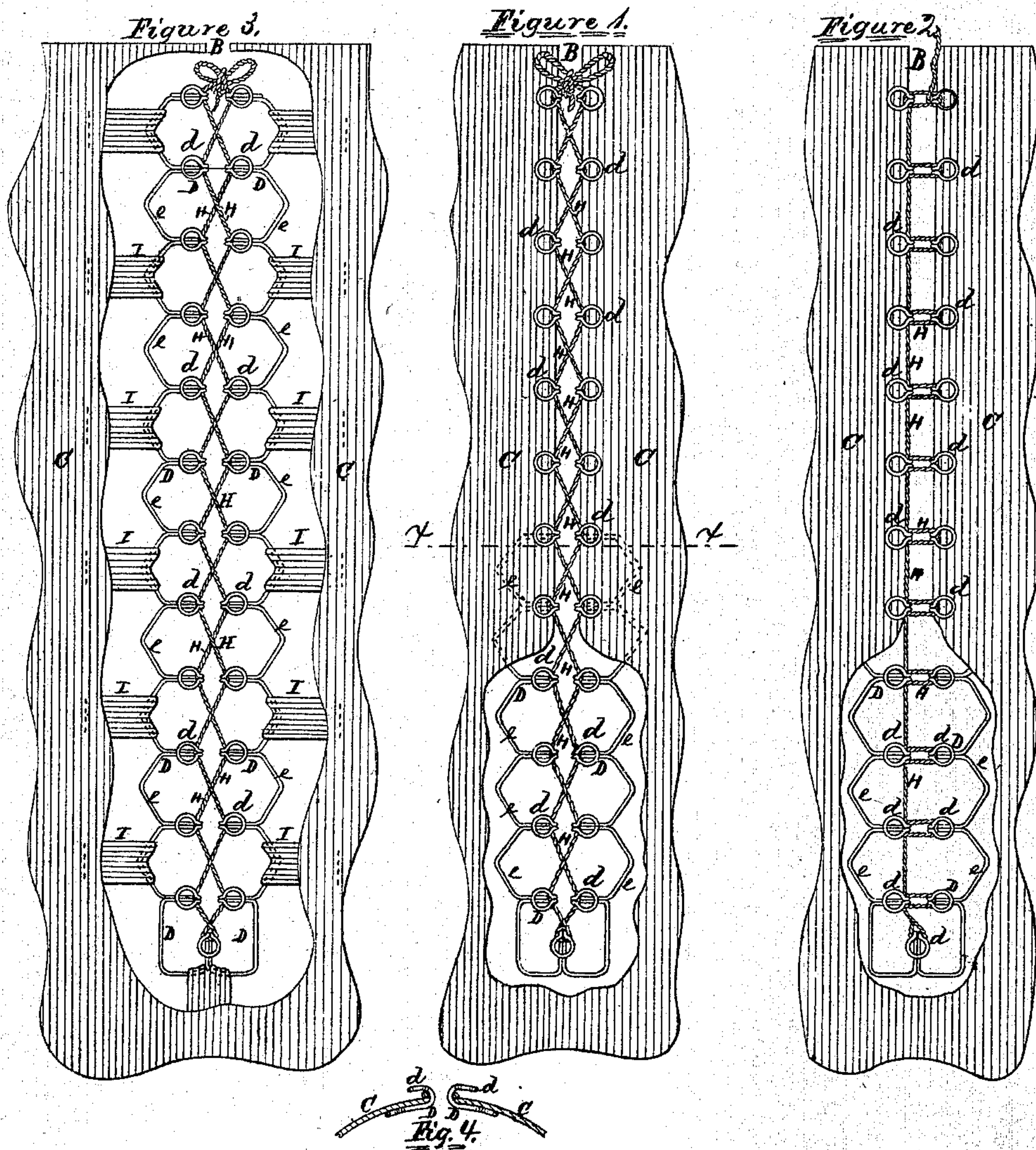


J. HARDING.
Shoe-Lacings.

No. 139,713.

Patented June 10, 1873.



Witnesses:
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UNITED STATES PATENT OFFICE.

JONES HARDING, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN SHOE-LACINGS.

Specification forming part of Letters Patent No. **139,713**, dated June 10, 1873; application filed October 15, 1872.

To all whom it may concern:

Be it known that I, JONES HARDING, of Galesburg, county of Knox and State of Illinois, have invented certain Improvements in Shoe-Lacings, of which the following is a specification:

The nature of this invention relates to devices for drawing and securing together the sides of the slit in ordinary styles of shoes; and the invention consists in bending and forming wires in such manner that they may be readily and easily attached to each side of the slit, either with or without elastic fastenings, and each wire presents a series of hooks of a circular form, around which the lacing cord or cords may be passed in various ways, and be made to draw the sides of the shoe toward each other by pulling its upper end.

In the drawings, Figure 1 represents the slit of an ordinary shoe, with detached parts of the sides partly broken away to show the form and arrangement of the fastening-wire, and laced with two cords. Fig. 2 is the same view as Fig. 1, except that it is laced with one cord. Fig. 3 is the same view as Fig. 1, with the fastening-wire secured to the sides with short elastic bands, and the adjacent sides of the slit broken away throughout its length. Fig. 4 is a sectional view of Fig. 1 on the line *x x*.

B represents the slit of an ordinary shoe, generally down the instep, and which it is necessary to close when the shoe is on the foot, and open to put the shoe on or take it off. C C are the parts of the shoe next to the slit, and forming the sides of the slit. D is the fastening-wire, formed, as plainly shown in the drawings, with a series of hooks, *d d d d*, along a line at one side, and a series of bases, *e e e e*, in a line along the other side. The wire D is bent, in forming the hooks *d*, in a manner to make the outer ends of the hooks circular in form for the better security of the lacing-cords, as hereinafter described, and is bent, in forming the

bases *e*, either into semicircular, triangular, or any other convenient forms for attachment to the shoe. H H H H are the lacing-cords; I I I are elastics.

The manner of attaching and using my invention is as follows: The wire D is placed in the relative position to the slit B, shown in the drawings, with the hooks *d* on the outer surface of the shoe and the bases *e* on the interior surface. It may then be attached to the shoe by stitching around the bases *e* and into the material of the shoe, as at Figs. 1 and 2, or it may be attached, when more elasticity is required, to one end of elastic bands I I I, their other ends being secured to the material of the shoe, as shown at Fig. 3.

The manner of lacing will be evident from the drawings. A single cord may be used by simply wrapping it around the adjacent hooks on either side of the slit, commencing at the lower end, and continuing to the upper end, when it may, by drawing, be made to bring the sides of the slit closely and snugly together, and may be secured by belaying on the upper two hooks, or otherwise. When double cords are used they may be passed around the hooks alternately from side to side of the slit, and drawn for tightening up the slit, as last described, and may be secured at their upper ends by tying together.

Various methods of interlacing the cord or cords with the hooks may suggest themselves to any ingenious operator of the fastening.

I claim—

The continuous wire D when formed into a series of hooks, as described, and secured to the shoe by means of the elastic cords or bands I, in the manner and for the purpose specified.

JONES HARDING.

Witnesses:

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