(No Model.)

C. E. BENTLEY.

BROOM HOLDER, &c.

No. 497,402. Patented May 16, 1893.

Fig. 1.

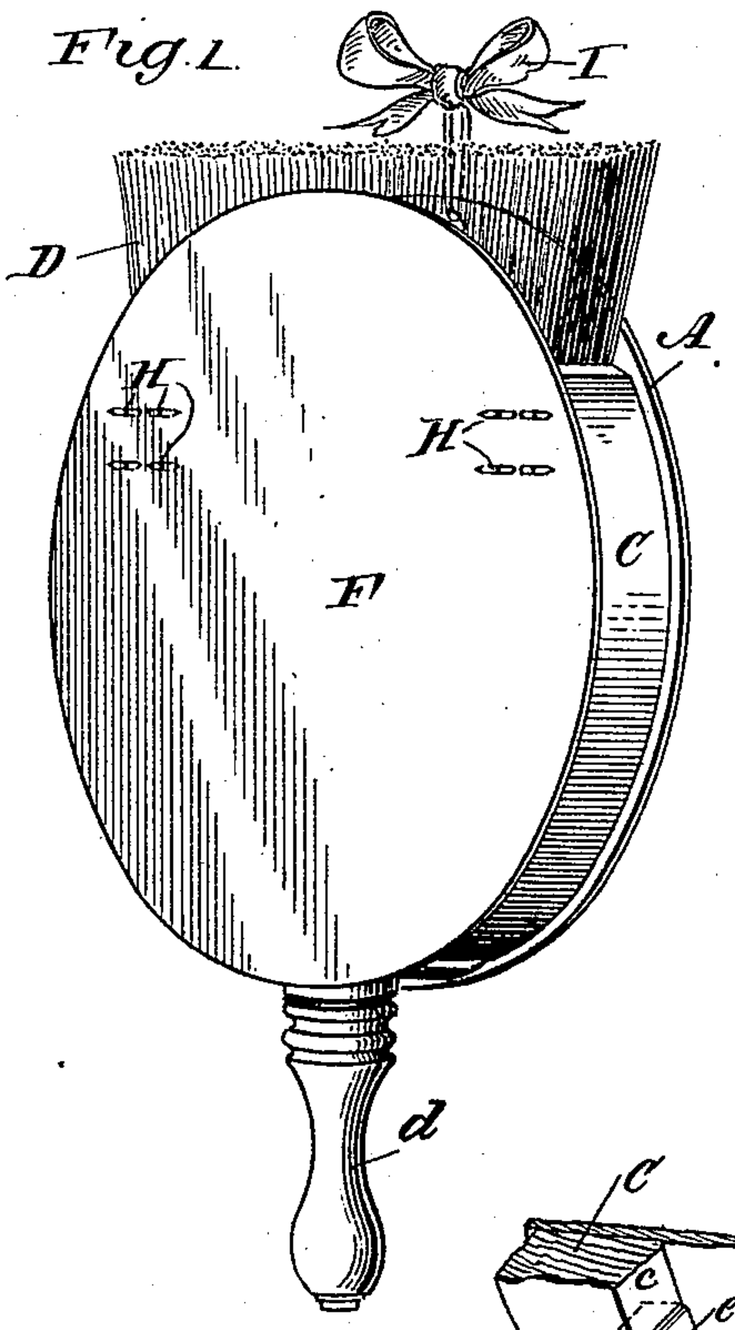


Fig. 2.

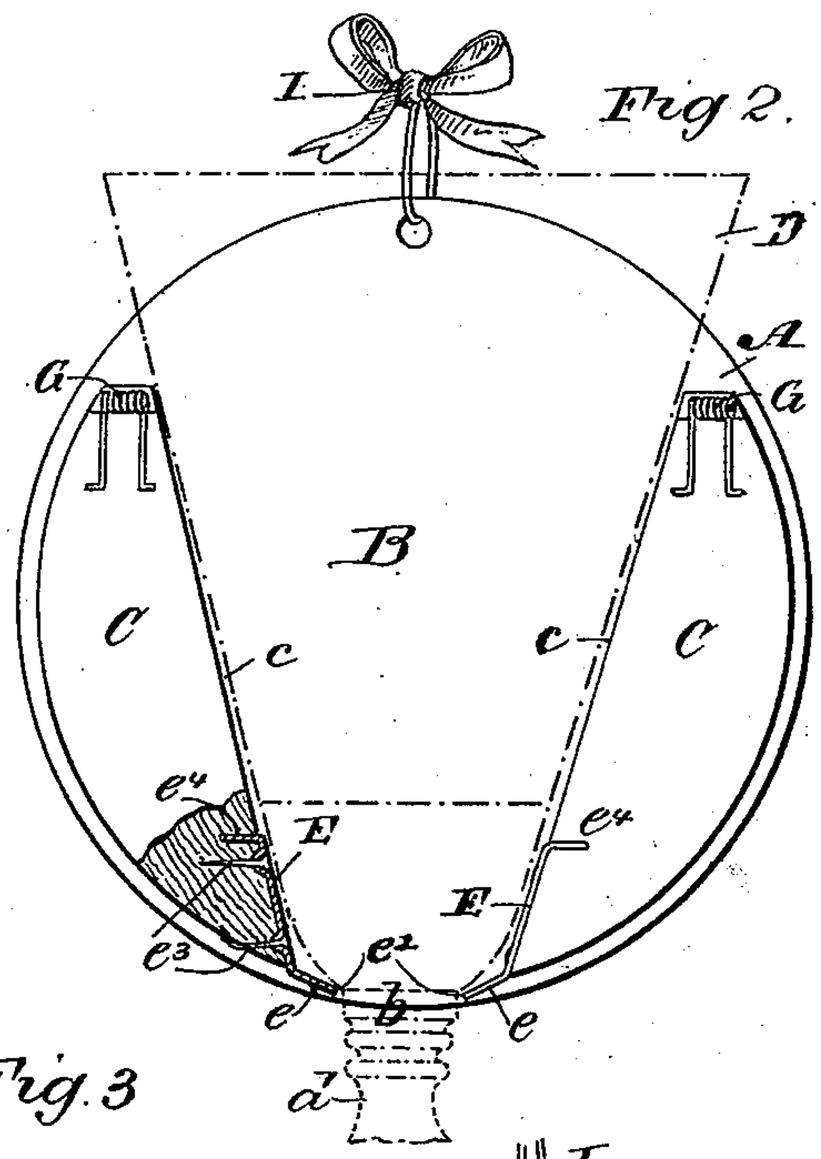


Fig. 3

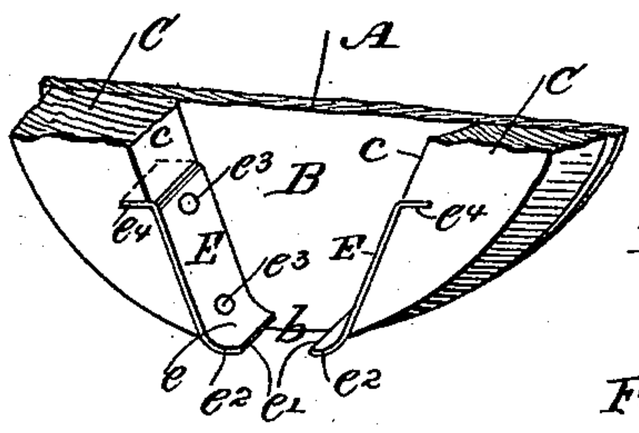


Fig. 4.

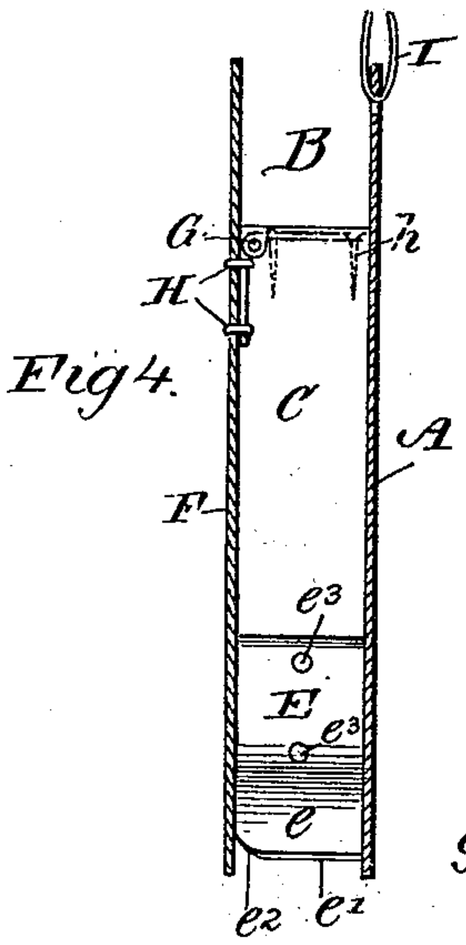


Fig. 5.

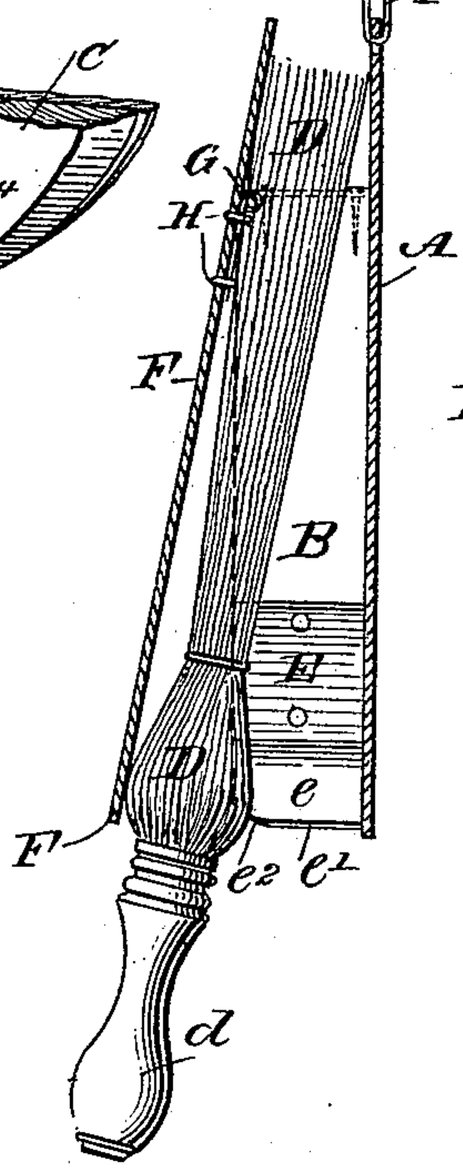
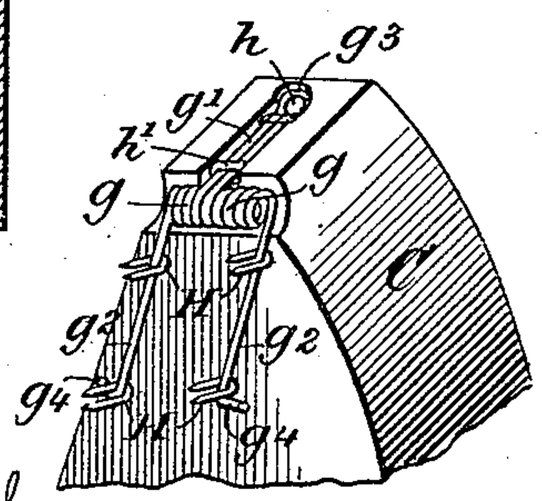


Fig. 6.



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BROOM-HOLDER, &c.

SPECIFICATION forming part of Letters Patent No. 497,402, dated May 16, 1893.

Application filed May 16, 1892. Serial No. 433,174. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BENTLEY, residing at the city of New York, county and State of New York, have invented certain new and useful Improvements in Holders for Whisk-Brooms or other Articles, of which the following is a full, clear, and exact description.

My invention relates to a holder or receptacle designed more especially to retain a whisk broom, but adapted to hold other brushes or articles which are to be removed occasionally for use.

The invention has for its object to provide a simple, inexpensive and efficient holder device from which the whisk broom or other article it is designed to contain may be removed quickly and easily only by a person understanding how to operate the device, and whereby a certain measure of security of the broom, brush or other article is attained as against those not having right to use the article, and whereby also a pleasing and useful novelty in holders of this character is provided to attract the curious and also to contribute to the tasteful decoration of the room or home.

The invention will first be described and then will be particularly defined, in claims hereinafter set forth.

The accompanying drawings, which form a part of this specification, represent the holder a specially designed, and adapted for use with an ordinary whisk broom but the holder may have any other general form adapting it to retain a variety of brushes or other articles not necessary to mention.

Figure 1, of the drawings, is a perspective view of the holder with the whisk broom therein. Fig. 2, is a partly sectional front view of the holder device with its yielding face or wall removed and the whisk broom indicated by dotted lines. Fig. 3, is a detail perspective view of the lower portions of parts shown in Fig. 2, omitting the broom. Fig. 4, is a central vertical sectional view of the closed holder. Fig. 5, is a central vertical sectional view showing the manner of easily removing the broom from the holder, and Fig. 6, is a detail perspective view, showing one of the spring hinges of the yielding face of the holder and a part of the holder body to which it is fastened.

The drawings represent the device mechanically or as an unfinished structure devoid of ornamentation such as painting, or a covering of fancy paper, silk or other fabric or materials, any or all of which may be adapted in great variety to give the finished holder a more or less artistic appearance to suit the tastes and purchasing capacity of the user.

In the whisk broom holder shown as an example of the invention, what I term the body portion comprises a back plate or disk A, of paper, wood, metal or other suitable material, at the face of which a chamber B, is formed to receive the broom, by partition pieces C, C, which in order to give increased strength and durability to the holder and to the connections of its several parts, are made preferably of light wooden blocks glued or otherwise fastened to the back of the plate. The opposing edges *c*, *c*, of these blocks C, C, may have any preferred contour or relative arrangement, but are shown straight and so inclined as to give the chamber B, a downwardly tapering form edgewise to conform to the whisk broom D, and hold its brush portion in proper shape. The form and relative arrangement of these blocks or partitions will, of course, vary with the shape of the article the holder may be specially designed to contain. Thus arranged, the chamber B, is open at the top to allow a whisk broom to be slipped downward into it handle-foremost and the broom handle *d*, then will project through the contracted lower end opening *b*, of the chamber while the broom is retained by the resting of its shoulders next the handle upon the side or edge walls of the chamber at the opening *b*, and preferably upon anti-friction plates E, E, to be hereinafter more fully described. It is to be understood that the discharge opening *b*, of the chamber B, is to be small enough to prevent direct pull through it of the broom or other article in the holder.

Probably the chief feature of my invention is the arrangement of the outer face or wall of the holder so as to yield, when peculiarly operated, to allow the broom D, or other article, to be quickly and easily withdrawn from the holder. Instead of making the yielding face or wall F, to yield bodily away from the body portion of the device, as may be done, I prefer to hinge it so that it may open back

or away from the contracted throat or discharge opening *b*, of the broom chamber. Any approved form of leaf or wire hinges may be used in connection with any suitable springs or elastic mediums which will normally close the face F, to the body of the holder. I prefer, however, to connect the face or wall F, to the holder body by means of peculiarly formed wire hinges G, G, which by their coiled portions, *g*, constitute springs which normally close the face F, and permit easy opening thereof.

Fig. 6, of the drawings, more clearly shows that each hinge G, is formed of a single piece of wire which is first bent over double at its center to form the portion *g'*, and preferably so as also to form a retaining eye or shoulder g^3, at the extremity of said part *g'*. The end parts of the wire are then shaped into the spring coils or spirals *g*, *g*, and the remaining wire forms the hinge parts g^2, g^2, which are fastened to the yielding face F, preferably by four staples H, which are clinched on the farther side of the face or wall. The parts g^2, are preferably bent over at right angles at their extremities as at g^4, to lessen liability of forcing themselves through the material of the light yielding face or wall. The eye g^3, of the hinge receives a barbed wire nail *h*, driven into the block C, and a barbed staple *h'*, is driven over the part *g'*, into the block at a point as near as may be to the spring coils *g*, of the hinge. Instead of the nail *h*, another staple may be driven astride of the part *g'*, next its eye or shoulder g^3, and as indicated in dotted lines in Fig. 6, of the drawings. In either case the entire hinge will be prevented from drawing off endwise of the part *g'*, from the nail or staple fastenings. This part, *g'*, of the hinge, with its fastenings, are preferably let flush into a cavity or groove in the block C, to allow the smooth application over them of a silk or other suitable covering or finishing fabric.

The anti-friction plates E, above named are not essential to the successful operation of the holder, but they are employed as a further improvement with a view to making the removal of the whisk broom or other article as easy as possible to those knowing how to operate the device. To this end, the plates E, which are preferably stamped or cut from smooth sheet metal, are each provided at the lower end with a bent flange portion *e*, on which and between the thin edges *e'*, *e'*, of the parts *e*, *e*, of both plates E, E, the shoulder of the whisk broom rests when the broom is in the holder. The outer parts of the plate flanges *e*, are also preferably cut away or rounded over at e^2, to facilitate outward and downward movement of the broom. These two plates E, E, are held to the opposing edges *c*, of the body blocks C, by suitable nails e^3, and the upper ends of the plates are preferably bent outward and are entered into saw kerfs or slots in the blocks as shown at e^4, in the drawings. These bent ends e^4 thus avoid sharp upper edges on the plates. Hence the plates will not catch upon and injure the broom or other article as it is being placed in or is being withdrawn from the holder. The very small surface contact which the broom or other article thus has with the smooth anti-friction plates E, E, allows outward bodily pull of the broom by a very slight draft applied to the broom handle even by one finger of the operator, while the broom itself opens the yielding face or wall F, of the holder and all without pulling the body portion of the device away from the wall or support on or against which the holder is freely hung by a cord or loop I, slipped over a nail or peg. This last named function, or the opening of the yielding face or wall F, by a light outward pull or draft on the broom handle *d*, and without drawing the body A, B, C, of the holder away from the wall, or dislodging the device from the nail or peg on which it is hung, is effected by a proper regulation of the tension of the coils *g*, of the spring hinges G, or of the yielding face springs or elastic connections should they be made separate from the hinges; in other words these springs or elastic connections must not be too strong, but only about strong enough in tension to close the yielding face or wall F, securely and with durable action.

The operation of the holder device is as follows: As the whisk broom is slipped downward handle foremost into the holder from the open top of the chamber B, it will be retained by or at the contracted bottom discharge opening *b*, of said chamber or the anti-friction plates thereat, and as shown in Figs. 1 and 2, of the drawings. If now an attempt be made to take the broom from the holder by a direct or straight downward pull upon its handle *d*, and as is ordinarily done with other holders of this class, the broom cannot be withdrawn which will surprise those not having right to use the broom and not knowing how to operate the holder to obtain it. The broom may however be very easily removed by simply drawing its handle *d*, outward while the face or wall F, yields or opens and until the broom shoulders pass outward beyond the retaining throat or opening *b*, of the chamber B, or from between the plates E, E, at said opening, whereupon the broom can easily be drawn downward from the holder, and as will be understood from Fig. 5, of the drawings. As the broom leaves the holder, the yielding face F, will be automatically closed by its spring hinges G, or equivalent spring or elastic connections, and the holder is again ready to receive and retain the broom.

I am aware that it is not new to make whisk broom holders with one or more yielding sides or walls which will expand or open and allow the broom to be withdrawn from the holder by a direct downward pull, as many different adaptations of this principle have been devised and patented, but I am not aware that holders of this general character have before

been made with a throat or discharge opening, having unyielding walls preventing such withdrawal of the broom or article by a direct downward pull and requiring that the broom or article, in order to be withdrawn, must first be moved outward toward and with a yielding wall and at an angle with the axial line of the discharge opening to carry its retaining shoulders laterally or outward beyond or clear of the unyielding walls of the discharge opening which had previously retained it.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A holder device provided with an interior chamber having walls at its throat or discharge opening which prevent withdrawal of the broom or other article by a direct downward pull, and provided also with a yielding and normally closing face or wall, substantially as described, whereby removal of the broom or article from the holder by a direct downward pull is prevented and the article may be withdrawn by moving it angularly and clear of the retaining walls of the discharge opening and operating the yielding face or wall, as herein set forth.

2. A holder device having an interior chamber open at opposing ends or parts and provided with walls at its throat or discharge opening which prevent withdrawal of the broom or article by a direct downward pull, and provided also with a yielding or normally closing face or wall, substantially as described, whereby a broom or article passed into the holder at one open end of the chamber will be retained at the opposing throat or discharge opening thereof and cannot be withdrawn downward without moving the article angularly and clear of the retaining walls of the discharge opening, and operating the yielding face or wall of the device, as herein set forth.

3. A holder device, provided with an interior chamber having walls at its throat or discharge opening which prevent withdrawal of the broom or article by a direct downward pull and provided also with a yielding and self closing face or wall, the spring or elastic connections of the yielding face or wall being regulated in tension to permit opening of it without affecting or dislodging the suspended body portion of the holder, substantially as described.

4. In a holder device provided with an interior chamber having walls at its throat or discharge opening which prevent withdrawal of the broom or article by a direct downward pull and provided also with a yielding and self closing face or wall which opens on withdrawal of the broom or article, the combination, with the interior walls of said chamber, of anti-friction plates facilitating outward and downward movement of the article from the holder, substantially as described.

5. In a holder device provided with an interior chamber having walls at its throat or discharge opening which prevent withdrawal of the broom or article by a direct downward pull and provided also with a yielding and self closing face or wall which opens on withdrawal of the broom or article; the combination, with the interior walls of said chamber, of anti-friction plates having flanges *e*, cut away or rounded over at their outer corners or parts, substantially as described.

6. In a holder device, the combination with the back plate A, and blocks C, C, thereon and forming a chamber B, having a contracted discharge opening *b*, of a face plate or wall F, hinged to the upper parts of the blocks, substantially as described.

7. The combination, with the back plate A, and blocks thereon forming a chamber to receive a broom or article, of a yielding face or wall F, connected to the blocks by spring hinges G, having doubled portion g', with an eye or detent g^3; coiled spring portions g, and front end portions g^2, said parts g', g^2, being fastened to the blocks and yielding wall respectively, substantially as described.

CHARLES E. BENTLEY.

Witnesses:
R. H. HARDING, Jr.,
JOSEPH UNDERWOOD.