G. M. Barth,

Window Washer.

No. 99814 Patented Feb. 15. 1870.

FIG. 1.

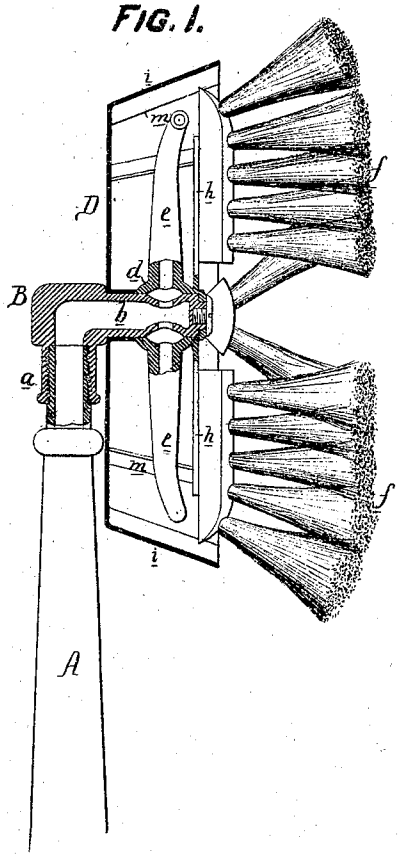


FIG. 2.

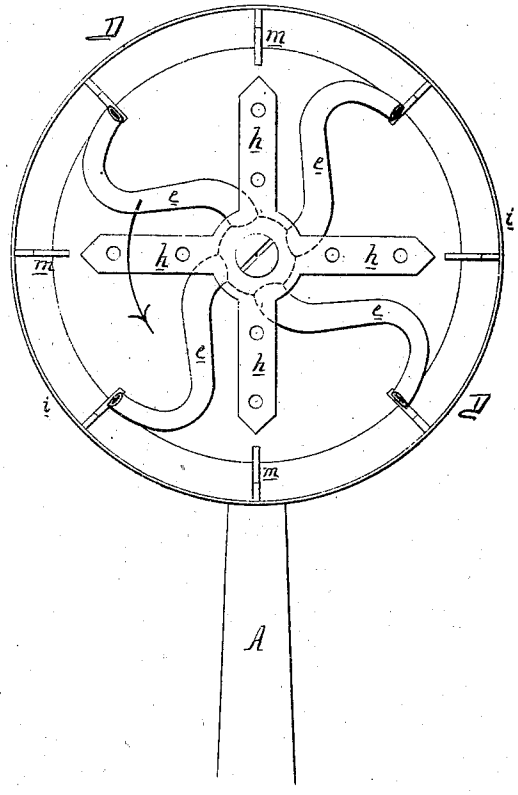
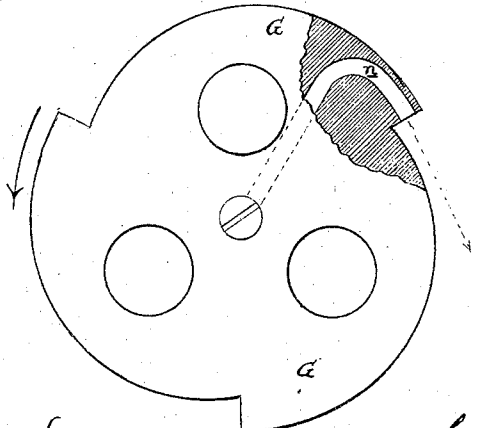


FIG. 3.



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GOTTLIEB M. BARTH, OP PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 99,814, *dated February* 15, 1870.

IMPROVED ROTARY WINDOW-WASHER.

The Schedule referred to in these Letters Patent and making part of the same.

I, GOTTLIEB M. BARTH, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improved Rotary Washer for Cleansing Windows, &c., of which the following is a specification.

Nature and Object of the Invention.

My invention consists of brushes caused to revolve by jets of water escaping from tubes or their equivalents, to which the brushes are attached, as fully described hereafter, a vaned shield being used in combination with the tubes for increasing the force exerted to turn the brushes, and for preventing the undue dispersion of the water, and the tubes being so bent that the jets of water will be directed toward the brushes and against the object to be cleansed, and the whole when applied to the nozzle of the hose-pipe of a hydrant forming an implement for rapidly and effectively cleansing windows and other objects.

Description of the Accompanying Drawing.

Figure 1 is a vertical section of my rotary washer for cleansing windows, &c.;

Figure 2, a front view of the same; and

Figure 3, a modification of part of my invention.

General Description.

A represents the nozzle of a hose-pipe, such as is in common use in connection with hydrants, for washing and sprinkling pavements, &c., and the end of this nozzle is prepared for receiving the branch of the elbow-pipe B.

The branch *b* of this pipe is closed at the end, and to this branch is fitted snugly, but so as to revolve freely, a hollow hub, *d*, from which projects any suitable number of bent tubes *e*, open at their outer ends and communicating with the hollow hub *d*, which, as will be observed on reference to fig. 1, has a free communication with the interior of the elbow-pipe.

To these rotating tubes *e* are attached brushes *f*, either through the medium of the arms *h*, which are connected to the hollow hub *d*, or in any other suitable manner.

The tubes *e* are arranged to rotate within a cup-like shield, D, in the inside of the flange *i*, of which are arranged vanes *m* for a purpose rendered apparent hereafter, the shield being secured to the elbow-pipe B, as shown.

When the elbow has been adjusted to the nozzle and the water has been turned on it will escape in forcible jets from the bent ends of the tubes *e*, which with their hollow hub *d* will revolve in the direction of the arrow, fig. 2, on the branch *b* of the elbow B.

Although the tubes will revolve without the aid of the vanes *m m* of the shield D, the jets of water impinging against these vanes will increase the power exerted by the revolving tubes, and the shield will confine the escaping water within reasonable limits.

It will be observed, on reference to fig. 1, that the tubes are so bent outward that the jets of water are directed toward the revolving brushes and to the object to which the brushes are applied.

The cleansing effect of the saturated rotating brushes, when applied to windows and other objects, will be understood without further explanation.

It is not essential that the jets of water should escape from bent tubes, as shown in figs. 1 and 2; a disk, G, for instance, may be substituted for these tubes, the disk being arranged to revolve on the branch *b* of the elbow, and having curved passage *n* communicating with the elbow, the jets escaping from these passages having the same effect as those escaping from the tubes.

The brushes, also, instead of being secured directly to the hub or bent tubes, may be connected with the same by any suitable arrangement of cog gearing, so as to make either a greater or lesser number of revolutions than the said tubes.

Claims.

1. A frame or plate revolving freely on its center and connected to or carrying a brush or brushes in combination with a series of curved water passages arranged in the frame or plate so as to impart a rotary motion to the latter on the escape of the water, as specified.

2. The combination of the said revolving tubes, or their equivalents, and the brushes, with the flaring shield D and its vanes *m m*, arranged as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GOTTLIEB M. BARTH.

Witnesses:

JOHN WHITE,

HARRY SMITH.