

W<sup>m</sup> A. Middleton,

Broom.

PATENTED JUL 18 1871

117192

Fig. 1.

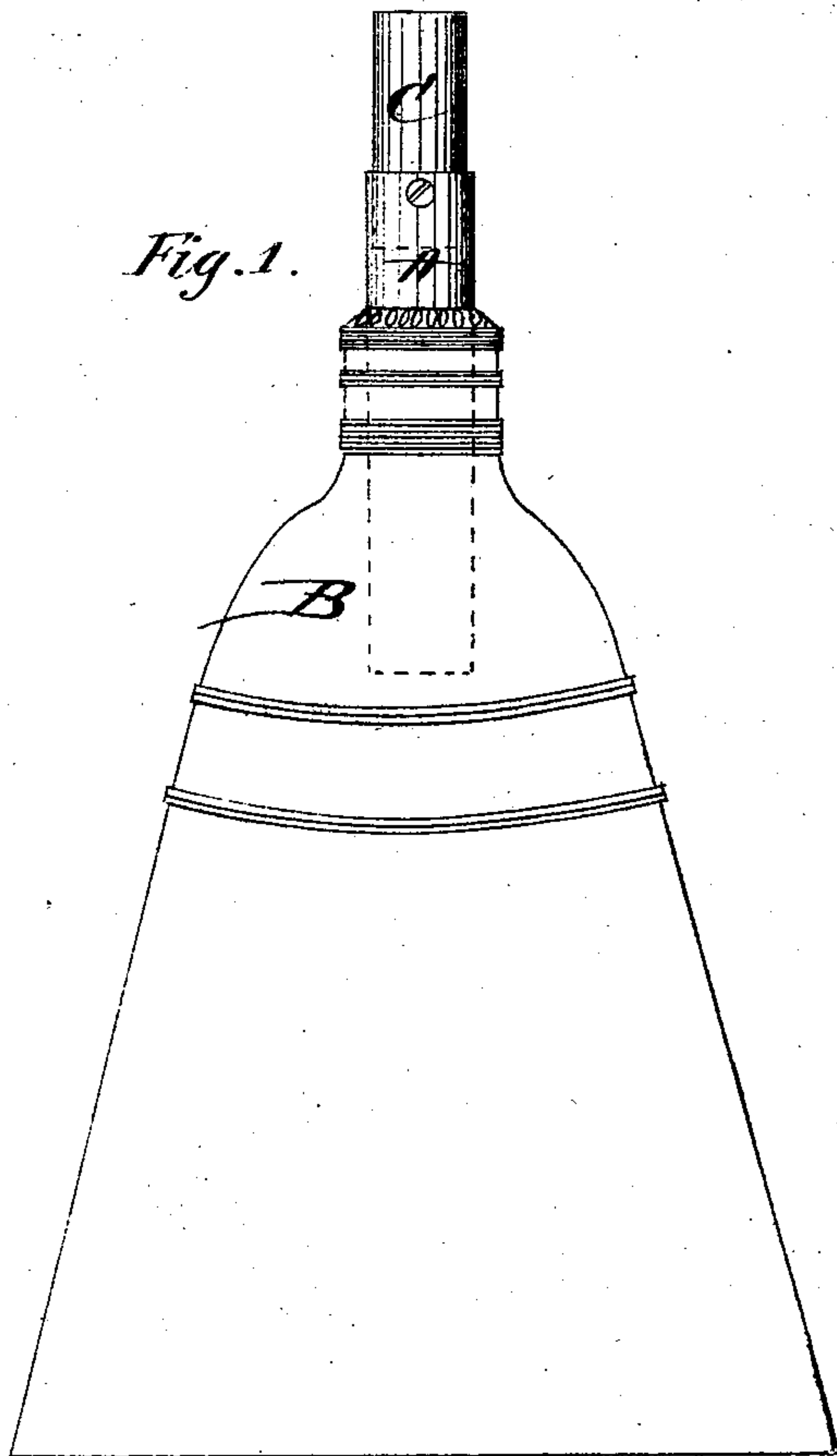
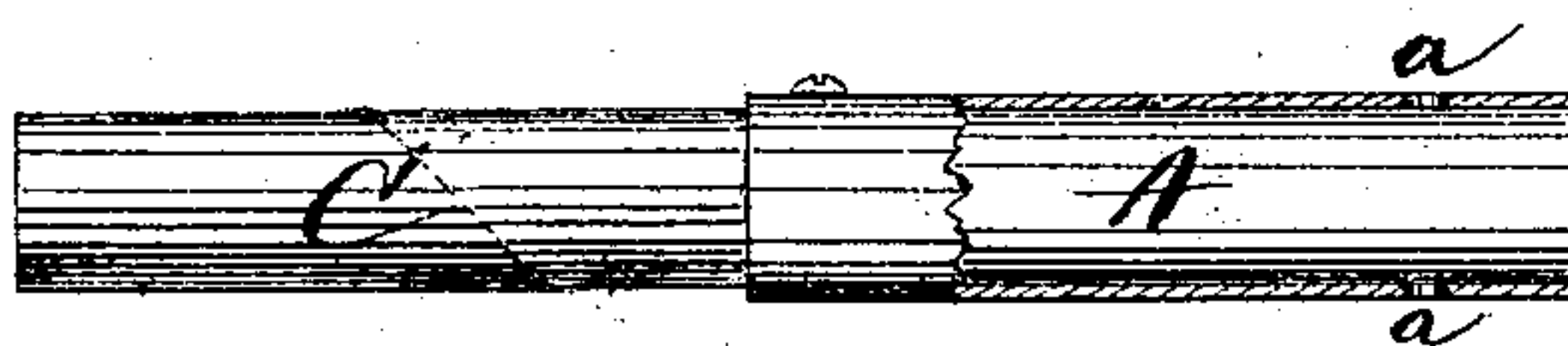


Fig. 2.



Witnesses.

Jas. O. Hutchinson

C. L. Everts.

Inventor.

Wm A. Middleton

per

Alexander Murray

Att'y

# UNITED STATES PATENT OFFICE.

WILLIAM A. MIDDLETON, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND GEORGE WINTERS, OF SAME PLACE.

## IMPROVEMENT IN BROOMS.

Specification forming part of Letters Patent No. 117,192, dated July 18, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM A. MIDDLETON, of Harrisburg, in the county of Dauphin and in the State of Pennsylvania, have invented certain new and useful Improvements in Brooms; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in a broom in which the splits or broom-corn are tied onto a metallic tube, so that the handle may be inserted or removed at pleasure.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view of my broom; and Fig. 2 is a side view, part in section, of the metallic tube with the handle inserted.

A represents a metallic tube of suitable dimensions, provided near one end with holes *a a*, as shown in Fig. 2. These holes are for the purpose of passing the wire through to hold it fast when the person commences to tie the broom-corn or splits B to the tube. The corn or splits are tied in the same manner as with any ordinary broom. When the broom is made the handle C is inserted in the outer end of the tube A and secured by a screw, *x*.

In manufacturing my broom I use a metal tube of sufficient length to allow it to extend above the upper end of the broom-corn, where it is se-

cured, and a sufficient distance below the point where it is banded down into the swell or body of the broom, so that when the handle is inserted in the tube the broom is stiffened and made firm both above and below the band at the upper end of the broom-corn. By extending the tube above the top of the broom-corn I am enabled to trim the splits neatly down against the tube without cutting into the wood handle and weakening the same at the point requiring most strength; also, I am enabled to screw the tube to the handle with ease, and brace the handle at its lower part.

I do not broadly claim a broom provided with a tube around which the corn is secured and the handle attached.

A broom made in this manner cannot get loose by shrinkage, and they may be made without the handle and shipped by themselves with the handles put up separately. When one handle gets broken it can easily be replaced.

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

The combination, with the handle C and broom B, of the metallic tube A, extending above the top of the broom-splits and down into the body of the corn, and secured to the handle C by the screw *x*, all as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of June, 1871.

WILLIAM A. MIDDLETON.

Witnesses:

W. S. BOWER,

DANIEL E. MARTIN.