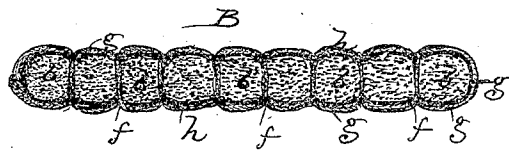
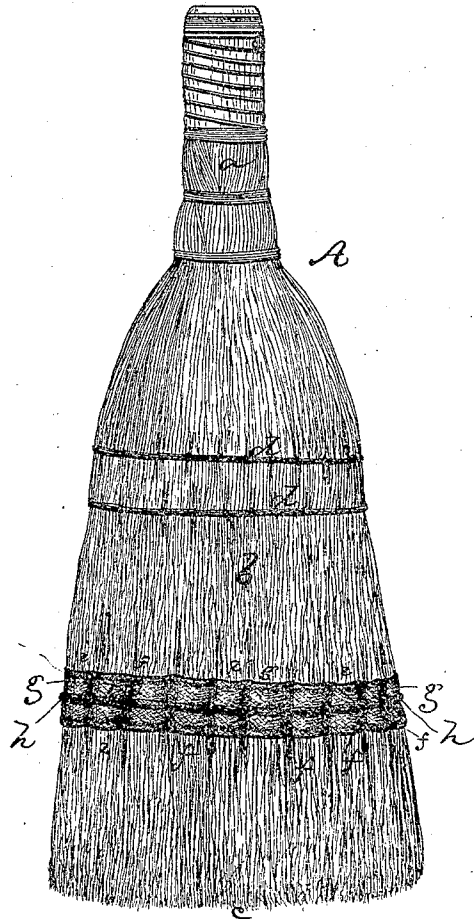


F. G. HARDING.

Improvement in Broom-Bands.

No. 131,270.

Patented Sep. 10, 1872.



Witnesses.  
P. B. Hilder  
L. H. Catmer.

Inventor.  
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by his attys.  
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# UNITED STATES PATENT OFFICE.

FRANCIS G. HARDING, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN BROOM-BANDS.

Specification forming part of Letters Patent No. 131,270, dated September 10, 1872.

*To all whom it may concern:*

Be it known that I, FRANCIS G. HARDING, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Brooms; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates to an improvement in brooms, or a device to be applied to brooms to retain the shape of the broom and keep the whisk from undue wear. In my invention I use a flexible band or strip that encompasses the whisk or broom tufts between the permanent fastenings and the free ends of the tufts, which band is made or provided with a series of regularly-spaced eyelets. Through these eyelets passes a lacing cord or wire, which extends through the broom from side to side so as to connect the eyelets on opposite sides of the broom, and so as to form a continuous length of cord all around the broom, and extending through the opposite eyelets and broom at regular intervals, thereby forming a series of bound tufts so connected and so held by the band and cord as to retain the whisk firmly together and in place, while permitting the broom to yield freely, as may be required in using it. It is in this eyeleted band or strap thus applied to a broom that my invention consists.

The drawing represents a broom having the protecting eyelet-band applied thereto. A shows the broom in elevation. B is a section through the eyelets.

*a* denotes the handle; *b*, the whisk or broom stuff, the ends *c* of which constitute the brushing-surface: The tufts are united at or to form the handle, and, being flattened, are permanently secured in position by the cords *d* in

the usual manner. This leaves the bristles free from the lines *d* to the line of points *c*, and the flexibility of the broom is such that when thus wholly unprotected the whisk breaks or becomes so misplaced as to injure the broom. To remedy this I apply the band *g*. This band is of sufficient length to extend entirely around the broom, as seen at B, and has set into it a series of eyelets, *f*. Beginning at one edge of the broom I pass through the two nearest opposite eyelets the two ends of a suitable cord or wire, *h*, one end through one eyelet at one side of the broom, through the broom and the opposite eyelet, and the other end through the same eyelets, but in the opposite direction. I then pass the ends to the next eyelets, and through them and the broom, and so on through all the eyelets, drawing the cord firmly, and uniting its ends, the drawing of the opposite eyelets together by the cords forming the whisk into the several tufts or bunches *i*.

In use the band thus applied enables the ends *c* to yield readily to any extent required in brushing, but returns them to position after the strain upon them is released. The band may be adjusted as to position, and is readily applied and removed. It is inexpensive and adds very materially to the wear of a broom. The band is shown as applied to a clothes-broom, but is equally applicable to and is more particularly intended for common floor-brooms.

I claim—

A broom having applied to it, by means of the eyelets *f* and a wire or cord, *h*, the encompassing-band *g*, substantially as shown and described.

F. G. HARDING.

Witnesses:

FRANCIS GOULD,  
S. B. KIDDER.