

PROTECTING THE OUTLET.

The outlet is often a source of trouble. Clay tile, if exposed to repeated freezing and thawing, as they are at the outlet of a drain, will chip and crumble, allowing the earth to drop down and obstruct the flow of water, and often the stock tramp on and break them. Sometimes the water undermines them and they side roll. To overcome these difficulties wooden boxes, from 6 to 12 feet long, are frequently used. Sometimes the last two or three feet of the ditch is built up with concrete surrounding the tile. Sewer crock are frequently used for the last four or six feet. All of these devices are good, and are preferable to leaving the end tile

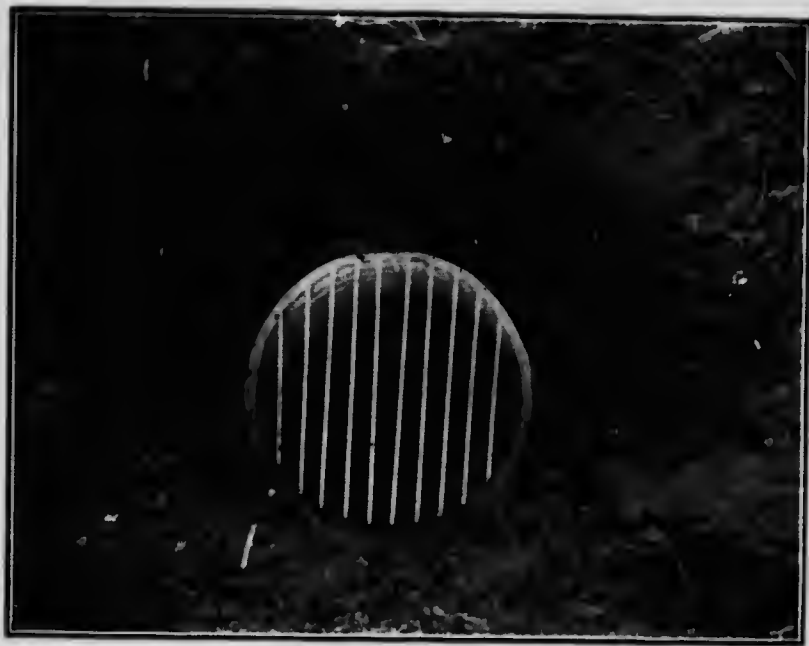


Fig. 21. End view of corrugated metal outlet.

exposed, but the wood soon decays at the end, the cement may be broken in time if undermined, and the sewer crocks are subject to displacement by undermining. Since corrugated metal culverts have been coming into use, it has occurred to me that a six or eight-foot length of corrugated galvanized iron pipe would make an ideal outlet for tile drains; and, besides, if one end was fitted with cross-rods, as it might easily be, it would give a sure protection against muskrats, which sometimes infest and block the drains. During the summer of 1909 a gentleman living near Beamsville, Lincoln County, put in a system of drains. After the first heavy rain in the autumn he went down to the outlet to see if they