No. 675,152.

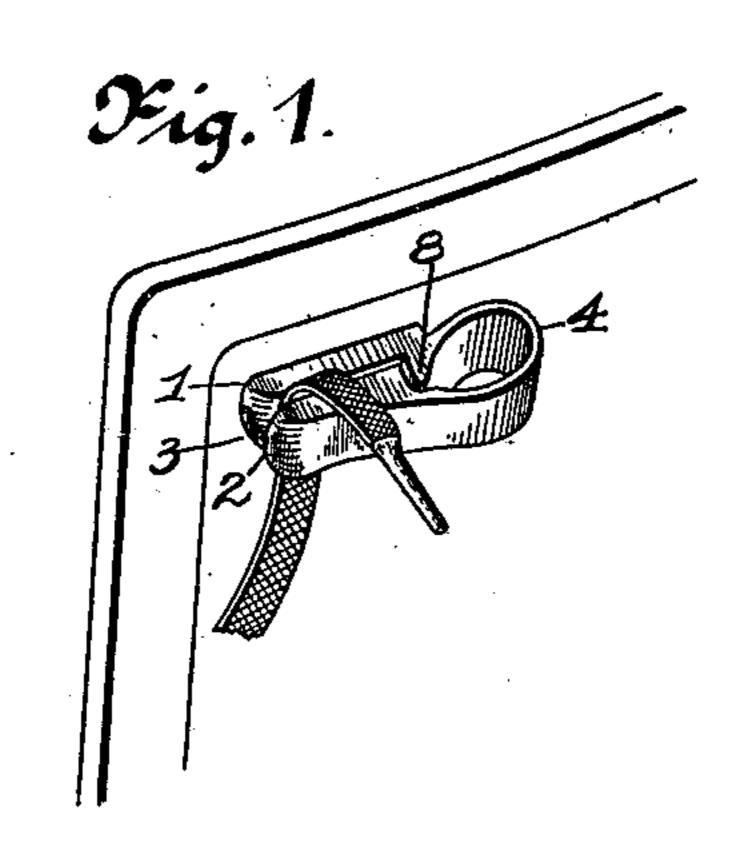
Patented May 28, 1901.

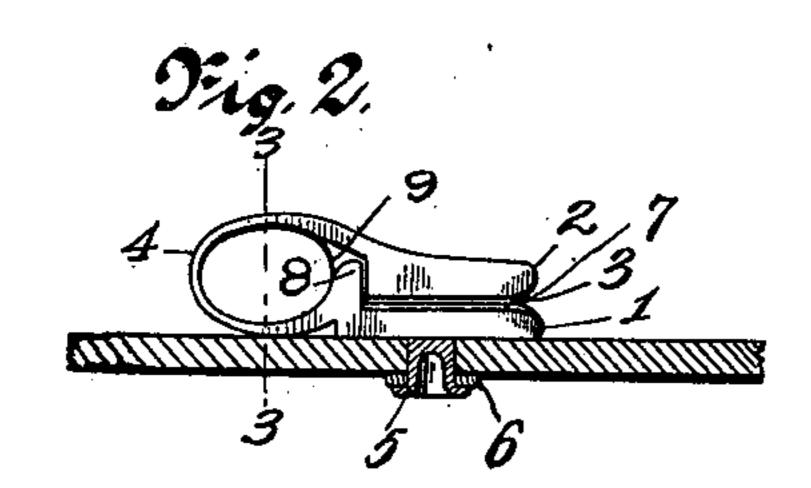
J. A. FREY.

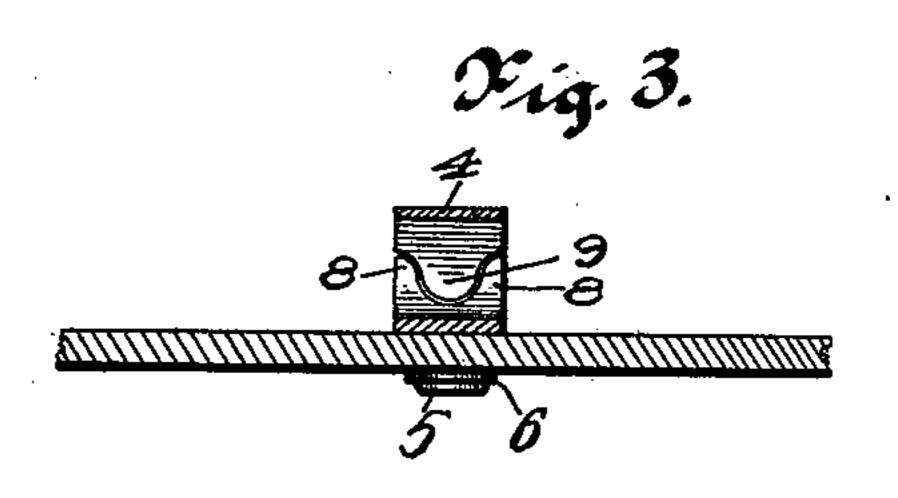
SHOE LACE FASTENER.

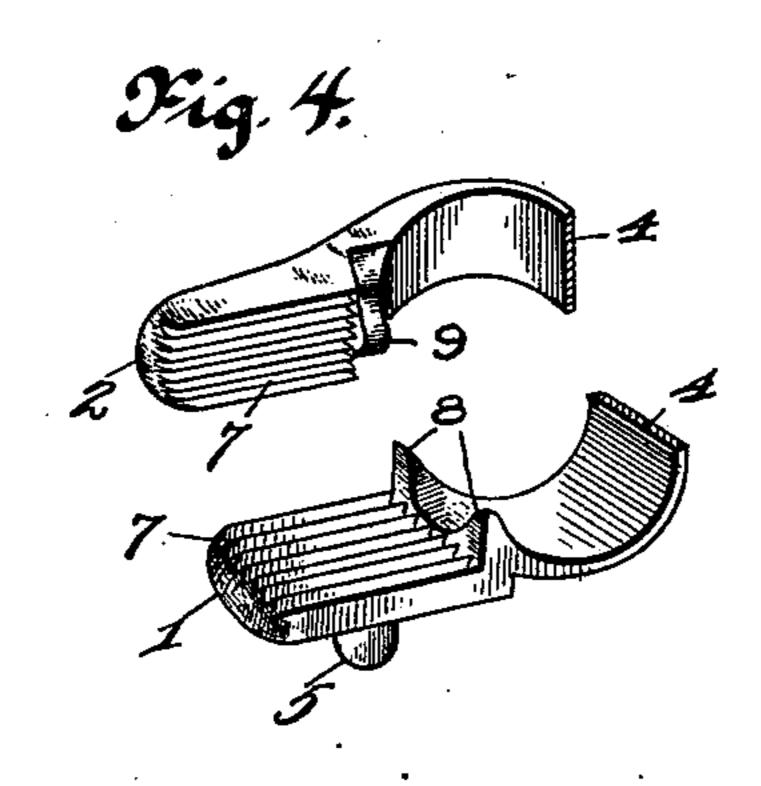
(Application filed Feb. 25, 1901.)

(No Model.)









Witnesses Alfred Obeicker Smithlippy

Inventor. Lacob a. Frey. By. Nigdon *Longan arry.

United States Patent Office.

JACOB A. FREY, OF ST. LOUIS, MISSOURI.

SHOE-LACE FASTENER.

SPECIFICATION forming part of Letters Patent No. 675,152, dated May 28, 1901.

Application filed February 25, 1901. Serial No. 48,684. (No model.)

To all whom it may concern:

Be it known that I, JACOB A. FREY, of the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Shoe-Lace Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to shoe-lace fasten-10 ers; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

The object of this invention is to provide an improved shoe-lace fastener which shall 15 hold the lace more securely than fasteners heretofore provided.

In the drawings, Figure 1 is a perspective view of the upper portion of a shoe having my improved fastener applied thereto. Fig. 20 2 is a sectional side elevation. Fig. 3 is a transverse section on the line 3 3 of Fig. 2. Fig. 4 is a perspective view with the jaws broken apart to more clearly show the interior construction.

My improved fastener is composed of a pair of spring-jaws 1 and 2, which are free at their outer ends and provided thereat with a flaring passage 3, so that the shoe-lace may readily be entered between said jaws, and so said jaws are connected at their ends oppo-

site said passage by a stout ribbon-spring 4. This spring 4 is preferably formed integral with the said jaws, but may of course in some instances be formed separately and secured to said jaws by means of rivets, solder, or other fastening device. This form of spring

possesses, as I have found, great strength and so securely urges the jaws toward each other as to clamp the shoe-lace against accidental detachment. Furthermore, I have found this form of spring permanently retains its power

form of spring permanently retains its power.
The entire device is preferably made of toolsteel.

The inner jaw 1 may be secured to the leather in any known manner. For instance, it may be provided with a shank 5, which is inserted in an aperture in the leather and its

outer end upset or riveted upon a washer 6. The inner surface of the said jaws is preferably formed with a series of longitudinally- 50 extending corrugations 7, so that the corrugations of one jaw intermesh with those of the opposite jaw, whereby the shoe-lace will be compelled to traverse a more tortuous passage and thereby be more securely retained. 55 Such construction of the jaws also prevents undue lateral movement of the same.

In placing the shoe-lace between the jaws undue longitudinal movement of the outer jaw is prevented by means of a stop, which 60 will now be described.

will now be described.

A pair of projections 8 are formed on the inner jaw at the inner end of said corrugations, and there is a curved depression between said projections. The opposite jaw is 65 provided with a curved projection 9, which is normally located in said curved depression.

The operation of the device is obvious and need not further be described except to state that the inward movement of the shoe-lace 70 is limited by contact with the projections 8

and 9.

What I claim is—

1. An improved shoe-lace fastener, comprising a pair of opposing jaws connected at 75 one end by a flat spring, longitudinal intermeshing corrugations 7 in said jaws to increase the friction-grip of the jaws, a lateral stop projecting from one of said jaws, and means for securing the device to a shoe, sub-80 stantially as specified.

2. An improved shoe-lace fastener, comprising a pair of opposing jaws connected at one end by a flat spring, longitudinal intermeshing corrugations in said jaws, intermesh- 85 ing lateral stops projecting from said jaws, and means for securing the device to a shoe,

substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB A. FREY.

Witnesses:

ALFRED A. EICKS, JOHN C. HIGDON.