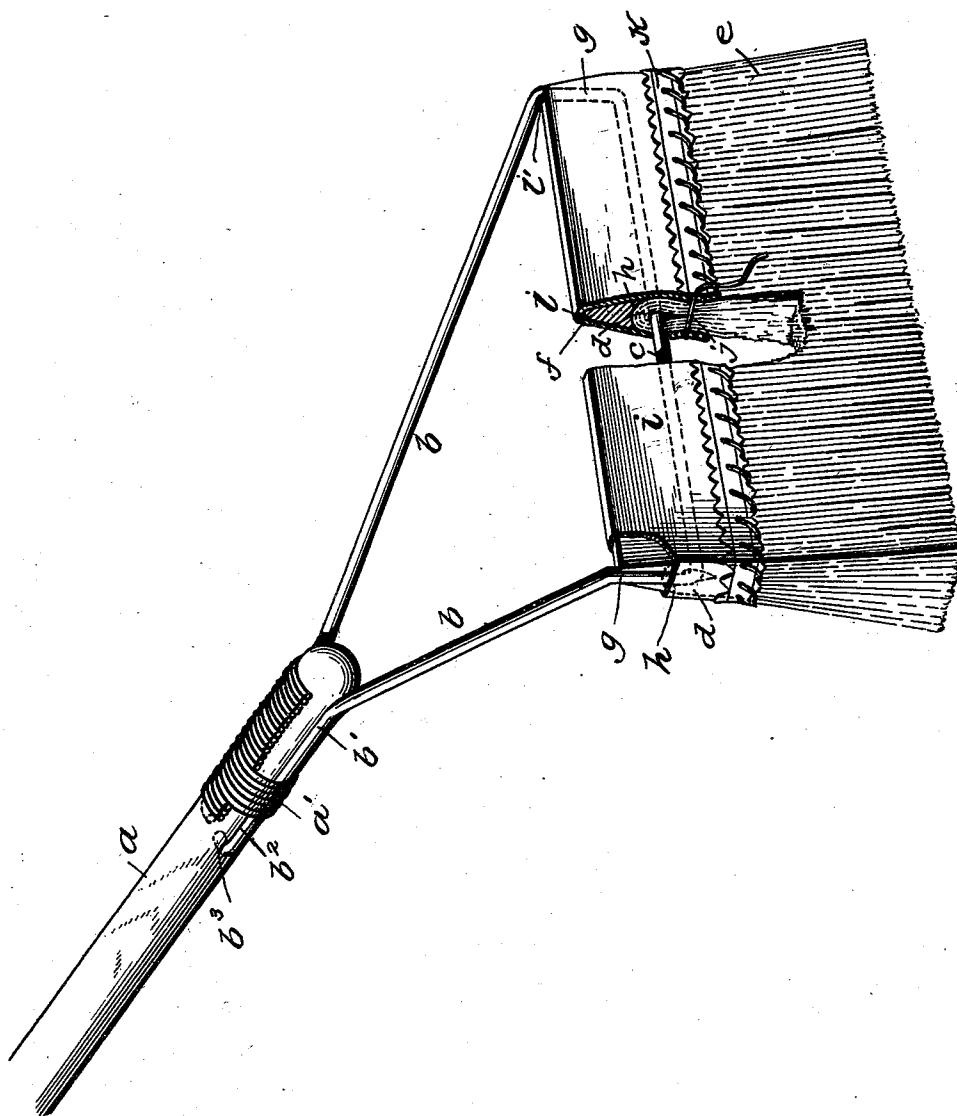


(No Model.)

T. H. PALMER.
BROOM.

No. 542,861.

Patented July 16, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

THERON HARRY PALMER, OF SAN BERNARDINO, CALIFORNIA.

BROOM.

SPECIFICATION forming part of Letters Patent No. 542,861, dated July 16, 1895.

Application filed January 8, 1895. Serial No. 534,247. (No model.)

To all whom it may concern:

Be it known that I, THERON HARRY PALMER, a citizen of the United States, residing at San Bernardino, in the county of San Bernardino and State of California, have invented certain new and useful Improvements in Brooms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to those brooms in which the bristles or fibers are secured within a metal cap next to the handle.

Heretofore brooms have been constructed by employing a filling-block over which the fibers are looped, a metallic cap fitting over the said block and looped portion of the fibers, and binding or riveting devices for securing the block, cap, and fibers together.

It is the object of the present invention to provide a broom of the class described wherein the component parts are constructed in lighter and more durable and efficient manner.

Having these objects in view my invention consists in certain improvements in the construction of the metallic cap, the filling-block, and the devices whereby the broom proper is secured to its handle, all of which will be more fully described hereinafter and embodied in the claims.

In the accompanying drawings the reference-letter *a* denotes the handle attached to the head portion of the broom by a metal frame composed of a single wire and having converging arms *b*, to which the handle is attached. This frame has the general outline of an inverted Y, and extends upward from the broom. Its lower end forms a cross-bar *c*, over which the middle portions *d* of the fibers or brushes *e* are looped or folded. A tapering block or filling *f* is next placed over the tops of the loops and extends across the head of the broom, and its opposite ends are embraced by upright straight portions *g* of the frame, which extend at right angles to the bar *c*. This block is tapered and forms a filling for a metallic cap *i*, its lower end being provided with a longitudinal concavity *h*,

which fits over the rounded tops of the loops. In this position it is held by means of the metal cap *i*, which passes over the block and the straight portions *g* of the frame. This cap unites all of these assembled head portions. The loops of the brushes are bound by means of a continuous wire *j*, located below the cross-bar *c* and passing transversely through an external leather band *k* and the lower edges of the cap. This leather band *k* serves to protect the furniture or other wood-work against which the metallic cap *i* would strike.

The fibers or brushes are preferably made of tampico, kittolene, or kittool, (vegetable fibers of tropical growth,) although it is evident that other well-known materials might be substituted. The materials particularly mentioned are in most cases considered superior for the purposes intended, because the surfaces of the fiber are rough and serve to catch the dust, nap, and lint which arise in sweeping carpets and like articles. The arms *b* of the frame pass through holes *i'* and are attached to the handle by means of straight ends *b'*, which lie in oppositely-located longitudinal grooves *b²* in the handle. The upper ends of these straight portions are bent laterally to form inwardly-projecting lugs *b³*, which enter corresponding recesses in the handle and prevent the frame from sliding longitudinally upon it. These straight portions are securely retained within their grooves by means of a wrapping-wire *a'*. It will be observed that the lower end of the handle only extends a short distance below the converging upper ends of the frame, thereby saving weight and material.

From the foregoing description it will be seen that the parts composing the broom are exceedingly simple and can be put together quickly and without much labor, and in a manner that effects great security and durability to the wearing parts.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A broom of the class described, comprising the combination of a cap, a frame secured to a suitable handle and having a portion formed into a fixed cross-bar which passes through the cap, a filling block within the cap

and above the cross-bar, fibers looped over the cross-bar and held against the filling block, and fastening devices for securing the fibers to the cap, substantially as described.

- 5 2. A broom of the class described, comprising the combination of a handle, a frame formed of side pieces and a fixed cross-bar, the upper extremities of the side pieces being secured to the handle, fibers looped over the
10 cross-bar, a cap covering the looped portion of the fibers, a filling block interposed be-

tween the apex of the cap and the fibers, a protecting band, and a binding wire passing through the cap and band below the cross-bar of the frame, substantially as described. 15

In witness whereof I affix my signature in presence of two witnesses.

THERON HARRY PALMER.

Witnesses:

CHAS. H. JONES,
JOHN TAYLOR.