TABLE II

Is a universal table, by which—with the aid of table 1—the velocity and discharge may be readily obtained for any pipe from 1 inch to 12 feet in diameter, with any inclination.

The columns of multipliers for velocity and discharge give respectively the relation between the velocity in a 12 inch pipe and that in other pipes, and between the velocity in a 12 inch pipe and the discharge in any pipe whose diameter is given in the table.

The application of the tables in practice is very simple. It is only necessary to multiply the velocity, given in table 1 for a 12 inch pipe, by the multiplier set opposite to the diameter of the required pipe or sewer in table 2, either for velocity or discharge.

EXAMPLE 1.—Required the velocity and discharge through a 10 inch pipe one mile long with a head of 66 feet.

The velocity in a 12 inch pipe by table 1 is 73.52 inches per second, and the multiplier for velocity in a 10 inch pipe by table 2 is 0.9075:

$73.52 \times 0.9075 = 66.72$ inches per second, the required velocity.

For discharge the multiplier by table 2 is 2.474:

$73.52 \times 2.474 = 181.89$ cubic feet per minute, the required discharge.

EXAMPLE 2.—Required velocity and discharge through a sewer 4 feet in diameter, falling at the rate of .05 per 100.

From the tables we obtain:

$11.73 \times 2.0615 = 24.18$ inches per second, and

$11.73 \times 129.5 = 1519$ cubic feet per minute.