(No Model.)

A. CAMPBELL.

MANUFACTURE OF HATS.

No. 368,188. Patented Aug. 16, 1887.

Fig. 1.

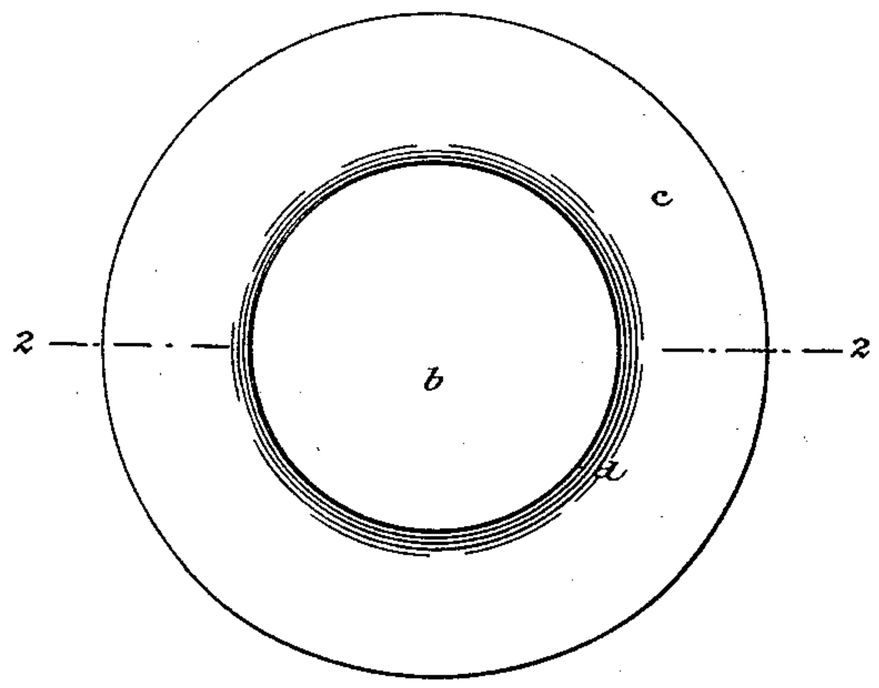


Fig. 3.

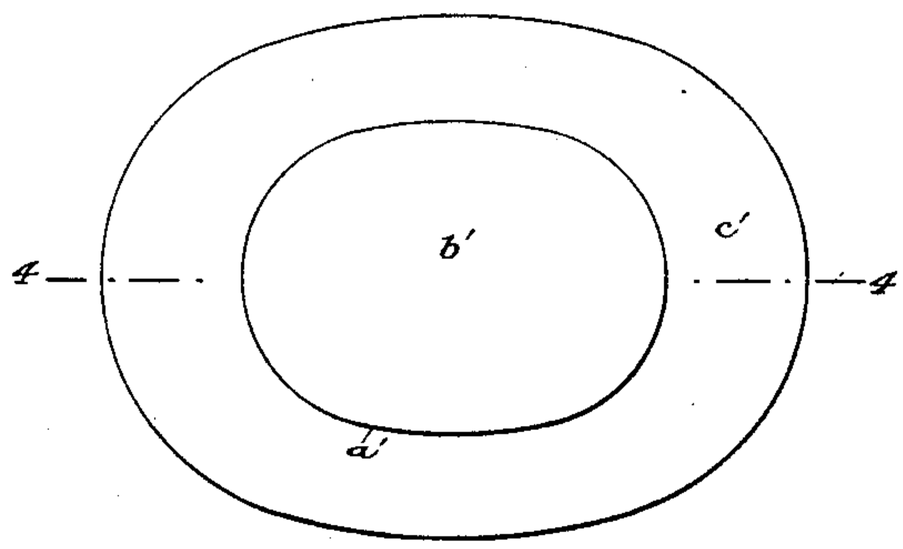


Fig. 2.

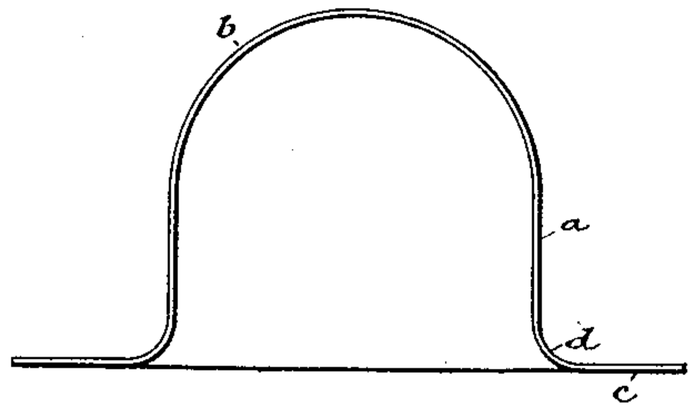
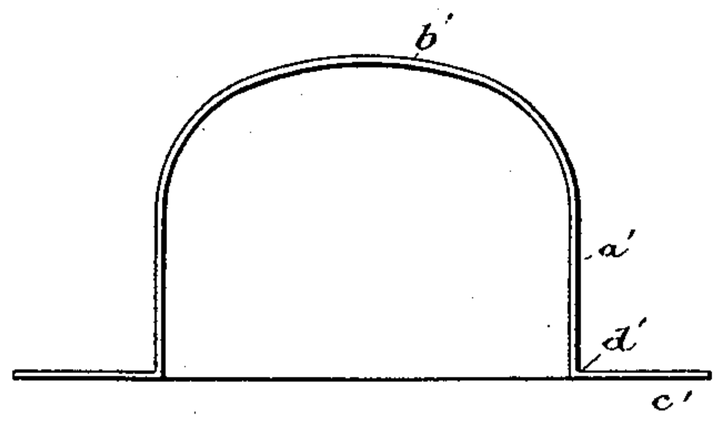


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANDREW CAMPBELL, OF BROOKLYN, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE HAT MACHINE COMPANY, OF SAME PLACE.

MANUFACTURE OF HATS.

SPECIFICATION forming part of Letters Patent No. 368,188, dated August 16, 1887.

Application filed October 12, 1886. Serial No. 216,014. (No model.)

To all whom it may concern:

Be it known that I, ANDREW CAMPBELL, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in the Manufacture of Hats, of which the following is a specification.

My invention relates to certain improvements in the manufacture of stiff felt hats; and the object of my invention is in part to facilitate the operation of finishing the hat, and in part to produce a better finish than is obtained by the mode of operation now in common use.

By the ordinary method the unfinished hat, after being properly charged with shellac, and while quite hot and pliable, is blocked in the usual way. This blocking imparts to the hat-body the proper oval or elliptical form, and the brim makes a sharp angle with the body at the line of its junction therewith. The hat is now "pounced" and "lured" before its removal from the block, these last operations giving it a soft velvety finish. Owing to the oval or elliptical form of the hat-body, given to it by the blocking, it is found to be impracticable to effect the pouncing and luring thereafter by any other means than the hands, and this renders the finishing a comparatively slow and expensive process. Being dependent wholly on the operator, it is also apt to produce variable and not uniformly good results.

My process or method of operation in its entirety consists in giving the hot and pliable unfinished hat, previously charged with shellac or like stiffening substance, a preliminary shaping, in a mold or die, for example, and by preference, whereby its body is given a round, cylindrical, or slightly-conical form, instead of an oval or elliptical form, and the brim is joined to the body by a curve instead of by an angle—that is to say, the hat has a form that may be turned in a lathe with ordinary centers. When cool and stiff, the hat is put in a lathe and pounced, both inside and outside, if desired, and lured by the usual means. After this "pouncing" and "luring" the hat is reheated until it is again pliable, and the proper form given to it by blocking or molding to fit it for the market.

It will be seen that my method comprises as its essential features the preliminary shaping of the hat to adapt it for rotation in a lathe, then the pouncing, and then the reheating and shaping for the market, these steps being taken in the order named. In the ordinary process the preliminary shaping is omitted, and the last two steps are reversed in their order of succession, the pouncing being the last step.

In the accompanying drawings, Figures 1 and 2 show the form I give to the hat by the preliminary shaping before pouncing. Fig. 1 is a plan, and Fig. 2 a section through the axis of the hat on line 2 2 in Fig. 1. Figs. 3 and 4 are similar views showing the form given to the hat by the ordinary method before pouncing. These views show an ordinary stiff Derby hat.

In Figs. 1 and 2, *a* represents the body of the hat, of cylindrical form; *b*, the crown, of hemispherical or convex form; *c*, the brim, and *d* the curve where the brim joins the body.

In Figs. 3 and 4, *a'* is the body of the hat, of elliptical form; *b'*, the crown, of semi-ellipsoidal form, and *c'* the brim, which forms a sharp angle with the body at *d'*.

It will be seen that the hat illustrated in Figs. 1 and 2 is of such a form that any plane passing through it perpendicular to its axis will be a circle plane, and this form adapts it to being mounted in a lathe and pounced while rapidly rotated. It may be pounced in this way both inside and out.

I do not limit myself to any particular mechanism or apparatus for carrying out my invention; nor is it material to my invention what form is given to the hat after the pouncing and reheating.

I wish it understood, however, that my herein-described method relates to the finishing of stiff hats exclusively, and not to soft felt hats. These latter are flexible and yielding, and do not require to be specially shaped like a stiff hat.

Where the hat is not required to have an

oval form, as in styles of stiff felt hats for women and children, I may omit the last steps of reheating and blocking. Such hats may have bodies, usually slightly conical, of forms that can be pounced on a lathe.

Having thus described my invention, I claim—

1. The herein-described improvement in the manufacture of stiff felt hats, which consists in first charging the hat with the usual quantity of shellac to produce a stiff hat, then giving to the hat while still hot a cylindrical or round form, as described, then mounting it in a lathe, and then pouncing it while it is being rapidly revolved on its axis in said lathe, as set forth.

2. The herein-described improvement in the manufacture of stiff felt hats, which consists in first charging the unfinished hat with shellac, then while hot giving to the hat, preliminarily, a cylindrical or round form, as set forth, then pouncing it, then reheating it, and then giving to it the finished form required to adapt the hat for the market.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ANDREW CAMPBELL.

Witnesses:
HENRY CONNETT,
J. D. CAPLINGER.