No. 795,674. PATENTED JULY 25, 1905.

H. U. ACKERMAN.

BRUSH CLAMP.

APPLICATION FILED FEB. 13, 1905.

Fig. 3.

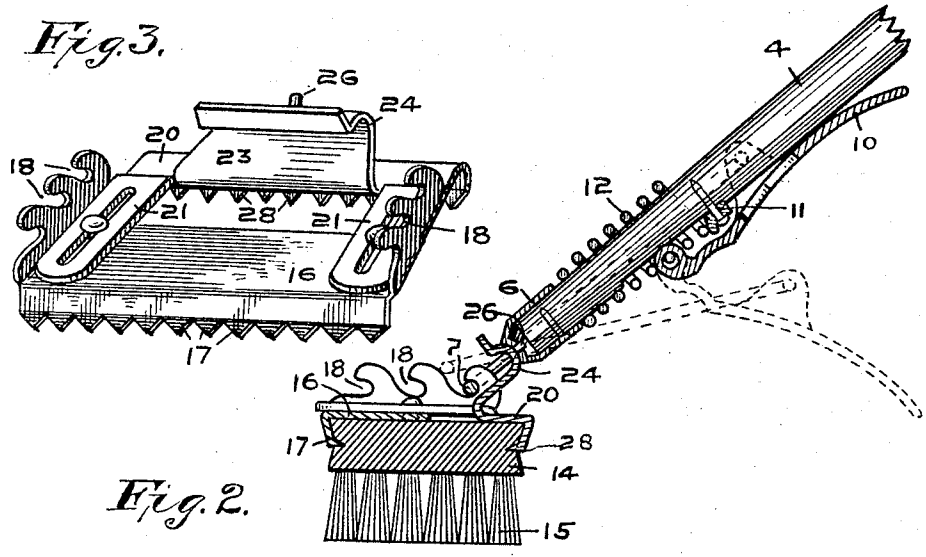
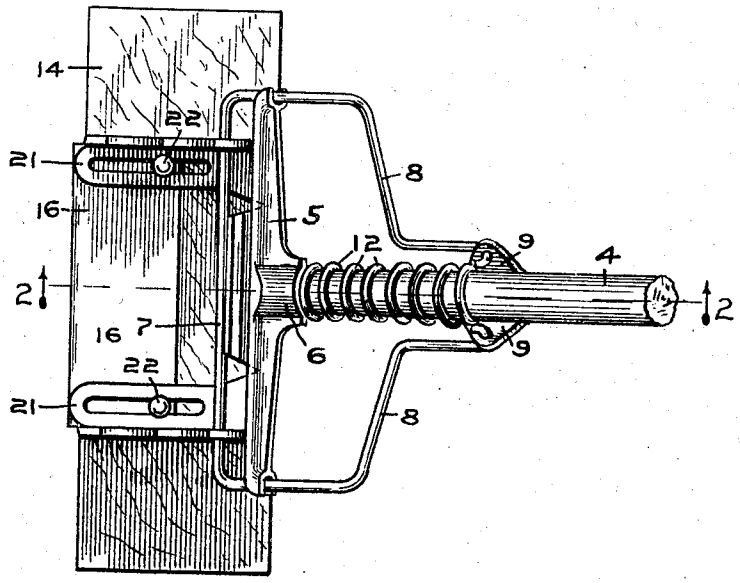


Fig. 2.

Fig. 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HOWARD U. ACKERMAN, OF INDIANAPOLIS, INDIANA.

BRUSH-CLAMP.

No. 795,674. Specification of Letters Patent. Patented July 25, 1905.

Application filed February 13, 1905. Serial No. 245,536.

To all whom it may concern:

Be it known that I, HOWARD U. ACKERMAN, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Brush-Clamps, of which the following is a specification.

This invention has for its object the production of an improved clamp for securing a mop-head and its handle to the back of a scrubbing-brush without the requirement of fastening-screws; and the further object is to provide an improved clamp which will be adjustable in its dimensions, whereby it may be changed to fit the different sizes of brushes.

My invention consists of certain new and useful features of construction and combinations of parts especially devised to those ends, as will be hereinafter fully described, and specifically pointed out in the claims.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is a top plan view of a mop head and handle united to a scrub-bush with a clamp embodying my invention. Fig. 2 is a section on the line 2 2 of Fig. 1, and Fig. 3 is a detail in perspective of the clamping device detached from the brush and mop-head.

Like characters of reference indicate like parts throughout the several views of the drawings.

4 is a mop-handle.

5 is a casting which forms the fixed clamping-jaw of the mop-head. It has the socket 6, into which the end of the handle 4 is inserted and in which it is fastened by means of a nail or screw, as shown.

7 is a movable clamping-jaw parallel with the fixed jaw 5. It has its ends bent backward at right angles and passed through the bifurcated ends of the head 5, as shown, and then converged, as shown at 8, and finally pivotally united to the ears 9 of a lever 10.

Located at a suitable distance from the lower end of the handle 4 is the stop 11, and surrounding the handle and between the stop 11 and the socket 6 is the spiral spring 12, to the under side of one of the coils of which spring the perforated end of lever 10 is secured in a manner shown in Fig. 2, whereby said lever is pivotally secured to the spring. The handle will be cut away for a suitable distance, as shown, to allow for the free movement of the lever end between said spring and handle.

Where a mop is used, it is inserted between the jaws 5 and 7, where it is securely held by means of the above clamping mechanism; but for my purpose the mop is not required, and I use the means for clamping the two jaws together as my means for tightening and holding the parts of my brush-holding clamp.

14 is a brush-head having the usual tufts 15 of bristles or other fiber.

16 is a metal plate having one of its edges bent downwardly. The body of the plate is laid upon the top of the head 14 with its bent edge against the edge of the brush, as shown in Fig. 2. This edge of the plate will preferably be serrated, as shown at 17, in order to more securely engage the brush-head. The ends of plate 16 are bent up at right angles and these right-angle portions have the notches 18, here shown as three in number, but which may be of a greater or less number and which are for the purpose of receiving and holding the movable jaw 7 of the mop-head. Also resting upon the head 14 is the metal plate 20, which has forward extensions 21 at each of its ends which rest upon the plate 16. These extensions have longitudinal slots for the passage therethrough of studs 22, whereby said extensions are adjustably secured to the plate 16. A part of the metal originally occupying the space between the extensions 21 is bent upwardly and rearwardly, as shown at 23, and then is bent in trough-like form, substantially U-shaped in cross-section, as shown at 24, to adapt it to enter the groove in the face of the head 5. Extending from the part 24 will be the stud 26 to enter a perforation in head 5 at the center of socket 6, as shown in Fig. 2. The plate 20 has its outer edge bent down to contact with the edge of head 14, and this bent edge will preferably have the serrations 28.

The operation of my invention is as follows: The plates 16 and 20 are drawn apart a sufficient distance to allow their edges to be inserted over the head of the brush to be held. Then the jaw 5 of the mop-head is placed against the part 24, with stud 26 entering the perforated socket, the lever 10 is thrown down into the position as shown in dotted lines of Fig. 2, and the movable jaw 7 is introduced into the nearest notches 18 of the bent ends of plate 16 that will draw the plates 16 and 20 together against the head 14 with the requisite tension, and then the parts are tightened up and locked by closing the lever 10 up against the under side of the handle 4. A plurality of notches 18 in the ends of plate

16 is desirable in order to enable my clamping-plates to be tightened upon brush-heads of different widths.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a utensil of the class described, in combination, a handle with a fixed clamping-jaw, a movable clamping-jaw, means for clamping the movable clamping-jaw against the fixed jaw, a plate adapted to rest on top of a brush said plate having upward end extensions with notches in said extensions and said plate having a downwardly-bent edge, a second plate also adapted to rest upon said brush said second plate having an edge bent down to engage an opposite side of the brush from that engaged by the bent edge of said first plate, means for adjustably uniting the two plates and said second plate having an extension to engage the said fixed jaw, all of said parts being united and held by the engagement of the movable jaw with notches in the ends of said first plate.

2. A handle-clamp for scrub-brushes comprising two plates secured to each other so as to be adjustable laterally of the brush, both of said plates having downwardly-bent edges between which the head of the brush is engaged, one of said plates having notched upwardly-extended ends to engage the movable jaw of the mop-head and the other of said plates having an extension to form a bearing for a fixed jaw of a mop-head and a mop-head having a handle and a fixed and a movable jaw.

3. The combination of a plate adapted to rest on a brush-head, said plate having an edge bent down and adapted to bear against the side of the head and having upwardly-projected ends with a plurality of notches, a second plate adapted to rest upon the brush-head and having an edge bent down and adapted to bear against the opposite side of the head from the bent edge of the first plate, both of said edges having teeth to increase the friction with the brush-head, the second plate having an upward extension, a handle, a head on said handle having a fixed jaw to bear against said upward extension of the second plate and said head having a movable jaw to engage notches in the upwardly-extended ends of the first plate and means for drawing the movable jaw toward the fixed jaw.

4. In a brush-clamp, a plate adapted to rest on top of a brush-head, said plate having upwardly-extended notched ends and an edge extending down and adapted to rest against the side of the said head, a second plate located upon the brush-head and having extensions resting upon the first plate, said extensions being longitudinally slotted, a stud passing through each of said slots and seated in the first plate whereby the two plates are adjustably connected, said second plate having an extension with a portion U-shaped in cross-section, a mop-handle, a head fastened thereto having a fixed jaw with a grooved face to engage and bear against the U-shaped portion of said extension, and said head having a movable jaw to engage the notches in the ends of said first plate, and means for drawing the two jaws together and for holding them in a given relation to each other.

5. In a brush-clamp, a plate adapted to be placed on top of a brush-head, said plate having a serrated bent edge to engage one side of said head and having upwardly-bent ends with a plurality of notches in each end, a second plate adapted to be placed on top of said brush also having a serrated downwardly-bent edge to engage an opposite side of said head, said second plate having longitudinally-slotted extensions which overlap the first plate, studs in said first plate passing through the slots of said extensions and terminating with overlapping heads, said second plate having an upward extension in which is a portion U-shaped in cross-section said U-shaped portion having an upwardly-projected stud or pin, a mop-handle, a head fixed thereto said head having a stationary longitudinally-grooved jaw, said jaw having a perforation or indent in said groove to receive the pin on the U-shaped portion of said extension, and said head having a movable jaw adapted to engage notches in the ends of said first plate, means for bringing the two jaws together and for holding them at a given position with relation to each other.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 7th day of February, A. D. 1905.

HOWARD U. ACKERMAN. [L. S.]

Witnesses:
F. W. WOERNER,
J. A. MINTURN.