

T. Walter,

Broom.

No. 100,343.

Patented Mar. 1. 1870.

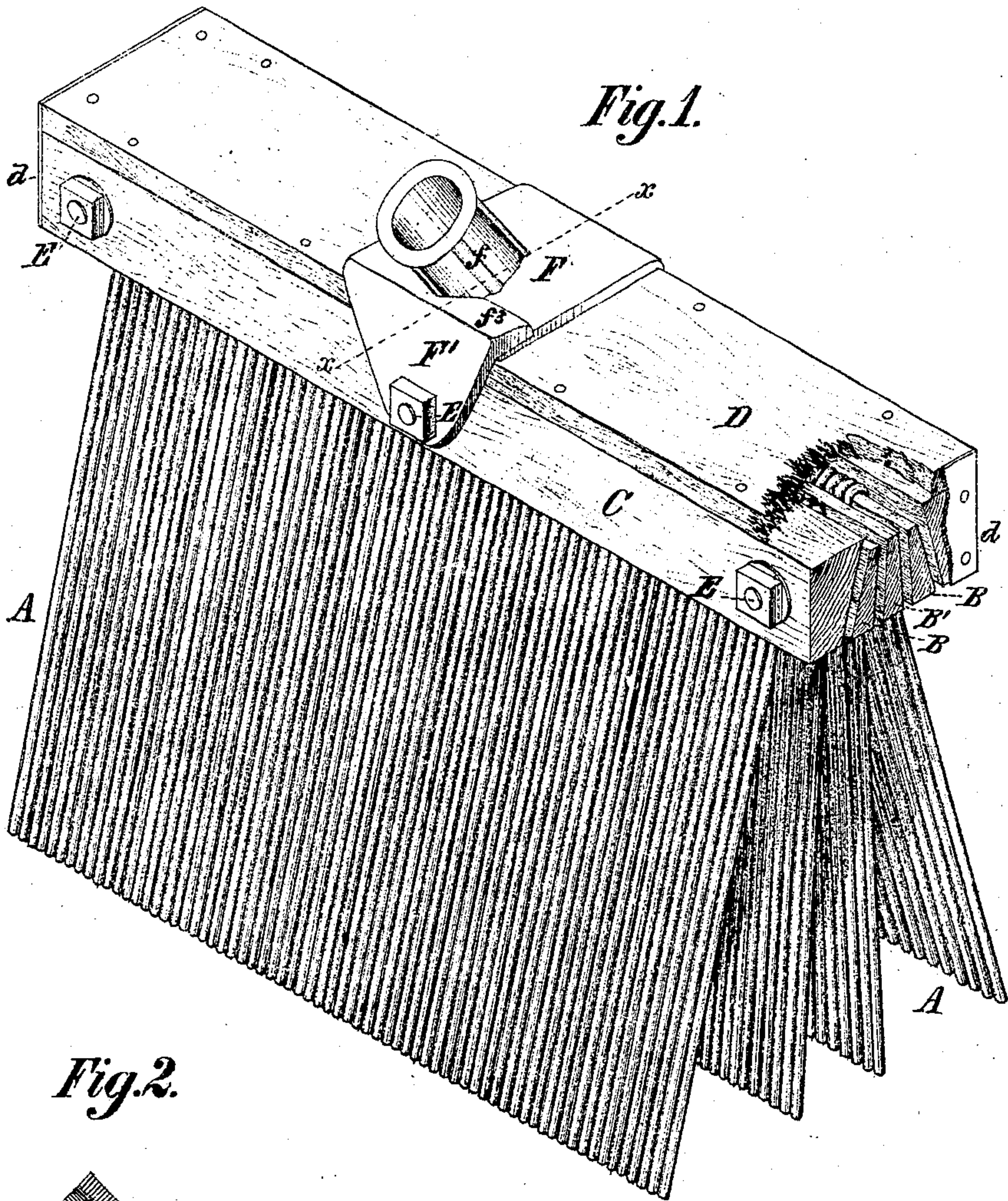
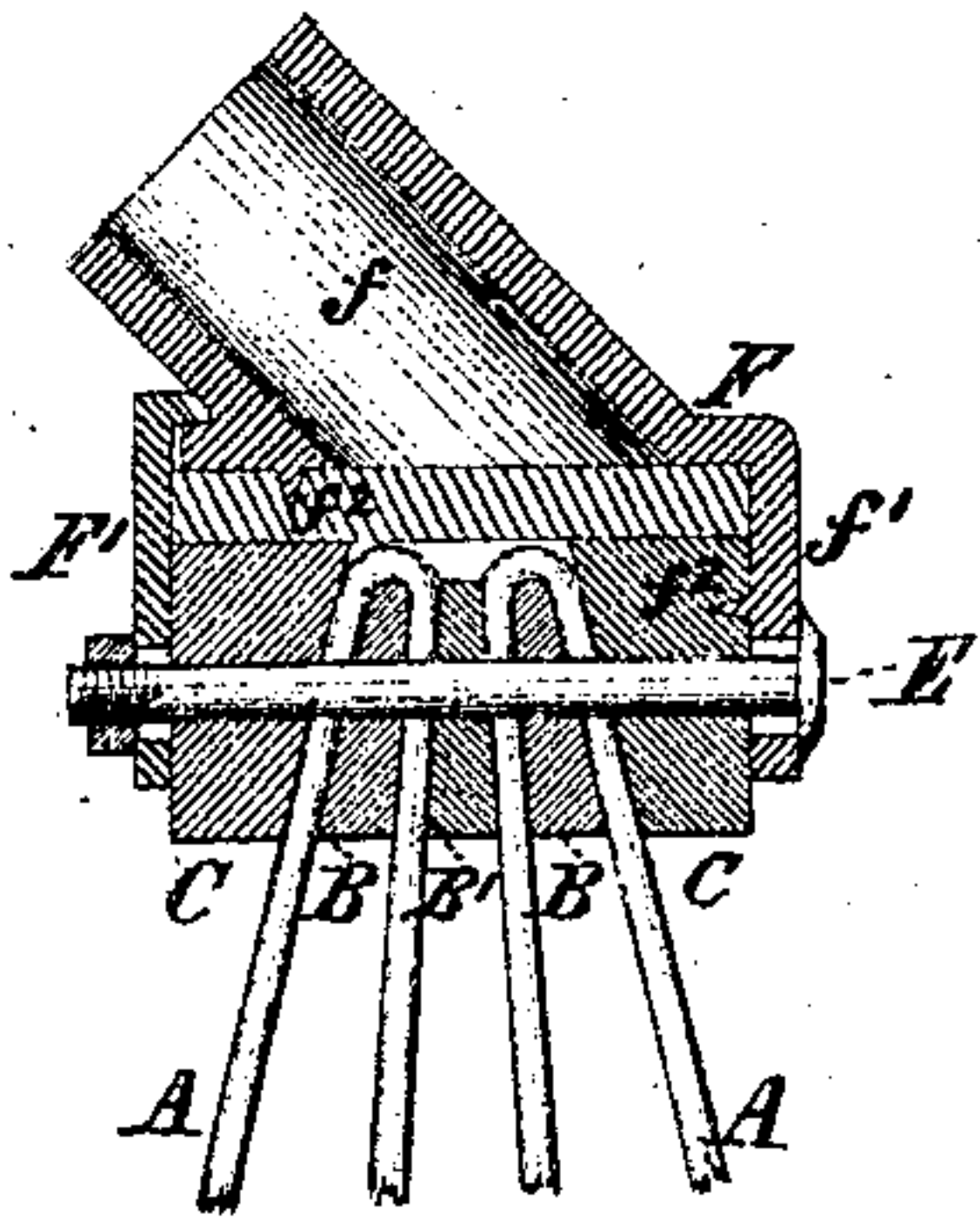


Fig. 2.



Witnesses { *J. Snowden Bell.*
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THOMAS WALTER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 100,343, dated March 1, 1870.

IMPROVED BROOM.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS WALTER, of city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Brooms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 is a view in perspective of one of my improved brooms; and

Figure 2, a transverse section of the same at the line *xx* of fig. 1.

The object of my invention is to provide a broom-head in which the reeds or splints may be arranged either vertically or with more or less spread, according to the purpose for which the broom is required; held firmly in this position when so arranged, and readily tightened whenever necessary; to which ends

My invention consists—

First, in the combination, with the reeds or splints, of bearing-strips, clamping-strips, and bolts, in such manner as to hold the reeds firmly in position, and to allow for tightening them if required, or for removing and renewing worn or defective portions.

Second, in the combination of a socket for the reception of the broom-handle with a clamp for holding the socket in position, and for tightening the bearing of the reeds and strips, as hereinafter more fully set forth.

Reeds or splints *A*, of proper length, are doubled over bearing strips *B B*, which I prefer to make of greater thickness on their lower than on their upper sides, as shown in the drawings, in order to give proper spread to the reeds or splints, and prevent the broom from being too stiff.

Two or more of these strips, each carrying a proper number of reeds or splints for the length of the head required, are placed side by side, a blank strip, *B'*, being by preference placed between them to prevent the inner lengths of reeds coming in contact, and to more evenly spread their free ends.

If a stiffer broom is required, the blank strip or strips may be provided with reeds or splints in the same manner as the bearing-strips.

The blank strips and bearing-strips are then placed in a vise between clamping-strips *C C*, whose inner sides are beveled to correspond to the inclination of the sides of the bearing-strips *B B*, and clamped firmly together by bolts *E* and nuts.

A top piece, *D*, is then secured upon the clamping-strips *C C*, and I generally secure very light metal

plates, *d*, upon the ends of the strips and top piece, to make a neat finish.

The broom is now completed and ready for the handle, which can be inserted either in a hole in the top piece *D* or in a separate socket attached thereto.

To insure more perfect uniformity in the surface, and spring of the reeds or splints, and at the same time to provide a secure and convenient receptacle for the handle, I cast a handle socket, *f*, upon a plate, *F*, slightly less in length than the width of the top piece *D* of the broom-head, and having a downward projecting flange, *f'*, to rest against one of the clamping-strips *C*.

Tits or prongs *f''* are formed upon the inner sides of the plate *F* and flange *f'*, to hold the same more firmly in position on the top piece and clamping-strip.

A clamp, *F'*, having a flange, *f'''*, to rest upon and hold down the top of the plate *F*, is then placed against the clamping-strip, on the side of the broom-head opposite to the flange *f'*, and the two are connected and clamped together by a screw-bolt, *E*, which passes through slotted holes in the flange and clamp, and is provided with a proper nut.

By the above-described construction it will be seen that I provide a simple and secure connection of the ends and head, holding the former firmly in position, and preventing any side motion or slackness, as well as enabling the strips to be drawn more tightly together, or to be taken out and replaced whenever occasion may require.

I do not limit myself to the use of strips wedge-shaped or tapering in their cross-section, the object of this form being, as before stated, only to give spread or taper to the reeds, but for certain purposes the reeds should be parallel, and in such cases strips of rectangular cross-section can be used without departing from the spirit of my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the reeds, or their equivalents, the bearing-strips *B B'*, the clamping-strips *C*, and the bolts and nuts, as and for the purpose set forth.

2. The combination of the adjustable broom-head, the socketed plate *F*, and the clamping-plate *F'*, substantially as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name.

Witnesses:

THOMAS WALTER.

J. SNOWDEN BELL,

HENRY BALDWIN, Jr.