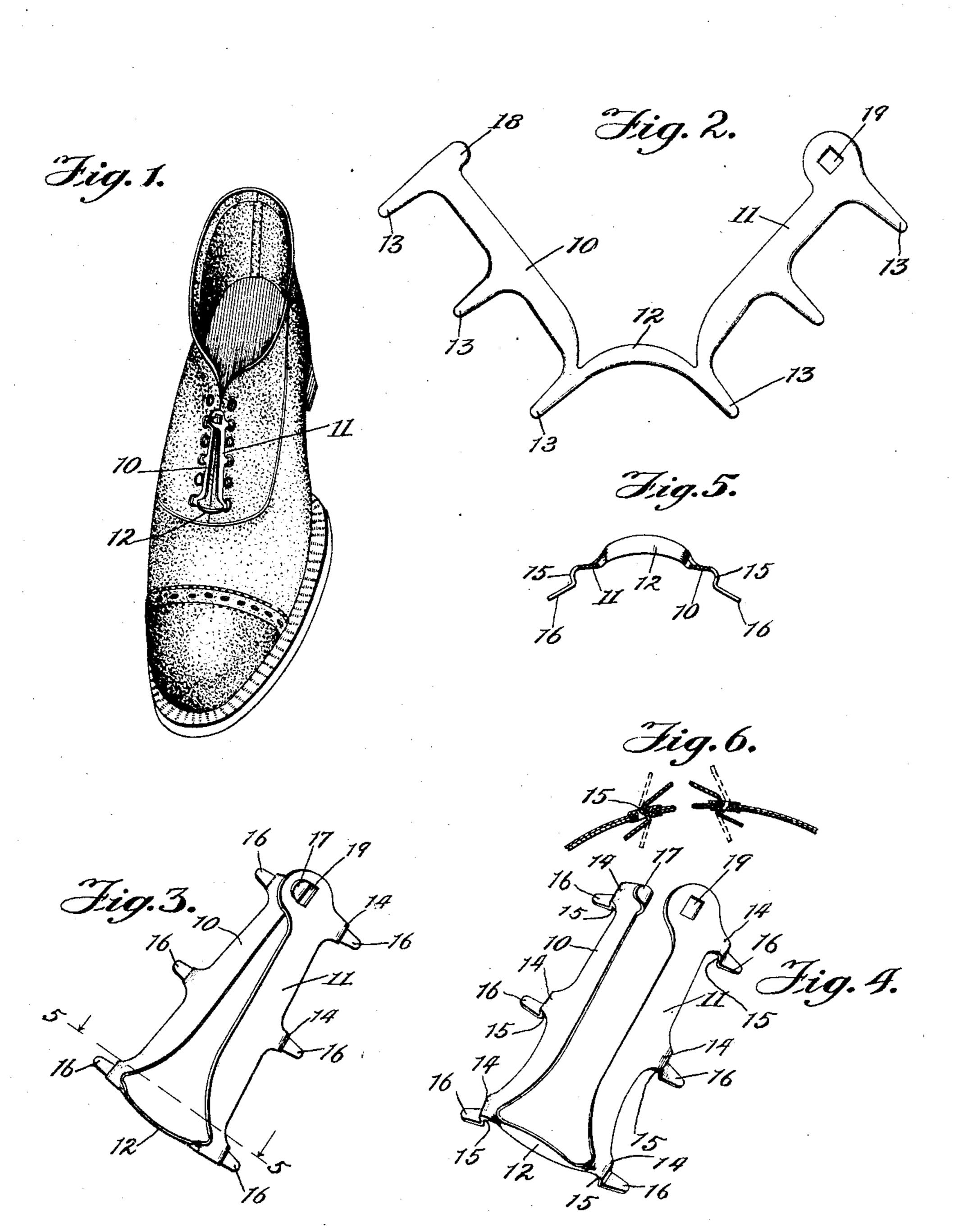
## J. W. BARNA & V. HOFFMAN. SHOE FASTENER. APPLICATION FILED AUG. 15, 1904.



Witnesses: BaD. George If V. Romanus. Inventors: Joseph W. Barna Valentine Hoffman By Coburn Milloberte Their Atty

## United States Patent Office.

JOSEPH W. BARNA AND VALENTINE HOFFMAN, OF CHICAGO, ILLINOIS.

## SHOE-FASTENER.

SPECIFICATION forming part of Letter: Patent No. 785,789, dated March 28, 1905. Application filed August 15, 1904. Serial No. 220,735.

To all whom it may concern:

Be it known that we, Joseph W. Barna and VALENTINE HOFFMAN, citizens of the United States, residing at Chicago, in the county of 5 Cook and State of Illinois, have invented certain new and useful Improvements in Shoe-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention has reference to a new and improved shoe-fastener designed to be used to secure the edges of the shoe-upper together during the process of manufacture of the shoe, and particularly while the sole is 15 being applied, although it may be used for the same purpose during the finishing operation generally.

The objects of the invention are to provide a shoe-fastener of the character referred to 20 adapted to secure and hold the upper snugly on and about the last and one that is inexpensive of manufacture, as well as to provide a device that may be readily attached to or detached from the shoe-upper and which when 25 in position engages the eyelets of the upper in such manner that accidental detachment is prevented.

The invention consists of the arrangement and details of construction hereinafter par-30 ticularly described, and then pointed out in the appended claims.

In order to more fully disclose the nature of the invention, reference is made to the accompanying sheet of drawings, in which-

Figure 1 is a perspective view of an ordinary low-quarter shoe, showing our fastener in its position of use to hold or tie the edges of the shoe-upper together. Fig. 2 illustrates the blank from which the fastener is 40 formed. Fig. 3 is a plan of the fastener alone, the side members being in their hooked or closed position. Fig. 4 is a perspective view of the fastener, showing the side members unhooked. Fig. 5 is a section on the line 5 5 45 of Fig. 3; and Fig. 6 is a transverse section of the fastener, illustrating the manner of engagement of the side members with eyelets of the shoe-upper.

In carrying out our invention we stamp 50 from a sheet of suitable metal, preferably of | or locking the side members together or in 100

a resilient character, such as sheet metal, a blank, as shown in Fig. 2. This blank provides a pair of side members 10 and 11, permanently connected at one end by a web 12. These side members and the web are of any 55 suitable widths and being in the form of thin sheets of elastic metal readily adapt themselves to the shoe-upper when attached thereto, as hereinafter explained. As the blank is originally stamped out and as shown in Fig. 60 2, the side members 10 and 11 are disposed divergingly, and the outer or remote edges of the same are provided with outwardly-projecting tongues 13, integral with the blank and designed to be formed into hooks for engage- 65 ment with the eyelets of the upper.

When the blank has been fashioned into its final form, it assumes the shape shown in Figs. 3 and 4. As there shown, the web 12, permanently connecting the ends of the side mem- 7° bers 10 and 11 is twisted at its ends at the points of connection with the said side members so that the central or body portion thereof stands in a plane substantially at a right angle to the side members. As thus ar- 75 ranged, the web provides a resilient connection between the side members, normally maintaining the free ends of the same separated and exerting a tendency when the fastener is in its closed position to separate the 80 said side members.

The tongues 13 of the blank are formed into hooks so shaped as to readily fit into the eyelets at the edges of the shoe-upper to maintain the fastener securely in position when in 85 use, and yet permitting the fastener to be readily detached when desired. To this end each of such tongues 13 extends outwardly, as at 14, a short distance from its associated side member, is then bent downwardly and curved 90 inwardly to provide a hook 15, and finally extends outwardly again, as at 16, at substantially a right angle to 15. Any suitable number of such hooks may be employed, three on each side member being shown in the present 95 instance, and so disposed as to engage the first, third, and fifth pairs of eyelets from the bottom of the shoe-upper, as shown in Fig. 1.

Suitable means are provided for securing

their closed position on the shoe-upper. In the present instance such means take the form of a hook 17, provided by bending an inwardly-extending tongue 18, formed in the blank at the free end of one of the side members, as 10, Fig. 2, and bent into hook shape, as shown in Figs. 3 and 4. This hook is adapted to engage an opening 19 at the free end of

the other side member 11. After the shoe-upper is sewed the fastener is employed therewith to hold the edges of the upper together and snugly about and on the last while the sole is put on the shoe and also during the finishing of the shoe. In using 15 the fastener the side members being separated, as shown in Fig. 4, are sprung or turned slightly into the position shown in dotted lines in Fig. 6, so as to enter the hooks of each side member into the appropriate eye-20 lets. When in position, as shown in full lines in the said figure, each hook 15 is seated in its associated eyelet, while the ends 16 of each opposite pair of hooks project laterally from the eyelets in opposite directions. The last 25 having been placed in the shoe, the free ends of the side members are brought together and the hook 17 entered in the opening 19, thereby drawing the upper closely and snugly about the last. The drawing together of the side 3° members is resisted by the resilient web 12 and results in bowing the said web, as shown in Figs. 1 and 3, and putting the same under

tension. Accidental dislodgement of the fastener 35 from the upper is prevented, owing to the engagement of the ends 16 of the hooks with the inner face of the edges of the upper and by reason of the engagement of the hooks 15 with the walls of the eyelets. When it is de-4° sired to remove the fastener, the hook 17 is first disengaged from the opening 19, and the web 12 in resuming its original position or straightening moves apart or separates the side members. Then by turning the side mem-45 bers slightly into the position shown in dotted lines in Fig. 6, such turning being permitted by reason of the resiliency of the metal of which the fastener is made, the hooks may be readily withdrawn from the eyelets of the 5° upper.

The web 12 is of sufficient length to bridge

the space between the bottom pair of eyelets, effectually tying them together, and serves to relieve the vamp at the meeting of the quarters from all strain, so that there is no 55 danger of splitting or tearing the vamp or the seams when the quarters are spread apart to withdraw the last. The web being flexible, the quarters may be readily spread apart to permit of the withdrawal of the last.

Having described our invention, what we claim, and desire to secure by Letters Patent

of the United States, is—

1. A shoe-fastener made from a single blank of sheet metal and comprising a pair of side 65 members provided with hooks adapted to engage the eyelets of a shoe-upper and connected at their ends by a resilient web standing in a plane substantially at a right angle to the plane of the side members, and means for de- 70 tachably connecting the free ends of the side members together.

2. A shoe-fastener comprising a pair of side members connected at one end by a resilient web and provided with curved hooks adapt- 75 ed to enter the eyelets of a shoe-upper and having laterally-extending ends to engage the inner face of the upper, and means for detachably connecting the free ends of the side members together, the said side members, web and 80 hooks being made from a single blank of sheet

metal.

3. A shoe-fastener made from a single blank of resilient sheet metal and comprising a pair of side members provided at the outer edges 85 with curved hooks adapted to enter the eyelets of a shoe-upper and having laterally-extending ends to engage the inner face of the upper, a resilient web connecting the side members at one end of the fastener and stand- 90 ing in a plane substantially at a right angle to the side members, the free end of one of the side members being provided with an opening, and a hook at the free end of the other side member to engage such opening.

In testimony whereof we affix our signatures

in presence of two witnesses.

JOSEPH W. BARNA. VALENTINE HOFFMAN.

Witnesses:

ELIZABETH MOLITOR. ARTHUR B. SEIBOLD.