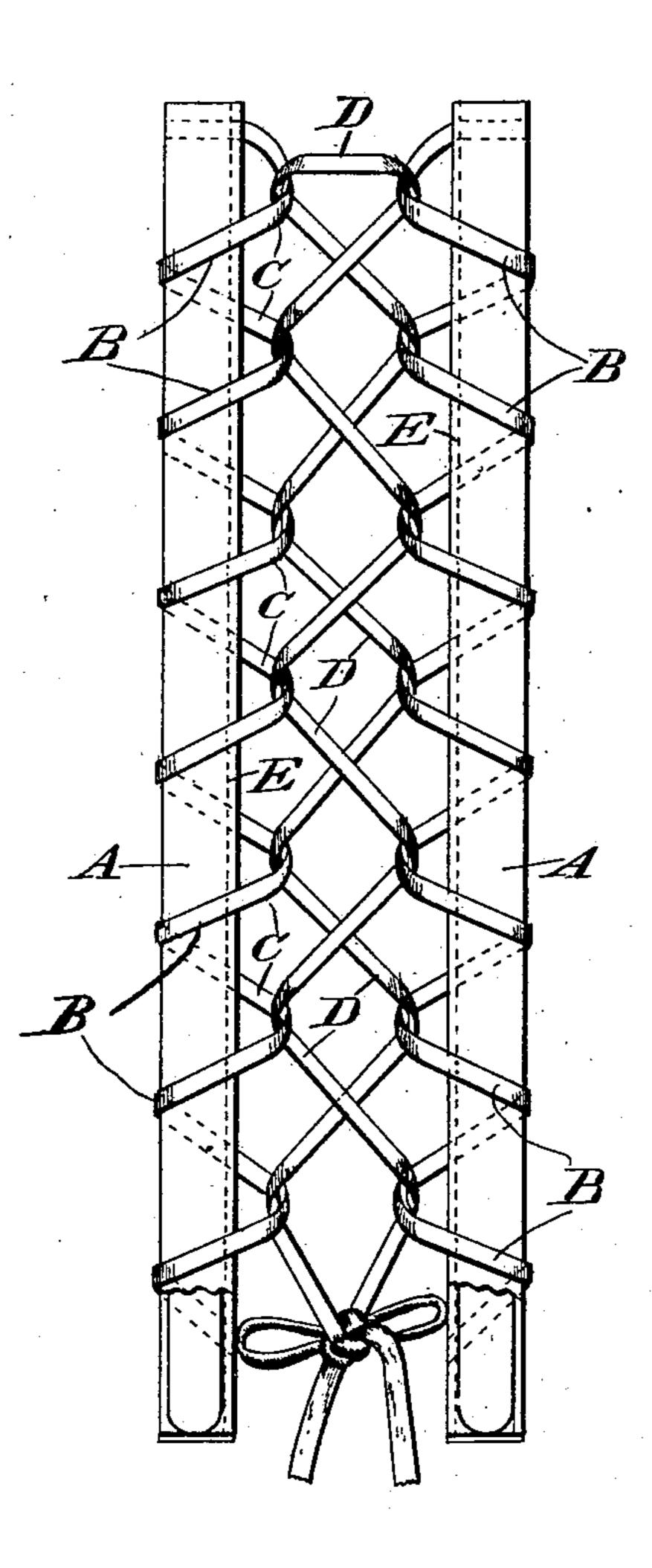
## W. J. PAYNE. FASTENING DEVICE.

Application filed Nov. 30, 1901.,

(No Model.)



Hig.1.

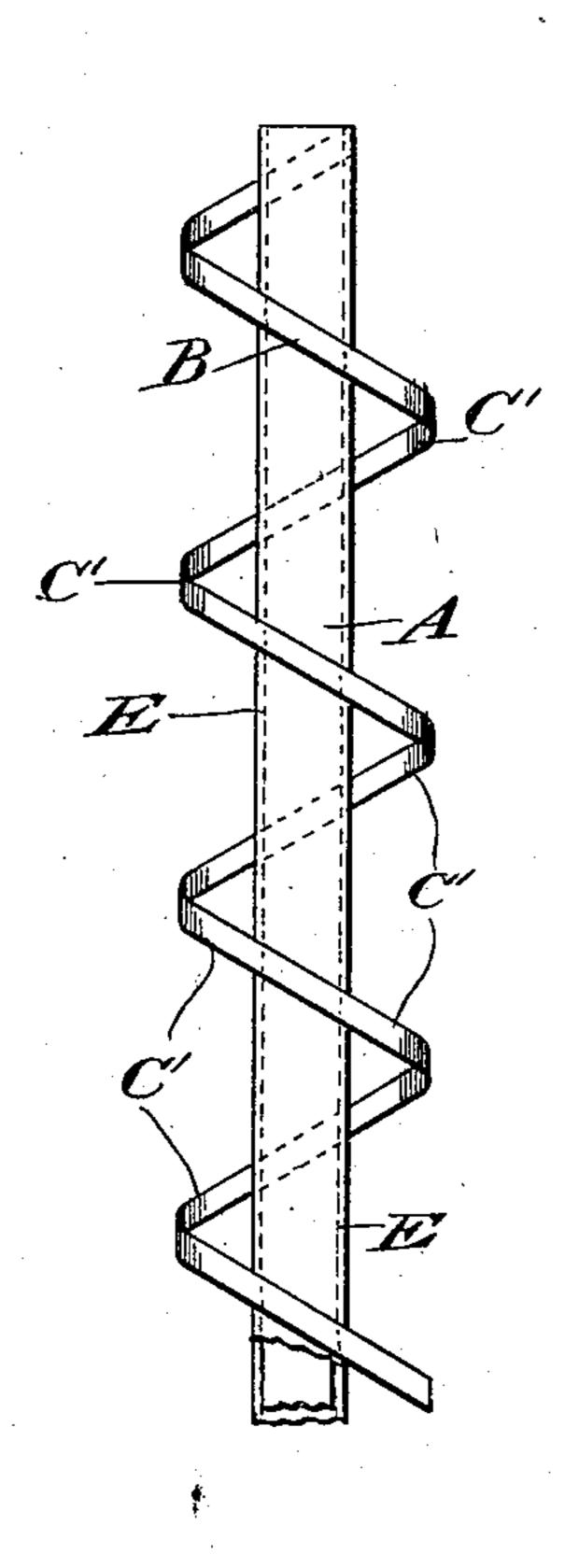


Fig. 2.

Witnesses: Jos Gregory

Inventor:
William J. Payne,
By his Attorney;
FM. Michards

## United States Patent Office.

## WILLIAM J. PAYNE, OF CANDOR, NEW YORK.

## FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 712,003, dated October 28, 1902.

Application filed November 30, 1901. Serial No. 84,196. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. PAYNE, a citizen of the United States, residing in Candor, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Fastening Devices, of which the following is a specification.

This invention relates to fastening devices, and has for its object to provide a fastening to connect or draw together and securely hold in such position the meeting edges of shoes, gloves, corsets, and other objects capable of being laced together.

Another object of the invention is to provide improved means for lacing such objects.

Another object of the invention is to pro-

vide improved eyes for lacing.

In carrying out my invention I employ eyes formed of some pliable material, which, if de-20 sired, may be the same material as that of which the lacing is made. The loops forming the eyes through which the lace will pass offer less resistance to the lace than do eyelet-holes similarly situated. The bases of the 25 loops forming the eyes are wide, by which means when a lace is drawn through a loop or eye the lace and loop or eye will come against each other in a spiral relation, thereby permitting an easy sliding of the lace 30 through the eye upon drawing up the lace and bringing the meeting edges toward each other. In an ordinary organization having laces passing through eyelet-holes as the edges come together the lace draws more 35 tightly, whereas in the present application it is easier to get the sides of the object being laced to come toward each other on account of the minimum of friction. At the last part of the drawing there is less friction than when 40 the edges are farthest apart.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a form of my invention. Fig.

2 is a modification.

A, which may be stays, and each side is represented as having a flexible strip B wrapped around it in a spiral direction, forming at the edges of the stays opposite each other loops or eyes C, through which the lace D is passed to draw the two sides together. The eyeloops may be made of any suitable flexible

or textile material and, if desired, may be made of the same material of which the lace is made. A row of stitching E may pass 55 through the covering of the stays and hold the eye-loops firmly in position. If it is desired to have two or more sets of lacing side by side, eye-loops may be applied to project beyond both edges of the strip or stay, and if 60 flexible material is employed it may be wrapped around the stay in a spiral, as shown in Fig. 2, making eye-loops C' C', projecting in opposite directions, the eye-loops being secured in their places by stitching.

The engagement of the eye-loops and lacing is a spiral one, which allows a free sliding.

The lacing will be longer-lived in this structure than in those embodying eyelets and the like, because the movement of the body caus- 70 ing the meeting edges of a garment or article to move in opposite lengthwise directions will not in this structure move the lacing in the eyes. There will instead be a mutual yield.

By passing or wrapping the textile or flexi-75 ble strips B B around or about the stays A A in the manner herein shown and described the said stays are made to bear practically all direct strains incident to tight lacing or drawing together of the two parts of a corset or 80 other article, it being understood that the stitching which passes through such strips is only subjected to the lesser or indirect strains and is mainly employed for maintaining the eye-loops in proper positions to receive the 85 lacing-cord. It will also be seen that by passing the said flexible strip first to one side and then the other of the stay A a plurality of broad bearings for said strip is obtained transversely of the stay capable of sustain- 90. ing great stress brought thereon in the direction of either side of the stay—such, for instance, as may be caused by the bursting tendency of a corset or shoe when tightly laced.

Having described my invention, I claim— 95
1. A stay and a continuous strip of flexible material passed about the same first to one side and then the other transversely and in excess of the width of the stay to form eyeloops for receiving a lacing, said strip being 100 secured to the stay.

2. A stay and a continuous strip of flexible material passed about the same first to one side and then the other transversely and in

excess of the width of the stay to form eyeloops for receiving a lacing said strip being secured to the stay at the edge of the latter adjacent the loops.

3. A stay and a continuous strip of flexible material passed about the same first to one side and then the other transversely and in excess of the width of the stay and forming eye-loops for receiving a lacing, each memore ber of each loop being secured to the stay.

4. A stay and a continuous strip of flexible material passed about the same first to one side and then the other transversely and in excess of the width of the stay and forming eye-loops for receiving a lacing, said strip being secured to the stay at the edge of the lat-

ter adjacent the loops by means of stitching passing through each member of the loops and the stay.

5. A fastener comprising oppositely-located stays each having a strip of textile material wound about the same spirally and secured to the stay to form eye-loops beyond the inner edge thereof, and a doubled crossed lac-

25 ing-strip passing through such eye-loops alternately from side to side.

6. A stay and a continuous strip of flexible material passed about the same first to one side and then the other transversely and in excess of the width of the stay at both edges 30 thereof, and forming eye-loops at each edge of the stay for receiving a lacing.

7. A stay and a continuous strip of flexible material passed about the same first to one side and then the other transversely and in 35 excess of the width of the stay at both edges thereof, and forming eye-loops at each edge of the stay for receiving a lacing, said strip being secured to the stay at each edge thereof by stitching passing through both the mem- 40 bers of the loops and the stay

8. A fastener comprising oppositely-located stays, each having a flexible strip of textile material twined about the same in a spiral direction, and secured near one edge of the stay 45

by stitching, said strips being formed into eyeloops at the inner edges of the stays, and a lacing-strip passing in and out of the loops. WILLIAM J. PAYNE.

Witnesses:

F. M. ELLIOTT, GEORGE E. GRAHAM.