

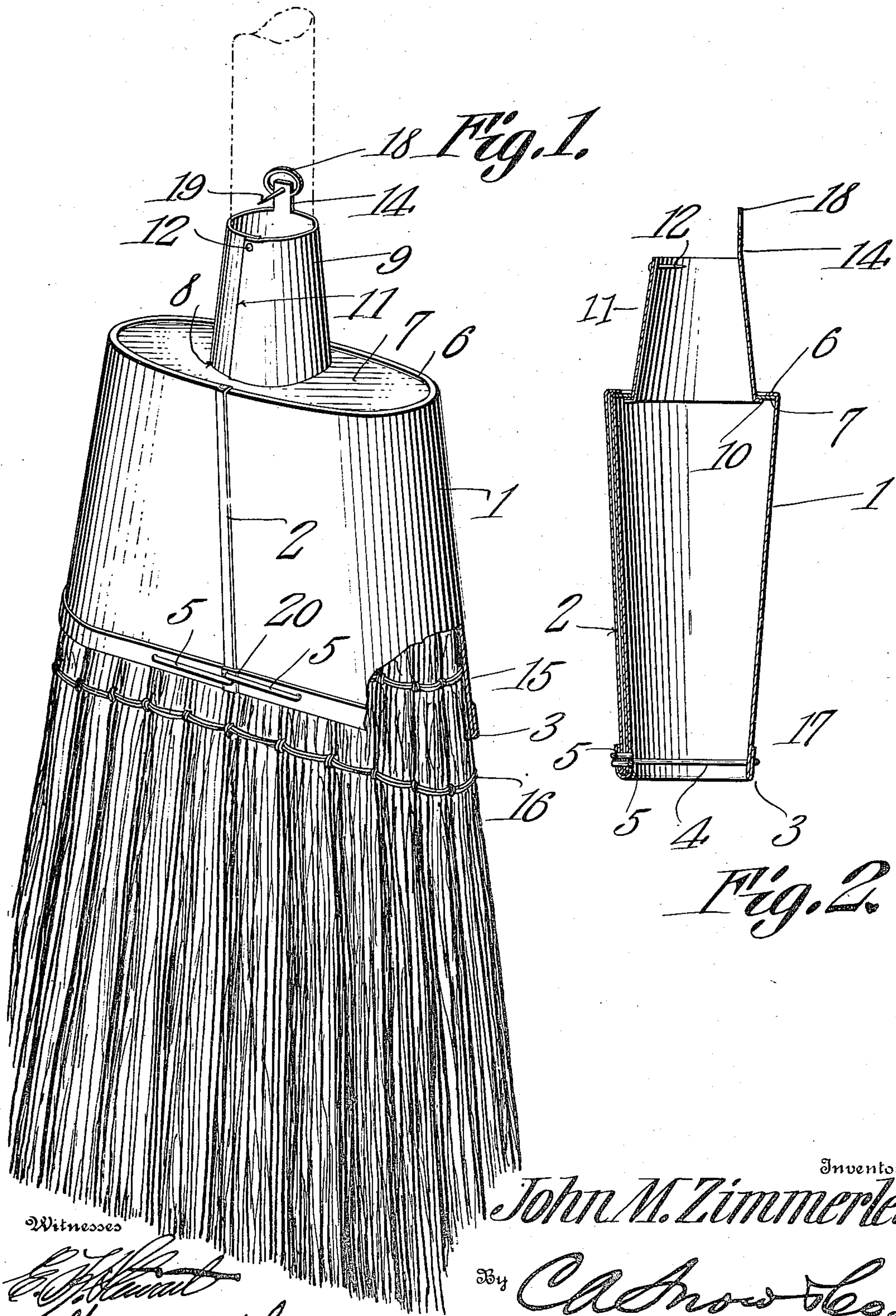
J. M. ZIMMERLEE.

BROOM.

APPLICATION FILED OCT. 4, 1909.

962,188.

Patented June 21, 1910.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN M. ZIMMERLEE, OF BETHANY, MISSOURI.

BROOM.

962,188.

Specification of Letters Patent. Patented June 21, 1910.

Application filed October 4, 1909. Serial No. 520,800.

*To all whom it may concern:*

Be it known that I, JOHN M. ZIMMERLEE, a citizen of the United States, residing at Bethany, in the county of Harrison and State of Missouri, have invented a new and useful Broom, of which the following is a specification.

It is the object of this invention to provide a protector of novel and improved form, adapted to be mounted upon a broom, the protector being so constructed that it will not break the fibers of the broom, and being so constructed that it may be adjusted to engage broom handles of different diameters, the protector including a suspension device of novel and improved form.

Another object of the invention is to provide a broom protector, the parts of which are assembled in a novel and improved manner, the protector being so constructed as to receive securely, the ends of a transverse retaining element, whereby the protector may be drawn closely upon the head of the broom.

Other objects of the invention will be made manifest as the description progresses, and it is to be understood, that, since the drawings show but one form of the invention, changes, properly falling within the scope of what is claimed, may be made, without departing from the spirit of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings, wherein;—

Figure 1 is a perspective, parts being broken away; and Fig. 2 is a longitudinal section.

It is obvious, owing to the nature of the invention, that the same may be disposed in any position, but, in order to define and locate the component parts, it will be supposed that the broom and protector which is mounted thereon, are disposed in the position which they will ordinarily occupy during the sweeping operation, and the terms "upper", "lower", and the like, will be selected accordingly, in the following description and in the statement of what is claimed.

The protector comprises, as a fundamental element, a body 1, which may be described, in broad terms, as taking the form of the frustum of an elliptical cone. The body 1 is fashioned from a single piece of metal, hav-

ing its ends overlapped, as denoted by the numeral 2, longitudinally of the body, and secured together, either by soldering, or by disposing the ends in the form of an inter-locked joint.

The lower edge of the body 1 is bent upon itself, upwardly, to form a rounded bead 3, adapted to prevent the protector from breaking the fibers of the broom, when the broom is in use. The lower edge of the body 1 which is bent to form the bead, is arranged to overlies the overlapped ends 2, adjacent the lower edge of the body. By this construction, a space of limited area is provided, consisting of a plurality of layers of metal, formed by the portions 2 and by the bead 3. This reinforced area 20 is provided with two openings, alined longitudinally of the body, and adapted to receive the ends of a staple 4 extending through the broom, the intermediate portion 17 of which staple lies upon the opposite side of the body near the lower edge thereof. The form given to the staple 4, and the manner of mounting the staple in the body, is considered of importance, and constitutes one of the features of the invention.

The upper edge of the body 1 is bent inwardly, to form a flange 6, beneath which is located a cap 7, engaged by the flange 6, and, if desired, secured thereto by soldering.

The cap 7 is provided with an opening 8, adapted to receive the neck 9, the lower edge of which is bent outwardly to form a flange 10, engageable by the cap 7, the cap 7 and the neck being soldered together, if desired, or otherwise secured.

The neck 9 is fashioned from a single piece of resilient metal, bent into conical form, and having its edges overlapped, as denoted by the numeral 11, and arranged to slide upon each other, so that the neck may be compressed or extended, to receive broom handles of different dimensions.

Rising from the upper edge of the neck 9 is an integrally formed lip 14, there being a ring 18, formed integrally with the lip, the periphery of the ring 18 being intersected by the lip 14, the portion of the lip located within the contour of the ring, being provided with an opening, adapted to receive a tack 19, or the like, whereby the protector may be supported upon the broom.

In mounting the protector upon the broom, the handle of the broom is slipped through the neck 9 and the body 1 is made



to engage the body or head of the broom. A tack 12, or the like is then driven through the overlapped portions 11 of the neck, the neck having first been adjusted to the handle 5 of the broom. The staple 4 is then mounted in place, and the ends 5 thereof overbent, drawing the body of the protector closely about the head of the broom. The retaining member is then mounted in the opening 10 19 and driven to place, the ring 18 being flattened out upon the handle of the broom in the process, as hereinbefore described.

While the device of my invention may be obviously employed upon brooms of any 15 construction, I have, in the present instance, mounted it upon a broom provided with two rows of stitching, the rows being indicated by the numerals 15 and 16. The protector should be of sufficient length so that the 20 body end thereof will inclose and retain the upper row 15, leaving the lower row 16 exposed below the lower edge of the body 1. By this construction, a portion of the stitching is inclosed within the body 1 and pro-

tected against being broken away, the row 25 16 of the stitching being left exposed, so that the brooms may readily be bundled together in dozen lots.

Having thus described the invention, what is claimed is;—

A broom protector comprising a body and a tubular neck rising therefrom, the neck, at its upper edge, being provided with an integrally formed, upstanding lip, and with a flexible ring formed integrally with the lip, 35 the periphery of the ring being intersected by the lip, and the lip being apertured within the periphery of the ring, to receive a nail, the ring being arranged to be bent into alinement with the neck and the lip. 40

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN M. ZIMMERLEE.

Witnesses:

W. S. WALKER,

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