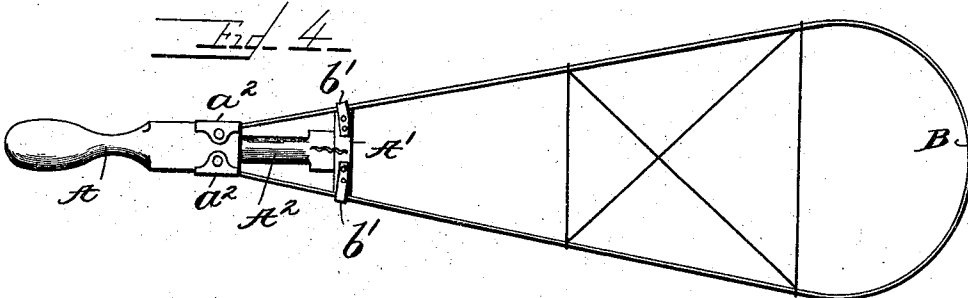
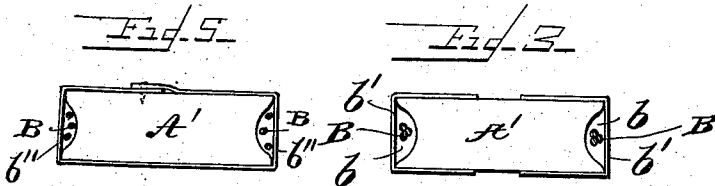
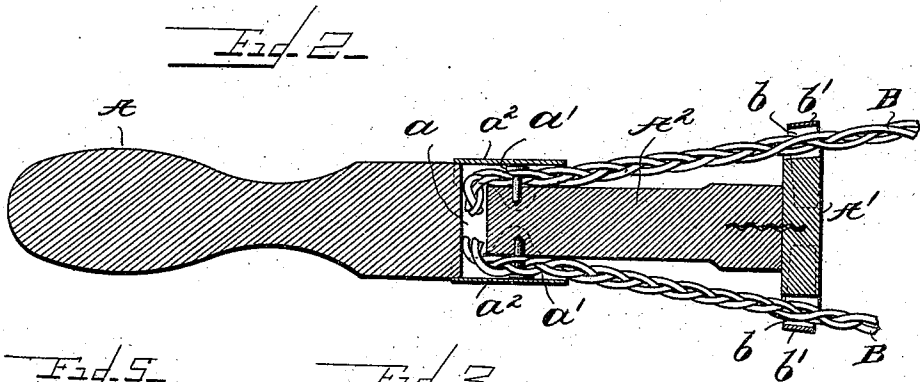
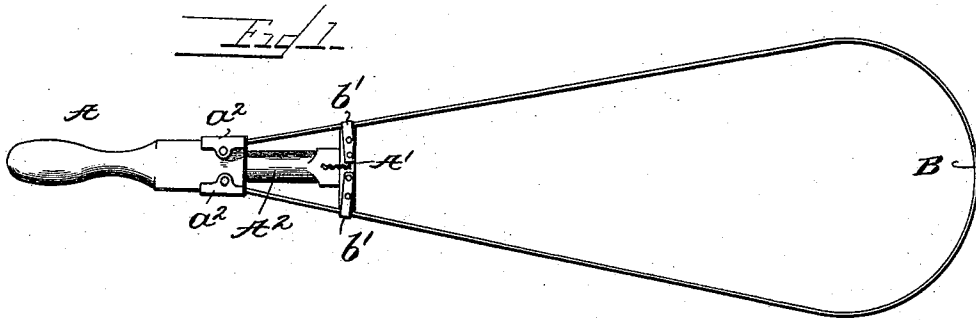


(No Model.)

T. J. STRAIT.
CARPET BEATER.

No. 548,144.

Patented Oct. 15, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

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CARPET-BEATER.

SPECIFICATION forming part of Letters Patent No. 548,144, dated October 15, 1895.

Application filed August 25, 1894. Serial No. 521,334. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. STRAIT, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Carpet-Beaters; and I do hereby 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.

My present invention is an improved article of the class of carpet-beaters or beaters for carpets, car-seats, and the like.

It consists in certain improved constructions and combinations of parts, all conducing to the production of a cheap yet effective and durable beater.

The best form in which I have contemplated embodying my invention is illustrated in the accompanying drawings, and my said invention is disclosed in the following description and claims.

Figure 1 is a view of my improved beater in elevation. Fig. 2 is a sectional view showing the method of attaching the handle to the beater-loop. Fig. 3 is an end view of the outer bearing bend of the handle, the beater-loop being shown in section. Fig. 4 shows the beater-loop with wires or cords connecting the opposite sides of the loop. Fig. 5 shows an alternative form of the construction shown in Fig. 4.

In the drawings, A is the handle and B the beater-loop. The loop of the beater as constructed by me is composed of braided wire, as shown in Fig. 2. It is not so illustrated in Figs. 1 and 4, owing to the difficulty of satisfactorily showing the edge of the braid on the scale of those figures, as the edge only can be seen in the position in which the loop is shown in said figures, the broader side of the braid lying against the handle. This construction has advantages in the results produced and in the fact that a beater of greater elasticity is produced. The added elasticity makes my beater more lasting than it would be were a single wire used. With the loop of a beater formed of a single wire the whole surface of the wire is brought into contact

with the article beaten. The dust is therefore held from leaving the article along the entire line of contact, whereas with the braided loop the edge of the beater brought in contact with the article being approximately an undulating line the dust is free to leave the article at all but the higher portions of the undulated surface striking it.

The handle is provided with an outer bearing-head A', which may be made integral with the main portion of the handle or it may be secured thereto. The ends of this bearing-head are made to loosely engage the sides of the loop B at a distance from their point of firm attachment to the handle, and between the bearing-head and the said point the sides of the loop are free to move in all directions.

In order to secure the ends of the loop firmly and cheaply to the handle, the latter is at its widest part provided with the transverse aperture *a* and with grooves *a'*, extending forward from the outer ends of the aperture *a* to the reduced portion of the handle A². The inner ends of the braid are bent inward and the bent portions are forced into the transverse aperture *a*, leaving the adjacent portions of the braid in the grooves *a'*. Two short nails, having fairly large heads, are then driven into the handle through the interstices of the braid lying in the grooves *a'*, firmly securing the ends of the loop. The bearing-head is provided at each end with a recess *b*, and a band of metal *b'* is secured over this inclosing braid, which lies loosely in the opening between the head and the band *b'*. Instead of two short bands *b'*, I may employ a single one extending entirely around the head, as shown at *b''* in Fig. 5. This method of fastening permits a part of the bend of the loop which occurs in raising the beater to take place at the open end of the grooves *a' a'* and a part adjacent to the outer bearing-head. This distribution of the bend along so large a portion of the loop renders it less liable to break and makes the beater very durable and lasting. The part of the loop extending between the bearing-head and the points of rigid attachment are advantageous in this, that when the loop

beyond the bearing-head bends in one direction the part on the inner side of the head bends in the opposite direction, reducing the sharpness of the bend at the head.

5 In case it is desired to cover the points of the fixed attachment of the ends of the loop and produce an article with a neater and more finished appearance, the covering-plates a^2 may be employed, or, as an equivalent, a band
10 of thin metal, extending entirely around the handle at that point and suitably secured thereto in the same manner as the band is applied to the outer bearing-head, as shown in Fig. 5.

15 When the beater is to be used as a car-seat beater, the loop may be provided with the cross-wires c or with other forms of wire connecting the sides of the loop.

The method of securing the ends of the
20 loop has many advantages. The ends being bent at a sharp angle and forced into the transverse aperture requires only the retention of the parts in this position to form a strong and durable fastening. The nails not
25 only retain the braids in this position, but, passing through the braid and pressing it tightly to the bottom of the groove give additional strength and durability.

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

30 1. In a carpet or like beater, the combination with the handle having an outer bearing head provided with apertures for loosely engaging the sides of the loop and a loop passing through said apertures and secured to the
35 main body of the handle, substantially as described.

2. In a carpet or like beater the combination with the handle having an outer bearing head provided with apertures for loosely engaging the loop, of a loop composed of braided wire passing through the said apertures and secured to the main body of the handle with a broad side of the braid against the handle, whereby the edge of the braid is brought in
40 contact with the article beaten and the strain on the loop is in the direction of its greatest width, substantially as described.

3. In a carpet or like beater the combination with the handle having the outer bearing head provided with recesses in the outer ends thereof, of the beating loop rigidly secured to the main body of the handle and having a portion of the loop lying loosely in said recesses and the securing bands applied to
45 said outer bearing head, substantially as described.

4. In a carpet or like beater the combination with a handle having the open grooves $a' a'$ and the outer bearing head having the
50 recesses $b b$ in line with the said open grooves, of the braided beating loop having its ends lying in the said grooves and extending into the recesses in the outer bearing head, the securing nails passing through the interstices
55 of the braid, and the securing bands applied to said outer bearing head, substantially as described.

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

THOMAS J. STRAIT.

Witnesses:

HIRAM MUDGE,
LUTHER M. OTE.