When operating a turbine tester the speed must be ascertained by means of a speed indicator, which is applied to the spindle of the machine. The speed is regulated by varying the steam pressure used, which is indicated by a steam gauge attached to the machine. The operator must determine what steam pressure on the gauge will give the desired speed to the tester.

When operating a hand-driven tester the number of revolutions which the bottle makes, to each revolution of the handle, should be determined by counting. The diameter of the circle described by the bottom of the bottle when in the horizontal running position should be measured. By consulting the above table, the required speed of the bottle is obtained. The number of revolutions per minute required as indicated by the table is divided by the number of revolutions the bottle goes to each revolution of the handle. The result will be the number of revolutions of the handle per minute.

Fig. 6.

Fig. 6.

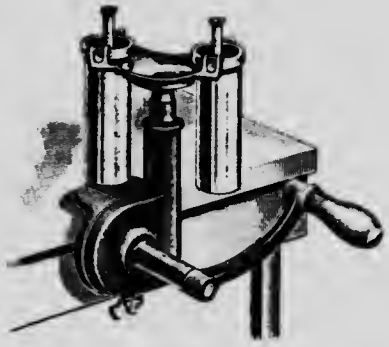

Fig. 6.

For example, if the bottle is found to complete twelve revolutions for each revolution of the handle, and the diameter of the circle described by the bottom of the bottle is fourteen inches, we find by consulting the above table that for a fourteen-inch diameter, the bottle must revolve 909 times per minute; 909 divided by 12 is 76 (almost), which is the number of revolutions required of the handle each minute.

The tester should be placed perfectly level on a firm bench and be kept well oiled.