

(No Model.)

3 Sheets—Sheet 1.

E. TWEEDY.

APPARATUS FOR TRIMMING HAT BODIES.

No. 293,380.

Patented Feb. 12, 1884.

Figure 1.

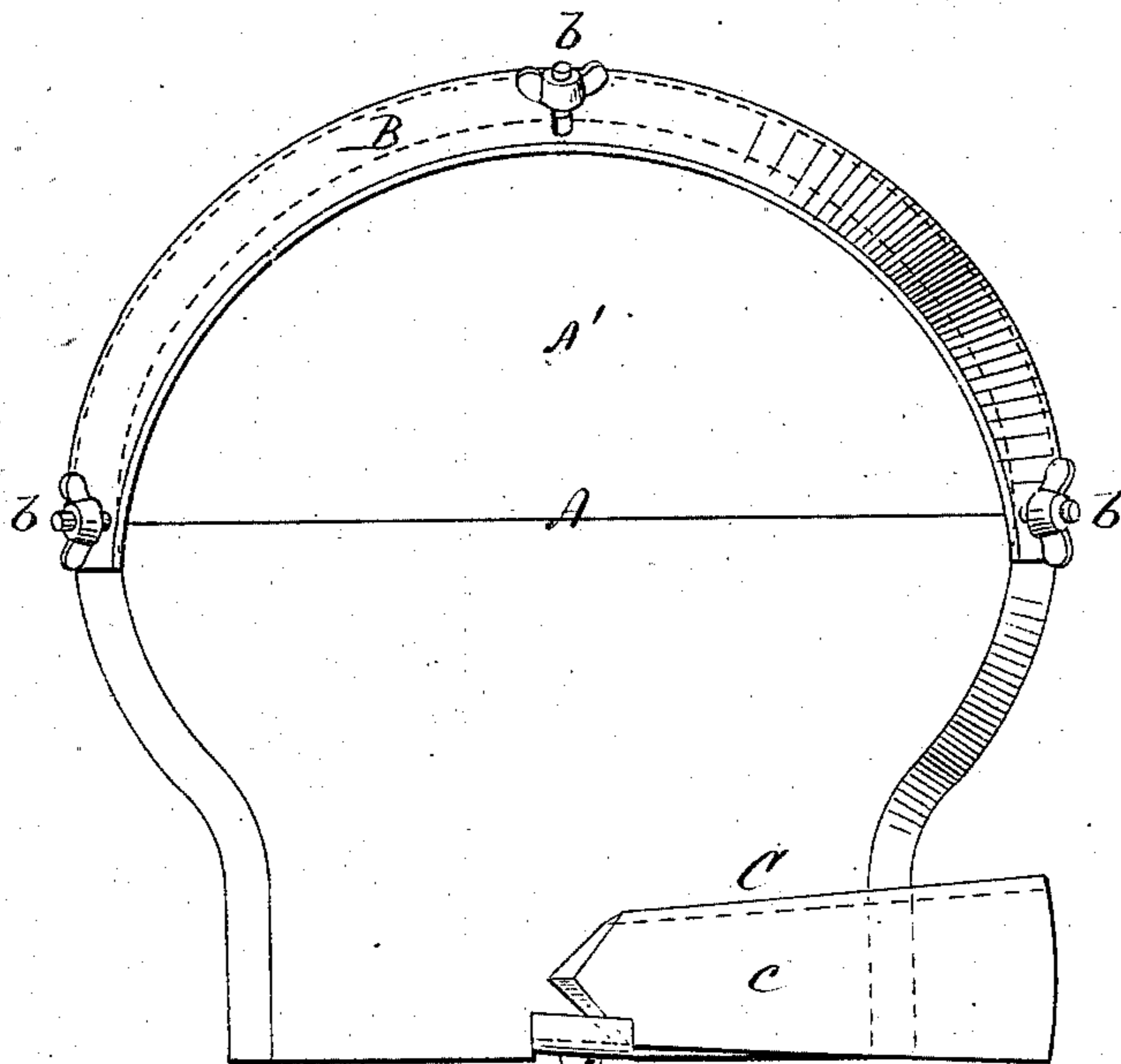
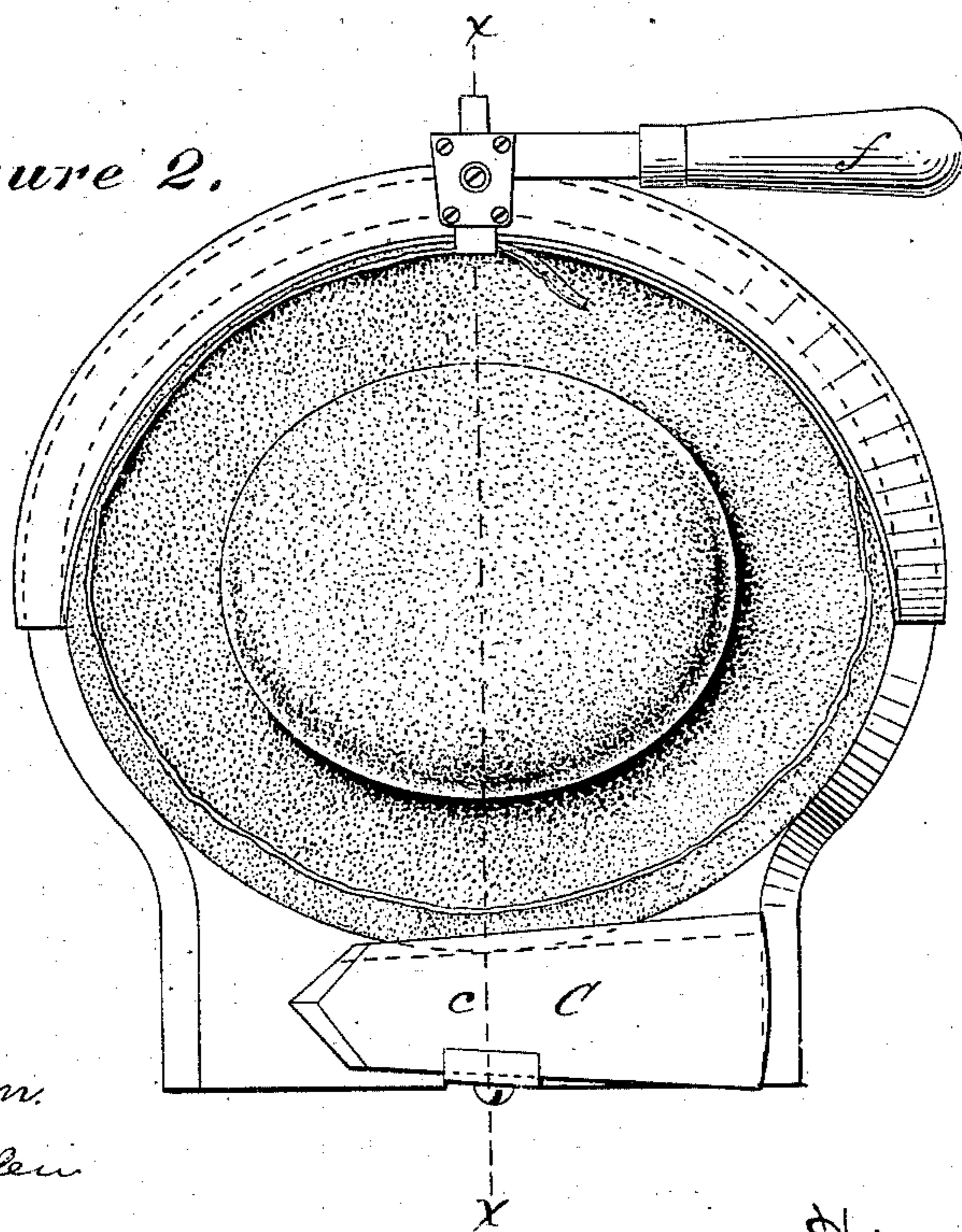


Figure 2.



Witnesses:
Anton J. Lehman.
Bern. J. Vetterlein

Inventor
Edmund Tweedy
By his Attorney
Henry L. Brewster

E. TWEEDY.

APPARATUS FOR TRIMMING HAT BODIES.

No. 293,380.

Patented Feb. 12, 1884.

Figure 3.

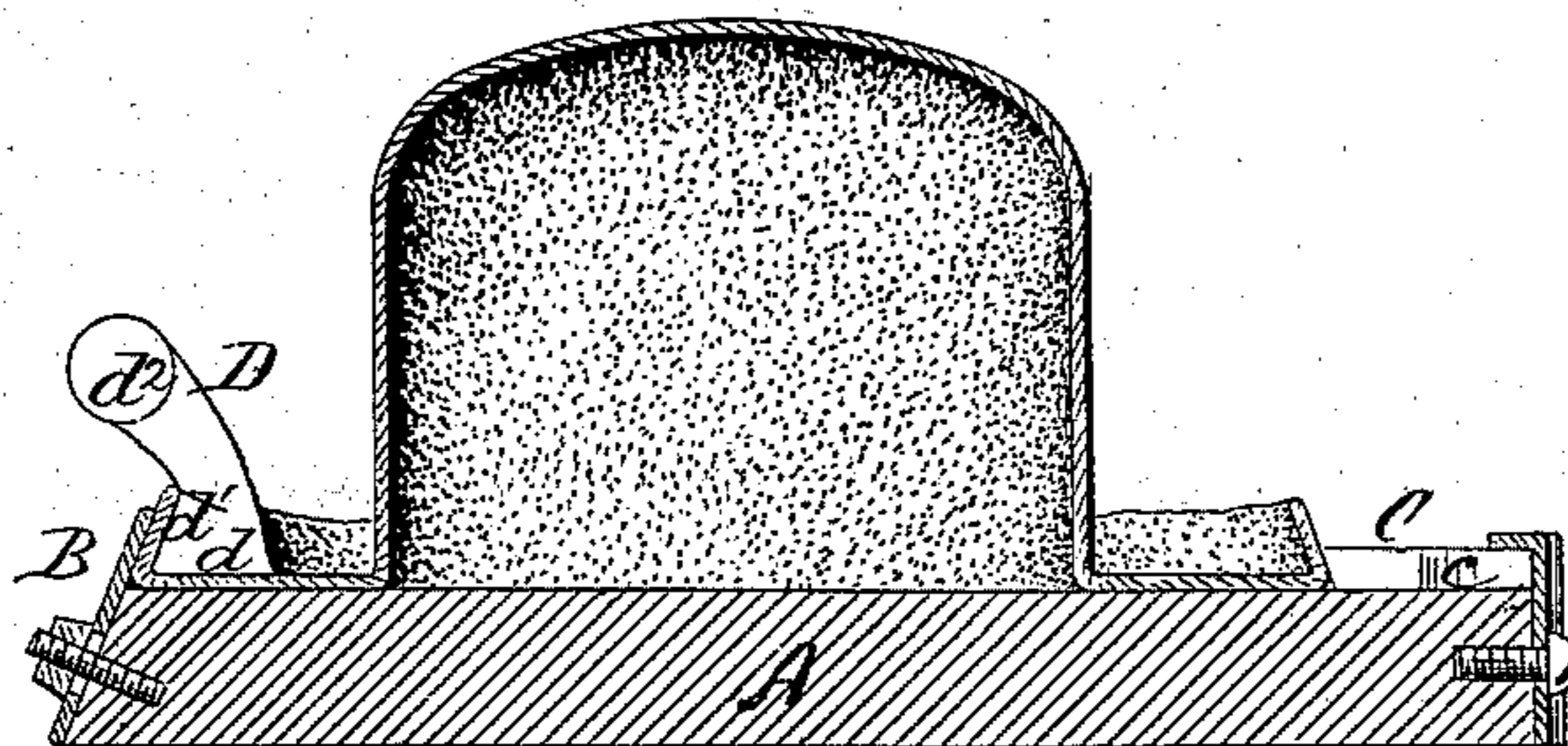


Figure 4.

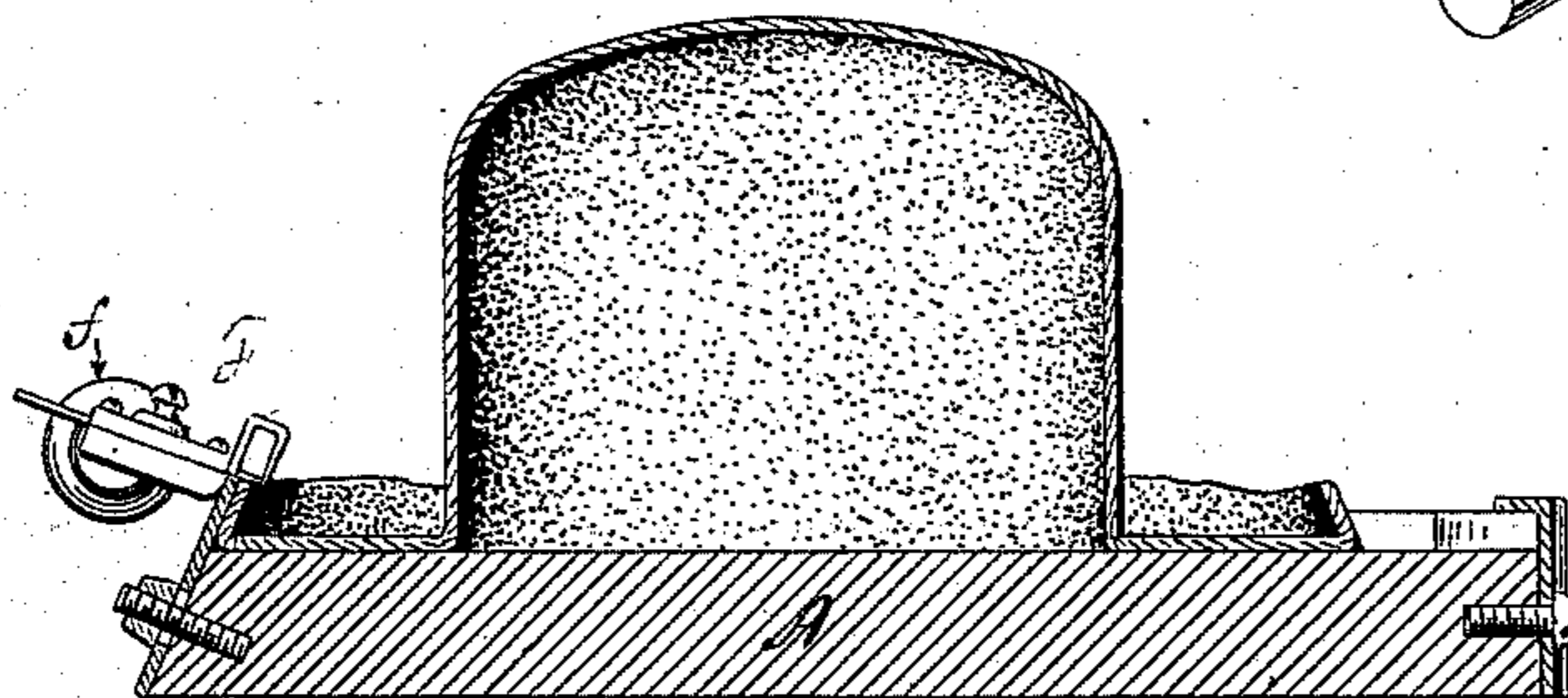


Figure 7.

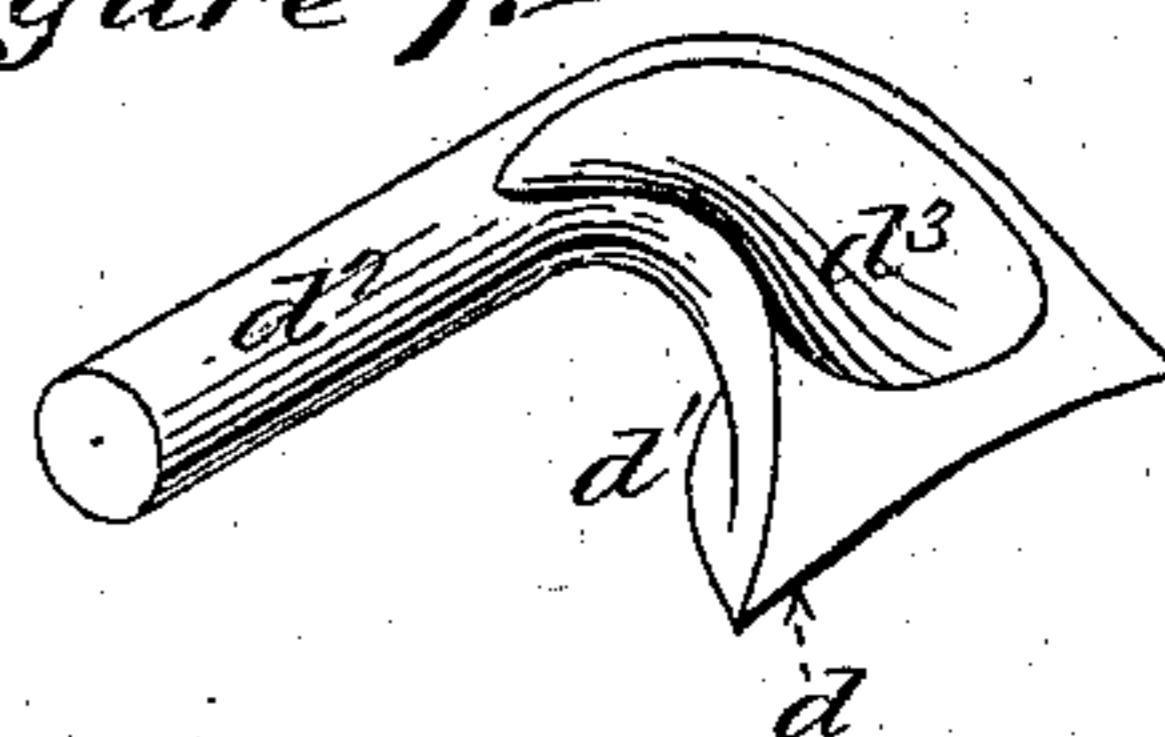


Figure 5.

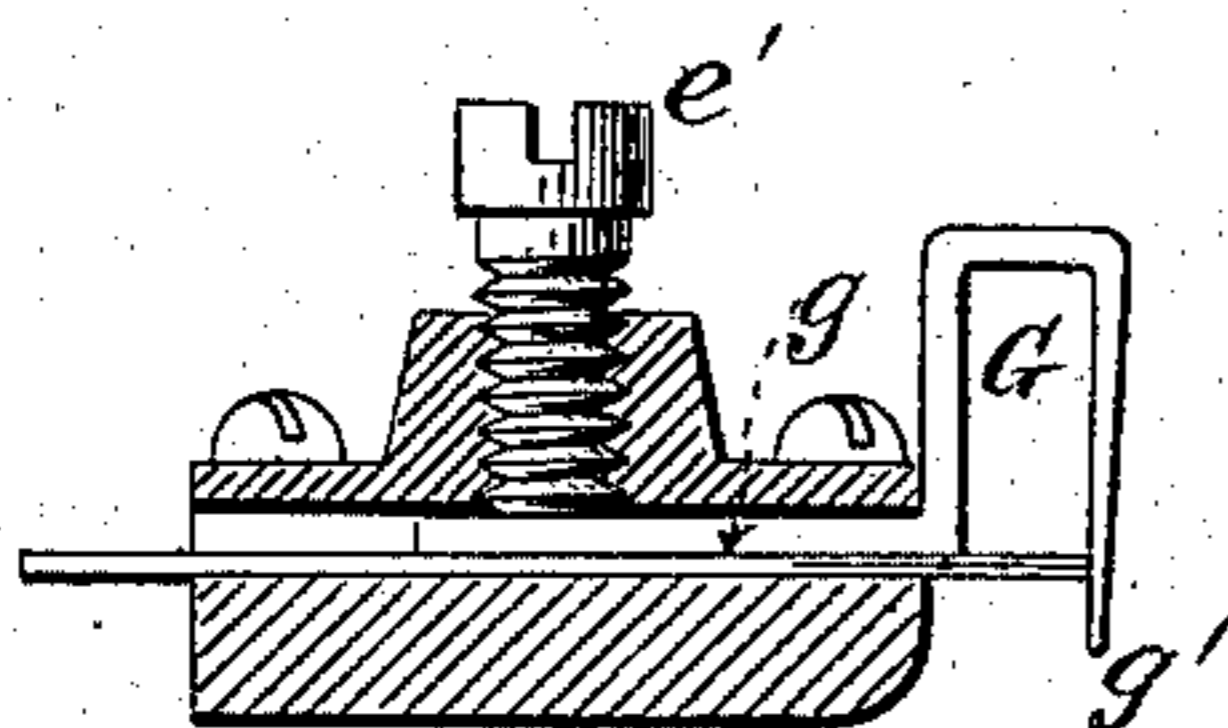
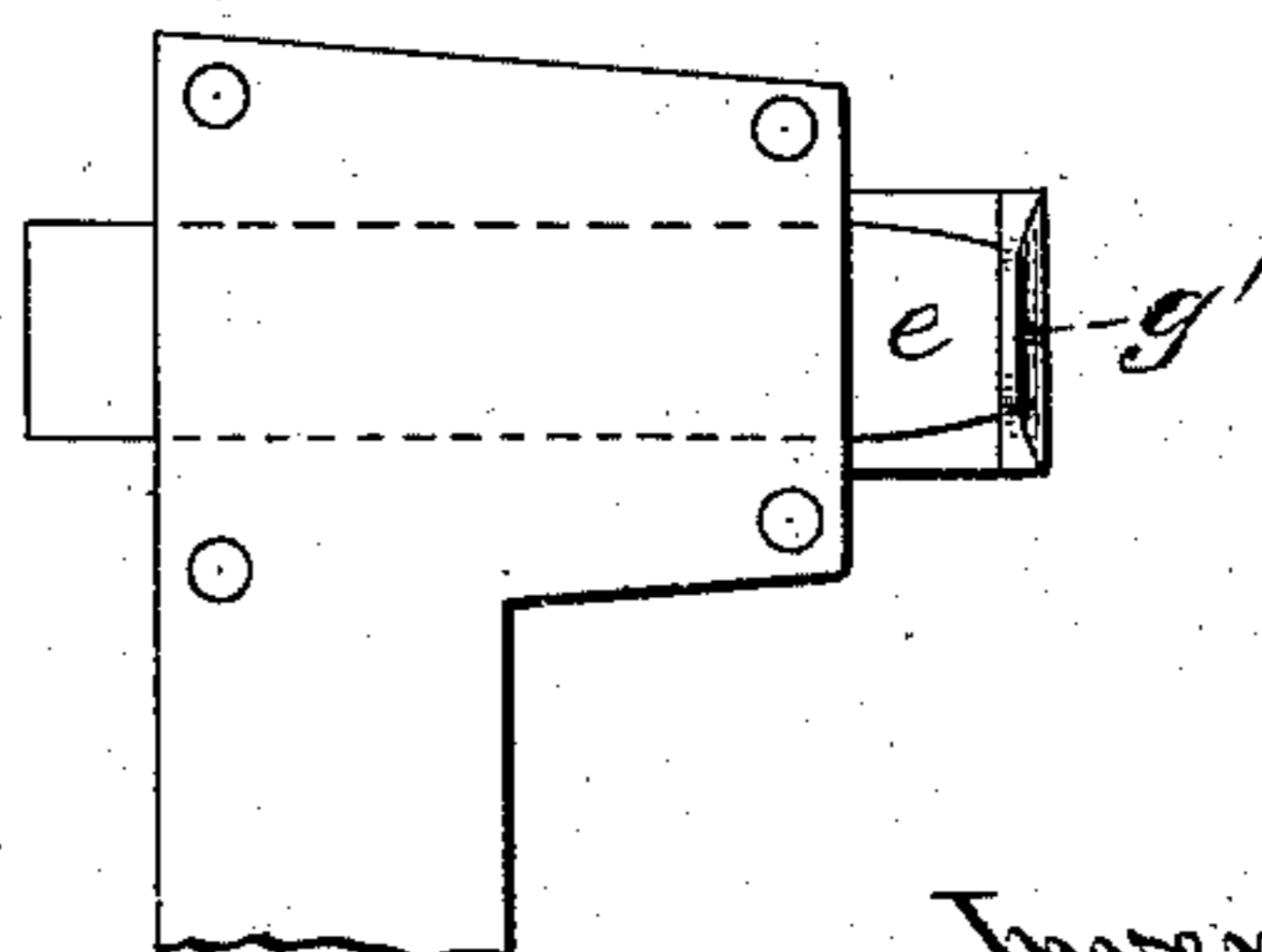


Figure 6.



Witnesses:
Anton. J. Lehman.
Bern. J. Petterlein

Inventor:
Edmund Tweedy
By his Attorney
Henry L. Grevolt

(No Model.)

3 Sheets—Sheet 3.

E. TWEEDY.

APPARATUS FOR TRIMMING HAT BODIES.

No. 293,380.

Patented Feb. 12, 1884.

Figure 8.

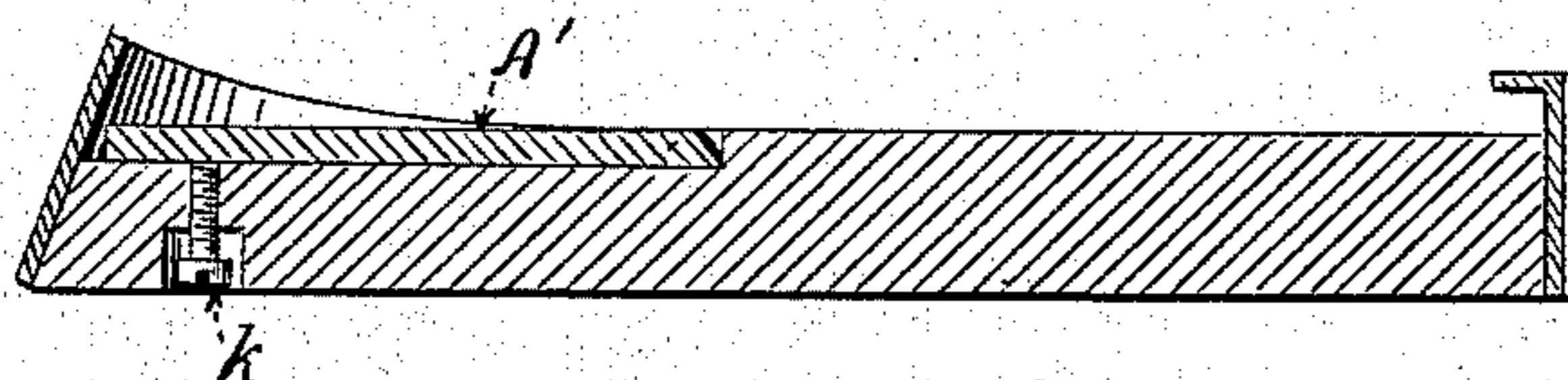


Figure 9.

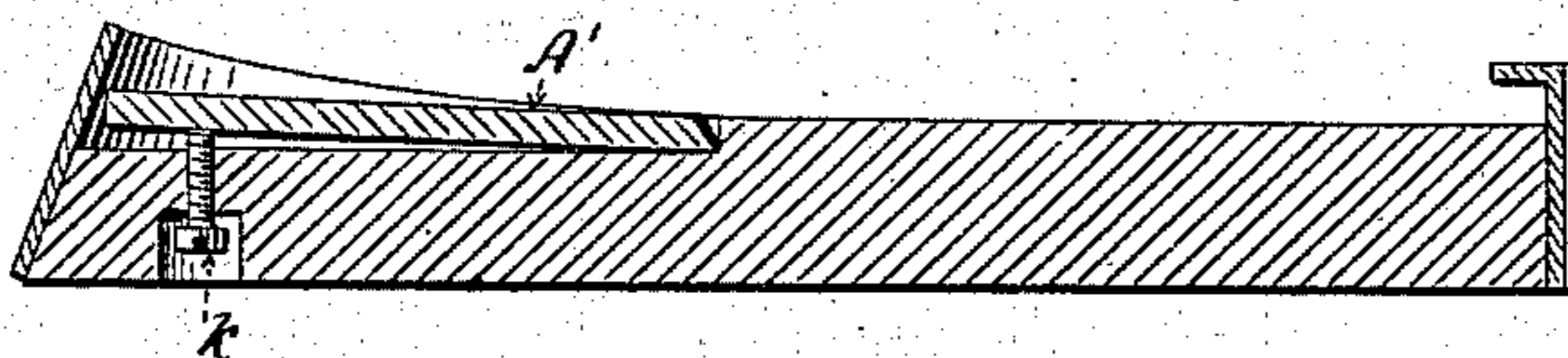


Figure 10.

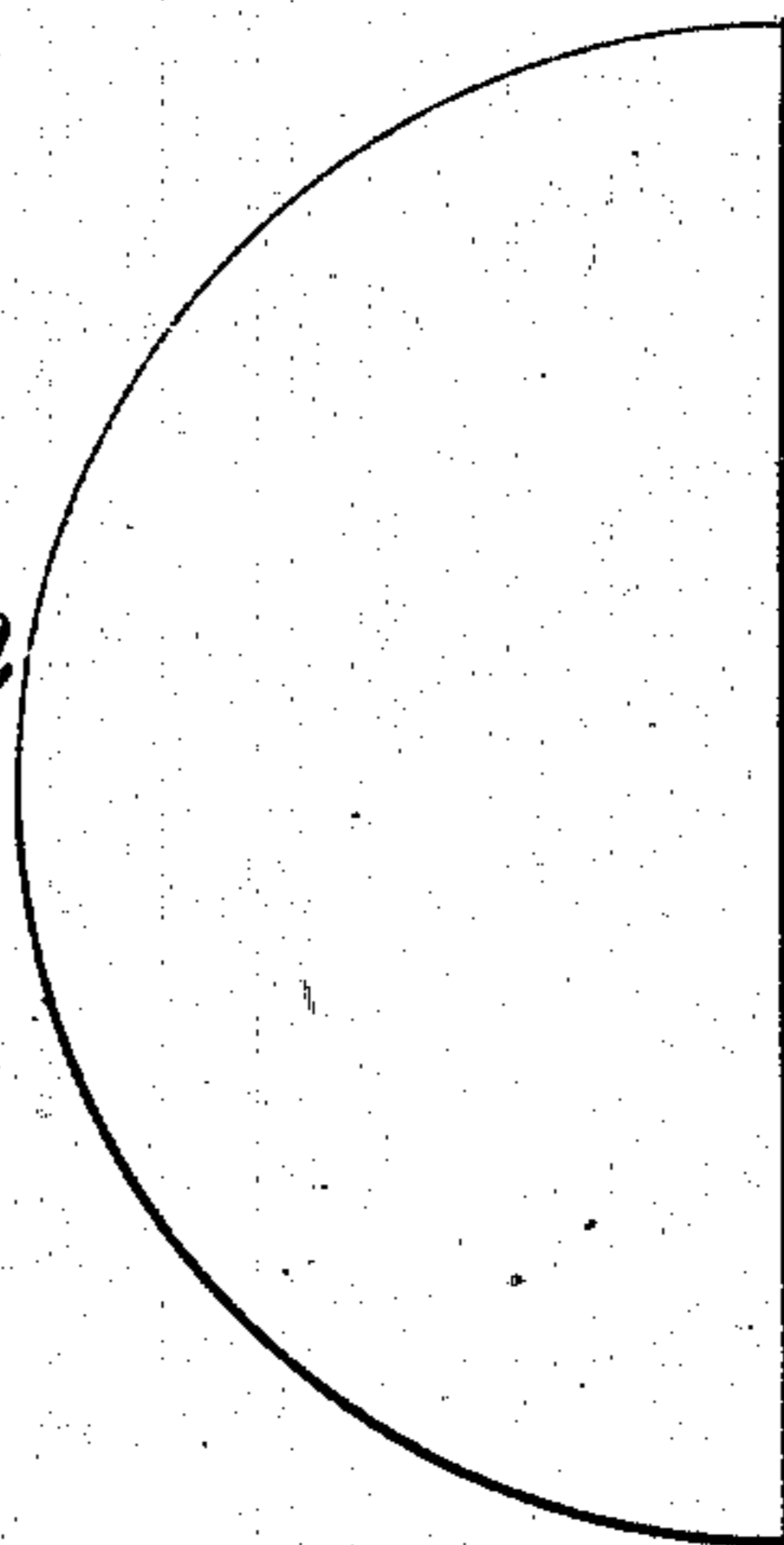
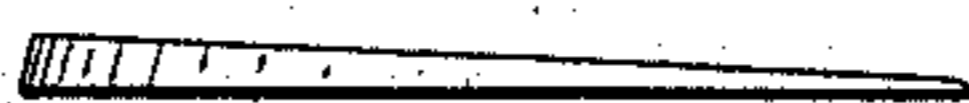


Figure 11.



Witnesses:
Anton. J. Lehman.
Bern. J. Vetterlein.

Inventor:
Edmund Tweedy,
By his Attorney,
Henry L. Brewster

UNITED STATES PATENT OFFICE.

EDMUND TWEEDY, OF DANBURY, CONNECTICUT.

APPARATUS FOR TRIMMING HAT-BODIES.

SPECIFICATION forming part of Letters Patent No. 293,380, dated February 12, 1884.

Application filed August 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDMUND TWEEDY, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented a new and Improved Apparatus for Trimming Hat-Brims, of which the following is a specification.

This invention relates to trimming off and rendering uniform the outer edges of hat-brims after the latter have been turned up or "curled" in the ordinary manner. This trimming has heretofore been done by means of a small hand plane or cutter held in one hand, while the hat-body was held directly upon a bench or table by the other hand of the operator, the stiffness of the hat-brim itself alone being relied upon to support it against the action of the trimming-tool, while the judgment and skill of the operator alone governed the degree of perfection attained. By this old method there is constant danger of spoiling the hat by an accidental or injudiciously deep cut with the trimming-tool, and although skilled labor only can be employed, there is unavoidably more or less variation between the curves imparted to the brims of different hats, and even in some cases between the curves of the opposite sides of the brim of a single hat.

It is the object of my invention to obviate these difficulties, and to insure a uniformity and perfection of result that may be attained even by the employment of comparatively unskilled labor.

My invention consists, primarily, in a device for holding a hat-body in a prescribed position, with a portion of its untrimmed brim projecting above or in such relation to a guide or pattern that the trimming-tool, as it is made to travel over the latter, will remove the surplus material from such portion of the brim, and invariably impart to its edge the required curve, thus dispensing with the numerous separate cuts and the frequent inspection and comparison unavoidable in the old method.

My invention also includes an adjustable bed for the purpose of regulating the depth of roll or curl, and of means for securing the hat upon the supporting block or bed.

Another feature of my invention consists, in combination with a hat-supporting block or

bed provided with a gage plate or pattern, of a smoothing and supporting device, by which the curl or upward projection of the hat-brim to be trimmed is pressed against the gage plate or pattern, and supported in such position during the action of the trimming device, which it immediately precedes.

Finally, my invention includes, for combination and use with the hat-supporting block or bed and hat-brim gage or pattern, a trimming device or cutter of peculiar construction, as hereinafter described, by which the extreme upper edge of the brim under treatment may be held laterally against displacement or strain on both sides, such lateral support coinciding with the cutting-edge and advancing with it.

In the accompanying drawings, Figure 1 is a plan of my hat supporting and retaining device ready for the reception of a hat-body. Fig. 2 is a similar view, showing a hat secured in position, and illustrating the operation of the trimming-tool. Fig. 3 is a vertical section on plane *x x*, Fig. 2, illustrating the office of the smoothing and supporting tool, which precedes the cutter or trimming tool. Fig. 4 is a similar view illustrating the action of the trimming-tool. Fig. 5 is a transverse section of the cutting-tool holder, and Fig. 6 a plan of the under side of the same. Fig. 7 is a view of the smoothing-tool. Fig. 8 is a section in the line *x x*, Fig. 2, showing an adjustable bed. Fig. 9 is the same view, showing the bed as elevated; and Figs. 10 and 11 are views of a wedge of wood, pasteboard, or metal which may be used in place of the adjustable bed.

The base or hat table A may be made of any desired form, provided it affords a suitable support for a hat-body. Secured to the base A is a flange, B, the inner side of which is inclined inward, so that when the latter is in place its curled brim upon one side will fit into and be overlapped by the flange B, as indicated in Figs. 2, 3, and 4. The hat is secured and locked in position upon its other side by a suitable tightening device, C, which, in the construction shown in the drawings, consists of a wedge, *c*, which is inserted between the rim of the hat and a stationary part of the bed-piece A, the edge of the wedge designed

for contact with the hat-rim being beveled inward, so that when the hat-body is in position and the wedge adjusted, as in Figs. 2, 3, and 4, the hat will be held against vertical displacement by the flange B on one side and the wedge C on the other. It is obvious that the construction of this tightening device C may be varied considerably, the only essential feature being a means of confining the hat-rim upon that side of the bed-piece acting in conjunction with the flange B upon the other side. The inner side of the flange B forms a concave curve corresponding to one side of the hat-brim, and it is preferably formed of a comparatively thin plate secured to the edge of the base A, which in such case is curved and beveled to coincide with the inner side of the flange. The upper edge of the flange projects above the bed-piece A a distance equal to the height of the finished hat-brim, and is curved vertically more or less, according to the shape which it is desired to impart to the latter, since the flange performs the double function of confining one side of the hat-brim and affording a guide rest or pattern for the trimming-tool, as shown in Figs. 2 and 4.

The smoothing and supporting tool D is formed with a flat surface, d , upon its under side, which in use rests against the upperside of the horizontal part of the brim, while one of its sides d' is beveled upon the same angle as that of the inclination of the inner side of the flange B, so that it may enter the inner side of the hat rim or curl and be made to press the latter against the said inner side of the flange. It is also formed with a longitudinal handle, d^2 , which is designed to rest in the palm of the hand, and with a depression or thumb-rest, d^3 , so that in use it may be conveniently grasped and firmly pressed against the inner side of the hat brim or curl.

The trimming-tool consists of a cutter, e , which is preferably double-edged, mounted in a suitable holder, F, provided with a handle, f . The blade e is clamped in the holder by the set-screw e' , which also, in the construction shown in the drawings, secures the rim-supporting tongue or flange-piece G. The latter is bent upward from the point where its shank g projects from the holder a sufficient distance to clear the upper edge of the untrimmed hat-rim, and then downward to and beyond the end of the cutting-blade e . The projection g' below the blade e allows the flange-piece G to enter the curl or rim, so that by holding the cutting-tool toward the inner side of the pattern-flange B during its progress over the latter while trimming the brim the upper edge of the rim or curl will be firmly held laterally on either side.

As hats have what is technically known as different "widths" of curl—that is, more or less material is turned up to form the curled brim at the sides—and as almost all hats have about the same width of curl at front and back, it becomes important to have some means of regu-

lating the position of the hat with reference to the top of flange B.

At Figs. 8 and 9 I have shown a bed, A', which is adjusted by the screw k , and which can be arranged to suit any width of curl. If a non-adjustable bed is used, as shown at Figs. 2 and 3, then the wedges of wood, metal or pasteboard shown at Figs. 10 and 11 can be used by being placed between the bottom of the hat and the top of the bed. The object of hinging the bed on a line which passes through the major axis of the hat, and of having the wedges shown at Figs. 10 and 11 beveled off, is to cause such adjustment to vary most at the line which passes through the minor axis of the hat, while such adjustment is scarcely perceptible at the line which passes through the major axis of the hat. This manner of adjustment is made necessary by the facts before stated.

The operation of trimming a hat in connection with my device is as follows: The proper adjustment of the bed A in relation to the flange B having been effected to correspond to the hat to be trimmed or the proper wedges having been inserted and the tightening device C sufficiently receded, the hat-body is passed into place with one of its side brims resting partly under the pattern-flange B, and the tightening device C is then adjusted so as to rest against the opposite brim, thereby firmly clamping the hat to the bed-piece A. The smoothing and supporting tool is then inserted between the inner side rim or curl and the upper side of the horizontal portion of the brim, and the trimming-tool placed immediately behind it, with the cutting-blade resting upon the upper edge of the pattern-flange B and the finger or projection g' resting against the extreme upper edge of the inside of the brim. The smoothing and supporting tool D being grasped by the left hand and the trimming-tool by the right, both are made to pass around the side of the hat in close proximity to each other, the smoothing and supporting device preparing the way for and in a measure supporting the hat-rim against the action of the trimming-tool. When the surplus material has been removed from one side of the hat, the tightening device is again retracted and the hat-body reversed, so as to bring the untrimmed edge in contact with the pattern-flange, and the operation is repeated.

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

1. A curled-hat-rim-trimming device consisting of a hat-supporting bed-piece provided with suitable means of securing a hat thereto, and which holding devices are not part of the hat-shaping mechanism, and with a pattern or guide rest for the trimming-tool, in combination with the latter, substantially as herein described.

2. A curled-hat-rim-trimming device consisting of a hat-supporting bed-piece provided

with suitable means for securing a hat thereto, and with a pattern or guide rest for the trimming-tool, and having an adjustable bed-plate, in combination with a trimming-tool, substantially as herein described.

3. In combination with a curled-hat-rim-trimming device consisting of a hat-supporting bed-piece provided with suitable means for securing a hat thereto, and with a pattern or guide rest for the trimming-tool, a trimming-tool formed with a projecting finger or flange arranged to enter the curl of a hat-brim and support its extreme upper edge during the operation of trimming the edge of the curl, substantially in the manner and for the purpose described.

4. In combination with a curled-hat-rim-trimming device consisting of a hat-supporting bed-piece provided with suitable means for securing a hat thereto, and with a pattern or guide rest for the trimming-tool, a curl smoothing and supporting tool for use in conjunction with the pattern or guide rest, substantially in the manner and for the purpose described.

5. In combination with a curled-hat-rim-

trimming device consisting of a hat-supporting bed-piece provided with suitable means for securing a hat thereto, with a pattern or guide rest for the trimming-tool, and with a trimming-tool of suitable construction, a curl smoothing and supporting device for use in conjunction with the pattern or guide rest and the trimming-tool, substantially in the manner and for the purpose described.

6. A curled-hat-rim-trimming device consisting of a hat-supporting bed-piece and suitable wedge-shaped adjusting-pieces, means for securing the hat to the bed-piece, and a pattern or guide rest for the trimming-tool, substantially as described.

7. The process of trimming the curled edges of hats, which consists in securing the hat upon a plate or bed having a pattern or guide rest, and then moving a cutting-tool around the hat and in contact with the said pattern or guide rest.

EDMUND TWEEDY.

Witnesses:

HENRY L. BREVOORT,
BEN. T. VETTERLEIN.