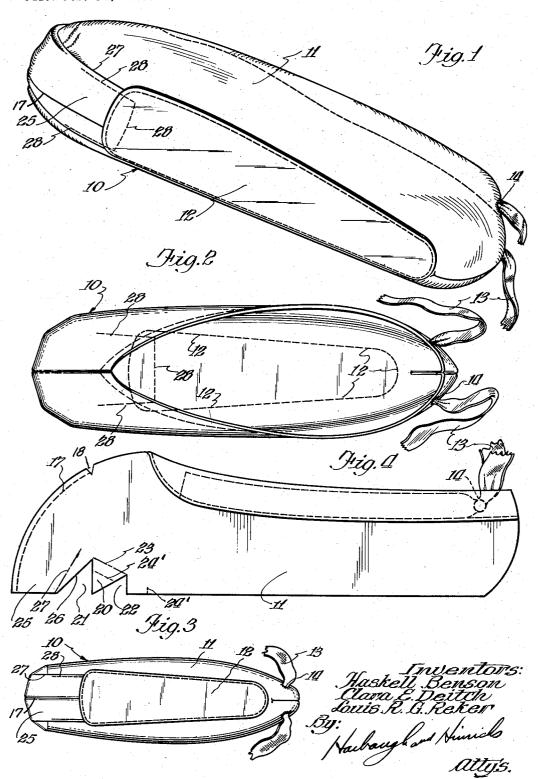
BALLET SLIPPER

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3 Sheets-Sheet 1



BALLET SLIPPER

Filed Feb. 14, 1951 3 Sheets-Sheet 2 20' 16 16 30

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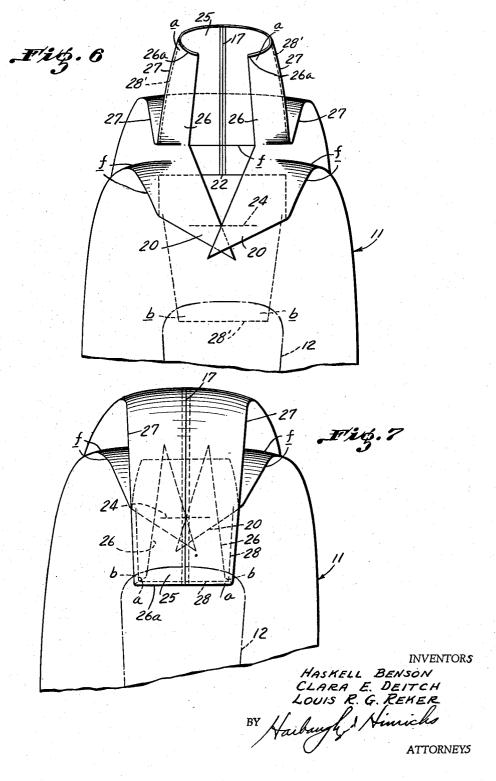
L. R. G. REKER ET AL

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BALLET SLIPPER

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## UNITED STATES PATENT OFFICE

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## BALLET SLIPPER

Louis R. G. Reker, Evergreen Park, and Clara Edith Deitch and Haskell Benson, Chicago, Ill.

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9 Claims. (Cl. 36-8.3)

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This invention relates generally to slippers or shoes and more particularly to an improved slipper of the ballet style which is suitable for manufacture from flexible materials such as leather. fabric or plastic.

One object of this invention is to provide a slipper which is adjustable in size so that a single size of slipper may be fitted to feet of various sizes, making it unnecessary to construct slippers of many different sizes to fit all sized feet and resulting in a slipper especially adapted to be worn by young children with rapidly growing feet.

Another very important object is to provide a slipper which may be readily manufactured from 15 only two pieces of material utilizing only an ordinary sewing machine and conventional fabric cutting means, one piece forming the relatively stiff sole and the other the soft, flexible upper of the slipper.

Another object is to provide a slipper which may be formed simply by folding and stitching two flat pieces into a finished three dimensional shape, without need for matching several small pieces or deforming pieces by coincident bending in two directions.

Other objects and advantages of the slipper of this invention will present themselves to those familiar with the art on reading the following specification in conjunction with the drawings 30 and the appended claims.

In the drawings:

Fig. 1 is a perspective view of the slipper of this invention;

Fig. 2 is a top view thereof;

Fig. 3 is a bottom view thereof;

Fig. 4 is a side view of the slipper at an intermediate stage in the manufacture thereof; and

Fig. 5 is a top view of the blank from which the upper is formed;

Fig. 6 is a bottom view of the toe portion of the slipper at an intermediate stage in its manu-

Fig. 7 is a bottom view of the toe portion of the slipper at an intermediate stage in its manu- 45 facture subsequent to that shown in Fig. 6.

The slipper 10 of this invention comprises a sheet of flexible material !! which is folded and sewn to form the upper, and a piece of more bottom of the piece ii to form the sole. The finished slipper 10 is shown in Figs. 1-3 of the drawings, Fig. 4 illustrating an intermediate step. The procedure in constructing the slipper 10 is

which the upper is formed is shown in the first stage of fabrication. In the figures, such as Figs. 4, 5 and 6, wherever a prime mark is applied to a stitch line numeral, it indicates the position such stitch line will occupy when applied.

The novel construction of the slipper 10 may be best understood by simultaneous reference to Fig. 5 and the other figures, where like parts have been given like numbers, and by consideration of the operational steps in the fabrication of the slipper.

The first step is to cut the piece 11 to the shape shown in the left hand side of Fig. 5 from fabric or soft leather. The next step is to lay the two tapes 13 which form the straps or ties in the positions shown, guiding the ends of the tapes 13 through a pair of holes 14 which are cut near the rear of the piece 11. The margins of the blank are then folded inwardly along the dot-dash line indicated at 15 to cover the tapes 13 and said folded margins are then stitched along the lines indicated at 16 and 15' to form shirr tubes around the top of the slipper 10 as shown in the right hand side of Fig. 5. It will be noted that the forward ends of the stitching 16 intersect the ends of the tapes 13, thereby securing the tape ends against withdrawal from the shirr tube. This procedure eliminates the need for having to fish the draw tapes through the shirr tubes as would otherwise be necessary.

The next step is to fold the two halves of the piece !! along the longitudinal center line, with the surface which is to be the outside of the finished slipper on the inside (Fig. 4), and stitch 35 the upper toe portions together along the line indicated at 17, the stitching in this step terminating at the matching notches 18 to be later extended to the shirr tube stitching 16 as indicated at 31 and described subsequently. The slipper now appears as shown in Fig. 4, except that the folds at dot-dash lines 23 and 27 have not vet been made.

The slipper is then turned right side out and the two tabs 20, between communicating triangular cut-outs 21 and 22, cut-out 21, having forward edges 26 and continuing as a slit having edges 26a to the forward end of the upper, are folded (Fig. 6) into contact with the outer face of the base piece !! and the stitch line 24, durable material 12, which is stitched onto the 50 shown in Figs. 6 and 7, is applied through the tabs 20 and base 11. Stitching 24 now acts to hold the tips of the tabs in overlapping relationship to the base II and to secure them to said base just to the rear of the rearmost edge best illustrated in Fig. 5 where the piece 11, from 55 of the triangle 22. This operation begins to

round out the toe portion of the slipper to its finished shape causing fold lines to be partially formed in the material at the lines indicated by the letter f and numeral 27 as shown in Fig. 6.

The next step is to finish the toe by drawing the front end of portion 25 rearwardly over the stitched tabs 20 to the position shown in Figs. 1 and 7 and tucking in the front edges 26 of the cut-out, with the edges 26a extending 10 transversely across the sole, to completely form the fold lines 21 and applying the stitch lines 28 at the positions shown in Figs. 5 and 6 whereby the several portions of the slipper all coincide as shown in Fig. 7, the stitching along the  $^{15}$ stitch line 28 (Fig. 7) serving to hold the front end portion of the slipper. The stitching along line 28 extends through the base piece 11. The two corners indicated at a in Fig. 5 lie adjacent to the points indicated at b after the fold and 20stitching 28 has been made.

The toe is now substantially completed and the sole 12 may be stitched in place by ordinary stitching through the upper 11 and the sole 12. The position of the sole on the blank is illustrated by dot-dash lines in Fig. 5, and it will be noted that the front end of the sole 12 covers the folded back toe portion 25 of the upper 11 (Fig. 3). The last step is to turn the slipper wrong side out again and stitch the heel end and the top of the toe portion as indicated at 30 and 31 respectively. Reversing the slipper again completes its fabrication.

If desired the sequence of the various steps may be varied somewhat from the described procedure. For example, if the material of the upper is quite flexible the closing of the toe and heel by seams 39 and 31 may be accomplished prior to the attachment of the sole to the upper. Similarly the ties or straps 13 may be attached after the slipper is finished, if desired. The described procedure has proved to be extremely satisfactory, however, since it reduces the distortion of the material to a minimum resulting in stronger seams and virtually no weakening of the material.

As stated previously the slipper of this invention is adjustable over a range of sizes simply by fitting it on the foot and pulling the ties 13 until a snug fit is achieved. The reason for this is that the particular way in which the toe is folded and stitched permits the toe portion to be drawn rearwardly by the ties to shorten the length of the slipper, the shortening occurring uniformly throughout the vamp rather than only in the instep opening as is normally the case. To express it another way, as the top portion of the toe is drawn rearwardly by the action of the ties 13, the entire slipper is shortened because the particular folding of the material  $^{60}$ just ahead of the front end of the instep draws material from the bottom of the toe upwardly around the wearer's toes at the front end to shorten the sole.

The basic pattern of the two blanks 11 and 6512 may be varied somewhat from the shape shown without materially affecting the way in which the slipper 16 is formed. For example, instead of the cutout triangular openings 21 and 22 a cut in the shape of a doubly crossed T may be employed to form the tabs 20. The triangular form is preferred, however, since a flatter fold results, there being no need to overlap the tabs when the triangles 21 and 22 are cut out.

to make the two halves of the pieces asymmetric in order to produce right and left slippers when such are desired.

Various other changes and modifications such as will present themselves to those familiar with the art may be made without departing from the spirit of this invention the scope of which is commensurate with the following claims.

What is claimed is:

1. A slipper comprising an upper made of a flexible material, a more rigid piece of material forming a sole secured to the upper, an a pair of draw tapes, said upper having a shirr tube on each side for one of said tapes and a cut-out at its front end having therein two opposed triangular tabs with apices of said tabs adjacent each other at the longitudinal center line of the slipper, said tabs being folded back one upon the other to partially form the toe cavity of the slipper, the portion of the upper that is in front of the tabs being stitched together in registering alignment and secured to the sole portion of the upper at the rear of the tabs, the sole portion of the upper extending forward beyond the rearmost point of the secured portions.

2. A slipper comprising an upper of flexible material, a sole of more rigid material secured to the upper, said upper having a shirr tube on each side, a pair of draw tapes one received in each shirr tube, said upper having a cut-out spaced from its front end having therein two opposed tabs with their ends adjacent each other at the longitudinal center line of the slipper, said tabs being folded back upon the upper on the bottom of the slipper to partially form the toe cavity of the slipper, the portion of the upper in front of the tabs being folded back over the tabs and extending to the rear of the tabs where it is secured to the sole portion of the upper, the sole overlapping the rearmost point of the secured front portion.

3. A ballet slipper or similar article constructed of a single section of material profiled to define toe, quarter, and opposed side portions surrounding a central sole area, shirr tube flange portions flanking the extreme edges of said opposed side portions and doubled over and space-wise stitched to their respective side portions and having therewithin a related one of a pair of draw tapes, said toe portion being right-for-left substantially symmetrical and stitched together in registering alignment to each other and thereby partially forming a toe box enclosure and an intermediate tube plait overlap, said plait overlap being superimposed over said cavity and secured at its end by stitching within the forward portion of the sole area.

4. The combination set forth in claim 3 in which a sole panel of semi-rigid material is perimetrically stitched over said sole area concealing the rear terminal end of said plait over-

5. The combination set forth in claim 3 in which said tube plait overlap comprises a bay formation with opposed tabs secured to one another for thereby forming the toe cavity.

6. The combination set forth in claim 5 in which said tabs are triangular projections having a triangular space between them.

7. A blank for forming a one-piece upper for a ballet slipper comprising an elongated piece of flexible material having an outwardly convex substantially semicircular front end, a rounded V-shaped rear end, a pair of triangular cut out Another modification of the basic pattern is 75 openings centrally located in said front end, and

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a longitudinal slit extending inwardly from the front end through one of said openings to the other.

8. A blank for use as an upper in a slipper comprising an elongated piece of flexible material 5 having an outwardly convex rounded front end and a longitudinal slit extending inwardly from the front end, said blank having cut-out portions inwardly of the slit defining portions converging towards each other which form a pair of tabs 10 on opposite sides thereof.

9. A blank for forming a one-piece upper for a ballet slipper comprising an elongated piece of flexible material having an outwardly convex 6

substantially semicircular front end, a rounded V-shaped rear end, a pair of cut out openings centrally located in semi-circular said front end, and a longitudinal slit extending inwardly from the front end through one of said openings to the other to define a tab on either side of said slit.

## References Cited in the file of this patent UNITED STATES PATENTS

Number	Name	Date		
1,872,641	Capezio	Aug.	16,	1932
1,891,022	Capezio	Dec.	13,	1932