

J. SHIPMAN.
Brooms.

No. 147,182.

Patented Feb. 3, 1874.

Fig. 1.

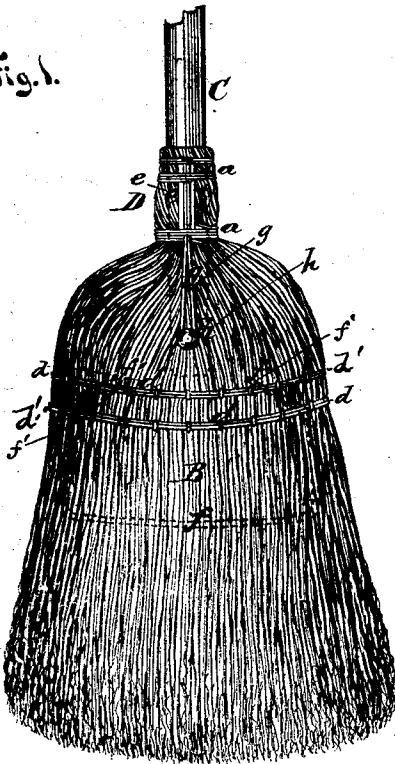


Fig. 2.

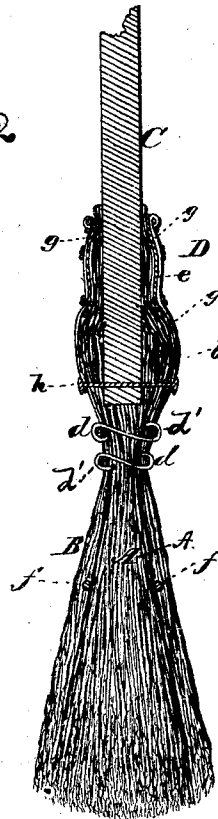
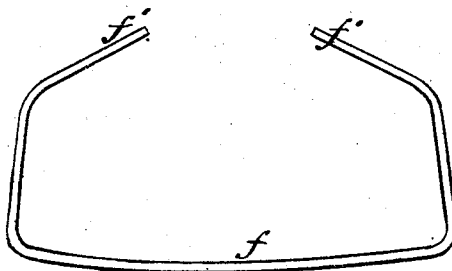


Fig. 3.



Witnesses.

Philo. Masi.
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UNITED STATES PATENT OFFICE.

JOHN SHIPMAN, OF SARATOGA SPRINGS, NEW YORK.

IMPROVEMENT IN BROOMS.

Specification forming part of Letters Patent No. **147,182**, dated February 3, 1874; application filed September 20, 1873.

To all whom it may concern:

Be it known that I, JOHN SHIPMAN, of Saratoga Springs, in the county of Saratoga and State of New York, have invented a new and valuable Improvement in Brooms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my broom. Fig. 2 is a vertical transverse section of my broom. Fig. 3 is a detail view of same.

This invention relates to certain novel improvements on brooms; and consists in the employment of two spring-bows, which are concealed inside of the broom between its core of wisps and the outer layer of wisps, and which are secured in such manner that they afford good supports for the wisps while using the broom; also, in securing the wire wrapping which is around the neck of the broom to the handle thereof by means of wire braces and a rivet, which will prevent the said wrapping slipping off the wisps which form the neck, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to understand it.

The wisps of broom-corn forming the core A, and also those forming the outer layer B, are bunched together after the well-known manner of making hand sweeping-brooms, and the handle C is secured in its place by the usual metal wrapping *a b*, which embraces the neck D and the head of the core A. The wisps thus wrapped and secured to the handle C are all connected together by two or more rows of annealed-wire sewing, *d*, which is far superior to pack-thread, or anything else hitherto used for this purpose, in that the wire will not decay nor be frayed out, and it affords, when properly applied, a very firm hold on the wisps. The wire wrapping *a*, which surrounds the upper end of the neck D, is liable to slip off the wisps upon the handle and greatly impair, if

not wholly destroy, the usefulness of the broom. This I obviate by means of binding-wires *g g* on opposite sides of the broom, which are looped around a rivet, *h*, that is driven through the handle C below the wrapping *b*, and which are carried up and under the wrapping *a*, and their ends hooked over and pressed closely around the upper wire of said wrapping. If desired, narrow strips *e*, of leather or other suitable material, may be applied between the wisps forming the neck D and the binding-wires *g g*, for the purpose of protecting the wisps.

When a broom is prepared as above described, I insert between the core A and the outer layer of wisps B, on opposite sides of the core, metal bows *f f*, which are nearly as wide as the broom below the sewing *d*, and which have their ends *f' f'* bent inwardly, as shown in Fig. 3, for the purpose of hooking them into the two courses of sewing *d* and across the binding-wires *d'* thereof. The bows *f f* are thus concealed in the broom and firmly held in place. They afford an excellent support to the wisps, stiffening them near their lower ends, and preventing them breaking off at the sewing *d*. The bows also allow free elasticity to the wisps, and greatly improve the efficiency of the broom, whether it is used in the right or left hand.

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

1. The spring supporting-bows *f*, having their ends *f'* bent inwardly and concealed inside of the broom, in combination with the core A and the outer layer of wisp, substantially as specified.

2. The combination, with the spring-bows *f*, with their ends *f'*, of the sewing *d* and binding-wires *d'*, for the purpose mentioned.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

JOHN SHIPMAN.

Witnesses:

P. F. ALLEN,
LEWIS ELLSWORTH.