

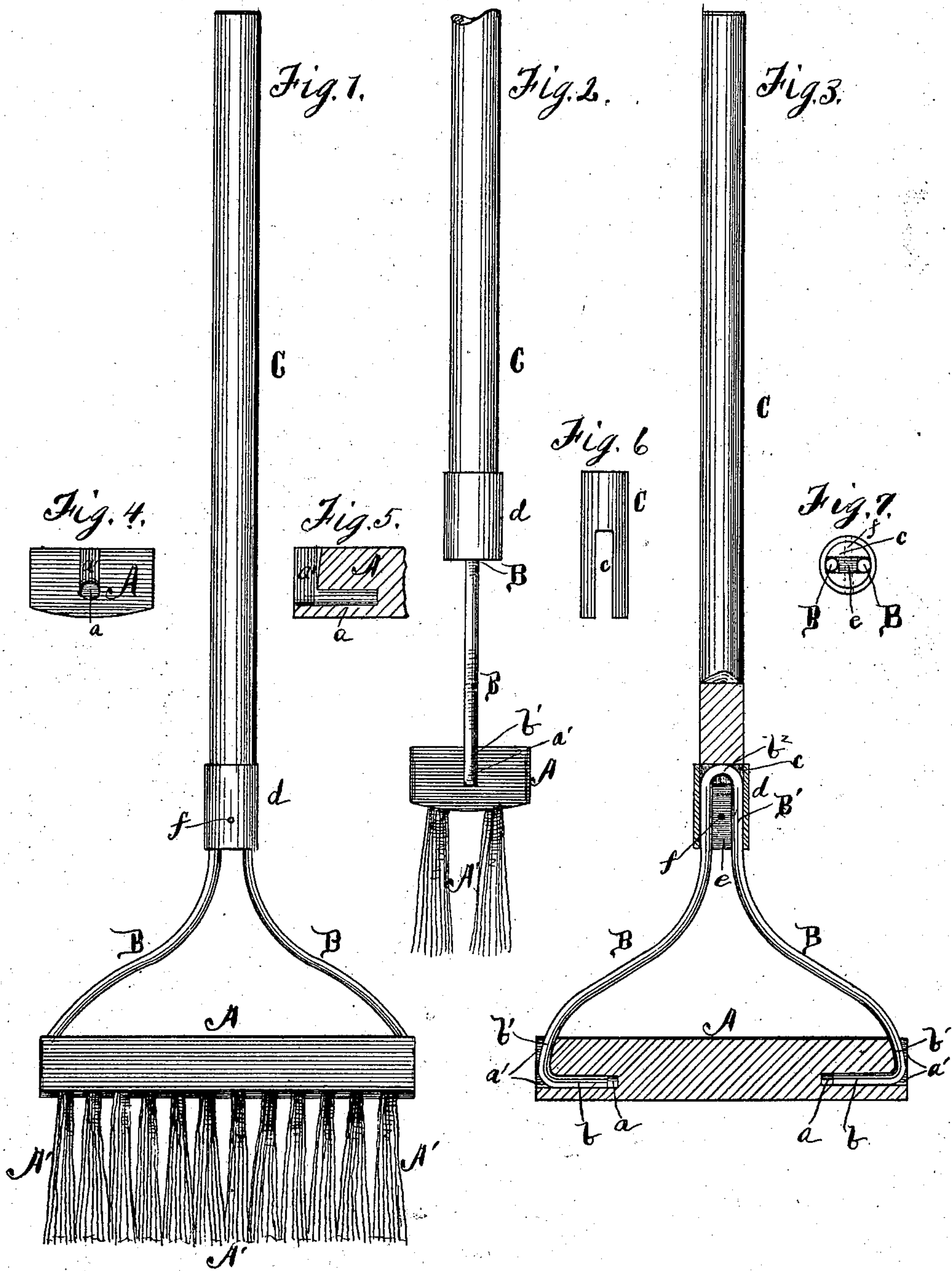
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A. BALDWIN.
BRUSH BROOM.

(Application filed July 8, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ALONZO BALDWIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO ROYAL BRUSH AND BROOM COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

BRUSH-BROOM.

SPECIFICATION forming part of Letters Patent No. 692,592, dated February 4, 1902.

Application filed July 8, 1901. Serial No. 67,425. (No model.)

To all whom it may concern:

Be it known that I, ALONZO BALDWIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Brush-Brooms, of which the following is a specification.

The object of the invention is to construct a brush and so attach it to a handle as to have the brush capable of use in the manner that a broom is ordinarily used and with the same effect as a broom in regard to flexibility and yield, and have the flexibility and yield produced by a spring attachment or connection between the head of the brush and the end of the handle, such connection being made from a single piece of flexing material, preferably wire, bent into a shape to have a tang or neck for attachment to the handle and two arms to enter and be firmly secured in the ends of the brush-head without other fastening than the engagement of the sides of the spring-arms at their ends with the ends of the brush-head, all as hereinafter more specifically described, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation showing the brush-broom complete; Fig. 2, an end elevation showing the brush-head, the attaching or connecting spring-support, and a portion of the handle; Fig. 3, a side elevation with the lower end of the handle and the brush-head in section and with the bristles of the brush removed; Fig. 4, an end elevation of the brush-head; Fig. 5, a detail in section of the end of the brush-head and showing the engaging and locking groove or recess; Fig. 6, a detail of the lower end of the handle, showing the slot for receiving the tang or neck of the spring-support; and Fig. 7, an end view of the handle with the tang or neck of the spring-support in section.

The brush-broom is constructed with a head A of the requisite dimensions and of a length, width, and thickness for the size desired, and this head can be made of wood or other suitable material and is provided on its under side with holes or other means for securing therein the bristles or fibers or tufts of suitable material to form a brush A', as shown in Fig. 1.

The spring support or connection furnishing a flexible and yielding attachment for the brush as a whole with the handle is formed of a single piece of flexing material, preferably wire, bent on itself to have side springs or arms B and a tang or neck B', as shown in Fig. 3. Each spring or side arm B at its attaching end to the brush-head is turned or bent so as to have an entering end *b* and an engaging side *b'*, with the entering end inwardly projecting from each spring or side arm and with the engaging side standing at right angles to the entering end, as shown in Fig. 3. The brush-head A at each end has therein, preferably, a hole *a* to receive the entering end *b* of the spring or side arm, and has also a slot *a'* opening from the longitudinal hole in the end to the top or upper face of the brush-head, into which slot the engaging side of the spring or side arm enters and is tightly held. The longitudinal holes and the end slots, one at each end of the brush-head, in connection with the entering ends and the engaging sides of the spring or side arms of the support, furnish a ready and quick means for firmly and rigidly attaching the brush-head to the support, as when the parts are engaged and interlocked, as shown in Fig. 3, the head will be rigidly attached to or connected with the support and will not require any other means than the interlocking parts of the head and the support in order to secure the head rigidly and firmly to the support, thus making the attachment an easy one and at the same time furnishing a strong and solid connection between the brush-head and the support.

The handle C can be made of wood or other suitable material and of any length and shape desired. The lower end of this handle has a longitudinal slot *c* therein, into which is entered the tang or neck B' of the spring-support, which tang or neck fits snugly in the slot in one direction and is held against spreading and in a firm manner in the other direction within a band or ferrule *d* on the end of the handle by a wedge *e*, driven between the sides of the tang or neck and into the slot, pressing the sides of the tang or neck closely against the wall of the band or ferrule, and

in addition the attachment is rendered secure by a nail or pin *f*, driven through the ferrule, the end of the handle, and the wedge, as shown in Fig. 3, which prevents the wedge
 5 from working out and the band or ferrule from becoming loose in use, so as to destroy the firmness of the attachment of the spring-support to the handle.

It will be seen that the construction of the
 10 brush-broom of my invention is exceedingly simple, but at the same time furnishes a brush-broom which has the flexibility and yielding qualities of an ordinary broom, and such flexibility is obtained by means of the spring-sup-
 15 port formed from a single piece of metal bent into shape and attached to the head, so as to give an attachment for the brush with the handle and so as to give the brush the sweeping action of an ordinary broom in use. The
 20 spring-support, made of a single piece of wire or metal bent so as to have a spring or side arm on each side, with an entering end and an engaging side or shoulder to interlock with a receiving hole and slot in the end of the
 25 brush-head, furnishes a ready means for attachment of the brush-head, so as to be held in a firm and rigid manner and so as to not interfere with the sweeping action in use and which will not break or tear out readily in
 30 use. The forming of the tang or neck with the same piece of wire or metal that makes the spring or side arms adds rigidity at the point of attachment of the spring-support to the handle, and this rigidity is increased by
 35 means of the retaining band or ferrule, the driven wedge, and the fastening nail or pin, which devices furnish a ready and strong attaching means for the spring-support to the handle.

40 The brush-broom as a whole is constructed so as to be strong and durable for use and at the same time not expensive in manufacture and has the advantages of a brush combined with the utility of a broom.

45 What I regard as new, and desire to secure by Letters Patent, is—

1. The combination of a head having in each end a slot running from near the center to the top of the head, and a holder formed of a
 50 single piece of flexing material bent on itself to have a spring-arm on each side and a tang or neck uniting the arms at one end and furnishing a means for attaching the holder to a handle, each spring-arm having its free
 55 end bent or turned to have an inwardly-extending end and a side or shoulder, for the end to enter the end of the head and the side or shoulder to enter and engage the slot in

the head end and furnish a rigid interlock uniting the head and the holder, substan- 60
 tially as described.

2. The combination of a head having in each end a longitudinal hole and a slot opening from the base of the hole to the top of the head, a holder formed of a single piece 65
 of flexing material bent on itself to have a spring-arm on each side and a tang or neck uniting the arms at one end, each spring-arm having its free end bent or turned to have an inwardly-extending end and a side 70
 or shoulder, for the end to enter the hole in the head end and the side or shoulder to enter and engage the slot in the head end and furnish a rigid interlock uniting the head
 and the holder, and a handle having a longi- 75
 tudinal slot extending back from its end into which the tang or neck of the holder is inserted for attaching the support to the handle, substantially as described.

3. The combination of a head having in 80
 each end a longitudinal hole and a slot opening from the base of the hole to the top of the head, a holder formed of a single piece of flexing material bent on itself to have a
 spring-arm on each side and a tang or neck 85
 uniting the arms at one end, each spring-arm having its free end bent or turned to have an inwardly-extending end and a side or shoulder, for the end to enter the hole in the head
 end and the side or shoulder to enter and en- 90
 gage the slot in the head end and furnish an interlock uniting the head and the holder, a handle having in its end a slot to receive the
 tang or neck of the holder, a ferrule encir- 95
 cling the end of the handle, and a wedge driven into the slot between the bars of the
 tang or neck forcing the sides of the tang or neck against the wall of the ferrule, substan-
 tially as described.

4. The combination of a head having in 100
 each end a longitudinal hole and a slot opening from the base of the hole to the top of the head, a holder formed of a flexing material having a spring-arm on each side, the
 arms lying within the slots in the head and 105
 having their ends bent or turned forming inward extensions to enter the holes in the head and furnish a rigid interlock uniting the head and the holder, and a handle to receive and rigidly secure the holder, substan- 110
 tially as described.

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