117167

S. A. GIBSON, and J. B. DEHAAS.

SCRUBBING BRUSH.

PATENTED JUL 18 1871

Fig. 1.

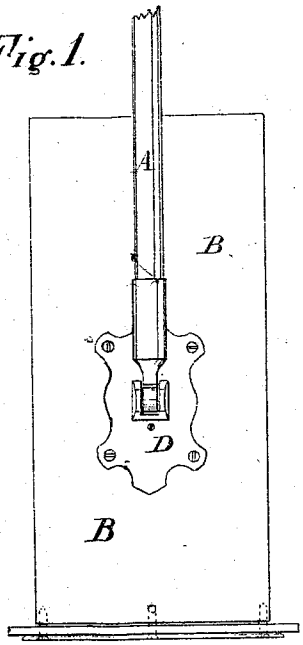


Fig. 2.

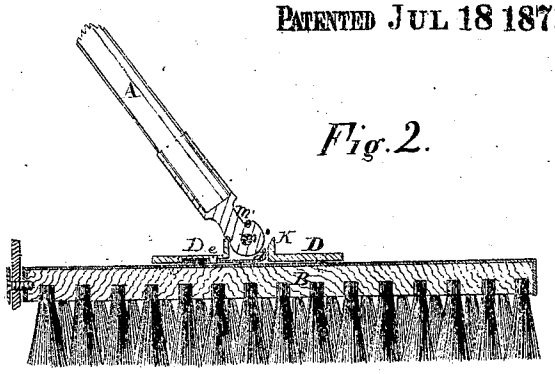


Fig. 3.

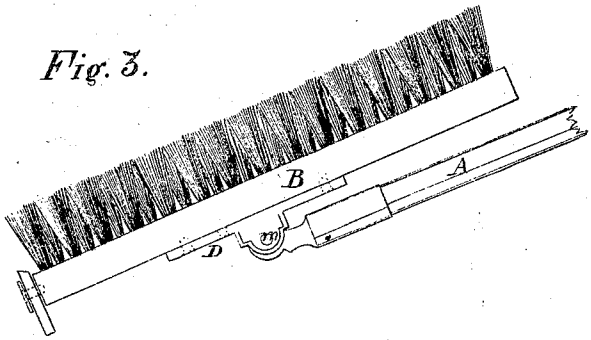
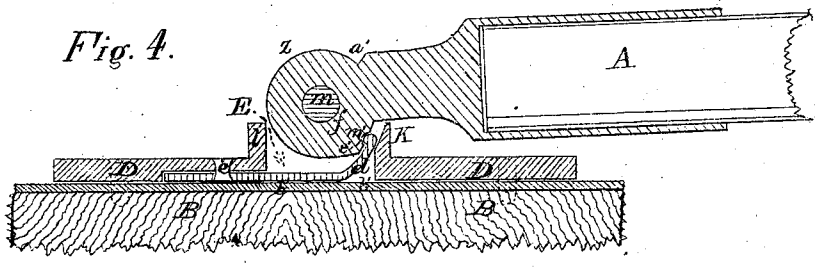


Fig. 4.



Witnesses.

Villette Anderson

F. B. Curtis

Inventors

S. A. Gibson,

J. B. De Haas,

Chipman & Fraser & Co

Attys.

UNITED STATES PATENT OFFICE.

STEPHEN A. GIBSON AND JAMES BINN DE HAAS, OF CLEARFIELD; SAID DE HAAS ASSIGNS HIS RIGHT TO WILLIAM HOOVER, OF BRADFORD TOWNSHIP, PA.

IMPROVEMENT IN SCRUBBING-BRUSHES.

Specification forming part of Letters Patent No. 117,167, dated July 18, 1871.

To all whom it may concern:

Be it known that we, STEPHEN A. GIBSON and JAMES BINN DE HAAS, of Clearfield, in the county of Clearfield and State of Pennsylvania, have invented a new and valuable Improvement in Scrubbing-Brushes; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a top view of our brush. Fig. 2 is a central vertical longitudinal section. Fig. 3 is a side view, and Fig. 4 is a central vertical section.

Our invention consists in the application of a novel and improved reversible knuckle-joint to a scrubbing-brush, so adapted as to be attached to the base-board of a brush and to receive the handle, with the object of rendering the implement more useful for the purpose hereinafter mentioned.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation.

A represents the handle of the scrubbing-brush. B represents the base-block to which the brush, rubber, and reversible knuckle-joint are secured. The brush or bristles are secured in the wood in the usual manner. The back and sides of the brush are covered with tin or any other suitable material. To the back of the brush, and on top of the metal covering, is attached the knuckle-joint plate D, which is secured by means of screws or otherwise. This plate D is provided with a socket, E, for the reception of the reversible knuckle-joint, &c. The upper part of the plate D, as shown at *b'*, is mortised or cut out to admit the elliptical spring *d*, which is securely fastened near its lower end in the plate D by means of a rivet *e*. The upper end of this spring projects up within a short distance of the top of socket and is rounded at its end. To the upper end of the plate-socket is pivoted the reversible knuckle-piece K, as shown on the drawing. This knuckle-piece K is provided with a shank and socket for handle, and is made in one piece of metal. The lower end *z* of this knuckle-piece is, in its general form, circular, but its periphery is varied by shoulders adapted to operate in connection with the edge *l* of the socket and the spring *d*. Through the center of this circular end passes the pivot-pin *m*, which serves to connect it to the walls of the socket. On one side of the circular head *z* is formed the shoulder *a'*, which is adapted to fit the edge *l* of the socket in such a manner that the handle of the brush will extend upward at a suitable angle for work. The object of this stop is to prevent the brush from dipping forward when raised from the ground, which it would otherwise do, as the brush is hung off its center, the part forward of the joint being longer and heavier. This eccentricity of weight also serves an important purpose in enabling the operator to reverse the brush and bring the rubber to the floor, this being accomplished by giving the handle a flirt or toss. This will throw the brush over on the upper side of the handle, in which position it will be at once fixed, partly by the superior weight of the end opposite the rubber and partly by the action of the spring *d*, which catches in the notch *e'* formed in the shoulder *f* on the other side of the circular head *z*. At the same time the shank of the knuckle-piece recessed at *m'* receives the wall of the socket and enables the handle to lie parallel or almost parallel with the back of the brush. When the rubber is down, and it is desired to reverse in order to bring the brush to the floor, it is only necessary to turn the handle over and press the end of the brush on the floor. This will release the spring *d* from the notch in the head *z*, and the weight of the forward end of the brush will carry it down into proper position. When the brush has been used for scrubbing the floor the implement is turned on the opposite side and held by the spring in the position as shown in Fig. 3. By operating the rubber on the floor the water will be moved forward and away from the parts scrubbed, and the floor is effectually cleansed and dried.

We claim as our invention—

A reversible brush and drier having the knuckle-joint K, provided with the spring-stop *e' d* and the shoulder-stop *a' b*, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

STEPHEN A. GIBSON.
J. BINN DE HAAS.

Witnesses:
S. R. MERRELL,
H. W. PARK.