

L. STEVENS.
HAT MATRIX.
APPLICATION FILED JUNE 5, 1909.

954,478.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

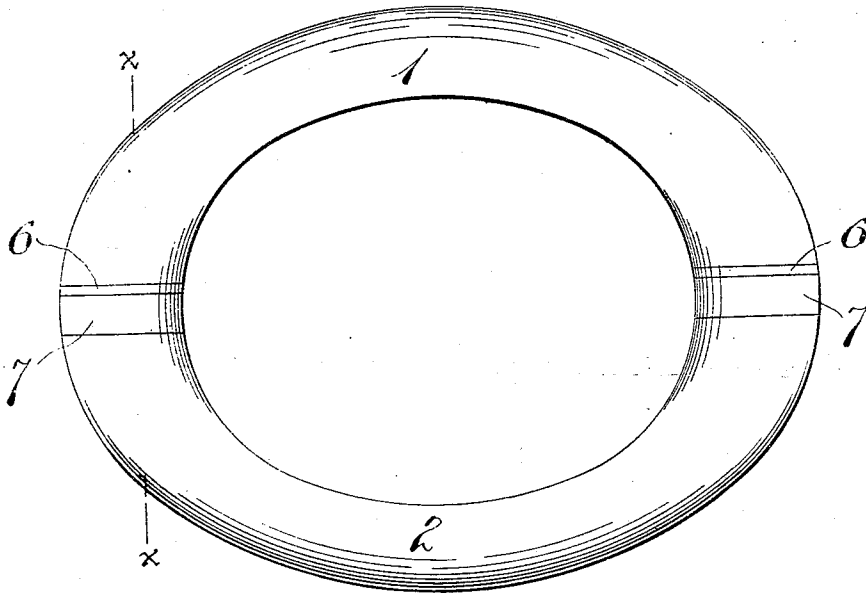


Fig. 2.

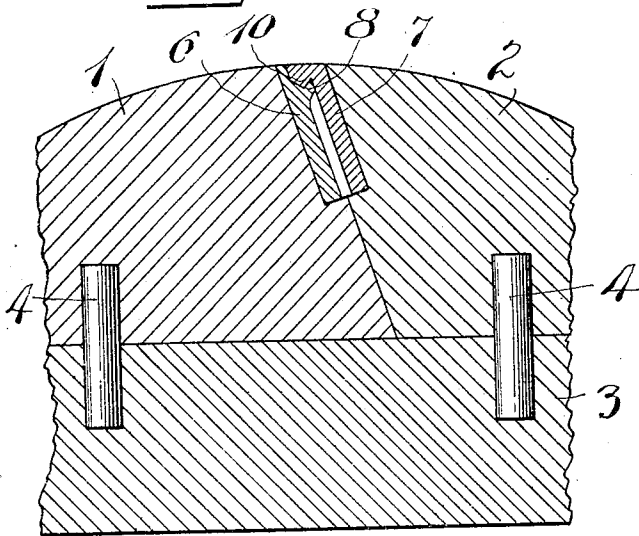
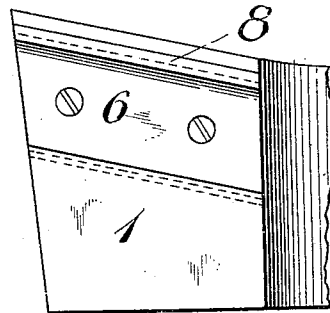


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

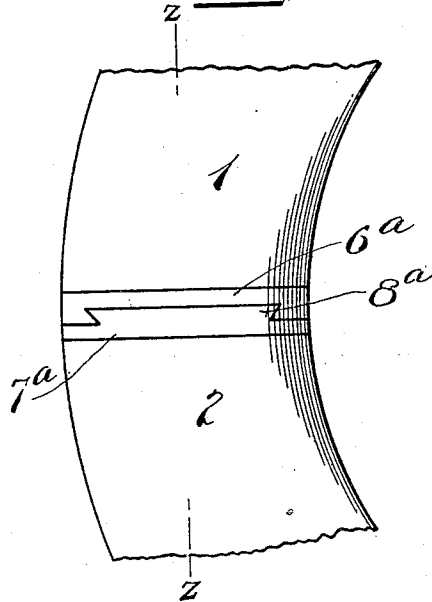


Fig. 5.

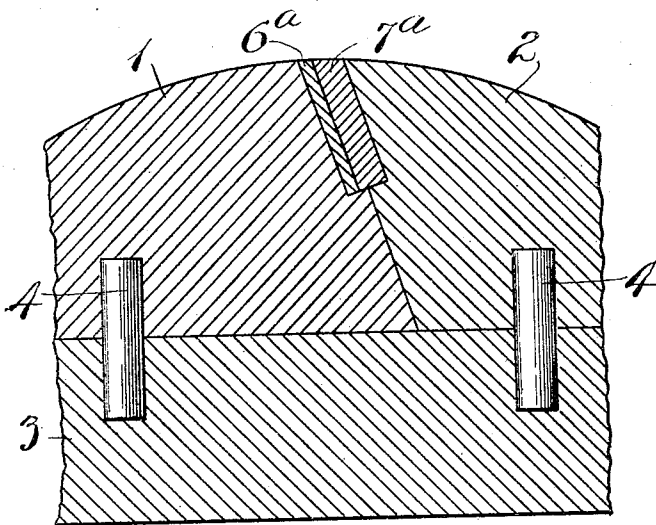
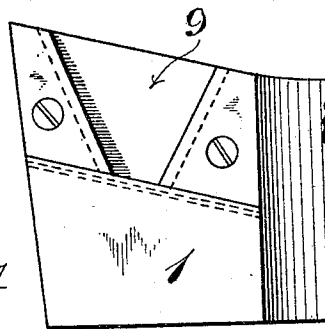


Fig. 6.



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UNITED STATES PATENT OFFICE.

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HAT-MATRIX.

954,478.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed June 5, 1909. Serial No. 500,391.

To all whom it may concern:

Be it known that I, LESLIE STEVENS, a citizen of the United States, residing at Glen Ridge, county of Essex, State of New Jersey, have invented certain new and useful Improvements in Hat-Matrices, of which the following is a full, clear, and exact description.

My invention relates to hat forming machines, and particularly to an improved "matrix", so-called.

The object of the invention is to provide a two-part matrix of improved construction, by the use of which superior results may be obtained. The construction is also such that the two parts are effectively interlocked, so that there is no danger of separation which, if permitted, would result in the formation of a line or ridge on the brim of the hat.

My improved matrix is formed in the main of an insulating material instead of metal, as heretofore. A distinct advantage is derived in the use of such a matrix because, where the brim has been properly contoured, if the matrix is of a character to retain the heat, it will not permit the brim to cool sufficiently while thereon. By my invention the heat is not retained. As a result, the brim cools quickly, takes a "set", and the matrix may be removed without danger.

In the accompanying drawings, Figure 1 is a top plan view; Fig. 2 is a relatively enlarged section on the line $x-x$ of Fig. 1, broken away; Fig. 3 is an end view of one of the parts, broken away; Fig. 4 is a top plan view of one end of the matrix and illustrating a modification, broken away; Fig. 5 is a cross section on the plane of the line $z-z$ of Fig. 4, broken away; Fig. 6 is an end view of one of the parts shown in Fig. 4, broken away.

1—2 represent two opposite side sections of a matrix, the same being in the main of wood or other insulating material which, in the preferred form, is treated with a water-proof material. These sections are detachably connected at each end by interlocking buffer plates 6—7. On the face of one of these plates, for example 6, is a lip or projection 8, forming a groove or recess to the rear of it. 10 is a lip on the plate 7, arranged to enter the said recess and interlock with the companion plate 6 in such a

manner as to hold these two sections positively against separation, thus guaranteeing a smooth forming surface. 3 is a supporting plate and 4—4 are pins carried thereby and arranged to enter corresponding recesses in the sections 1—2 to prevent lateral displacement. The buffer plates serve not only as interlocking devices, but by extending from edge to edge of said sections and being flush therewith, they protect the surface upon which the hat is formed from chipping or abrasion which would, if it were permitted, injure the contour of the hat material. The interlocking buffer plates, therefore, perform the double function of providing protecting buffers, as well as interlocking devices, thus making it possible to employ for the matrix sections light material, such as wood. As already indicated, wood being of low conductivity, when the hat material is applied to the matrix and formed thereon with heat, this heat will not be absorbed to any great extent and retained for any length of time by the matrix itself. Hence, when the heat used in forming is removed, the formed hat material quickly cools and becomes set so that the matrix may be taken out without danger of injuring said shape. By the employment of my improved matrix much greater speed will be attained in the manufacture of hats.

In the modification shown (see Figs. 4 to 6), 1, 2, 3 and 4 represent the side sections, base and retaining pins, respectively, as before. The buffer blocks are represented by 6^a 7^a, the same being suitably secured to their respective side sections, one of the same having a retaining recess of modified form, indicated at 9 (Fig. 6). The sides of this recess are undercut so as to permit a dovetailed interlocking projection 8^a on the other plate to enter. This recess and dovetailed projection are preferably tapered, as shown in Fig. 6.

What I claim is:

1. In a hat matrix, two separable sections formed of material of low conductivity, protecting interlocking buffer plates at the ends of said sections, said buffer plates extending from edge to edge of said sections and flush with the forming surface thereof.

2. In a hat matrix, two separable sections, a plate secured to each end of each section, said plates being formed to interlock with

one another and to protect the adjacent exposed edges of the sections at the meeting points thereof.

3. In a hat matrix, two separable sections,
5 each of said sections being formed of wood, interlocking buffer plates at the separable end of said sections, one plate in said set being grooved, the other plate in each set hav-

ing a projection arranged to enter said groove for the purpose of securing said interlocking of the parts. 10

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