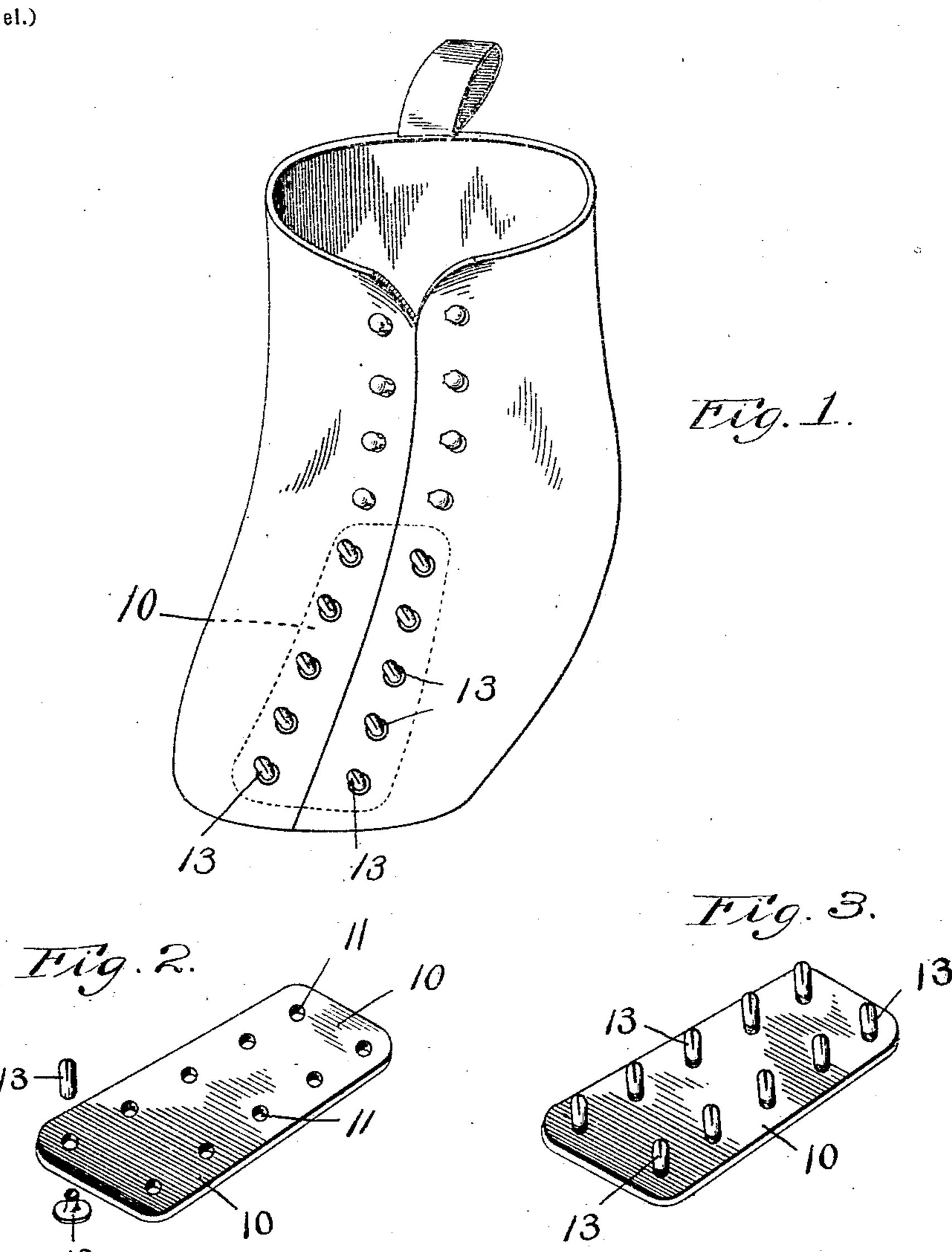
E. E. DONOVAN.

TEMPOBARY FASTENER FOR SHOES.

(Application filed July 5, 1900.)

(No Model.)



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United States Patent Office.

ERNEST E. DONOVAN, OF NORTH GRAFTON, MASSACHUSETTS, ASSIGNOR TO EDWIN B. STORY, OF SAME PLACE.

TEMPORARY FASTENER FOR SHOES.

SPECIFICATION forming part of Letters Patent No. 677,539, dated July 2, 1901. Application filed July 5, 1900. Serial No. 22,513. (No model.)

To all whom it may concern:

Be it known that I, ERNEST E. DONOVAN, a citizen of the United States, residing at North Grafton, in the county of Worcester and State 5 of Massachusetts, have invented a new and useful Temporary Fastener for Shoes, of which the following is a specification.

This invention relates to a device for holding together the front edges or instep portion 10 of a shoe-upper during the manufacture of a laced shoe; and the object of this invention is to provide a simple, inexpensive, and efficient fastener which not only may be used to fasten together the instep portion of a shoe-15 upper during the manufacture of the shoe, but which will also bring the eyelets of the shoe into such accurate register with each other as to dispense with barring or temporary stitching together the ends of a shoe-up-20 per, as is now ordinarily the practice as a preliminary step to vamping the shoe.

To this end the invention consists of the temporary fastening device as hereinafter described, and more particularly pointed out in 25 the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a shoe-upper, illustrating the application of my temporary fastener thereto. Fig. 2 is a perspective view 30 of the parts employed to make up a temporary fastener according to my invention. Fig. 3 is a perspective view illustrating the temporary fastener, and Fig. 4 is an enlarged fragmentary sectional view illustrating the 35 manner of securing the parts together.

In the manufacture of shoes as a preliminary step to the lasting process it is now customary to lace the front of the shoe with string or twine. This practice is objection-40 able, as the shoe will be shaped over the instep portion of the last accordingly as the upper is laced more or less tightly, and as twine will necessarily stretch to different degrees or the knots for holding the twine will slip 45 more or less during the lasting operation the shoes made on the same last will vary to considerable extent among themselves.

As a preliminary step to vamping or sew-

holding the eyelets in position so that they will register accurately with each other. This has heretofore ordinarily been accomplished by "barring" or sewing together the front lower corners of the upper portion of a shoe- 55 upper by means of a few stitches or short seam. The objections which exist to lacing up the front of the upper with string or twine and the unnecessary cost in barring or stitching together the corners of a shoe-upper have 60 long been recognized, and a number of temporary fasteners have been devised the use of which is intended to supersede these operations. Several of such temporary fastening devices have been patented, and my inven- 65 tion relates especially to this class of fastening devices, the especial object of my present invention being to provide a fastening device which is not only reliable and efficient in óperation, but which can be manufactured 70 and placed on the market at a price which will insure a far more extensive use and adoption of the same than of other temporary fastening devices with which I am familiar.

Referring to the accompanying drawings 75 and in detail, a temporary fastener constructed according to my invention, as herein illustrated, comprises a body portion or plate 10, of flexible sheet metal. The plate 10 is provided along opposite edges with perfora- 80 tions 11, and set into the perforations 11 are spring-ended studs which engage the eyelets of the shoe. To secure the studs in place, I preferably insert an eyelet 12 into each of the perforations 11. The eyelets 12 are provided 85 with flaring upper ends which project through the sheet-metal plate 10. Fitting over each of the eyelets 12 are round-ended sheet-metal caps 13, which are secured in place by being crimped in around the flaring ends of the eye- 90 lets 12, as most clearly illustrated in Fig. 4. The round-topped sheet-metal caps are then split or slotted and their upper ends slightly expanded, as shown, in order to make springfastening devices which when pushed through 95 the eyelets of the shoe will hold the fastener securely in place.

In a previous application for patent I have ing on the lower portion of an upper of a shoe described and claimed a temporary fastener to it is also necessary to provide some means for for shoes which is made out of a single piece 100 sheet metal having integral split-ended is punched out therefrom along opposite es thereof.

'he temporary fastener forming the subt-matter of this application for patent I re designed as an improvement over the gle-piece fastener of my previous applicaa for patent, as I have found in practice t the manufacture of temporary fasteners m a single piece of metal requires the use high-grade brass or similar stock, and the st of the dies and tools for stamping and awing the fastener into shape is necessarily isiderable, whereas in the form of fastener closed in this application for patent the dy portion 10 may be made from comparaely inexpensive material, such as sheet-, and only the round-topped cap portions need be formed of spring-brass or more pensive material, and my present invenn resides especially in the novel arrangeent and combinations of parts for securing e spring-studs to the sheet-metal body por-

m. I am aware that changes may be made in e shapes and proportions of temporary fasners constructed according to my invention thout departing from the scope of the inention as expressed in the claims. I do not ish, therefore, to be limited to the form which have herein shown and described; but What I do claim, and desire to secure by

etters Patent of the United States, is-1. As an article of manufacture, a tempo-

rary fastener for shoes comprising a sheet- 35 metal plate having perforations along opposite edges thereof, eyelets each having a flaring end of less diameter than said perforations inserted through said plate from the rear side thereof, and each having a flange 40 of greater diameter than said perferations, and a sheet-metal cap fitting over the flaring end of each eyelet and crimped in place thereon after the end of said eyelet has been inserted through said plate to form studs, sub- 45 stantially as described.

2. As an article of manufacture, a temporary fastener for shoes comprising a sheetmetal plate 10 having perforations 11 along opposite edges thereof, eyelets 12, each hav- 50 ing a flaring end of less diameter than said perforations inserted through said plate from the rear side of the plate, and having a flange of greater diameter than said perforations, and a round-topped sheet-metal cap 13 fit- 55 ting over the flaring end of each eyelet and crimped in place thereon after said eyelet has been inserted from the rear side of the plate, the tops of said caps being split and expanded to form spring-catches for engaging the eye- 60 lets of a shoe, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing

witnesses.

ERNEST E. DONOVAN.

Witnesses: PHILIP W. SOUTHGATE, JOHN F. CROWELL.