

No. 687,977.

Patented Dec. 3, 1901.

E. H. BUCHANAN.

BROOM HEAD.

(Application filed July 27, 1901.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

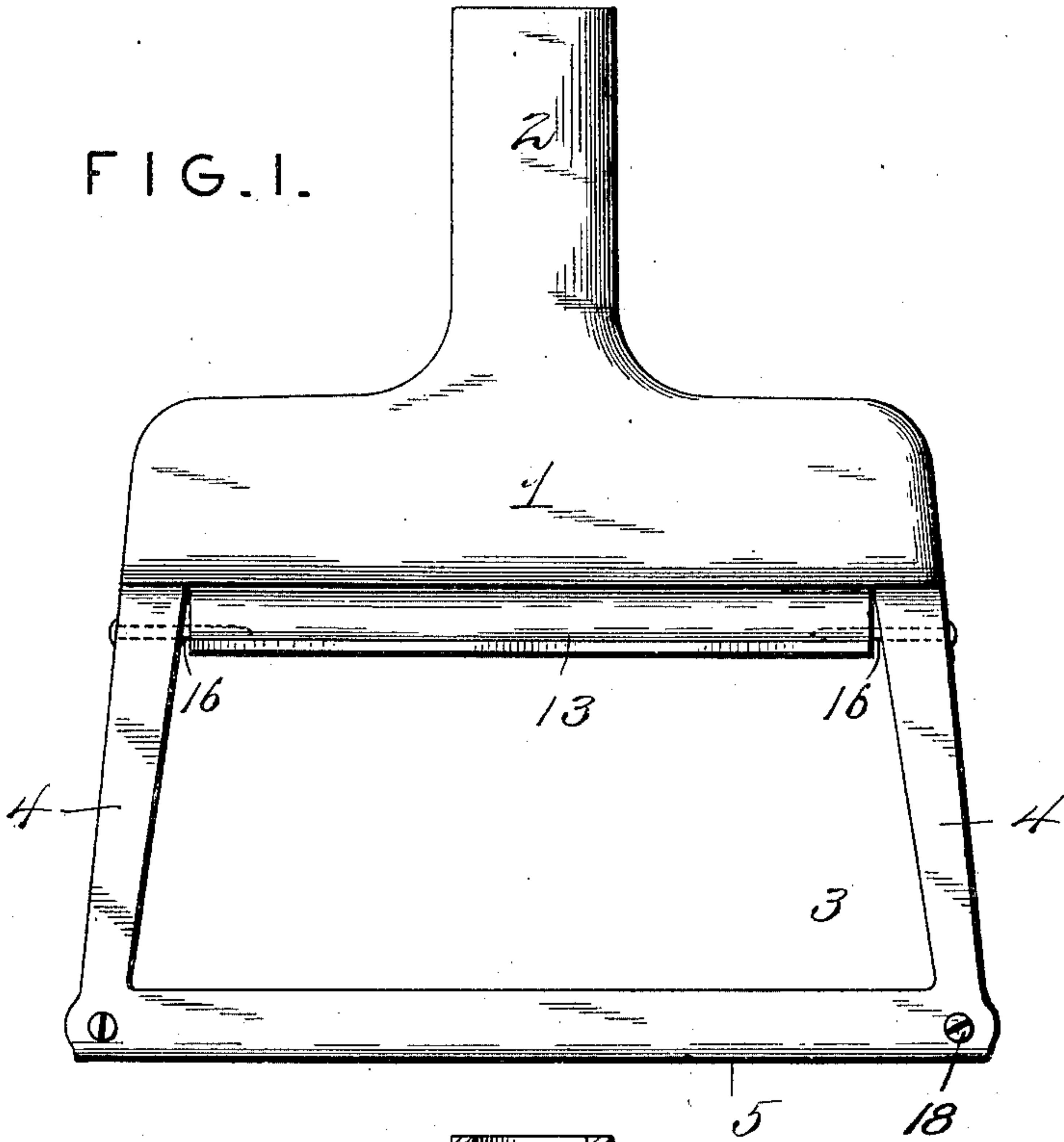
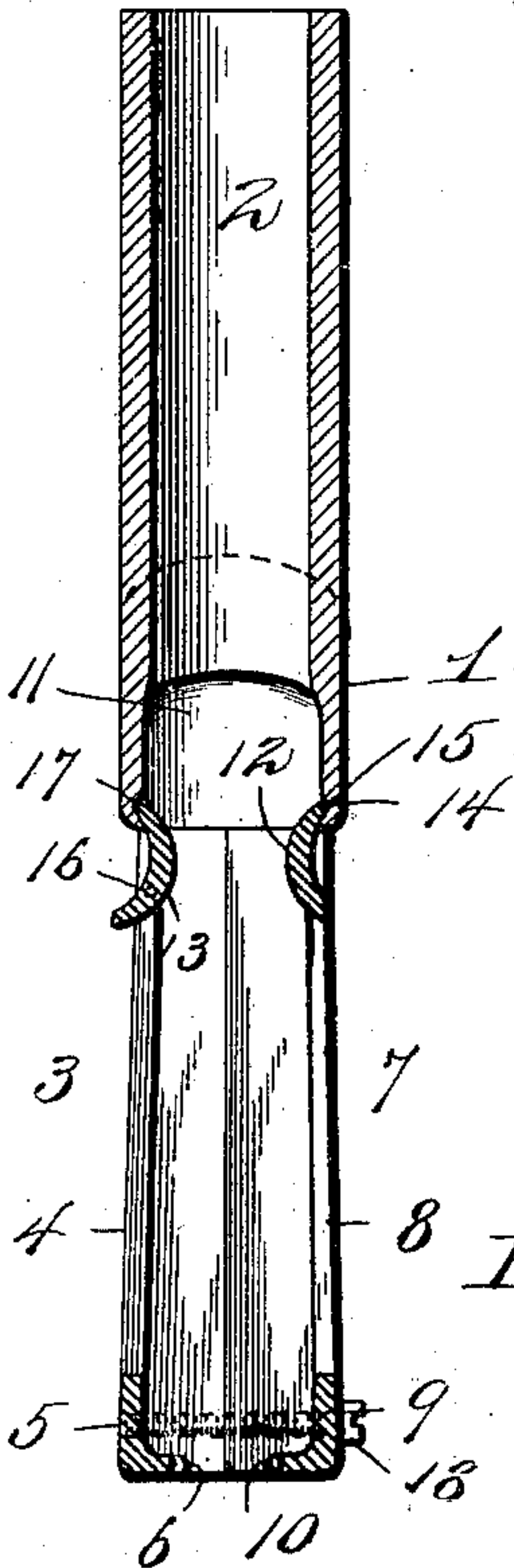


FIG. 2.



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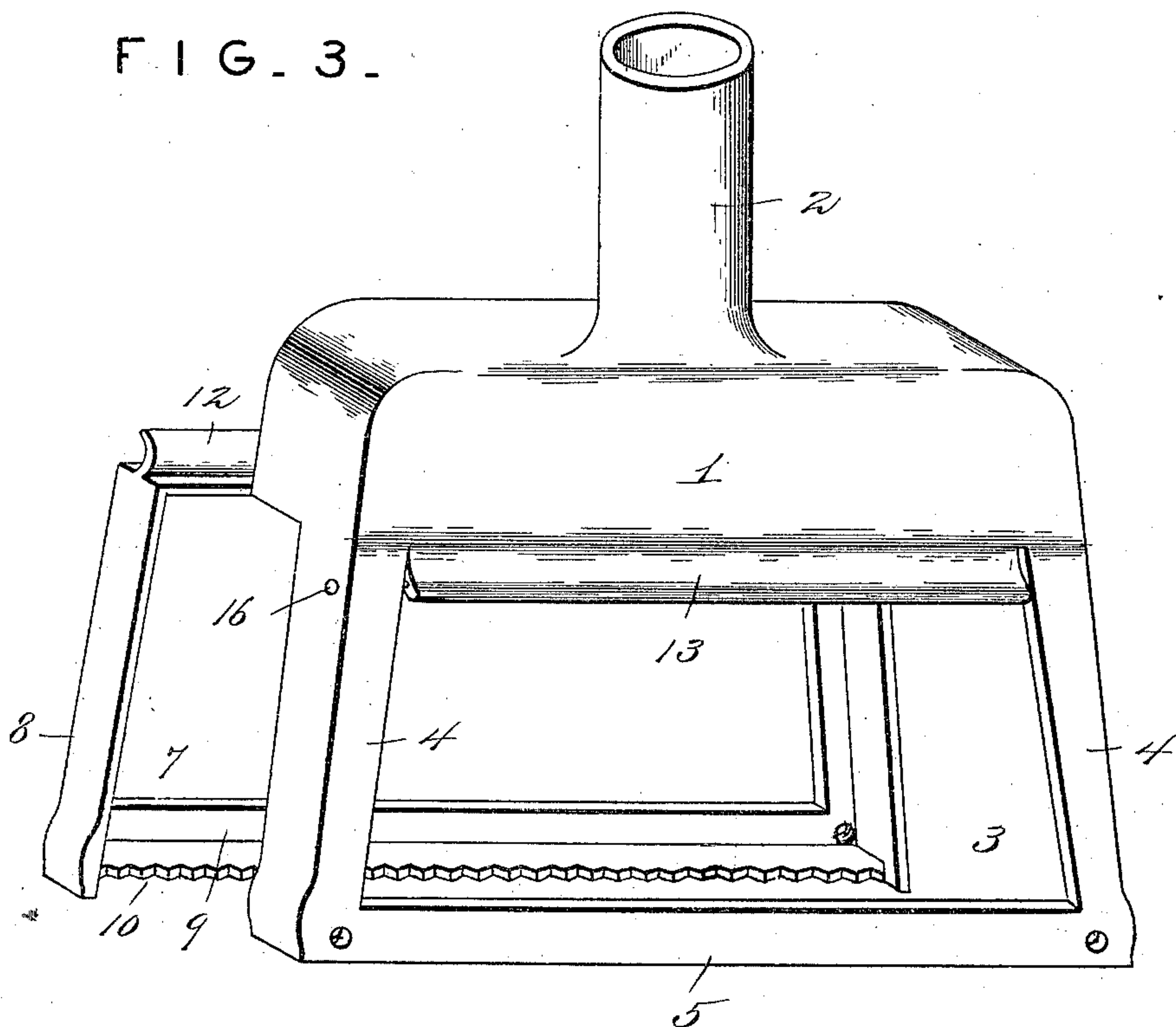
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UNITED STATES PATENT OFFICE.

EDWARD HAZZARD BUCHANAN, OF NASHVILLE, TENNESSEE, ASSIGNOR OF
ONE-HALF TO O. T. BEHNE, OF NASHVILLE, TENNESSEE.

BROOM-HEAD.

SPECIFICATION forming part of Letters Patent No. 687,977, dated December 3, 1901.

Application filed July 27, 1901. Serial No. 69,973. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HAZZARD BUCHANAN, a citizen of the United States, residing at 1115 South Market street, Nashville, in the county of Davidson and State of Tennessee, have invented new and useful Improvements in Broom-Heads, of which the following is a specification.

This invention relates to broom-heads; and the invention has for its object to provide a simple, reliable, and effective broom head or frame by means of which broom-straws may be collected and held securely and also adjusted when the broom is partially worn out, so as to extend the straws or bristles and enable the life of the broom as a whole to be materially increased. The broom-head is sectional and comprises a stationary and movable member, between which the broom-straws are confined, and also embodies a pair of clamps which operate to bite into and securely hold the broom-straws near their upper or inner ends.

With the above and other objects in view, the nature of which will more fully hereinafter appear, the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a view in elevation of a broom head or bridle constructed in accordance with the present invention. Fig. 2 is a central vertical cross-section through the same. Fig. 3 is a view in perspective of my invention with the hinged section detached.

Referring to the drawings, 1 designates the main body of the broom-head, which has connected therewith and preferably formed integral therewith a handle socket-tube 2, adapted to receive a suitable handle of any desired length for manipulating the broom.

Connected rigidly with the main body 1 is the stationary member 3 of the binder-frame, in which the broom-straws are secured, said broom comprising downwardly-diverging side bars 4 and a connecting end or cross bar 5, which is L-shaped in cross-section, as illustrated in Fig. 2, to form an inwardly-disposed toothed biting edge 6. Arranged opposite the stationary member 3 is a detachable mem-

ber 7, corresponding in its construction with the stationary member 3, being shown to comprise the side bars 8 and the cross-sectional L-shaped cross-bar 9, provided with an inwardly-disposed toothed biting edge 10.

The body 1 is hollowed out to form a chamber 11 for the reception of the inner butt-ends of the straws, and adjacent to the mouth of said chamber are located oppositely-arranged clamping members 12 and 13. Both of said members are crescent-shaped in cross-section, the member 12 being rigid with the detachable member 7 of the binder-frame and having its convex surface disposed inward, so as to leave the upper edge 14 thereof in position to enter and engage a groove 15 in the side wall of the chamber 11, thereby serving as a retaining means for holding the detachable member 7 securely in place. The fixed clamp member 12 thus performs a double function, acting as a straw-clamp and as a retaining device for the detachable binder-frame member 7. The other clamp member 13 is pivotally mounted at its opposite ends upon inwardly-projecting pintles 16, connected with the side bars 4 of the stationary member 3, as clearly shown in Figs. 1 and 2. The upper edge of the member 13 enters a groove 17 in the adjacent wall at one side of the chamber 11, so as to facilitate the insertion of the broom-straws. After the broom-straws have been inserted by turning the member 13 on its pivotal connection with the frame the upper edge thereof is brought to bear firmly against the straws to partially indent or bite into the same, thereby securely and effectually clamping and holding the straws, any tendency toward outward movement of the straws causing the pivoted clamp member to bind the straws the more firmly.

In constructing the broom the detachable member 7 is removed and the ends of the straws inserted in the chamber 11 until the latter is filled. The detachable member is then associated with the rest of the head and secured in place by passing a wire or cord alternately around the connecting cross-bars 5 and 9 between the straws at convenient points. By then partially turning the pivoted member 13 the butt-ends of the straws are firmly clamped and held against displacement. Thus

the straws are held at different points in their lengths, which serves to prevent the straws from buckling and bulging out in case the broom gets wet or old. When the straws become worn close to the cross-bars 5, they may be let out by relieving the pressure of the clamp-bars 12 and 13 on the inner ends of the straws, thus adding materially to the life of the broom as a whole. If desired, clamping devices, such as screws 18, may be used for drawing the cross-bars 5 and 9 toward each other to clamp the straws.

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

A broom-head comprising a body hollowed out to receive the inner ends of the broom-straws and provided with a handle socket-tube; a sectional binder-frame, one member

of which is rigidly connected with the head, 20 and the other member detachably connected therewith; the sections of the binder-frame embodying end cross-bars; and a pair of oppositely-located clamp-bars one of which is rigidly connected with the detachable frame 25 member and also acts as a retaining device for holding said member to the head; the remaining clamp member being pivotally connected with the stationary member of the binder-frame and adapted when turned to compress 30 the straws between the two clamp members, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD HAZZARD BUCHANAN.

Witnesses:

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