

G. W. PARSONS.

Broom Head.

No. 51,964.

Patented Jan'y 9, 1866.

Fig. 1

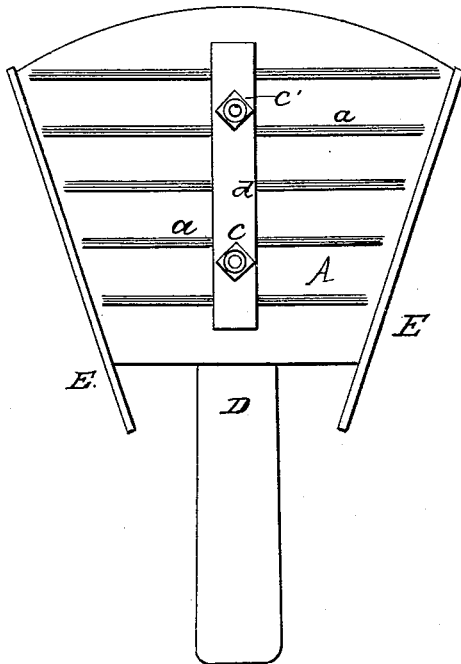


Fig. 2.

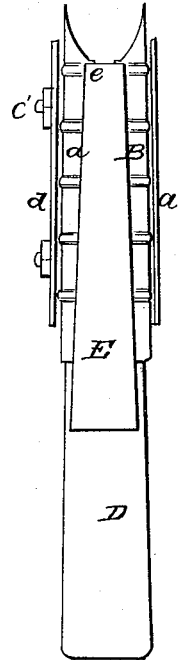


Fig. 3.

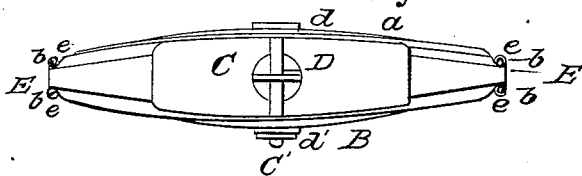
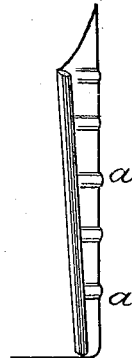


Fig. 4.



Inventor  
Geo W Parsons

By Baldwin & Son  
attys

Witnesses  
J. Peyton  
Geo Johnson

# UNITED STATES PATENT OFFICE.

GEORGE W. PARSONS, OF HARRISBURG, PENNSYLVANIA.

## BROOM-HEAD.

Specification forming part of Letters Patent No. 51,964, dated January 9, 1866.

*To all whom it may concern:*

Be it known that I, GEORGE W. PARSONS, of Harrisburg, in the county of Dauphin 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 of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a view of my invention with the broom-handle inserted; Fig. 2, a central transverse section through the same; Fig. 3, a view of the front or outer end, and Fig. 4 an edge view of one of the corrugated plates.

It is the object of my invention, while making the broom-head strong and light, to so arrange its parts as that they may be easily separated to remove the old and receive new filling, and closed to compress the filling as firmly as necessary on the outsides as well as in the center; and to this end my invention consists, first, in forming the head-stock for brooms or brushes of thin corrugated metal plates, and, second, in forming the edges of the plates with a groove to receive a tapered slide-clamp, having edges turned to enter grooves in the plates, and so arranging the taper-slide that when depressed the plates may be wide enough apart to remove worn and insert new filling, and when the taper-slide is raised the edges of the plates shall be tightened firmly on the filling.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

From any suitable thin sheets of metal I cut plates A and B in the form of a section of the frustum of a cone, one of which may be sufficiently longer than the other to turn over and form a top plate, C, through the center of which to insert the handle D of the broom. On the plates A and B, I form corrugations *a*, of any size and number desired to give suitable stiffness to the head, and I turn a groove, *b*, on the edge of each plate. The plates are now bent into the form desired to receive the filling, care being taken to have their edges truly register or parallel with each other. The

plates are punctured to receive screw-bolts *c* and *c'*, that pass through the handle where it passes between the plates, and through bars *d* and *d'*, that rest on the corrugations, the bolts *c* and bars *d* serving to hold the head firmly together when filled properly. It is obvious that the corrugations may be radial, transverse, or longitudinal on the plates A and B by simply adapting the form and position of the bars *d* and *d'* to rest upon a sufficient number of the corrugations to give the head the strength required. I now form a taper-slide, E, the edges *e* of which are turned to enter the grooves *b* in the plates A and B, and move therein upon the application of a slight degree of force, and when depressed the plates will be at liberty to open on relaxing the screw-nuts to remove worn broom-corn or bristles, and when the taper-slides are raised until their lower edges come even with or above the lower edges of the plates the latter will be tightly clamped on the filling, and when the screws are tightened on the bars the whole head will be kept securely together and the filling will be held as rigidly at the edges as at the center. To fill the head thus constructed it is only necessary to depress the taper-slides and relax the screws, and when filled all that is required to secure the filling firmly is to raise the taper-slides and tighten the screws to the degree desired.

It is obvious that my invention is equally applicable to painters' and other brushes as it is to brooms, and that its use with bristles, corn, or splinters is attended with marked durability, neatness, and economy.

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

1. The employment of corrugated metal plates for broom-heads, substantially as and for the purpose set forth.

2. The combination of the corrugated plates and the taper sliding clamp, substantially in the manner and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name.

GEO. W. PARSONS.

Witnesses:

ROGER S. HENDERSON,  
ALFRED ROBINSON.