(No Model.)

A. HARTEG & C. E. SHECKLER.

SLIP JOINT FOR SCRUB BRUSHES.

No. 590,835. Patented Sept. 28, 1897.

Fig. 1.

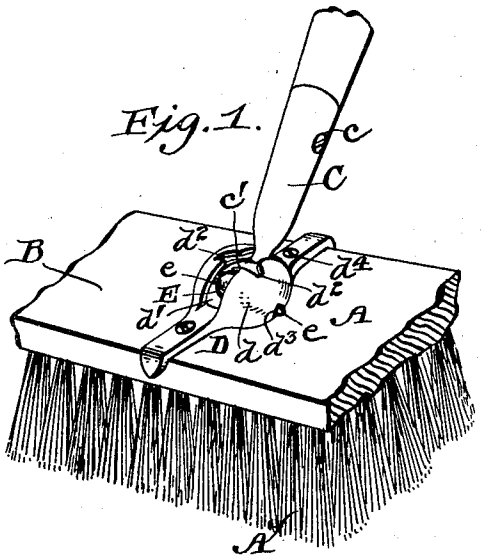


Fig. 2.

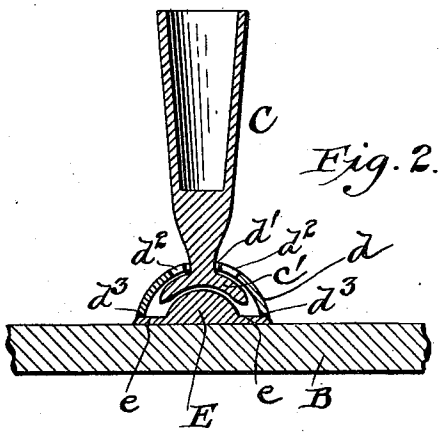


Fig. 3.

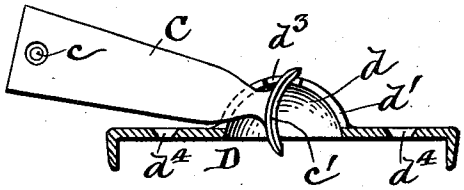


Fig. 4.

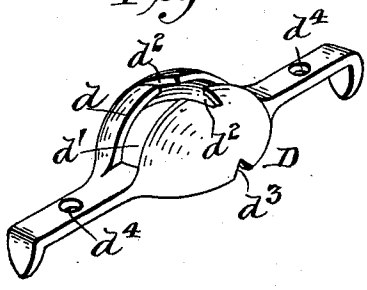


Fig. 5.

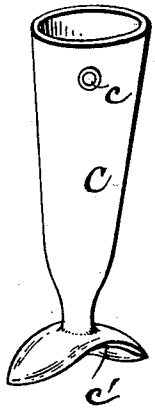
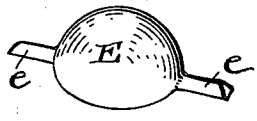


Fig. 6.



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AUGUSTUS HARTEG AND CHARLES E. SHECKLER, OF CATASAUQUA, PENNSYLVANIA.

SLIP-JOINT FOR SCRUB-BRUSHES.

SPECIFICATION forming part of Letters Patent No. 590,835, dated September 28, 1897.

Application filed March 19, 1897. Serial No. 628,342. (No model.)

To all whom it may concern:

Be it known that we, AUGUSTUS HARTEG and CHARLES E. SHECKLER, citizens of the United States, residing at Catasauqua, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Slip-Joints for Scrub-Brushes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to slip-joints for securing handles to brushes, particularly to what are known as "scrubbing-brushes;" and it consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 is a perspective view of a scrubbing-brush with our invention applied to the same. Fig. 2 is a vertical transverse section through the same. Fig. 3 is a longitudinal section through the housing and a portion of the handle, the handle being turned down in a horizontal position in the act of being united to the said housing. Fig. 4 is a perspective view of the casting constituting the housing and socket. Fig. 5 is a perspective view of the ferrule or socket in which the lower end of the brush-handle is inserted and secured, and Fig. 6 is a perspective view of the approximately semispherical bearing.

A in the drawings represents a scrubbing-brush of the ordinary construction, and B the back thereof, which is preferably elongated in form.

C represents a ferrule or socket in which the lower end of the handle of the brush is inserted and secured, preferably by means of a screw or rivet passed through an opening *c* formed in the side of the said ferrule. This ferrule is formed at its lower end with an elongated concaved portion *c'*, which latter, by holding the ferrule in the proper position, is adapted to be inserted into a casting D, which constitutes a housing and socket for the handle of a brush. This casting D is formed with a central semispherical upwardly-extending hollow portion forming a socket *d*. This hollow portion is provided with a longitudinal slot *d'* and with transverse notches d^2 and also at its lower end or under edge with notches d^3 and with holes d^4, the latter being designed to receive screws for securing the housing to the back of the brush. The housing is also formed at its ends with downwardly-extending flanges, which are adapted to fit snugly over the ends of the brush and serve as a means of preventing the back of the brush from warping and cracking and also for holding the housing in position. The longitudinal slot *d'* and the transverse notches d^2 serve as a means of securing the brush-handle to the housing and admitting of the handle being adjusted to any desired position and operated in said position without the necessity of any auxiliary screw or clamp being brought into use.

When it is desired to attach a handle having the ferrule portion C to the casting or housing D, the elongated concaved portion *c'* is turned so that one of its narrow ends can enter and pass through the transverse notches d^2, and by being pushed down the entire concaved end and the contracted lower end of the ferrule will pass into the socket of the housing, and it will be found impossible to disconnect the ferrule from the housing without bringing the parts into exactly the same condition they were when they were assembled for being connected, and it will be seen that when the parts are in position upon the back of the brush and the housing secured down it will be impossible for the parts to get into such a position.

The longitudinal slot *d'* not only serves as a means of permitting the handle of the brush to be set in any position and operated in such position, but said slot permits the handle to be turned down into a horizontal position for uniting the same with the housing.

E represents a semispherical bearing, which is formed with lugs or projections *e*. These lugs *e* pass under the transverse notches d^3 on the lower edge of the housing, and in this manner the semispherical bearing is prevented from moving. The semispherical bearing E conforms to the under side of the concaved portion *c'* at the lower end of the handle, so that there will be a smooth univer-

sal-bearing contact between these parts, sufficient space being secured between the upper surface of the semispherical bearing E and the under side of the housing.

By our construction and arrangement the back of the brush is prevented from warping or splitting, which is very important, as it enables the brush to be used much longer, and the handle can be held in a rigid position while the brush is being moved back and forth over the floor. When the parts are all assembled and arranged, they are secured in position on the back of the brush by means of screws, which pass through holes d^4 in the housing.

It will be readily observed that the handle can be removed from the brush by removing the screws above referred to, and when desired a new or different brush can be secured in position on the handle.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A slip-joint for scrubbing-brushes comprising in its construction a housing provided with a central upwardly-extending hollow portion having a longitudinal slot and transverse notches, in combination with a ferrule or handle-receiving socket provided at its lower end with an elongated concaved portion, adapted to be passed through the transverse notches so as to engage the under side of the housing, substantially as described.

2. In combination with the back of a scrubbing-brush, a slip-joint comprising in its construction a housing provided with a central upwardly-extending hollow portion having a longitudinal slot and transverse notches, a ferrule or handle-receiving socket provided at its lower end with an elongated concaved portion adapted to be passed through the transverse notches so as to engage the under side of the housing, and a semispherical bearing portion arranged beneath the central hollow portion of the housing with a space between the same to admit of the free movement of the concaved portion of the lower end of the handle-receiving socket and means for securing the housing to the back of the brush, the construction and arrangement being such that the handle-receiving socket can be removed from the housing without the handle being turned into an approximately horizontal position and the concaved portion passed through the transverse notches, substantially as described.

3. In combination with the back of a scrubbing-brush a slip-joint comprising in its construction a housing provided with a central upwardly-extending hollow portion having a longitudinal slot, upper transverse notches and lower transverse notches, end extensions having downwardly-extending flanges or shoulders which fit over the edges of the back of the brush, a ferrule or handle-receiving socket provided at its lower end with an elongated concaved portion adapted to be passed through the upper transverse notches so as to engage the under side of the housing, and a semispherical bearing portion having lugs which rest in the lower transverse notches and arranged beneath the central hollow portion of the housing with a space between the same to admit of the free movement of the concaved portion on the lower end of the handle-receiving socket and means for securing the housing to the back of the brush, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

AUGUSTUS HARTEG.
CHAS. E. SHECKLER.

Witnesses:
WM. SACKS,
EDWIN C. KOONS.