

No. 751,343.

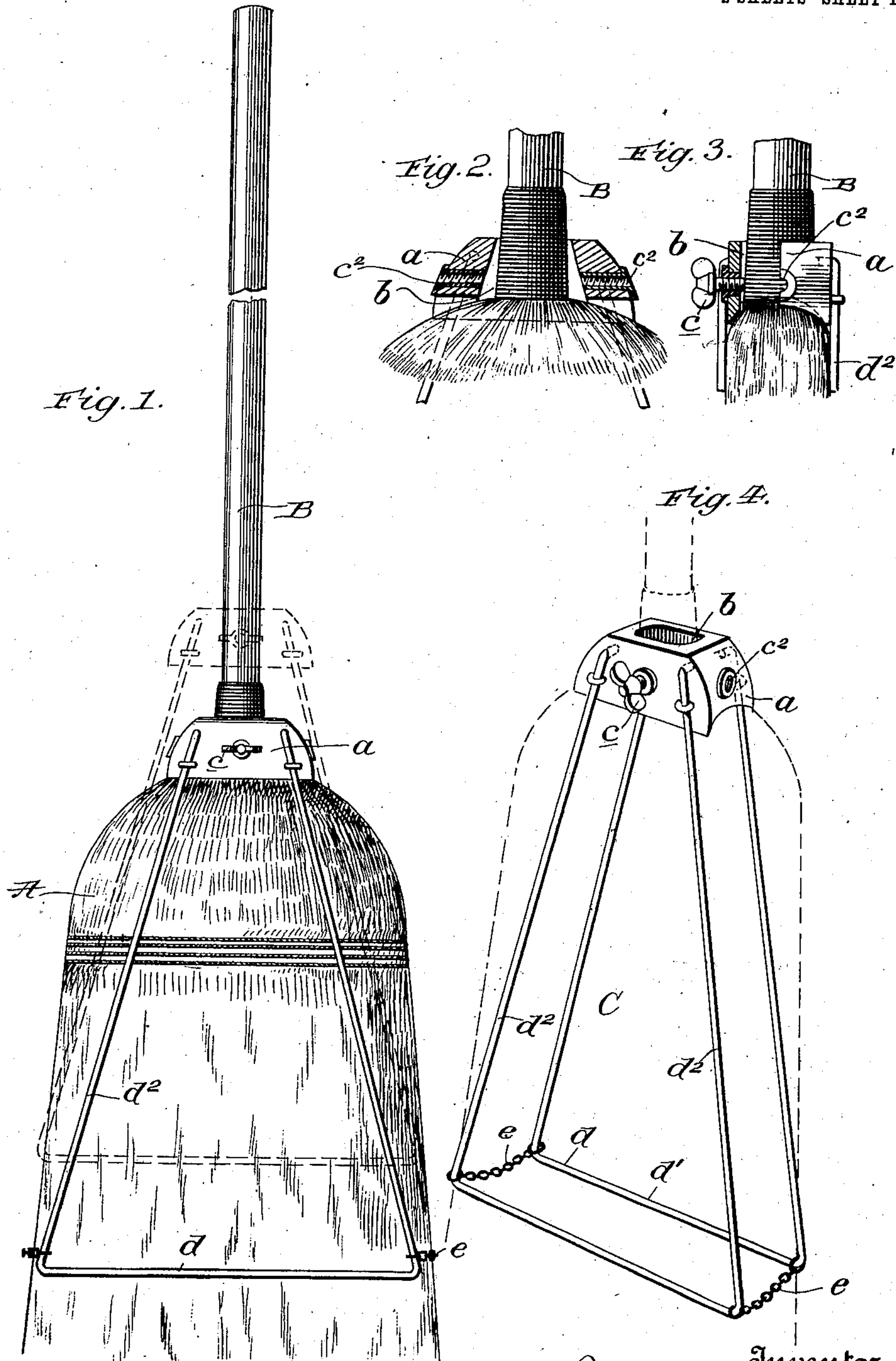
PATENTED FEB. 2, 1904.

J. B. RYAN.  
BROOM BRIDLE.

APPLICATION FILED JUNE 22, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
*E. J. Gauder*  
*N. C. Healy*

Inventor  
*James B. Ryan.*  
by *James J. Shucky* Attorney

No. 751,343.

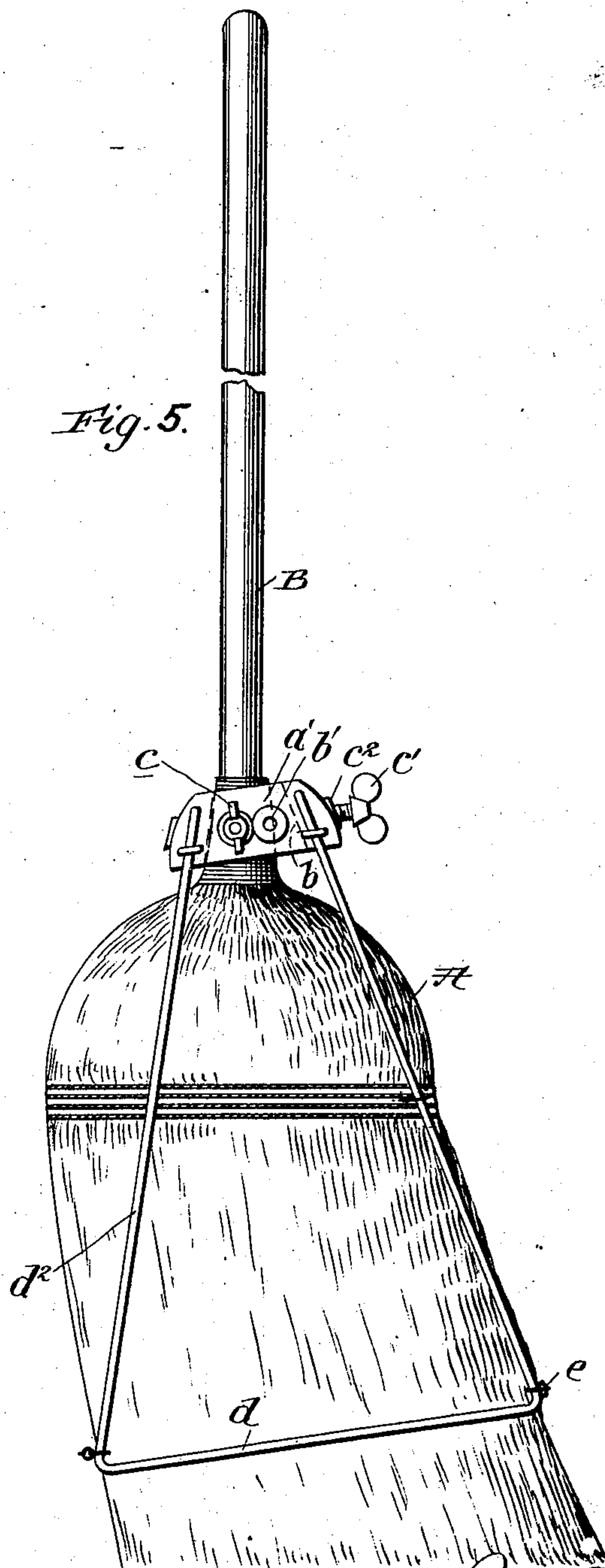
PATENTED FEB. 2, 1904.

J. B. RYAN.  
BROOM BRIDLE.

APPLICATION FILED JUNE 22, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses  
*E. A. Raeder*  
*T. E. Turpin*

By

*J. B. Ryan.*  
*James J. Shiehy*

Inventor

Attorney



# UNITED STATES PATENT OFFICE.

JAMES B. RYAN, OF KANSAS CITY, MISSOURI.

## BROOM-BRIDLE.

SPECIFICATION forming part of Letters Patent No. 751,343, dated February 2, 1904.

Application filed June 22, 1903. Serial No. 162,644. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES B. RYAN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented new and useful Improvements in Broom-Bridles, of which the following is a specification.

My invention pertains to broom attachments; and it has for its object to provide a broom-bridle which while simple, inexpensive, and light in construction and adapted to be readily applied to and adjusted on ordinary brooms is highly efficient in holding a broom-head in shape and against uneven wear and is therefore calculated to materially prolong the usefulness of the head and enable the same to do good work easily and quickly until entirely worn out.

With the foregoing in mind the invention will be fully understood from the following description and claims, when taken in connection with the accompanying drawings, in which—

Figure 1 is a front elevation of a broom equipped with the bridle constituting the preferred embodiment of my invention, the bridle being shown by full lines in its lowermost position and by dotted lines in a raised position. Fig. 2 is an enlarged detail view illustrating the block of the bridle in longitudinal section. Fig. 3 is an enlarged detail view illustrating the block partly in end elevation and partly in transverse section. Fig. 4 is a perspective view illustrating the protector in position on a broom shown by dotted lines. Fig. 5 is a front elevation of a modification hereinafter referred to.

Referring by letter to said drawings, and more particularly to Figs. 1, 2, 3, and 4 thereof, A is the head of an ordinary household broom, B the handle thereof, and C my improved bridle. In the present and preferred embodiment of my invention the bridle comprises a block *a*, of wood or other suitable material, having a vertical aperture *b*, designed to receive a broom-handle, and also having a threaded aperture *b* in one of its sides and threaded apertures *c* in its ends, a screw *c*, designed to bear in the aperture *b'* and having for its purpose to adjustably fix

the block on the handle in any desired position, members *d*, preferably of heavy wire, connected to and depending from the block and adapted to rest at opposite sides or edges of a broom-head, and connections *e*, preferably chains, between the lower portions of the members *d* for holding the said members in against the sides of the broom-head and protecting the edges by preventing their expansion and breakage laterally. The members *d* are preferably loop-shaped and have horizontal bars *d'* of about the proportional length illustrated and upwardly-converging side bars *d''*. I desire it understood, however, the said members *d* may be of any other suitable shape or material without involving a departure from the scope of my invention.

In practice when my improved bridle is applied to a new broom it is arranged with its block *a* on the broom-handle immediately or slightly above the head and its members *d* at opposite sides of the head and is adjustably fixed in position by turning the screw *c* in against the handle. With the bridle secured on the broom as stated it will be observed that the members *d* will reinforce the head A and effectually prevent spreading, twisting, or uneven wear thereof. It will also be observed that while the members *d* are resilient and free to give incident to the use of the broom there is no liability of the bridle becoming loose and casually moving on the broom, as the block *a* and the adjustable screw hold it firmly. It will be noticed, however, that as the broom wears or when it is required for scrubbing or heavy sweeping the bridle may be easily and readily raised or lowered or adjusted sidewise and secured in a new position and that this adjustment may be repeated until the broom is entirely worn out; also, that the bridle may be used on broom after broom practically for years.

The aperture *b* in the block *a* of my novel bridle is preferably oblong and tapered or gradually reduced in length toward the top of the block *a*, this in order that when a broom-head is weak or too flexible at its lower end the bridle may be adjustably fixed in an inclined position, so as to render said end of the broom-head stiff. When it is thus de-



sired to stiffen the broom-head, the bridle is placed in an inclined position on the head, and the screw *c* is set against the broom-handle to fix the bridle in such position. If the  
 5 screw *c* is found insufficient for such purpose, an additional screw *c'* is placed in one of the end apertures *c''* of the block and set against the broom-handle after the manner shown in Fig. 5.

10 The construction shown in Fig. 5 differs from that shown in Figs. 1 to 4 in that the block *a'* has two apertures *b'* in its side at opposite sides of the vertical center. With this construction when the bridle is placed in an  
 15 inclined position the screw *c* is placed in that aperture *b'* which is in line with the longitudinal center of the broom-handle, this in order to enable it to better engage the broom-handle.

Notwithstanding its advantages as pointed  
 20 out in the foregoing it will be observed that my improved bridle is extremely simple and inexpensive and at the same time so light as not to add materially to the weight of the broom to which it is applied.

25 I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understand-  
 30 ing of the same. I do not desire, however, to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the  
 35 scope of my invention as claimed.

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

1. A broom-bridle comprising a block hav-

ing a vertically-disposed, oblong aperture, 40 tapered or gradually reduced in length upwardly, and adapted to receive a broom-handle, a screw bearing in the wall of the aperture in the block, and adapted to engage the  
 45 handle, and means fixed to and movable with the block, for receiving and reinforcing a broom-head.

2. A broom-bridle comprising a block having a vertically-disposed, oblong aperture, tapered or gradually reduced in length up- 50 wardly, and adapted to receive a broom-handle, a screw bearing in one end wall of the aperture in the block, and adapted to engage the handle and bind it against one of the inclined walls of the aperture in the block, and means 55 fixed to and movable with the block, for receiving and reinforcing a broom-head.

3. A broom-bridle comprising a block having a vertically-disposed, oblong aperture, tapered or gradually reduced in length up- 60 wardly, and adapted to receive a broom-handle, screws bearing in one side wall and one end wall, respectively, of the aperture in the block, and adapted to engage the handle when the same is placed against one of the inclined 65 walls of said aperture, loop-shaped members fixed to, depending from and movable with the block, and arranged to rest at opposite sides of a broom-head, and loose connections between the said members at the lower corners 70 thereof.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES B. RYAN.

Witnesses:

CHAS. B. ADAMS,  
 JOHN L. RILEY.