

(No Model.)

C. C. BRIDWELL.  
WINDOW OR BUGGY WASHER.

No. 559,510.

Patented May 5, 1896.

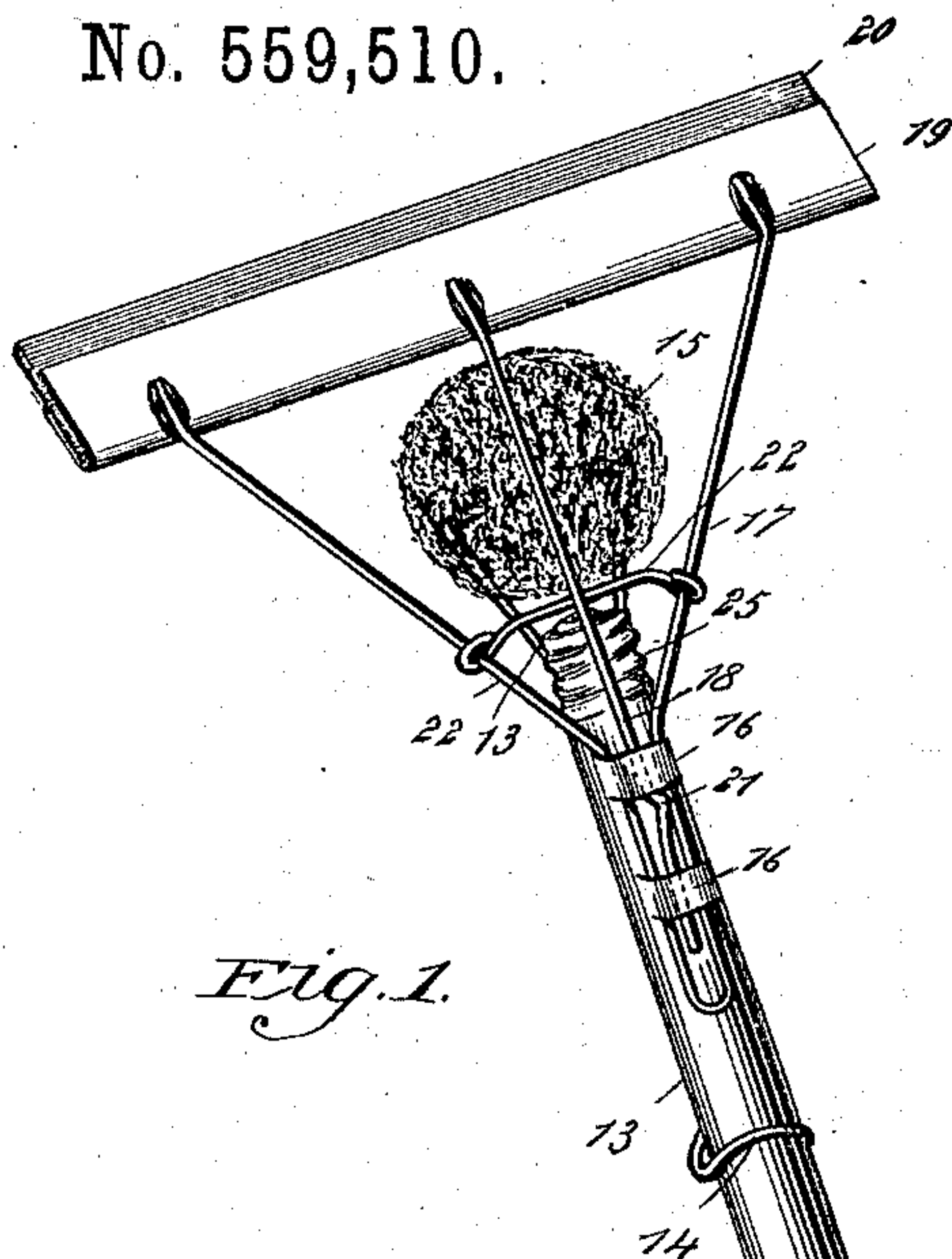


Fig. 1.

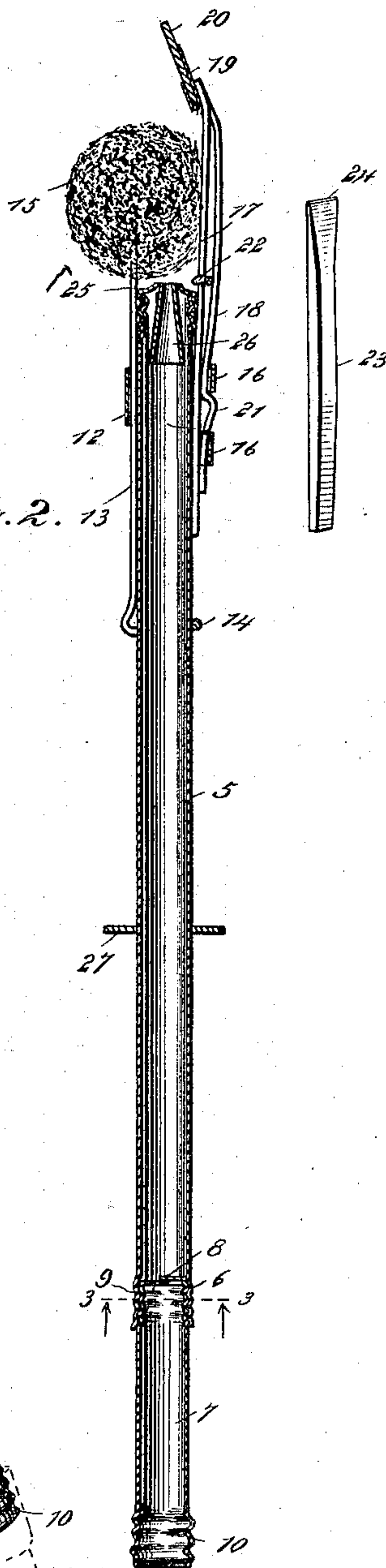


Fig. 2.

Fig. 3.

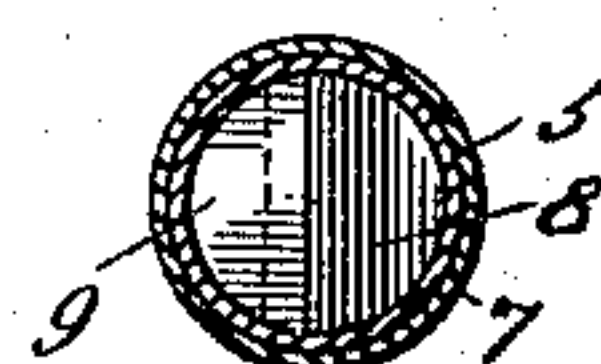
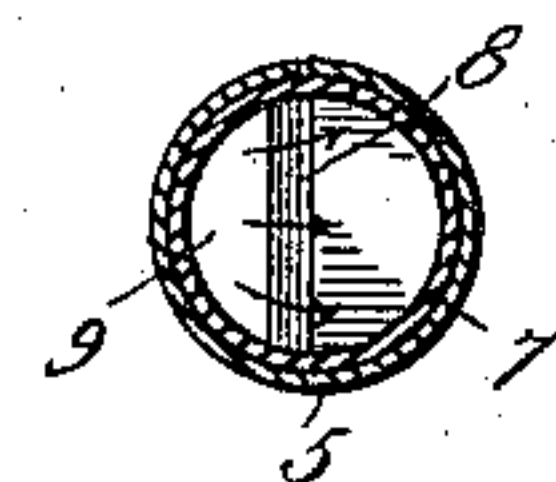


Fig. 4.



WITNESSES:

Edward C. Rowland.

J. B. Owens.

INVENTOR

C. C. Bridwell

BY

Munn & Co.  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CHARLES C. BRIDWELL, OF PORTSMOUTH, OHIO.

## WINDOW OR BUGGY WASHER.

SPECIFICATION forming part of Letters Patent No. 559,510, dated May 5, 1896.

Application filed May 21, 1895. Serial No. 550,073. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES C. BRIDWELL, of Portsmouth, in the county of Scioto and State of Ohio, have invented a new and Improved Window or Buggy Washer, of which the following is a full, clear, and exact description.

This invention relates to an improvement in buggy and window cleaning devices, and it is especially related to that class in which a brush or sponge is provided with means for supplying it with water, whereby the windows and parts of the buggy may be cleaned.

The object of the invention is to provide superior means for holding a sponge in close relation to a water-supplying nozzle and also a more effective window-rubbing strip.

To these ends the invention consists, essentially, in certain peculiar features of construction attending a rigid tube which serves as a handle and also to conduct the water for washing. This tube is provided with a peculiarly-constructed valve by which the flow of water is regulated and also with improved devices for attaching thereto the sponge and window-rubbing strip. I also provide for use in connection with the tube a chisel or scraper formed, preferably, of hard wood and capable of attachment to the device, the purpose of the chisel or scraper being to provide means for removing mud from the vehicle or other parts which are being cleaned.

All of these various features will now be described in detail, and finally embodied in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 represents a perspective view of my complete device, showing the sponge and rubbing-strip thereof in place. Fig. 2 is a longitudinal section of the device, the parts being in the same position as Fig. 1, and also showing the chisel or scraping-tool referred to hereinbefore. Fig. 3 is a cross-section taken through the tube on the line 3 3 of Fig. 2 and showing the valve of the tube closed; and Fig. 4 is a section taken on the same line and showing the valve open.

The reference-numeral 5 indicates the tube, which is preferably formed of sheet metal

and which has its lower end formed with internal screw-threads 6. These threads are adapted to cooperate with the correspondingly-threaded end of the short section 7 of tubing. Rigidly secured within the lower portion of the tube 5 and directly adjacent to the upper extremity of the thread 6 thereof is a semicircular disk 8, the same operating to close a little more than one-half of the tube.

9 indicates a similar disk which is secured in the upper extremity of the short tube 7, and which is capable of binding against the lower side of the disk 8, so that the straight edges of the two disks will overlap and thereby close the interior of the tube 5. This closed position of the disks 8 and 9 is illustrated in Fig. 3, where it will be seen that their edges overlap and bind against each other, as has been just described. When, however, the tube 7 is moved a slight distance down the tube 5, the disks 8 and 9 will disengage each other and leave a space between them, as illustrated in Fig. 4, through which space the water may pass after the manner indicated by the arrows in said Fig. 4. The lower extremity of the short tube 7 is screw-threaded at 10, so as to permit the attachment of the flexible water-supplying hose or tube 11. (Shown by dotted lines in Fig. 1.)

12 indicates an eye which is formed near the upper end of the tube 5 and at one side thereof. Through this eye the parallel portions of the spring rod or wire 13 are adapted to pass and to be capable of movement therein. The spring wire or rod 13 is bent at its middle to form the ring 14, which embraces the tube 5, so as to be slidable thereon, while the extremities of the wire are bent inwardly, as may be seen by reference to Fig. 1, so that they may effectively engage and hold the sponge 15. The sponge is secured between these extremities by moving the wire 13 inwardly and below the upper end of the tube 5, so that the extremities will move together. This movement is effected by forming the ends of the wire divergent, so that upon moving the wire down the tube the divergent ends will be forced together by passing into the eye 12 and the sponge clamped between said ends.

Rigidly secured to the side of the tube 5 which is opposite the eye 12 are the eyes 16,



which are also near the upper end of the tube and which are two in number, they being adapted for the reception of the wires or rods 17 and 18 of the window-rubbing device. The window-rubbing device comprises a sheet-metal socket-plate 19, which is approximately U-shaped in cross-section and which is capable of receiving and holding the rubber strip 20, the same being arranged with one edge in position to engage and rub a window-pane.

Soldered or otherwise rigidly secured to the outer portions of the socket-plate 19 is the wire 17, which is bent at its middle to form two parallel portions and which has its ends diverged or spread, so as to approach the opposite ends of the plate 19.

The parallel portions of the wire 17 are adapted to pass through the eyes 16, and by these means the window-rubbing device is connected to the tube 5. The wire 18 is soldered or otherwise rigidly secured to the middle of the plate 19 and projects downwardly between the parallel portions of the wire 17, terminating a short distance above the bend in the wire 17. Near the lower end of the wire 18 a bend 21 is formed, which bend is adapted to spring under the upper eye 16 and to hold the wire 18, and consequently the plate 19, in connection with the tube.

22 indicates a cross-wire which is fixed to the divergent portions of the wire 17 and which has the wire 18 passed over it. This cross-wire serves to push the wire 18 out and give it that degree of resiliency which is essential to the intended operation of the bend 21 of the said wire 18. Thus it will be seen that the window-rubbing device is rigidly yet removably secured to the tube 5 and that the tube 5 may be used as a handle to manipulate the window-rubbing device.

23 indicates the chisel or scraping-tool referred to hereinbefore, and this consists of an elongated device having a sharpened edge 24 and having a shank capable of being securely fitted within the eyes 16 of the tube 5. When it is desired to use this tool, the window-rubbing device is removed from the eyes 16, as has been explained, and replaced by the tool 23. This tool is useful in removing from the wheels and other portions of the vehicle accumulations of mud and grease. It is preferable to form the tool of wood, to the end that the liability to scratch the painted surface of the vehicle will be reduced.

Formed in the upper portion of the tube 5 are external threads, which are adapted to receive corresponding threads on the cap 25. This cap 25 screws over the upper end of the tube 5 and has formed centrally therein an opening in which is received the small end of the tapering nozzle 26. This nozzle 26 is rigidly connected to the cap 25 by soldering the said small end in the opening of the cap, and the lower or larger end of the nozzle is equal to a little less than the interior diameter of the tube 5. Thus it will be seen that

the water passing through the tube 5 will be forced into the tapering nozzle 26 and discharged through the small end thereof. By means of this tapering nozzle the stream is concentrated and made to escape with greater force than otherwise. It will be observed that the nozzle 26 and its cap 25 are located directly adjacent to the sponge and window-rubbing device and that the water discharged from the nozzle will pass upon the sponge and keep the same continually wet. By means of the removable cap and the nozzle fixed thereto these parts may be disconnected from the tube 5 when it is desired to clean the tube or to remove those obstructions which will necessarily accumulate in such devices. The tapering nozzle 26 also serves to prevent the water from forcing itself through the screw-thread connection between the cap 25 and tube 5, and by these means leakage, which would otherwise occur, is prevented.

27 indicates a rubber disk which is centrally perforated and which is placed on the tube 5 at a point about midway between the ends of said tube 5 and the tube 7. The purpose of this disk 27 is to prevent the water discharged through the nozzle 26 from passing down the tube 5 and wetting the operator's hands and arms. By this means the water is shed from the lower portion of the tube and made to drop off on the ground.

In the use of my device the hose 11 is connected to the tube 7 and the sponge and rubbing device placed in their operative positions. The water may now be turned on at the tube 11, and when it is desired to supply the sponge with water the tube 7 may be slightly rotated, so as to disengage the plates 8 and 9, whereupon the water will be admitted to pass through from the tube 7 to the tube 5 and to escape upon the sponge by way of the nozzle 26. If it is desired to use the chisel or scraping-tool 23, the rubbing device may be disconnected from the eyes 16 and the scraping device connected thereto. Water may be used in connection with this scraping device or not, as the operator may prefer.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A washing device, comprising a rigid tube capable of having water passed through it and of discharging the same at one end, an eye fixed to the tube near its discharge end, a spring-rod bent at its middle to form a ring slidably embracing the tube and having its ends divergent from each other so that they will be forced together as they pass into the eye, and a sponge held by the ends of the spring-rod, substantially as described.

2. A washing device, comprising a rigid tube capable of having a stream of water passed through it and of discharging the stream at one end, two longitudinally-alined eyes secured to the tube near its discharge end, a U-shaped clip-plate, a rubbing-strip secured



in said clip-plate, a wire bent at its middle to form two parallel portions projected through the eyes of the tube, the extremities of the wire being secured to the U-shaped plate near its ends, and a second wire secured approximately midway the U-shaped plate and projecting between the parallel portions of the first wire, the said second wire having a bend therein which locks with one of the eyes on the tube and holds the plate and its rubber strip in place, substantially as described.

3. In a washing device, a tube, a sponge yieldingly held to the discharge end of said tube, a window-rubbing device also held to the discharge end of the tube and having sus-

taining devices engaging the sponge and supporting the same against lateral movement, substantially as described.

4. In a washing device a tube, rubbing devices held to said tube, and a cap embracing the discharge end of the tube and having an opening and having also at its inner side an inwardly-flaring cone, the apex of which surrounds and communicates with the opening in the cap, substantially as described.

CHARLES C. BRIDWELL.

Witnesses:

MORRIS H. BRIDWELL,  
JOSEPH H. WHEELER.