A stiff 1:2:4 mix is being used, making it possible to dispense with all forms except two ¼-in. x 6-in. steel plates as side forms and a board at the top and bottom, the edges of which are placed flush with the surface of the slab.

Two laborers at the bottom of the chute distribute the concrete to two screeders who work from the berm level and from three steps placed one at the water level and one a little above and below. These are made by placing three 4-in. x 4-in. x ¼-in. angles in notches in the two plates already mentioned as side forms. The steps are not only useful for the purpose for which they are made, *i.e.*, providing a means of exit for a person in the water, but also form three additional edges to work to, as well as facilitating the screeders' movements. Fig. 1 shows a straight edge from the board at the bottom to the first step.

No trouble has as yet been experienced in making the concrete stand on the 1¼:1 slope, and fair progress has been made with the placing. A gang of seven men are able to lay about 200 feet of stone a day with the stone on top of the slope and by chuting it down, as shown in Fig. 3. The average progress on the slab, pouring directly from the mixer into the work, is four 16-foot panels, or about 107 square yards, with a maximum of five panels. This can be done with a force of twelve men and a ½-yard rotary mixer.

Fig. 1 shows part of the cut at the Queenston Road, which at present has been carried to berm elevation. From ten feet above the slab to canal grade the material

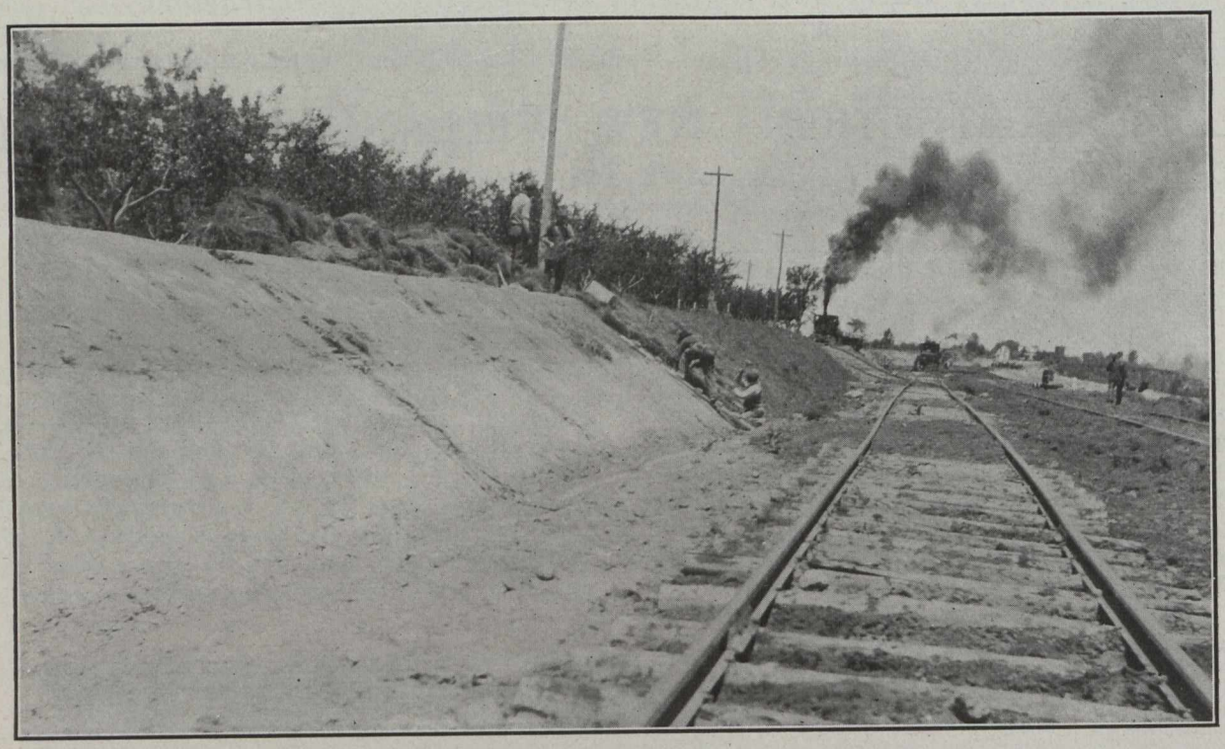

Fig. 2.—Sodding Railway Slope, Using Pegs for Holding Sods in Place.

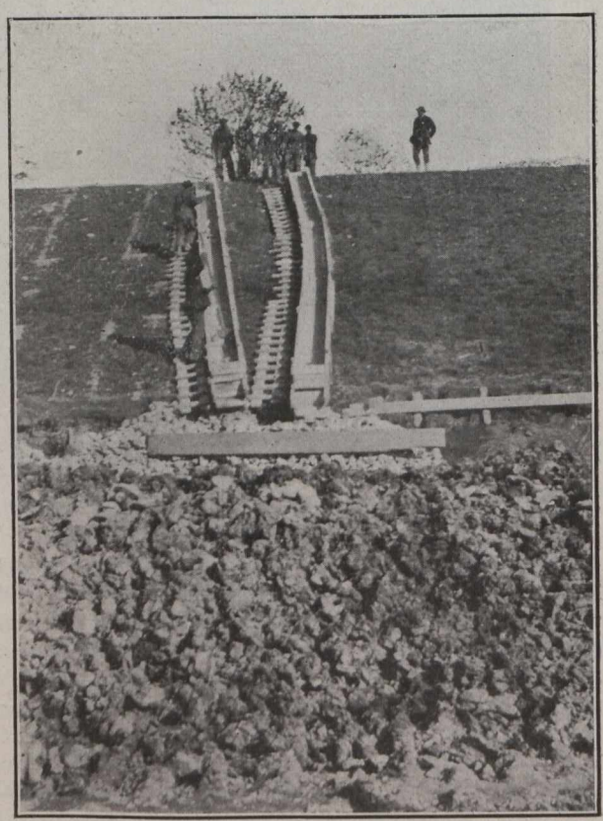

Fig. 3.—Chutes for Depositing Crushed Stone Foundation Layer.