J. BIGELOW.
Hat-Tip.

No. 225,096. Patented Mar. 2, 1880.

Fig. 1.

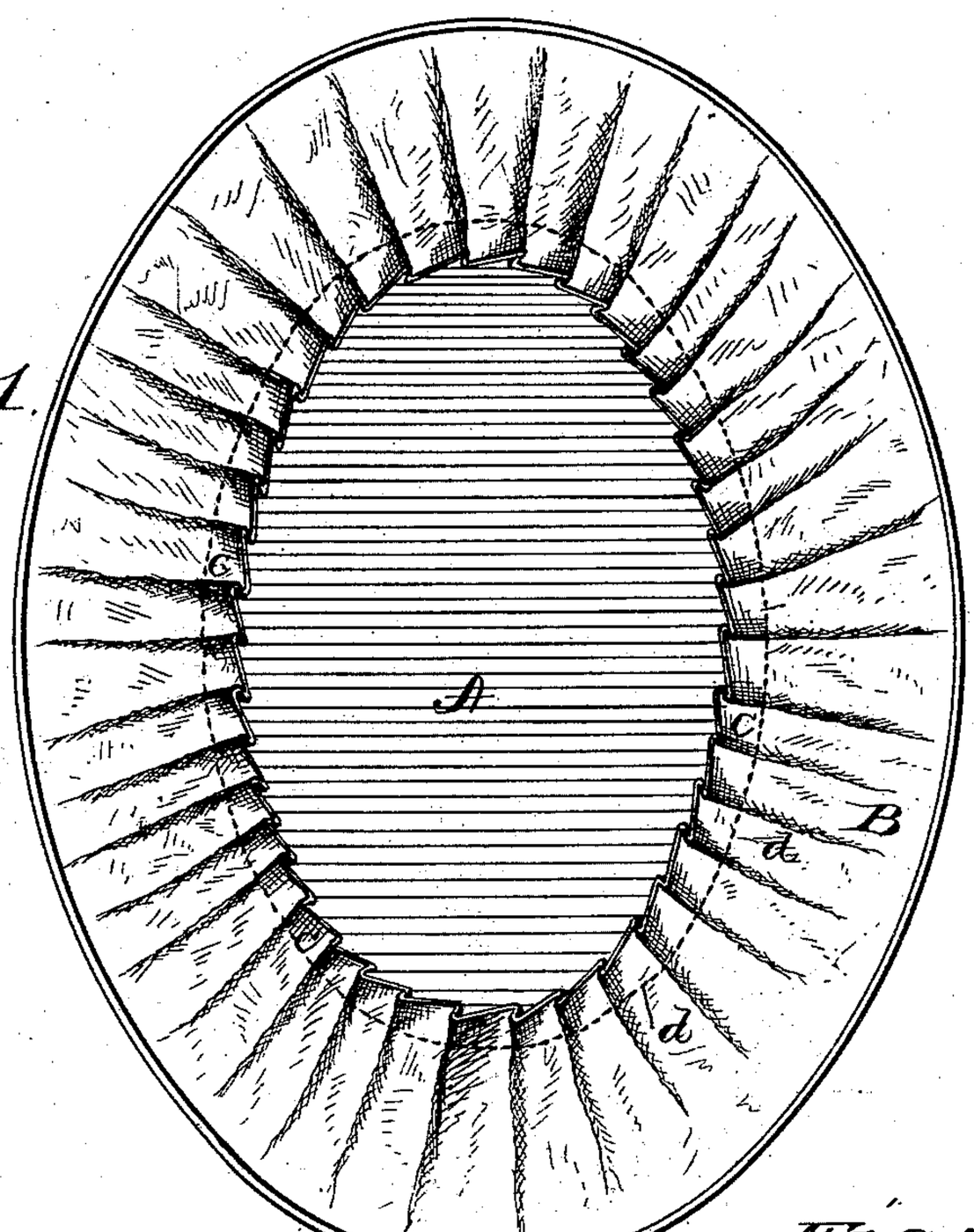



Fig. 2.

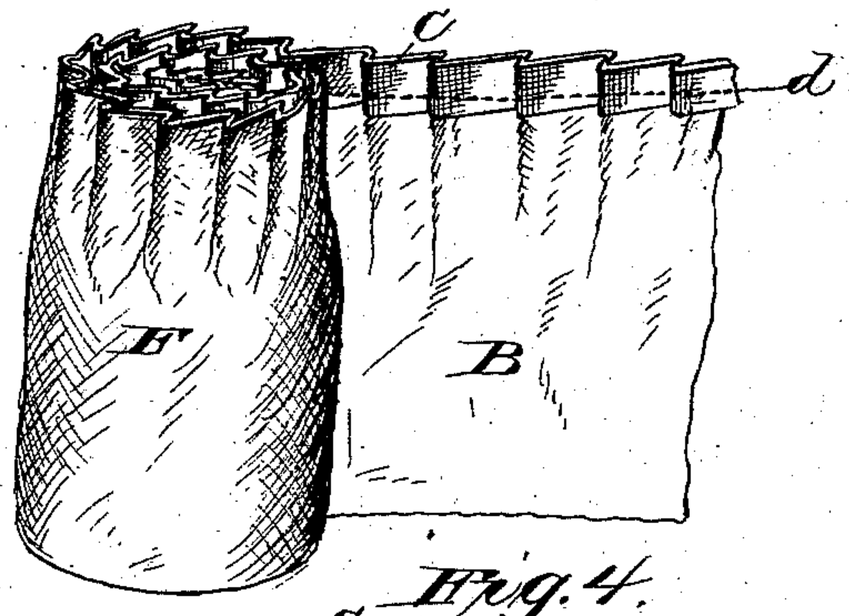



Fig. 3.

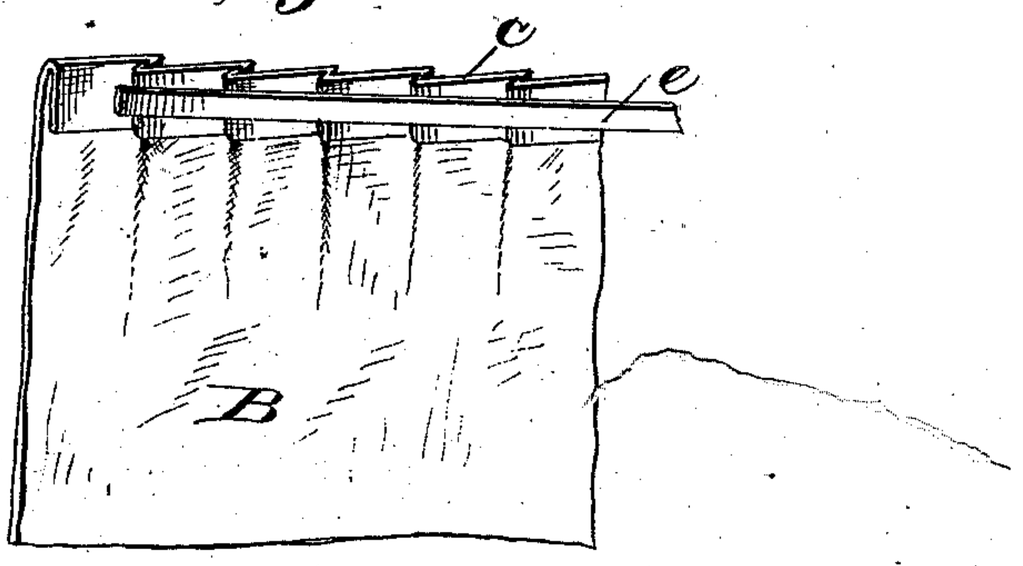



Fig. 4.

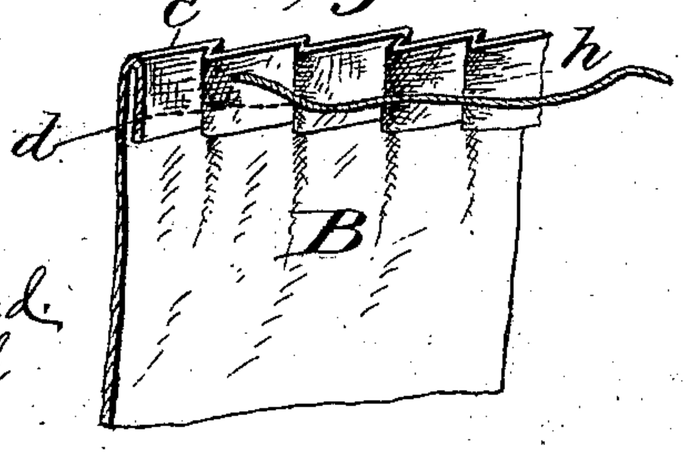
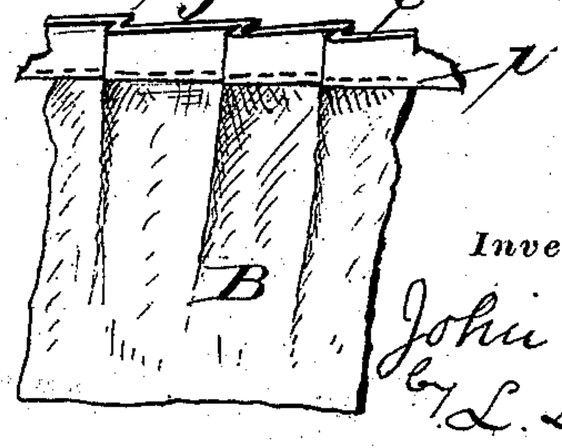



Fig. 5.




Witnesses:
F. L. Durand.
Robert Lynch

Inventor:
John Bigelow.
by L. Deane.
Atty.

# UNITED STATES PATENT OFFICE.

JOHN BIGELOW, OF PHILADELPHIA, PENNSYLVANIA.

## HAT-TIP.

SPECIFICATION forming part of Letters Patent No. 225,096, dated March 2, 1880.

Application filed February 4, 1880.

*To all whom it may concern:*

Be it known that I, JOHN BIGELOW, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hat-Tips; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view, showing the lining sewed to the hat-tip in accordance with the present invention. Fig. 2 is a view in side elevation, showing the side lining secured according to the present invention and done up in rolls for sale or use. Fig. 3 is a view, in side elevation, of the lining plaited, the plaits held in position by a detachable strip and ready for being sewed. Figs. 4 and 5 are details, showing modifications in the ways of manufacture.

Heretofore hat-tips have been cut and sewed on a machine patented by A. Judson, of Newark, New Jersey. The top of tip is cut oval in one operation, and then brought under the sewing-machine and the side lining is sewed to it plainly. In some instances, in order to get fullness and to cause the tip when complete to fit round-top hats, the side lining has been plaited by hand in an irregular and imperfect manner.

The subject of my invention is a hat-tip having the side lining machine plaited and sewed to the oval top piece so regularly that the completed tip shall fit even round-top hats, because the fullness is evenly distributed, while the edge of the side lining shall be so laid around the oval center piece as to take away the bald and irregular appearance of hand plaited work, and the completed tip, though made of the materials now used, is most sightly and salable.

Using the Judson or any other suitable oval-chuck arrangement for presenting the center piece, A, to the cutter and sewing-machine, my change comes in the addition to the sewing mechanism of a peculiar plaiting arrangement, by which, simultaneously with the sewing and without diminishing the speed of the machine, the side lining, B, as it is being sewed to the edge of the oval top piece, is regularly creased and plaited, as at *c*, in intervals of several—say three, four, or more—stitches, *d*, according as the mechanism is adapted, while the line of sewing is made within the edge of the plaited side lining, so that said edge shall project over and toward the center of the oval center piece.

I do not describe the plaiting mechanism in detail, as it will be the subject of another application for a patent; neither do I confine myself to a tip having the plaited edge of its side lining exposed beyond the sewing, since by my mechanism it can be made equally well if folded under.

When desirable the side linings can be plaited by machinery entirely independent of the sewing mechanism, the plaits being secured by pasting a strip of any suitable holding material, *e*, along the edge of the same, or, having been marked and pressed, can be fed into the present Judson or any other tip-sewing machine with regularity and good effects by using great care; or, again, they can be plaited and stitched independently of the oval top piece, and sold as a separate article of manufacture, to be sewed to the oval tip-pieces, the same as the plain side linings are now done. In this case the piece of tip material—satin, for instance—should be cut into strips, straight or bias, and the ends of the strips united so as to make a continuous strip or roll, *f*, of a very considerable length. This strip can then have its raw edge on one side folded under and be plaited and sewed without any holding-strip beneath, the plaits being held by the sewing only.

The plaiting should extend only a short distance back from the edge, not the full width of the side lining. This is necessary in order to obtain the fullness for the completed tip before described, which is required for round or narrowed top hats.

The plaited strips thus made can be cut into the lengths required for each tip before or after it has been sewed to the center piece. A second line of sewing is required to unite them to the center piece.

Of course, a braid, *h*, can be used to orna-

ment or conceal the sewing, as may be desired, and the edge of the side lining can have a ribbon, *i*, or bright-colored fringe or other ornamental material, attached to it by folding over or in any suitable manner.

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

1. A machine-made hat-tip having its side lining machine-plaited, substantially as shown and described.

2. A machine-made hat-tip having its side lining on the edge by which it is united to the center piece machine-plaited, with plaits converging to a common center, substantially as shown and described.

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

JOHN BIGELOW.

Witnesses:

ROBERT LYNCH,

G. W. BALLOCH.