

M. W. OWENS.  
Broom Head and Clamp.

No. 57,369.

Patented Aug. 21, 1866.

Fig. 1.

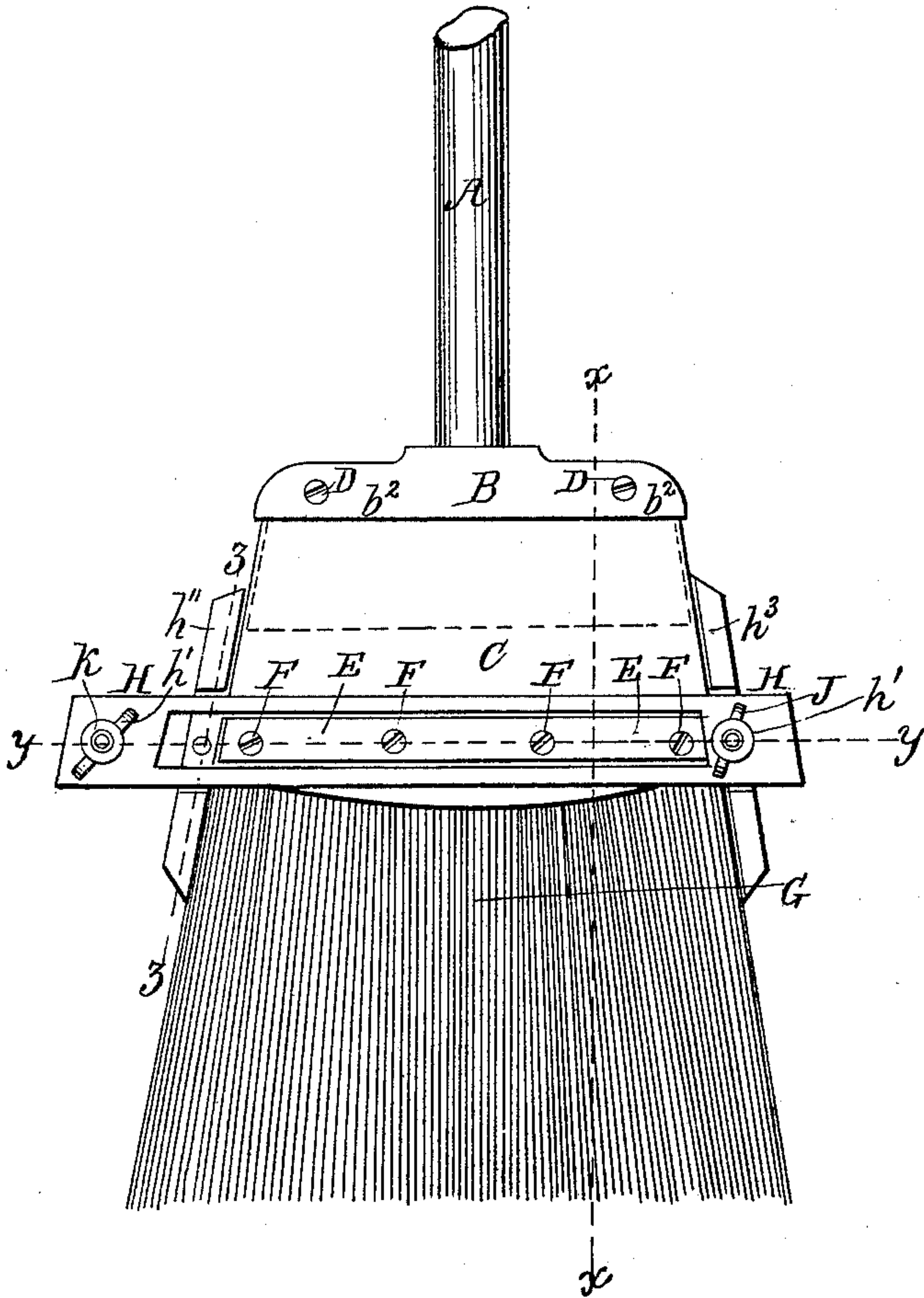


Fig. 2.

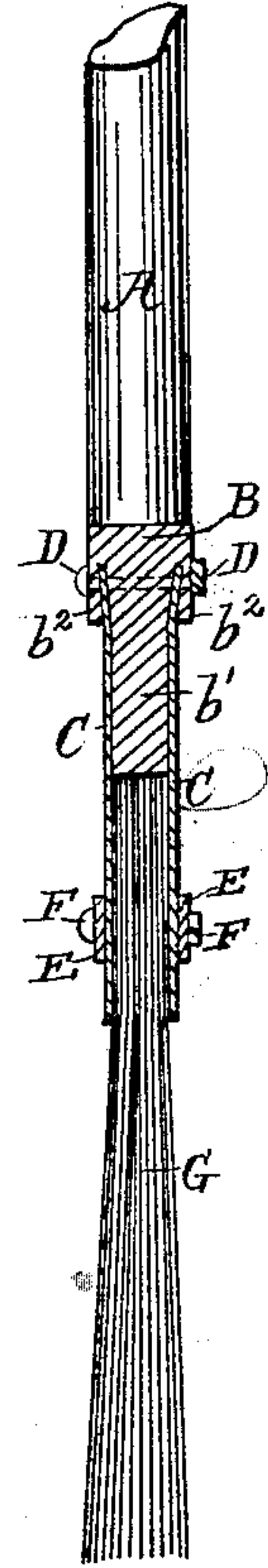


Fig. 3.

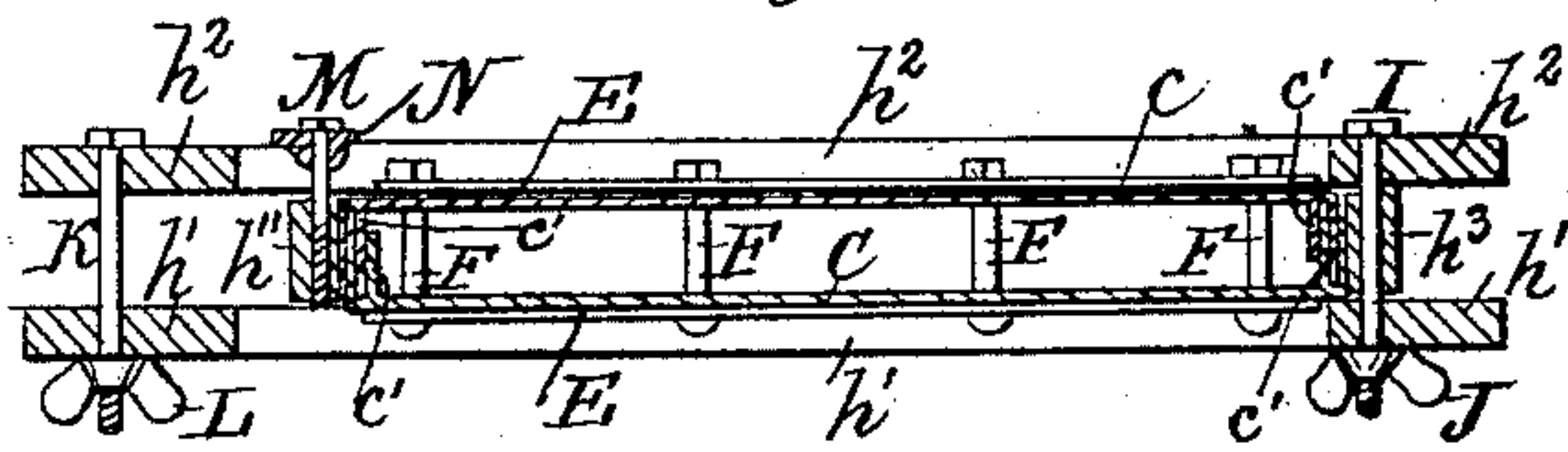
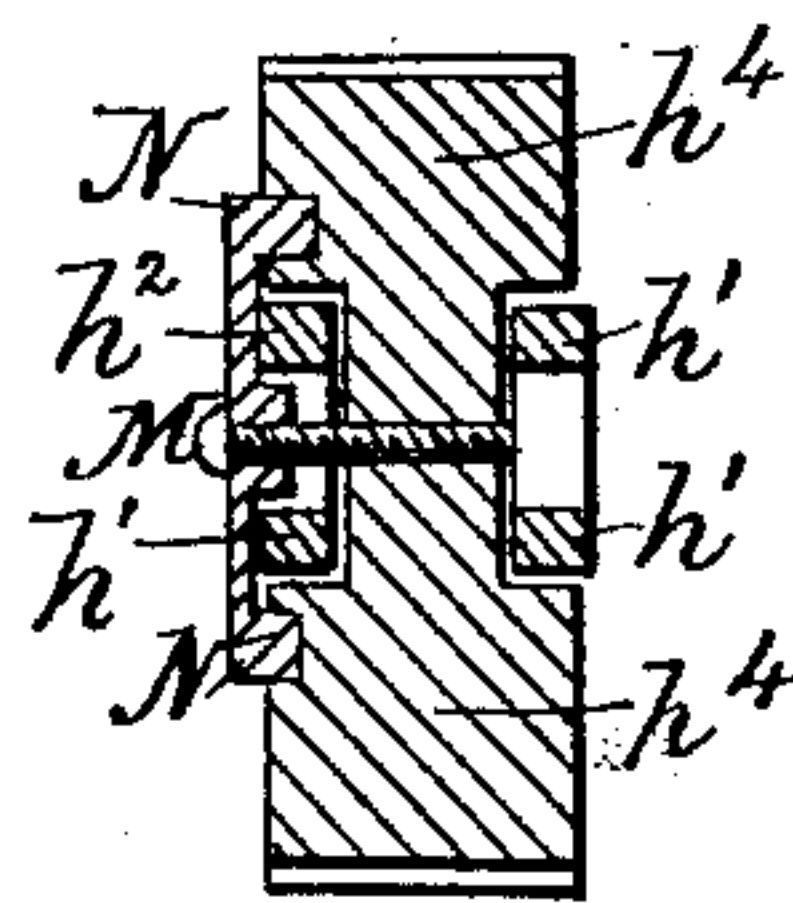


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVED BROOM-HEAD AND CLAMP.

Specification forming part of Letters Patent No. 57,369, dated August 21, 1866.

*To all whom it may concern:*

Be it known that I, M. W. OWENS, of Waterford, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Broom-Heads; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my improved broom-head, showing the clamp or packer for tightening the corn in place. Fig. 2 is a longitudinal section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a cross-section of the same, taken through the line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved broom-head, light, simple, and strong, and which will hold the brush firmly whether much or little corn may have been inserted in said broom-head; and it consists, first, of an improved broom-head formed by combining the wooden head, the metallic clasps, and the bars and bolts with each other and with the corn of the broom, the metallic clasps and the wooden head being constructed as hereinafter described—that is to say, the wooden head being constructed with a groove for the reception of the upper edge of the clasp, and with an expanding tenon, which enters the upper part of said clasp, and the side edges of the clasp having narrow plates attached to them, which interlock with each other and keep the edges of the broom firm when pressed together; second, in the clamp or packer, constructed as described, when used in combination with the broom-head for the purpose of compressing the corn, as hereinafter more fully described.

A is the handle of the broom, which handle is made in the usual form, and has a tenon formed on its lower end, which enters a mortise formed in the upper edge of the wooden broom-head B, to which it can thus be securely attached without danger of splitting said broom-head. The wooden head B is made with a dovetailed tenon, *b'*, formed on its lower edge, which enters the upper part of the clasp C, and prevents the said clasp from being

drawn from its place upon said tenon *b'*. Within the shoulders *b<sup>2</sup>* of the head B, at the base of the tenon *b'*, are formed grooves, into which the upper edge of the clasp C fits, as shown in Fig. 2.

D are screw-bolts passing through the wooden head B, as shown in Fig. 1, to prevent the said head from splitting. These bolts D may also pass through the upper edges of the clasp C, as shown in Fig. 2, in order to guard against the said clasp being drawn from its place. The clasp C is made in two pieces cut out into proper shape, and the side edges of which are bent down so as to overlap each other at the edge of the broom-head. To the inner side of each of these bent-over edges are firmly soldered or otherwise attached narrow plates *c'*. The four edges of metallic plate thus formed at each of the edges of the broom-head interlock with each other, as shown in Fig. 3. This construction affords a firm support to the edges of the broom-head against the outward pressure of the corn when compressed within said broom-head.

E are strengthening-bars placed across the broom-head near the lower edge of the clasp C. F are screw-bolts passing through the bars E, through the clasp C, and through the corn G, as shown in Figs. 2 and 3. By means of these bolts F the sides of the clasp C may be drawn together, compressing the corn G between them and holding it securely in place. H is the clamp or packer, by the help of which the corn G is placed or packed in the broom-head. The sides of this clamp H are two bars, *h'* and *h<sup>2</sup>*, a little longer than the desired breadth of the broom. These bars *h'* and *h<sup>2</sup>* are slotted longitudinally, said slots being longer than the strengthening-bars E, and of such a size that the said bars can be attached to their places upon the broom-head through the said slots. The end pieces, *h<sup>3</sup>* and *h<sup>4</sup>*, of the packer are blocks, the edges of which are notched to receive the ends of the bars *h'* and *h<sup>2</sup>*. At one end of the packer H the ends of the bars *h'* and *h<sup>2</sup>* are attached to the block *h<sup>3</sup>* by a bolt, I, and thumb-nut J. At the other end of the packer the ends of the bars *h'* and *h<sup>2</sup>* are held together by a bolt, K, and thumb-nut L; but the block *h<sup>4</sup>* is adjustable, and is held in any desired position by the set-screw M and button N, as shown in Figs. 3 and 4.

In filling the broom-head the desired amount of corn is arranged in the clamp or packer, and compressed by means of the bolts I and K and thumb-nuts J and L, in which position it may be sewed, if desired. The clasp C is then placed over the upper or butt ends of the corn G. The packer H is then loosened and moved up till the holes through the clasp C are in a line with the slots through the bars  $h'$  and  $h^2$ . The thumb-nuts J and K are then screwed down, and the strengthening-bars E and bolts F applied, drawing the sides of the clasp C still closer together and holding them securely in place. The clamp or packer H is then removed, and the broom is ready for use.

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

1. An improved broom-head formed by combining the wooden head B and metallic clasps C, when constructed as herein described, with each other and with the bars E, bolts F, and corn G, substantially as described, and for the purpose set forth.

2. The clamp or packer H, constructed as herein described, when used in combination with the broom-head B C and corn G, substantially as described, and for the purpose set forth.

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Witnesses:

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