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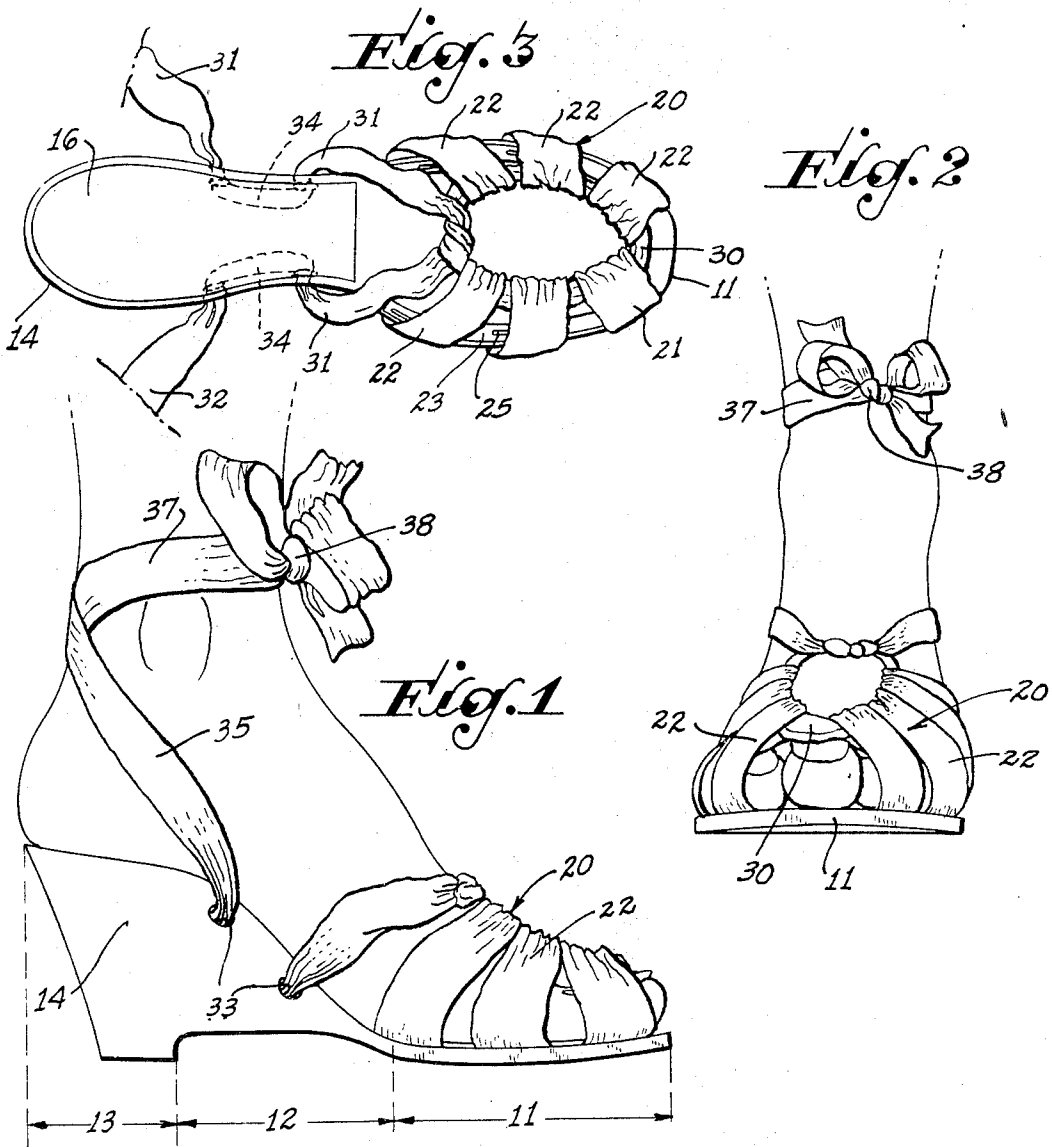
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MOLDED PLASTIC SHOE

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MOLDED PLASTIC SHOE

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4 Claims. (Cl. 36—25)

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My invention relates to shoes, and particularly to shoes which on account of their utility and appearance will have a special appeal to women, in other words, to a dress shoe for women.

It is an object of my invention to provide such a dress shoe which will be made largely of plastic, the word "plastic" being used to denote a compound which can be pressed or molded into any desired form. Such plastics are in common use today for various purposes and are designated by various trade names. Some of these plastics may be produced in transparent form, which may be colored or otherwise ornamented. It is important in using such materials that the article to be made from them be designed with a full knowledge of the properties of such materials and efficient methods of working them. The shoe which I have invented and which is shown in the accompanying drawings is formed partly of such plastic material and partly of fabric, preferably in the form of ribbon.

In the drawings, which are for illustrative purposes only,

Fig. 1 is a side view of the shoe as it appears on the foot of the wearer;

Fig. 2 is a front view of the shoe, that is, as viewed from in front of the wearer;

Fig. 3 is a view looking down on the shoe, with the foot of the wearer removed therefrom;

Fig. 4 is a perspective view showing the shoe before it is placed on the foot of the wearer;

Fig. 5 is a side view partly in section;

Fig. 6 is a view looking down on the top of the shoe, with the basket upper spread out to show its construction;

Fig. 7 is a section through the shoe on a plane represented by the line 7—7 of Fig. 5, this plane being viewed in the direction of the arrows adjacent the line 7—7;

Fig. 8 is a section on a plane represented by the line 8—8 of Fig. 5, this plane being viewed in the direction of the arrows adjacent the line 8—8; and

Fig. 9 is a section showing how the basket upper is attached to the sole of the shoe.

The shoe shown in the drawings, like all shoes, consists of a sole portion 11, a heel portion 13, and an intermediate or shank portion 12 which connects the heel and sole portions. In my shoe the sole portion 11, the heel portion 13, and the shank portion 12 are formed of plastic material by the process known as "injection molding." When so made, a main body 14 is molded in one piece. The heel portion 13 terminates in a heel which projects downwardly, terminating in a flat sur-

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face upon which the wearer of the shoe may rest his weight. This surface is below the bottom surface of the intermediate portion 12 of the shoe.

The shoe shown in the drawings is of what has come to be known as a "coolie type," in which a high heel is used but is not obvious, since the shank portion 12 is carried down very close to the bottom of the heel, a cavity 15 being provided which extends throughout the heel portion and through nearly all of the shank portion of the shoe. By providing this cavity I make the walls of the cavity and the sole of the shoe of approximately the same thickness, making a very light and very practical member which can be easily molded by the injection molding process. The top of the cavity 15 is closed and filled by a closure member 16 which fits tightly in a recess around the top of the heel and instep portions and which may be cemented in place if desired. The top of the closure member 16 and the top of the sole portion 11 may be covered with leather or cloth if desired, the leather or cloth being cemented to the closure member 16 and the top of the sole portion 11.

The shoe, as shown, is provided with a basket upper, which is generally designated by the numeral 20, the basket upper consisting of two loop assemblies 21. The method of forming the loop assemblies and attaching them to the sole portion 11 is best shown in Figs. 6, 8, and 9. In the shoe shown in the drawings there are two loop assemblies 21, each consisting of a single attachment strip 23 and three loops 22 preferably formed of ornamental ribbon. I prefer to sew or stitch the ribbons to the attachment strip 23, which is also formed of cloth or some similar material, to form a loop assembly consisting of one attachment strip and three loops. One of these loop assemblies is placed on each side of the sole portion 11 which has grooves 24 in the bottom thereof. A metal staple 25 is driven through each of the loops 22, the attachment strip 23 and the sole portion 11 of the shoe, being clinched on the bottom side of the shoe in the grooves 24. A tie ribbon 30 is then run through the loops as shown in Fig. 4. This ribbon has two ends 31 and 32. Two holes 33 are provided in each side of the wall of the instep portion 12 near the upper edge thereof, and each of the ends 31 and 32 of the ribbon 30 is passed through the two holes on its respective side passing first inwardly, then forming a loop 34 and passing outwardly so that the end of the ribbon is free to pass upwardly as shown at 35 around the Achilles tendon of the wearer and around the ankle, as shown at

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37, being tied in a bow, as shown at 38. When the ribbon is drawn tight, it forms a highly ornamental basket top, as shown in Figs. 1, 2, and 3, and, since the ribbons used are of colored material and the plastic portion of the shoe may also be of colored material, the effect is highly ornamental and striking.

I claim as my invention:

1. In a shoe, the combination of: a primary member formed of a single piece of material and having a forward portion upon which the ball of the foot of a wearer rests, an intermediate portion extending under the instep of the wearer, a heel portion integral with, and rearwardly placed with relation to, said intermediate portion and forming a heel surface below the lower surface of said intermediate portion, and a wall extending upwardly from said heel portion and said intermediate portion to form a cavity open at the top, said cavity extending over said heel portion and over said intermediate portion and under the instep of the wearer; and a closure member fitting over and closing the top of said cavity and extending under the instep of the wearer.

2. In a shoe, the combination of: a primary member formed of a single piece of material and having a forward portion upon which the ball of the foot of a wearer rests, an intermediate portion extending under the instep of the wearer, a heel portion integral with, and rearwardly placed with relation to, said intermediate portion and forming a heel surface below the lower surface of said intermediate portion, and a wall extending upwardly from said heel portion and said intermediate portion to form a cavity open at the top, said cavity extending over said heel portion and over said intermediate portion and under the instep of the wearer; and a closure member fitting over and closing the top of said cavity and extending under the instep of the wearer, said closure member fitting tightly in a recess of greater area than said cavity, said recess being formed in the top of said primary member and extending around said cavity.

3. In a shoe, the combination of: a primary member formed of a single piece of material and having a forward portion upon which the ball of the foot of a wearer rests, an intermediate portion extending under the instep of the wearer, a

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heel portion integral with, and rearwardly placed with relation to, said intermediate portion and forming a heel surface below the lower surface of said intermediate portion, and a wall extending upwardly from said heel portion and said intermediate portion to form a cavity open at the top, said cavity extending over said heel portion and over said intermediate portion and under the instep of the wearer, said wall having two holes on the right-hand side thereof and two holes on the left-hand side thereof, so placed that a ribbon passing over the instep of the wearer may be passed through each pair of holes to produce a loop in said cavity and allow a free end of said ribbon to project from said wall in such a position as to be over the foot or around the leg of the wearer; and a closure member fitting over and closing the top of said cavity and extending under the instep of the wearer.

4. In a shoe, the combination of: a primary member formed of a single piece of material and having a forward portion upon which the ball of the foot of a wearer rests, an intermediate portion extending under the instep of the wearer, a heel portion integral with, and rearwardly placed with relation to said intermediate portion and forming a heel surface below the lower surface of said intermediate portion, and a wall extending upwardly from said heel portion and said intermediate portion to form a cavity open at the top, said cavity extending over said heel portion and over said intermediate portion and under the instep of the wearer, said wall having two holes on the right-hand side thereof and two holes on the left-hand side thereof, so placed that a ribbon passing over the instep of the wearer may be passed through each pair of holes to produce a loop in said cavity and allow a free end of said ribbon to project from said wall in such a position as to be over the foot or around the leg of the wearer; and a closure member fitting over and closing the top of said cavity and extending under the instep of the wearer, said closure member fitting tightly in a recess of greater area than said cavity, said recess being formed in the top of said primary member and extending around said cavity.

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