

ing the sub-grade a uniform crown, 7 inches higher in the centre than at the sides. Lay a row of 5-inch porous tile in the road-bed 2 feet from each of the curb lines, and parallel with them, these tiles to be laid 2 feet beneath the sub-grade and have a regular and uniform fall into the catch-basins or outlets. Lay lateral drains of porous tile 4 inches in diameter, extending diagonally into the roadway, at an angle of 45 degrees with the side drains, these drains to be at intervals of 50 feet. Make the trenches to receive the tiles as narrow as possible and fill them with coarse gravel, the surface of the sub-grade to be rolled until it is thoroughly compacted. During the process of rolling, fill any settlement or depression with gravel or other suitable material. Place the kerbing at each side of the roadway in the usual manner.

On the sub-grade thus prepared, place a single layer of flake stone about 5 inches in thickness. This stone is to be laid as closely as possible and the openings between them carefully filled with stone chips or coarse broken stone; upon this and over the flake stone place a layer of the coarsest broken stone now being produced by the crusher, 7 inches deep in the centre and 5 inches deep at the curb, and sprinkle upon it the fine stone screenings until all the voids are filled. Sprinkle this layer with water from the watering cart, and by the use of a harrow work the fine screening into a mass. Pass a roller over it three times. Upon this place a layer 2 inches in depth of the intermediate grade of crushed stone. Apply fine screening and sprinkle as above specified, over this place a single layer of the third grade of crushed stone, and cover with screenings until all the voids are filled. Then sprinkle and harrow as above specified, adding the fine screenings until all the voids are filled, and sprinkle and roll until the mass is thoroughly consolidated and the surface made hard and smooth.

While the rolling of the finishing surface is in progress, the material should be kept moist by sprinkling, but not wet, and in no case should sufficient water be used to reach the sub-soil foundation.

DRAINAGE.

One of the most serious defects in the streets of Winnipeg, owing to the nature of the soil, is the lack of drainage. Good pavements are largely a matter of good drainage. Not that the shape of the roadway, the material of which the sur-