

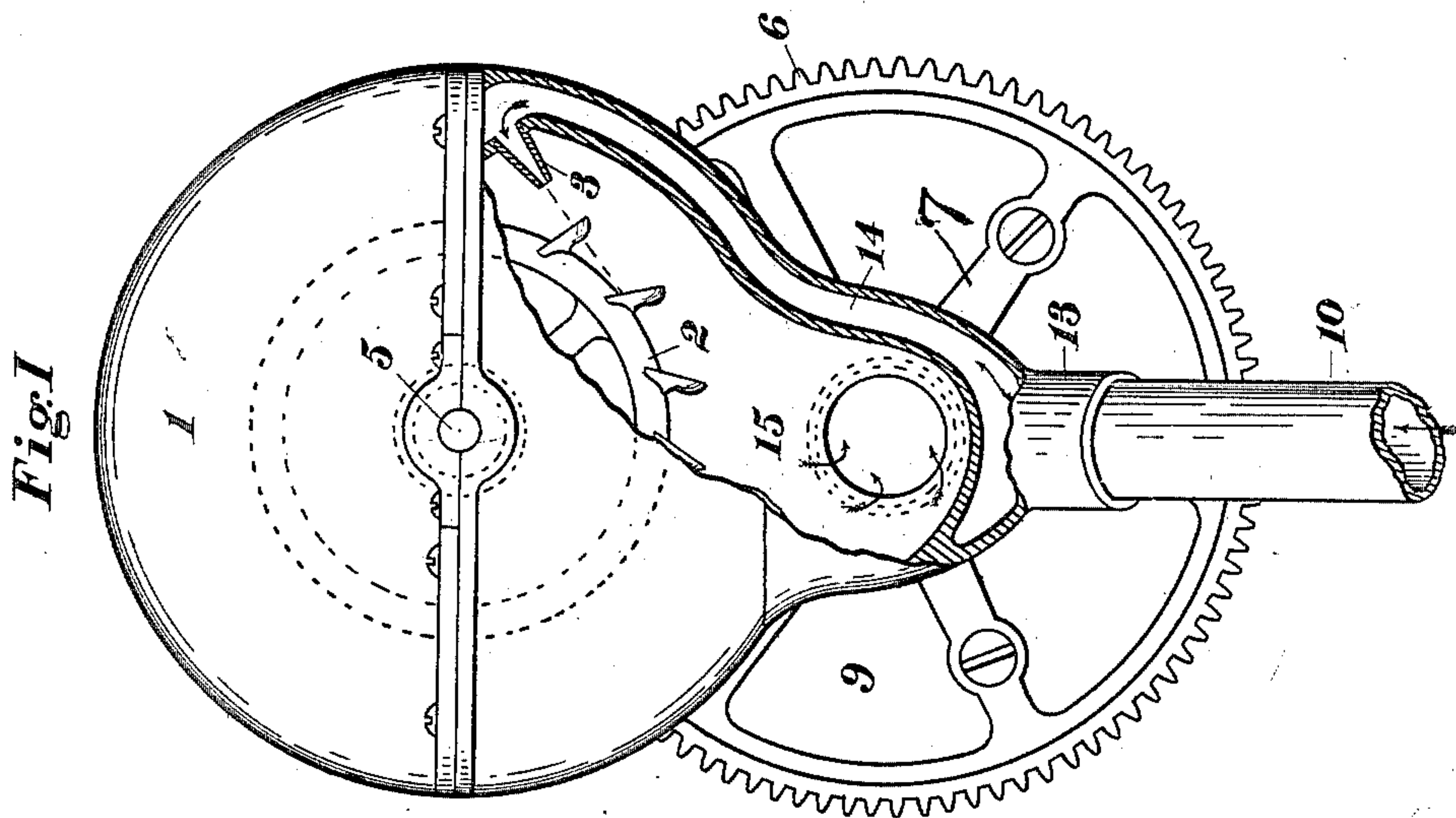
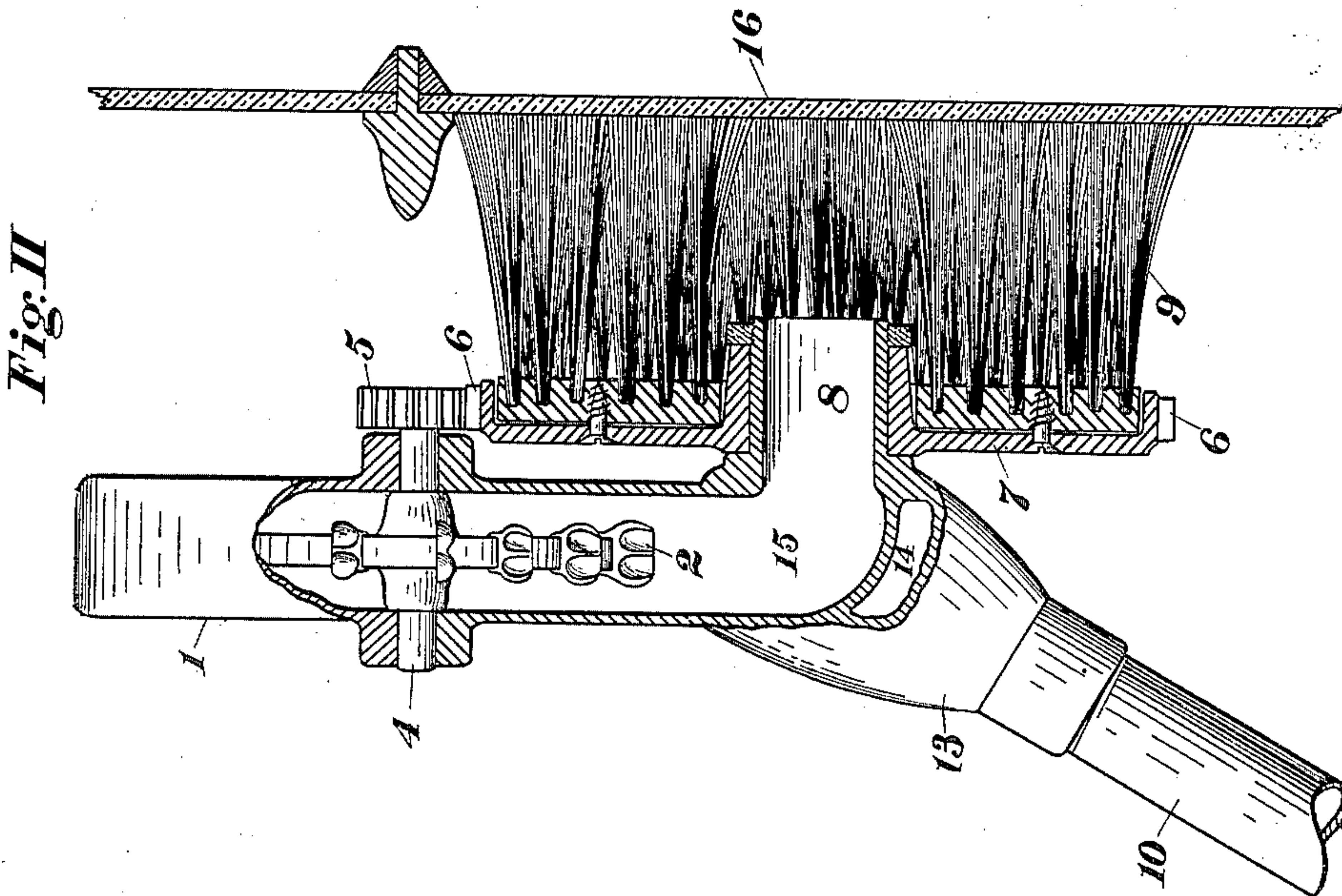
No. 661,277.

Patented Nov. 6, 1900.

E. A. RIX.
HYDRAULIC BRUSH.

(Application filed Apr. 3, 1900.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDWARD A. RIX, OF SAN FRANCISCO, CALIFORNIA.

HYDRAULIC BRUSH.

SPECIFICATION forming part of Letters Patent No. 661,277, dated November 6, 1900.

Application filed April 3, 1900. Serial No. 11,381. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. RIX, a citizen of the United States, residing at San Francisco, county of San Francisco, and State of California, have invented certain new and useful Improvements in Hydraulic Brushes; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to a new and improved device for washing and cleansing plane surfaces, such as windows, doors, decks, floors, or other purposes of analogous nature.

My improvement consists in the combination of a rotative brush and a water-wheel to drive the same, the water used first acting to drive the water-wheel and the brush geared or connected thereto, then entering the rotary brush at its center, from where the water is thrown out by centrifugal force through and beneath the brush, flooding and washing directly the surfaces on which the brush is acting, the whole being mounted on a pipe which forms a handle and is connected to a water-supply under pressure.

The objects of my invention are to employ the pressure or energy of the water to perform the required rubbing action with the brush and to diffuse and apply the water directly where required continuously and uniformly, thus attaining celerity and efficiency of the operation, also enabling the work to be conveniently performed beyond the reach of the operator.

To these ends I provide the improved rotary hydraulic brush illustrated in the drawings herewith, forming a part of this specification.

Figure I is an enlarged rear view of one of my improved devices, partly broken away to the water-passages and water-wheel nozzle. Fig. II is a vertical central section through the operating parts in a plane at a right angle to Fig. I.

The main member or casing 1 is made separable and contains a water-wheel 2, in this case of the tangential type, driven by a nozzle 3 in the usual manner. On the spindle 4

of the water-wheel 2 is a spur-pinion 5, that engages the teeth 6 on the periphery of the revoluble disk 7, mounted loosely on the nipple 8, as seen in Fig. II. To this disk 7 is fastened a circular brush 9, which may be of any of the well-known kinds, hard or soft, as the work may require. Water enters by the pipe 10, which can be attached at any angle and also forms a handle for the implement, as shown in Fig. I, the supply being controlled by a cock 12, within convenient reach of the operator. The water on entering through the nozzle 13 of the casing 1 flows up the passage 14 and after acting on the wheel 2 and setting the brush 9 in motion is collected in the chamber 15 and discharged through the nipple 8 into the brush 9. On entering the bristles of the brush 9 the water impinges against a pane of glass 16 or other surface being cleansed and is thrown outward by centrifugal force, filling the brush, and is completely diffused over the surface on which the brush is acting continuously and uniformly.

By reference to Fig. I it will be seen that the implement can be applied on vertical surfaces at any required height from the ground or on a deck or floor without any exertion except to guide its course, also that the device can be employed on surfaces horizontal, vertical, or at any angle.

I employ, preferably, a tangential water-wheel 2; but it is obvious that other forms of water-wheels can be used. I illustrate a modification that has proved successful in use.

When the brush 9 is removed from the surface 16, it at once becomes a radial sprinkling device and can be employed in that manner for final washing or sprinkling when that is necessary.

Having thus explained the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a hydraulic brush, in combination, a tubular handle, a chambered casing attached to said tubular handle, a tangential wheel mounted within said casing, a nozzle directed upon the vanes of said wheel, a passage in

said casing forming communication between
said tubular handle and said nozzle, a rotary
brush mounted on said casing, gear connec-
tion between said rotary brush and said
5 wheel, and an outlet from said casing through
said rotary brush, substantially as specified.
In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

EDWARD A. RIX.

Witnesses:

ALFRED A. ENQUIST,
A. BORCHARD.