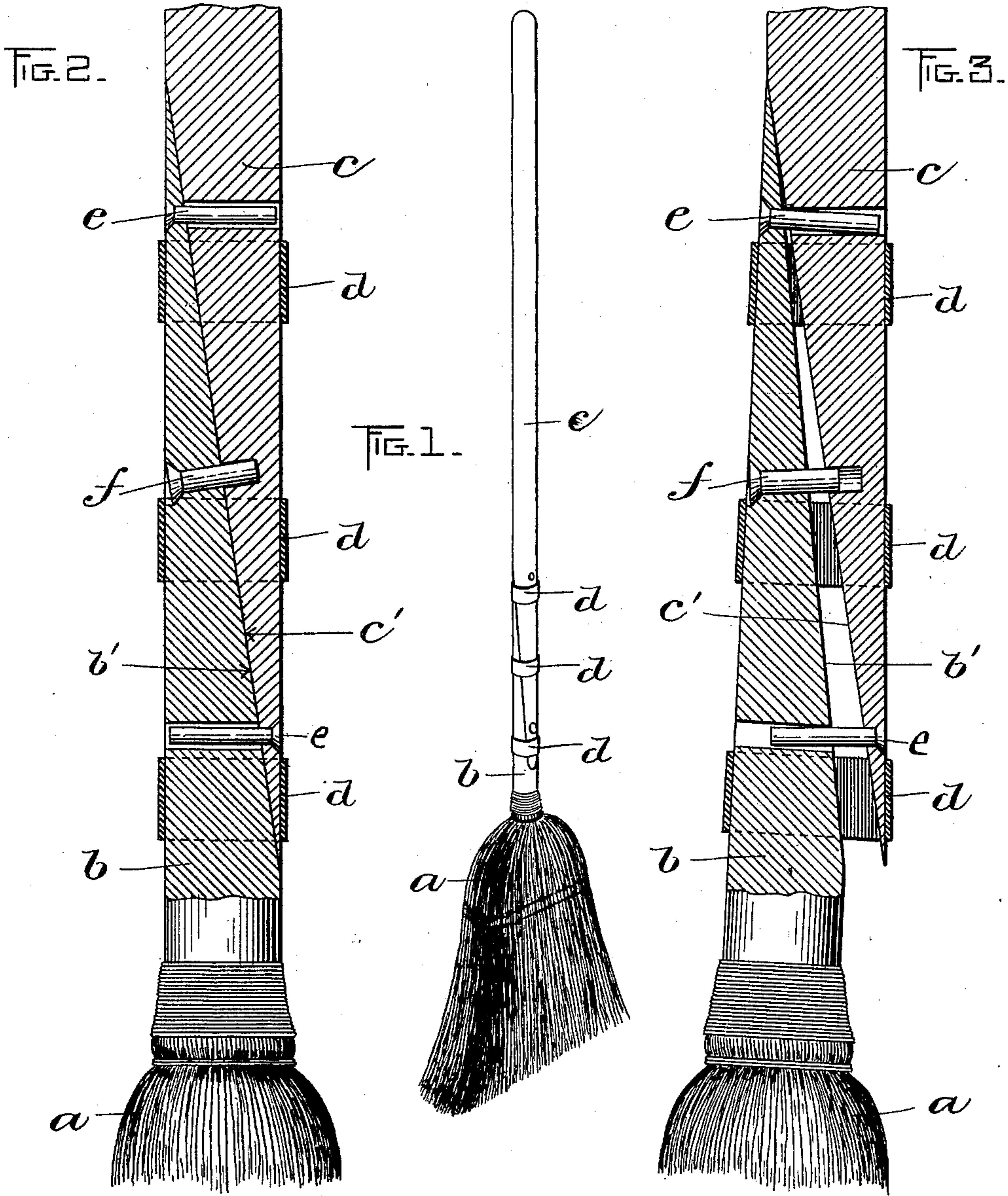


(No Model.)

G. W. PARK.
BROOM HANDLE.

No. 592,554.

Patented Oct. 26, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE W. PARK, OF QUINCY, MASSACHUSETTS.

BROOM-HANDLE.

SPECIFICATION forming part of Letters Patent No. 592,554, dated October 26, 1897.

Application filed April 26, 1897. Serial No. 633,926. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PARK, of Quincy, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Broom-Handles, of which the following is a specification.

This invention relates to broom-handles which are elastic or resilient in order that in the act of sweeping the broom may yield and swing backwardly from the handle while downward and forward pressure is being exerted upon it by the operator, the handle being thus put in a condition of tension and caused to throw the broom forward when the downward and forward pressure is removed.

The invention has for its object to provide a simple, inexpensive, and effective construction whereby the desired resilience may be imparted to a broom-handle; and it consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a broom the handle of which embodies my invention. Fig. 2 represents a longitudinal section of the same. Fig. 3 represents a view similar to Fig. 2, showing the handle in the act of yielding. Figs. 4 and 5 represent a modified form of clamp.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a broom-head, which may be of any suitable construction and is attached to a short handle-section *b*. Said section has a beveled or inclined face *b'* on one side. *c* represents another section having a correspondingly beveled or inclined face *c'*, formed to abut against the face *b'*. The two sections are preferably formed so that when the faces *b' c'* are in contact with each other the handle is of substantially the same size at all points. The sections are yieldingly connected by resilient bands *d d d*, which surround the overlapping portions on which the faces *b' c'* are formed and are preferably made of rubber. When said bands are in their normal condition, they hold the faces *b' c'* in contact with each other, as shown in Fig. 2. When the broom is in use, the pressure exerted by the operator causes the

broom-head and the handle-section *b* to swing backwardly, the bands *d d* yielding, as shown in Fig. 3. This takes place when the operator is moving the broom forward, its lower end being in contact with the floor. When the forward stroke is completed and the downward and forward pressure is relieved, the bands *d* contract and force the broom-head forward until the faces *b' c'* meet. This action is found to materially decrease the muscular effort required in sweeping, making the operation much easier.

To prevent relative endwise movement of the two sections, I affix to each a dowel-pin *e*, the pin on the section *b* entering a socket in the section *c*, while the pin in the section *c* enters a socket in the section *b*, each pin being movable endwise in its socket. As an additional means to the same end, I show a pin *f*, affixed to the section *b* between the pins *e e*, said pin entering and being movable in a socket in the section *c*.

I may, if desired, modify the form of clamp shown in Figs. 1, 2, and 3.

In Figs. 4 and 5 the sections *b* and *c* of the broom-handle are held yieldingly together by clamps consisting of elliptical straps or castings *g g*. A screw *h* is passed through the band and is threaded into the section of the broom-handle which is thicker at that point, as through the section *b* in Fig. 5. It is passed loosely through an enlarged aperture in the other or thinner section of the handle and is threaded into an aperture in the strip or band, so that it extends longitudinally of the major axis of the ellipse. Between the thinner section and the strap a spring *i* is coiled about the screw, so as to permit the sections of the handle to separate under pressure, the screws acting as dowel-pins to prevent longitudinal movement of the sections. With this construction also the broom may yield so as to reduce the effort required in sweeping.

Other changes may be made without departing from the spirit and scope of the invention.

I claim—

1. A broom-handle composed of two sections having beveled or inclined faces which abut against each other, said sections being

provided with means for preventing relative endwise movement of either section, and means for yieldingly connecting the portions on which said beveled faces are formed.

- 5 2. A broom-handle composed of two sections having beveled or inclined faces which abut against each other, each section having a pin projecting loosely into a socket or aperture in the other section, the two sections
10 being yieldingly connected by resilient means

which surround the portions on which said beveled faces are formed.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of 15 April, A. D. 1897.

GEORGE W. PARK.

Witnesses:

C. F. BROWN,

A. D. HARRISON.