

(No Model.)

M. C. HOWARD.

WHISK BROOM.

No. 391,796.

Patented Oct. 30, 1888.

FIG. 1

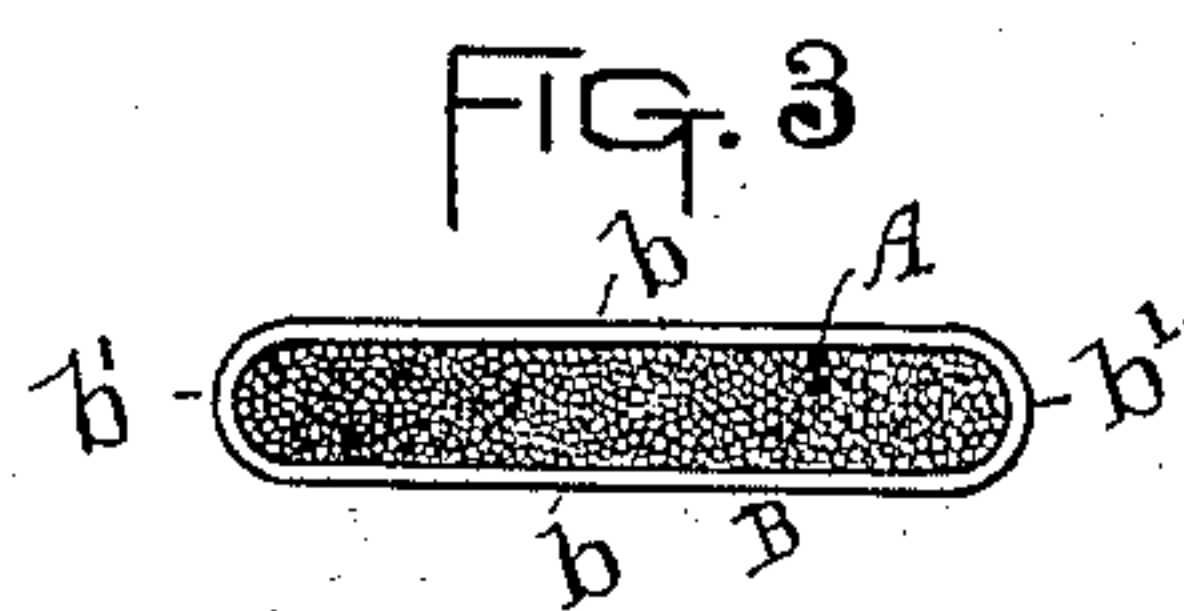
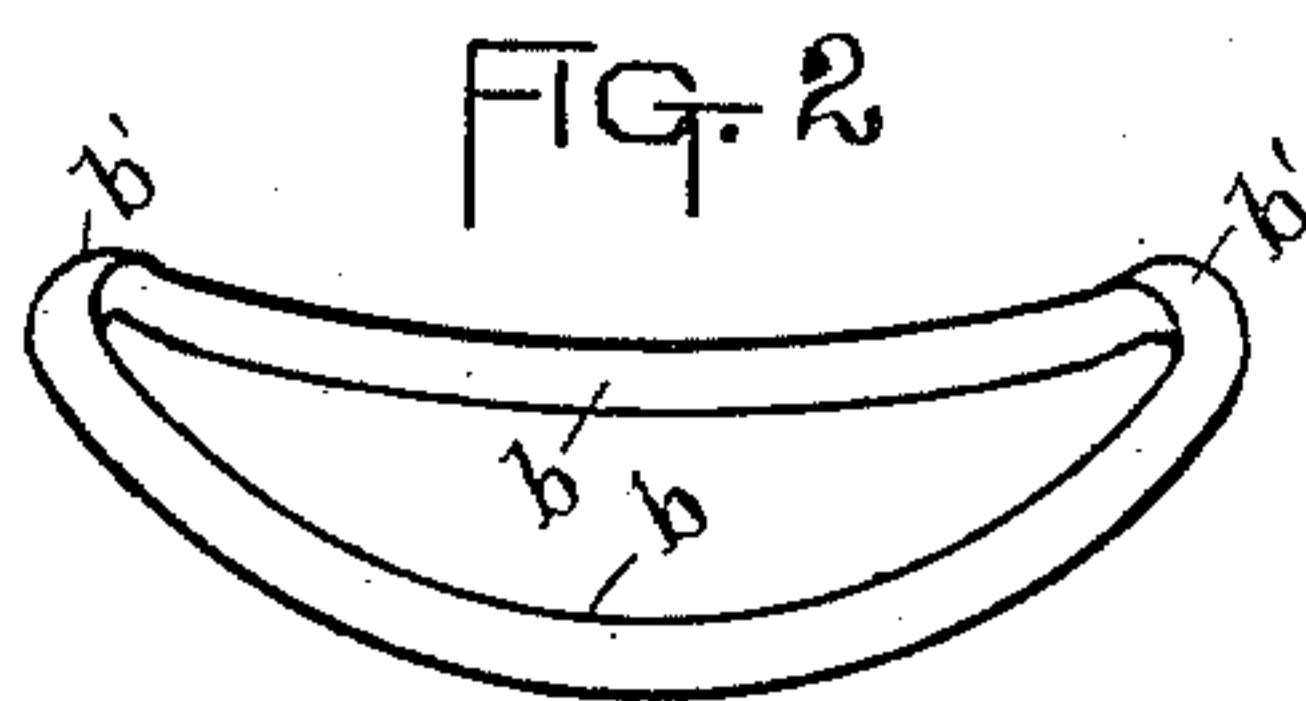
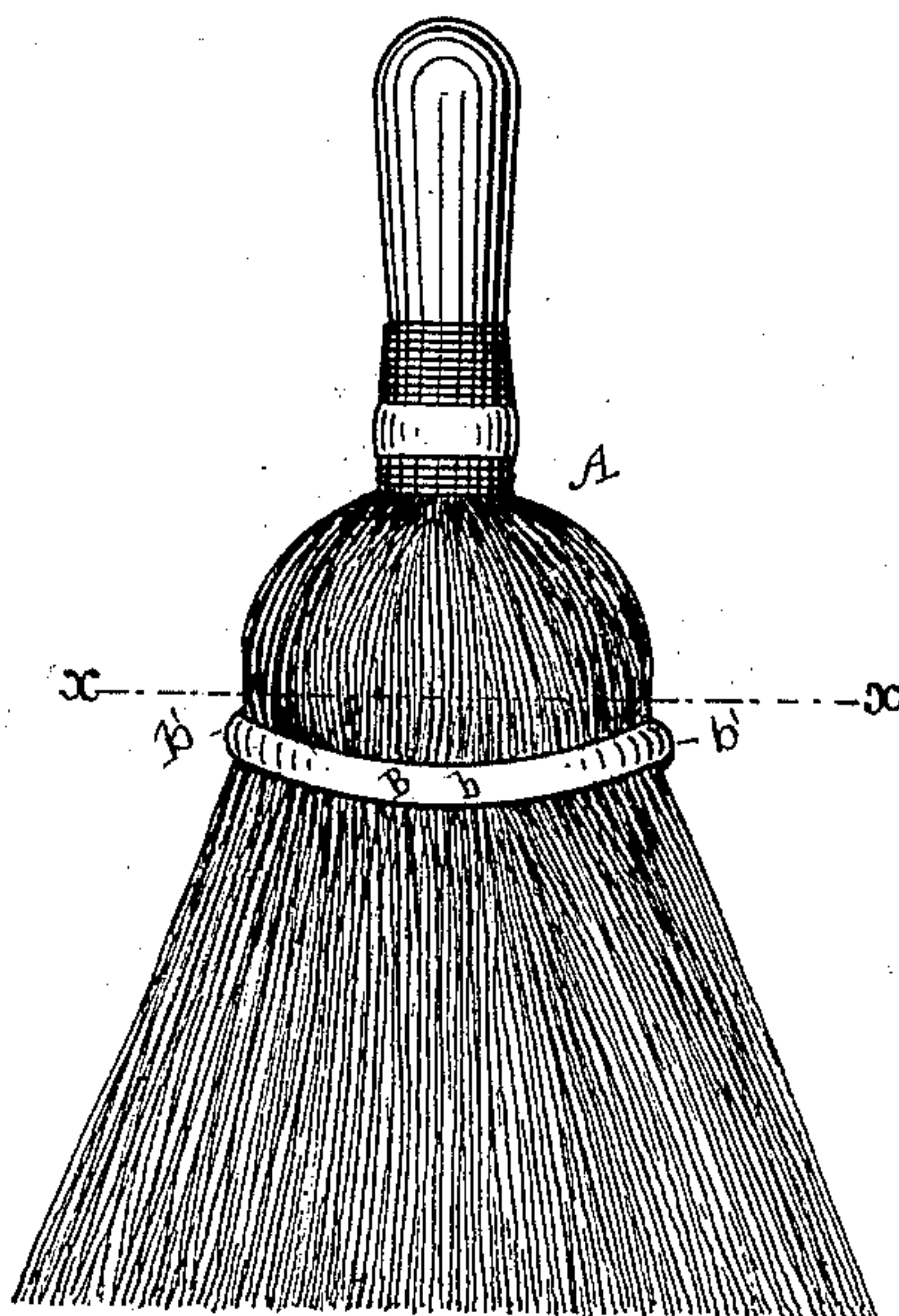


FIG. 4



WITNESSES:  
*C. B. Currier*  
*Gordon Moodie*

INVENTOR.  
*Mitchell C. Howard*  
By his Attorney  
*C. C. Shepherd*

# UNITED STATES PATENT OFFICE.

MITCHELL C. HOWARD, OF COLUMBUS, OHIO.

## WHISK-BROOM.

SPECIFICATION forming part of Letters Patent No. 391,796, dated October 30, 1888.

Application filed February 6, 1888. Serial No. 263,150. (No model.)

*To all whom it may concern:*

Be it known that I, MITCHELL C. HOWARD, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Whisk-Brooms, of which the following is a specification.

My invention has particular relation to the improvement of the binder of whisk-brooms; and the objects of my invention are to provide whisk-brooms with a durable metallic binder so constructed and applied as to bind the fiber of a broom securely and compactly together; to so construct said binder as to prevent by its contact therewith breaking of the fiber; to prevent any tendency of the binder to slip from its original position, which might be caused by shrinkage of the fiber, and to form said binder in a neat, simple, and inexpensive manner. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a whisk-broom having my improved binder thereon. Fig. 2 is a view in perspective of said binder before application to the broom. Fig. 3 is a transverse section taken on the line  $xx$  of Fig. 1, and Fig. 4 is a transverse section of one of the sides of the binder-band.

Similar letters refer to similar parts throughout the several views.

A represents a whisk-broom of the usual form, and B represents my improved binder, consisting of a continuous band, preferably formed of annealed metal, and of sufficient rigidity to retain its form after the sides are pressed toward each other against the broom fiber, and of the form set forth in the claim, whereby the bridle is clamped and securely held in place without the aid of any auxiliary fastenings. The general form of this binder-band B is nearly oval, as shown in Fig. 2 of the drawings, at the time it is placed upon the broom fiber, thus forming a greater space between said halves at the central portion of their lengths than between points at or adjacent to the ends of the oval. For reasons hereinafter mentioned the ends  $b'$  of said band are bent slightly upward, as shown.

As shown in Fig. 4 of the drawings, the band B has its inner and outer surfaces rounded or beveled to form an oval outline when shown in cross-section.

The broom being in readiness for the at-

tachment of the binder, the latter may be slipped over the head of the former, the enlarged space between the central portions of the band admitting of the handle and head passing therethrough. When the binder has been thus lowered to the desired position on the broom, the central portions,  $b$ , of the binder may be pressed toward each other and firmly against the fiber of the broom by any desirable means. This pressure will operate to bring the curved portions  $b$  into parallel lines, as shown in Fig. 3, and at the same time cause the fiber to spread until the space within the binder is uniformly filled.

It will be seen that the partially flattened and rounded form of the band coupled with its upwardly-bent ends will tend to bring all points of the binder within a common radius of the body of the broom, and thus insure compactness and solidity, while the curved or oval construction of the ends of the binder insures the adaptation of annealed metal without danger of breaking.

It will be seen that the beveled or rounded surfaces of the band on the inner side will prevent the cutting of the fiber by contact therewith, and that no sharp edges are presented on the outside which may scratch or mar articles of furniture with which the broom may come into contact. It will also be observed that the device herein described is simple of construction, neat in appearance, and extremely durable.

I am aware that metallic binders formed in two or more parts have been used on brooms; but said binders differ from mine in points of construction and shape.

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

A binder for brooms formed of a continuous metallic band, B, having rounded or beveled surfaces, outwardly-bent central portions,  $b$ , and upwardly-bent ends  $b'$ , said band being adapted to be secured to a broom and made of material sufficiently rigid to retain its form after the sides are pressed toward each other against the broom fiber, substantially as and for the purpose specified.

MITCHELL C. HOWARD.

Witnesses:

A. L. SHRIDE,  
C. C. SHEPHERD.