

TABLE 2.

Diameter.	Areas.	Multipliers for Velocity.	Multipliers for Discharge.
Ft. In.	Square Feet.	Inches per Second.	C Feet per Minute
$\frac{1}{2}$			.0011
1	.005454	.2450	.0067
2	.021816	.3719	.0406
3	.04909	.4693	.1150
4	.08726	.5514	.2405
5	.13635	.6203	.4229
6	.19635	.6891	.6766
7	.26725	.7470	.9984
8	.3400	.8052	1.405
9	.4418	.8562	1.891
10	.5464	.9075	2.474
1—0	.7854	1.090	3.927
1—2	1.0690	1.085	5.799
1—3			6.700
1—4	1.3962	1.164	8.127
1—6	1.7671	1.238	10.942
1—8	2.1816	1.308	14.276
1—10	2.6398	1.375	18.157
2—0	3.1416	1.439	22.611
2—2	3.6869	1.494	27.541
2—4	4.2760	1.560	33.352
2—6	4.9087	1.620	39.76
2—8	5.5850	1.672	46.69
3—0	7.0686	1.777	62.80
3—4	8.7265	1.876	81.87
3—8	10.5591	1.971	104.07
4—0	12.5664	2.061	129.52
5—0	19.6350	2.312	226.98
6—0	28.2744	2.538	353.85
7—0	38.4846	2.746	528.54
8—0	50.2656	2.940	739.05
10—0	78.5400	3.295	1293.9
12—0	113.0976	3.615	2044.4

FOR EGG-SHAPED SEWERS.—Where the diameter of the large circle or crown equals two-thirds of the height of the sewer, the radius of the invert equals half the radius of the crown, and the radii of the sides equal the height of the sewer—the discharges when running full, two-thirds, half and one-third full, may be found—approximately in the following way:

Find the discharge through a cylindrical sewer having the same diameter as that of the crown of the egg-shaped sewer; when flowing full $\times$ the result by 1.5; when flowing two-thirds full $\times$ by 1.0; when flowing half full $\times$ by 0.75, and when flowing one-third full $\times$ by 0.3.

Example.—Required the discharge through an egg-shaped sewer 4' 0" x 6' 0" with an inclination of 1 in 5000.

From table 1 we obtain 7.04, and from table 2 the multiplier for a 4 foot sewer is 129.5; the results would therefore be, for a 4' 0" x 6' 0" sewer

$$7.04 \times 129.5 \times 1.5 = 1367 \text{ c. ft. per m., when full.}$$

$$7.04 \times 129.5 \times 1.0 = 911 \text{ c. ft. per m., when } \frac{2}{3} \text{ full.}$$

$$7.04 \times 129.5 \times 0.75 = 683 \text{ c. ft. per m., when } \frac{1}{2} \text{ full.}$$

$$7.04 \times 129.5 \times 0.3 = 273 \text{ c. ft. per m., when } \frac{1}{3} \text{ full.}$$