W. B. WANSOR.

BROOM.

APPLICATION FILED MAY 3, 1921.

1,398,052. Patented Nov. 22, 1921.

Fig. 1.

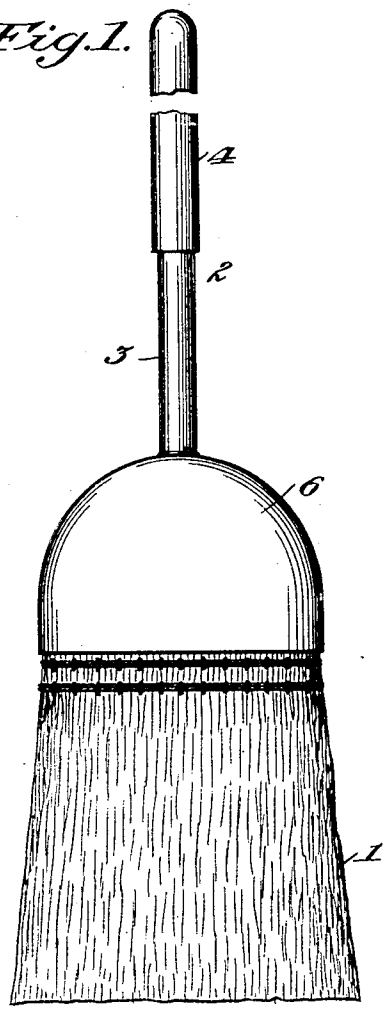


Fig. 2.

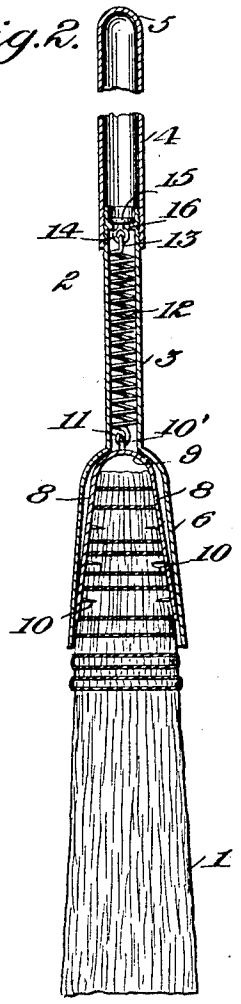
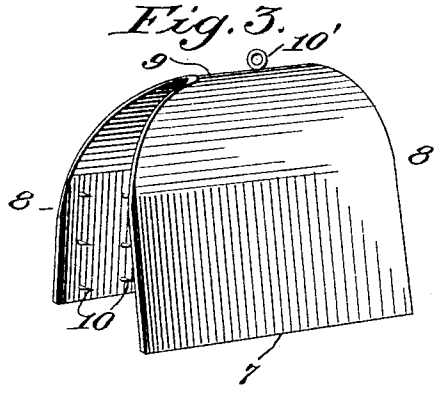


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM B. WANSOR, OF LOCUST VALLEY, NEW YORK.

BROOM.

1,398,052. Specification of Letters Patent. Patented Nov. 22, 1921.

Application filed May 3, 1921. Serial No. 466,574.

To all whom it may concern:

Be it known that I, WILLIAM B. WANSOR, a resident of Locust Valley, in the county of Nassau and State of New York, a citizen of the United States, have invented certain new and useful Improvements in Brooms, of which the following is a specification.

The object of this invention is to provide a broom or brush of novel construction whereby the head may be renewed from time to time without requiring a new stick or handle.

The invention seeks to provide a simple and inexpensive device in which the head will be firmly held in the thimble or socket while in use, but may be readily removed when worn out, a new broom head being as readily secured in the thimble or socket.

A further object of the invention is to provide a novel construction whereby excessive spreading of the fibers of the broom head will be prevented while unnecessary weight will be avoided.

One embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is an elevation of the improved broom;

Fig. 2 is a longitudinal section of the handle and holder with the broom head in end elevation; and

Fig. 3 is a detail perspective view of the clamp.

The broom head 1 is shown as the ordinary straw construction of well known form. The handle 2, in the present instance, consists of a lower tubular member 3, externally threaded at its upper end and an upper tubular member 4, internally threaded at its lower extremity, to engage over the upper end of the lower member, the upper extremity of the upper member being closed, as at 5, to prevent the entrance and collection of dust and dirt. The lower end of the lower member 3 is enlarged and flared to form a thimble or socket 6, in which the broom head is received and held. To secure the head I employ a clamp 7, consisting of a pair of jaws 8, corresponding in outline to the upper end of the broom head and joined at their upper ends by an integral resilient arch or bridge 9. On the inner face of each jaw 8 are teeth or spurs 10, which penetrate the broom head, as shown clearly in Fig. 2, and prevent accidental displacement or withdrawal of the head from the clamp. On the upper side of the arch or bridge 9 is an eye or loop 10′, in which is engaged the hook 11 at the lower end of a coiled retractile spring 12, which is housed within the lower handle member 3. A hook 13 at the upper end of the spring 12 is engaged in an eye 14 depending from an anchor disk 15, which rests on a shoulder or other projection 16 provided in the handle member 3, adjacent the upper end thereof.

In assembling the device the spring is placed within the lower handle member and one end drawn past the rest or shoulder 16 by any convenient tool. The anchor disk is then engaged with the spring and seated on the said rest or shoulder, after which the handle members are threaded together. The clamp is placed in position over the broom head and pressed into engagement with its fibers, the lower end of the spring being then caught by any convenient tool and drawn through the open lower end of the socket to be engaged in the eye 10′. When the spring has been engaged in said eye, it is permitted to retract whereupon it will draw the clamp into the socket or thimble and thereby hold the head in position to permit use of the broom. It will be readily noted that the jaws 8 will ride on the inner walls of the thimble or socket and will be thereby pressed toward each other so that the broom head will be firmly clamped by the jaws. The clamp will be entirely housed by the thimble or socket and the clamp and socket will effectually prevent spreading and separation of the fibers or straw of the broom head. When the broom is worn out the spring will yield to a pull so that the clamp may be withdrawn from the thimble to release the old head and receive a new head.

The device is light and sightly and a single handle may be used with an indefinite supply of broom heads, thereby constituting a very efficient aid to domestic economy.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is—

1. The combination of a handle, a thimble at the end of the handle, a broom head, a clamp consisting of flared jaws conforming to and engaging against the opposite sides of the broom head and a resilient bridge connecting said jaws, and yieldable means housed within the handle and normally drawing the clamp into the thimble to be thereby compressed upon the broom head.

2. The combination of a tubular handle, a broom head, a thimble at the end of the handle, a clamp conforming to and fitting against the opposite sides of the broom head, and a retractile spring anchored at one end in the tubular handle and attached at its opposite end to the clamp to hold the same and the engaged portion of the broom head within the thimble.

3. The combination of a tubular handle having a rest therein, a thimble at one end of the handle, a broom head, a clamp constructed to fit over and engage the upper end of the broom head and to fit within the thimble, an anchor upon the rest in the handle and projecting past the rest toward the thimble, and a retractile spring housed in the handle and having its ends engaged with the anchor and the clamp respectively whereby to draw the clamp and the engaged broom head within the thimble.

In testimony whereof I hereunto affix my signature.

WILLIAM B. WANSOR.