

(No Model.)

C. E. HOWLAND.  
BRUSH.

No. 545,691.

Patented Sept. 3, 1895.

Fig. 1.

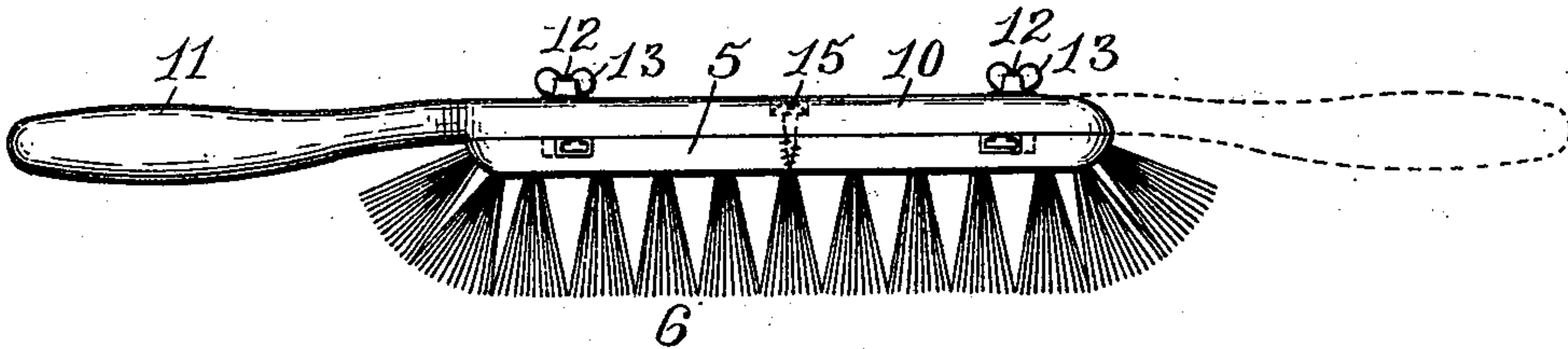


Fig. 2.

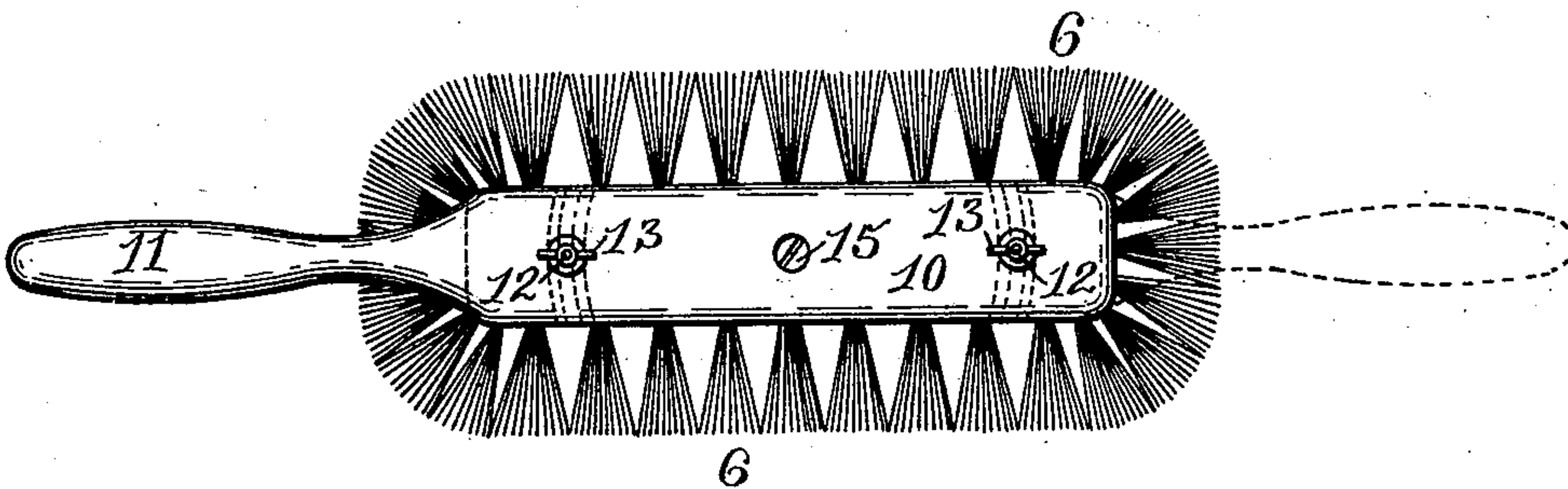


Fig. 3.

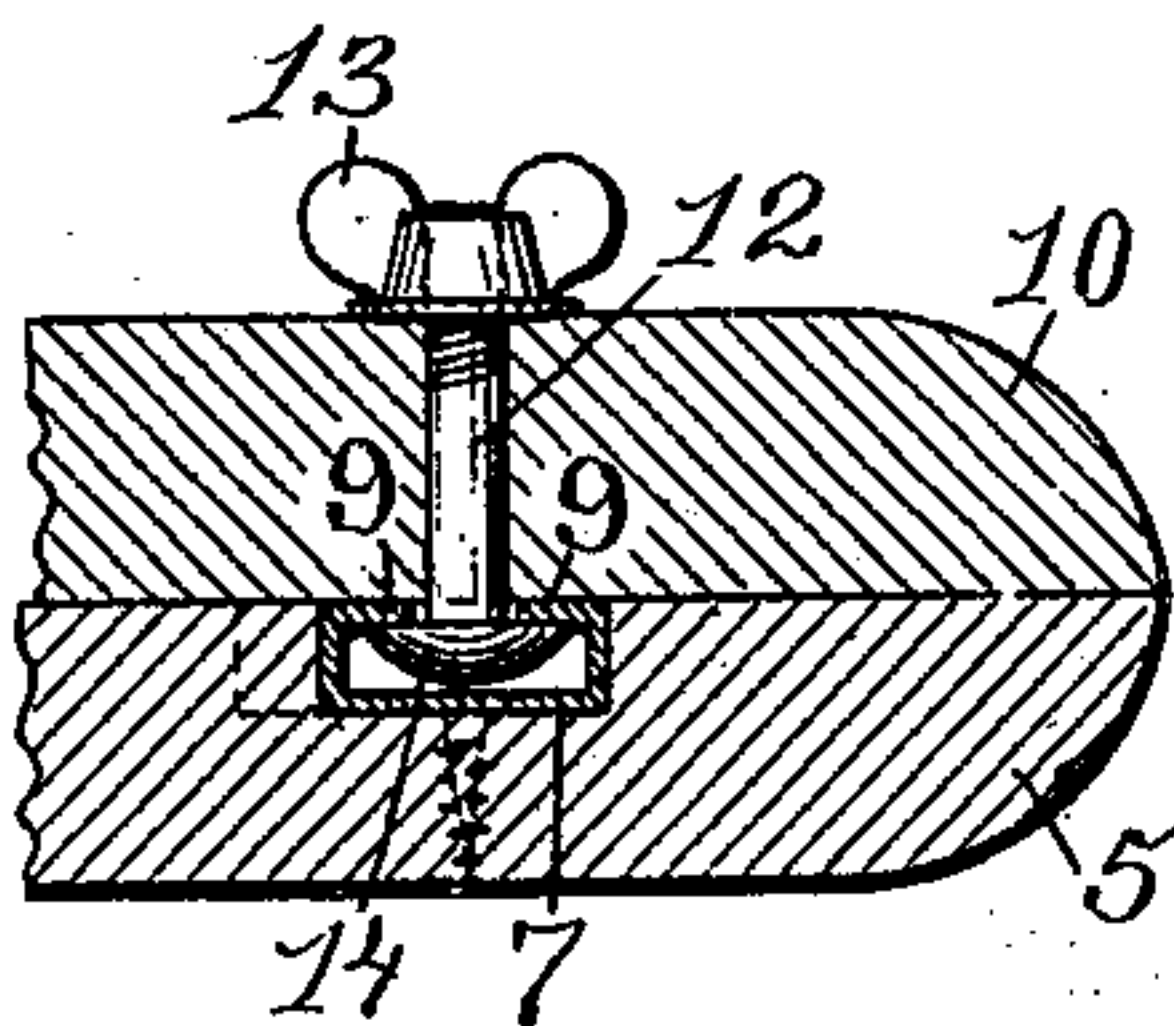
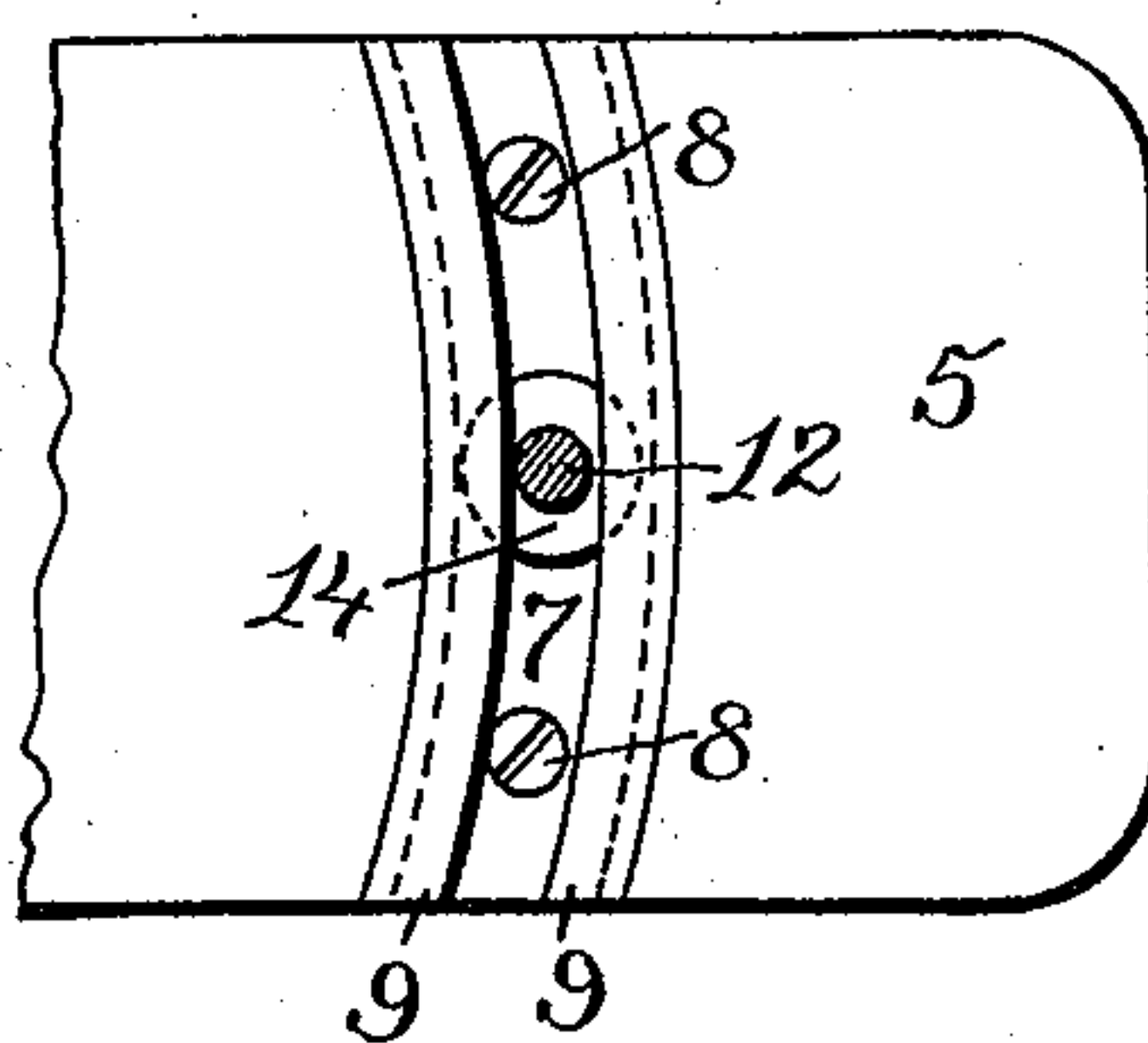


Fig. 4.



WITNESSES:

Henry J. Miller  
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INVENTOR:

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by Joseph A. Miller & Co.  
Attys.

# UNITED STATES PATENT OFFICE.

CHARLES E. HOWLAND, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR, BY  
DIRECT AND MESNE ASSIGNMENTS, TO THE REVERSIBLE BRUSH COM-  
PANY, OF RHODE ISLAND.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 545,691, dated September 3, 1895.

Application filed March 20, 1893. Serial No. 466,870. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. HOWLAND, of the city of Providence, in the county of Providence and State of Rhode Island, have  
5 invented certain new and useful Improve-  
ments in Brushes; and I hereby declare that  
the following is a full, clear, and exact de-  
scription of the same, reference being had to  
the accompanying drawings, forming part of  
10 this specification.

This invention has reference to an improve-  
ment in brushes; and it consists in the pecu-  
liar and novel construction of the handle and  
its connection with the brush, as will be more  
15 fully set forth hereinafter.

Figure 1 is a side view of the brush, show-  
ing the handle at one end and indicating in  
broken lines the position of the handle at the  
opposite end of the same. Fig. 2 is a top view  
20 of the brush. Fig. 3 is a sectional view of  
part of the brush-back and the bristle-holding  
portion to more clearly show the clamping de-  
vice by means of which the two parts are  
clamped together; and Fig. 4 is a top view of  
25 a part of the bristle-holding portion, showing  
the semicircular guideway in which the head  
of the clamping device is held.

In the drawings, 5 is the bristle-holding por-  
tion or head of the brush.

30 6 6 are the bristles.

7 7 are the arc-shaped grooved metallic  
pieces which are let into the head 5 and are  
secured thereto by means of the screws 8 8.  
These metallic pieces 7 7 are constructed with  
35 the lips 9 9 and prevent the warping of the  
head 5. They are struck from one and the same  
center, which is the central pivot 15—that is,  
the grooved plates are secured in the head 5  
equidistant from the pivot, so that when the

back 10 is revolved the bolts 12 describe a cir- 40  
cle of which the said plates are arcs. The  
back 10 is made in one piece with the handle  
11 and carries the bolts 12 12, which are pro-  
vided with the thumb-nuts 13 13 and heads 14  
14. This back 10 is pivoted to the head 5 by 45  
the screw 15.

Brushes always wear first at the end oppo-  
site the handle, the bristles or other elastic  
fibers wearing off at this end more rapidly  
than at the opposite end. By the use of my 50  
invention the handle can be readily reversed  
by simply loosening the thumb-nuts 13 13, re-  
volving the bristle portion 5 on the pivot 15  
until the ends are reversed and the heads of  
the bolts 12 12 are in the center of the oppo- 55  
site arc-shaped pieces 7 7, then screwing the  
thumb-nuts down on the backing 10 and se-  
curely clamping the two portions of the back  
together, as is clearly shown in Fig. 3.

It is evident that by the construction shown 60  
and described a very durable brush is se-  
cured—one that can be readily changed to al-  
low of equal wear to both ends of the brush.

Having thus described my invention, I  
claim as new and desire to secure by Letters 65  
Patent—

In a reversible brush, the combination of  
the back 10, the head 5 pivoted centrally to  
the back, the arc-shaped grooved plates set  
into the head, and the bolts carried by the 70  
back, and adapted to engage the grooves, sub-  
stantially as and for the purposes set forth.

In witness whereof I have hereunto set my  
hand.

CHARLES E. HOWLAND.

Witnesses:

JOSEPH A. MILLER, Jr.,

M. F. BLIGH.