

CUBIC FEET PER MINUTE PER FOOT WIDTH OF WEIR.

Weir Depth. Inches.		1/4 in.	1/2 in.	3/4 in.	1 in.	1 1/4 in.	1 1/2 in.	1 3/4 in.
2	12.90	14.16	15.42	16.74	18.06	19.44	20.82	22.26
3	23.70	25.20	26.70	28.26	29.88	31.50	33.12	34.74
4	36.42	38.16	39.90	41.70	43.50	45.30	47.16	49.02
5	50.24	52.86	54.78	56.76	58.80	60.78	62.88	64.80
6	66.90	69.00	71.10	73.20	75.48	77.64	79.80	82.08
7	84.36	86.64	88.22	91.20	93.60	96.00	98.28	100.68
8	103.08	105.60	108.00	110.40	112.80	115.32	117.90	120.60
9	123.00	125.40	128.10	130.80	133.50	136.20	138.60	141.30
10	144.00	146.70	142.40	152.10	155.10	158.10	160.80	163.50
11	166.20	169.20	172.20	174.90	177.60	180.60	183.30	186.30
12	189.30	192.30	195.30	198.30	201.30	204.30	207.30	210.30

NOTE.—Depths less than 2in. are not reliable.

Columns 3 to 9 refer to depths in fractions of 1 inch between the whole numbers for weir depths in inches as set out in column 1.

EXAMPLE:—

Width of flow over gauge board = 4 ft.

Depth of flow over gauge board = 5 3/8 in.

Then, from the table, 5 3/8 inches depth = 56.76 cubic feet per minute, per foot depth of weir.

As weir is 4 ft. wide, flow is 4 × 56.76 = 227.04 cubic feet per minute.

TANK METHOD.

For very small quantities an accurate measurement may be made by diverting the water into a tank or drum of known capacity and measuring the time taken to fill the receptacle.

Measuring "Head"

The fall or "head" available is, for all practical purposes, the difference in level between the water surface at the intake and the floor level at the power house. In the case of turbines fitted with a draught or suction tube, the

"head" is the difference in level between the water surface at the intake and the discharge level in the tailrace. Usually the machinery is set 5ft. to 10ft. above tail water in order to be clear of floods.

Where a surveyor's level and sighting staff are not available, fairly accurate results can be obtained in measuring the water head by sighting along an ordinary carpenter's level on to a measuring rod held by an assistant. This is conveniently done by fitting the



Fig. 4.—Level fitted to tripod for sighting to measuring pole.

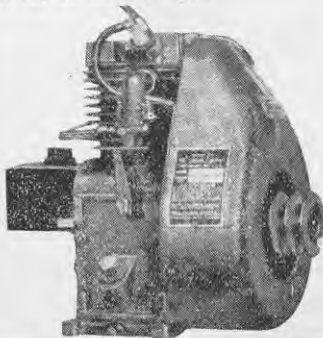


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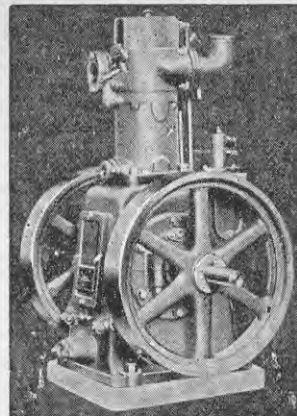
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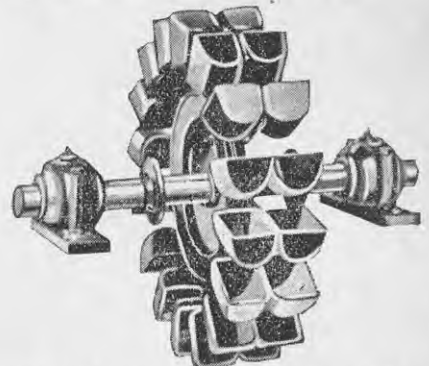
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