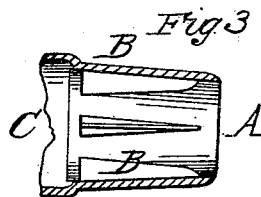
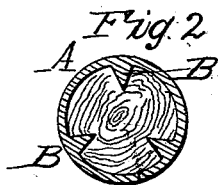
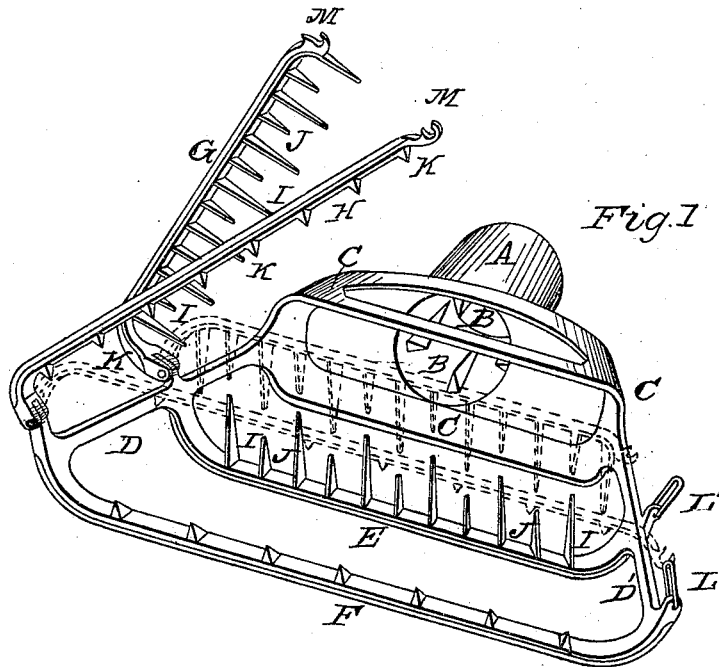


C. E. MILLER.

Broom Head.

No. 51,658.

Patented Dec. 19, 1865.



witnesses  
James W. Layman  
Hillward

Inventor  
C. E. Miller  
By Knight & Bros  
attys

# UNITED STATES PATENT OFFICE.

CHARLES E. MILLER, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND  
FRANK DIAL, OF SAME PLACE.

## BROOM-HEAD.

Specification forming part of Letters Patent No. 51,658, dated December 19, 1865.

*To all whom it may concern:*

Be it known that I, CHARLES E. MILLER, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Metallic Broom-Head; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

The subject of my invention is a light, easily-operated, and very effective head or sheath of malleable cast-iron or other metal, by which farmers and others are enabled to make their own brooms.

Figure 1 is a perspective view of a metallic broom-head embodying my invention. Fig. 2 is a transverse section of the socket and handle; Fig. 3, an axial section of the socket.

A is a circular and downwardly-flaring socket for the insertion of a wooden handle.

The concavity of the socket is armed with fins B, three or more in number, which thicken and widen downward, so that as the butt of the handle is driven into the said socket the pins act to enter and spread the butt, and thus insure its firm and permanent occupancy of the socket.

The lower end of the socket expands into a case or shell, C, from which extend two arms, D D', connected by two curved ribs or bows, E and F, of which E is the shortest and deepest.

Hinged to one of the arms D are two bows or clasps, G and H, of similar form to the bows E and F, respectively.

The two bows E and G are armed with alternately long and short teeth I and J, of which the long teeth on one bow are opposite the short teeth on the other bow, so as to enter

easily and gripe firmly the material placed within the head.

The bows F and H are armed with short teeth K, which alternate with each other on the respective bows.

L L' are links which enter eyes in the arm D', and which, when the bows G and H are folded down over the material, are made to engage in notches M in the said bows, which are thus secured to their places.

The process of filling is a short and easy one. Material having been suitably trimmed is laid in that portion of the head which occupies the undermost position in the drawings. The bow H is then brought down over the material and secured by the link L'. This movement serves to hold the material and yet to permit its rearrangement on the head preparatory to the final clamping by means of the bow G.

Should the broom become slack or loose in the head, it may be tightened by adding more material or by engaging the links in the notches next above.

I claim herein as new and of my invention—

1. The combination of the socket A, shell C, arms D D', bows E F, clasps G H, and links L L', when constructed and arranged to operate as and for the purposes specified.

2. The arrangement of the alternate long and short teeth I J upon both the bars E and G, as and for the purposes specified.

In testimony of which invention I hereunto set my hand.

CHAS. E. MILLER.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.