

No. 696,375.

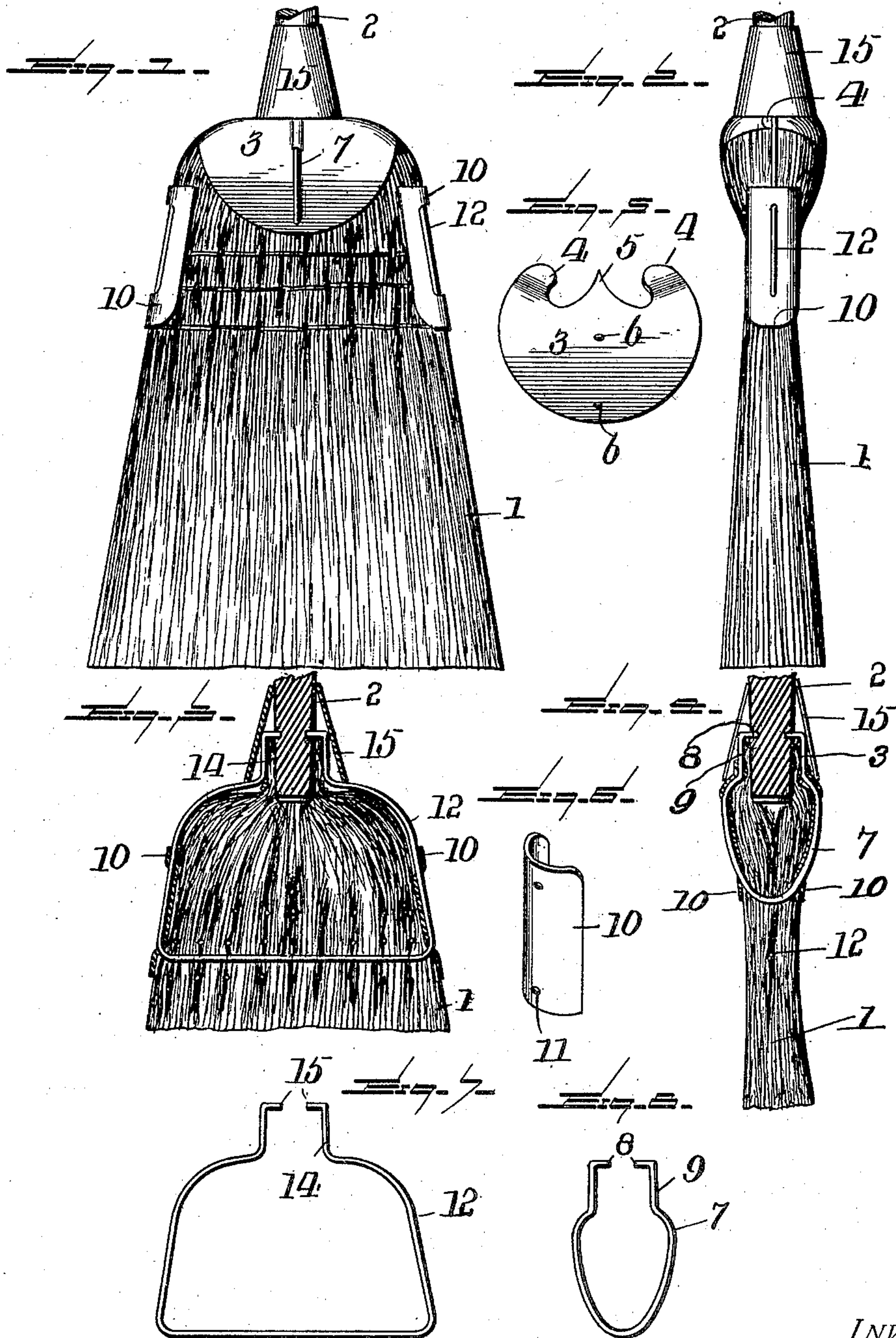
Patented Mar. 25, 1902.

A. P. LONGDON.

BROOM BRIDLE.

(Application filed Sept. 20, 1901.)

(No Model.)



WITNESSES:

*W. F. Doyle.*  
*R. A. Mues.*

INVENTOR

*Alexander Powers Longdon*

BY

*H. E. Smith* Attorneys.



# UNITED STATES PATENT OFFICE.

ALEXANDER POWERS LONGDON, OF DEMOREST, GEORGIA.

## BROOM-BRIDLE.

SPECIFICATION forming part of Letters Patent No. 696,375, dated March 25, 1902

Application filed September 20, 1901. Serial No. 75,742. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER POWERS LONGDON, a citizen of the United States of America, residing at Demorest, in the county of Habersham and State of Georgia, have invented certain new and useful Improvements in Broom-Bridles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in brooms, and more particularly to improvements in broom-bridles, the object of the invention being to construct a broom especially adapted for use in factories and other places where brooms are incident to damage from contact with machinery and the like.

My invention, therefore, broadly aims to provide means for protecting the broom-head from injury and secondarily aims to more securely bind the broom-head to the handle.

Briefly described, the invention consists in providing the broom-head with two face-bridles for protecting the face of the broom from being cut and broken when in service, these bridles being held in position by means of a wire passing through the broom from face to face, with the ends driven into the handle above the neck of the broom and holding the latter securely to the handle. The edges of the broom are also provided with two bridles that protect the seams and shoulders of the broom, these edge-bridles being held in position by a wire running through the broom from edge to edge and extending over the shoulder and neck, with the ends driven into the broom-handle. This latter wire serves to stiffen the broom and also makes it impossible for the broom-head to become detached from the handle. The ends of these two binding-wires are securely held in the handle by means of a ferrule fitting down tightly over them, covering the otherwise exposed wire on the finish of the broom and protecting it from being cut or pulled loose. All of these details of construction, together with others entering into my invention, will be hereinafter more specifically described and then particularly pointed out in the claims, and in describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and

wherein like numerals of reference will be employed for designating like parts throughout the several views, in which—

Figure 1 is a face view of a broom complete constructed in accordance with my invention with the handle broken away. Fig. 2 is an edge view of the same. Fig. 3 is a central vertical sectional view of a part of the broom-head. Fig. 4 is a central transverse vertical sectional view thereof. Fig. 5 is a detail perspective view of one of the face-bridles. Fig. 6 is a like view of one of the edge-bridles. Fig. 7 is a detail plan view of the binding-wire for securing the edge-bridles to the broom-head, and Fig. 8 is a like view of the binding-wire for securing the face-bridles to the broom-head.

In the accompanying drawings, 1 indicates the broom-head, which is bound by wires in the usual manner to the broom-handle 2 and is stitched or sewed in the usual manner. By reason of this stitching or sewing, which binds the fiber of which the broom-head is constructed closely together at the point of stitching, the broom-head is of greater diameter just above the stitching, and thus projects sufficiently so as to engage and be battered by an object around which the sweeper may be using the broom, thus causing the fiber to be broken at this point and destroying the effectiveness of the broom as well as in a short time entirely destroying its usefulness. To protect the broom from such injury, I employ two face shields or bridles 3, somewhat segmental in form and cut away on their upper edge to form two lugs or ears 4 and a central lug or ear 5. These two face shields or bridles are placed one on each face of the broom at the upper end of the head, and the lugs or ears 4 of each shield are overlapped upon each other, while the lug or ear 5 projects upwardly along that part of the fiber that is bound to the broom-handle. These face shields or bridles are provided with apertures 6, and they are securely bound to the broom-head by means of a binding-wire 7, which is passed through both apertures 6 in one face shield or bridle, through the broom transversely thereof, then through both apertures in the other face shield or bridle, and has its ends 8 bent inwardly toward each other and driven securely into the broom-



handle 2. The neck portion 9 of this binding-wire 7 lies in engagement with the fibers of the broom-head where the latter are bound to the broom-handle.

5 In order to protect the edges of the fiber and also the sewing where it passes around these edges, I employ two edge shields or bridles, one for each edge of the broom. These shields or bridles 10 are substantially U shape  
10 in cross-section and are each provided with two apertures 11.

The shields or bridles 10 are bound to the broom-head by means of a binding-wire 12, which is passed through both apertures 11 in  
15 one of the shields 10, through the broom horizontally thereof, and then through both apertures in the opposite shield 10, then drawn together to form a neck 14, which is bound to the handle 2, and the ends 15 thereof turned  
20 inwardly toward each other and driven into the broom-handle in the same manner as the ends 8 of the other binding-wire. This binding-wire 12, passing horizontally through the center of the broom-head, serves to a considerable extent to stiffen the broom-head, and that  
25 portion of the binding-wire which lies over the shoulders of the broom-head above the shields 10 serves to protect these shoulders from injury. The fastening for the fibers of  
30 the broom-head and the parts of the binding-wires above the broom-head are inclosed by a ferrule 15, which may be made so as to tightly bind the binding-wires to the broom-handle, and besides serving to hold the same  
35 securely also serves to protect the same and prevent their being pulled loose or the loosening of the wires which bind the broom-head fiber to the handle.

It will be observed that with this construction all parts of the broom most liable to injury are fully protected, and while I have shown and described a practical form of the invention, yet it will be observed that various slight changes could be made without departing from the general spirit of my invention.  
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Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a broom, the combination with a broom-head, of two face-shields, one on each  
50 face of the broom-head, each shield having overlapping lugs or ears, and a binding-wire passed transversely through the broom-head, through each shield twice, and has its ends driven into the broom-handle above the  
55 broom-head, substantially as described.

2. In a broom, the combination with the broom-head, of two face-shields each having overlapping ears, a binding-wire passed transversely through the broom and threaded  
60 twice through each face-shield with its ends driven into the broom-handle above the broom-head, a pair of edge-shields, one on each edge of the broom-head, and a binding-wire passed twice through each edge-shield  
65 and entirely through the broom-head horizontally thereof, with its ends driven into the broom-handle above the broom-head, substantially as described.

3. In a broom, the combination with the  
70 broom-head, of two edge-shields one on each edge of the broom, and a binding-wire threaded twice through each face-shield and extending entirely through the broom horizontally thereof with its ends driven into the  
75 broom-handle above the broom-head, substantially as described.

4. In a broom, the combination with the broom-head, of a face-shield on each face thereof, an edge-shield on each edge thereof,  
80 of, separate binding-wires passing entirely through the broom-head for said shields with their ends driven into the broom-handle above the broom-head, and a ferrule affixed to the broom-handle and inclosing the ends of the  
85 binding-wires, substantially as described.

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

ALEXANDER POWERS LONGDON.

Witnesses:

H. R. STAIGHT,  
W. H. BYARS.