(No Model.)

## D. H. ABNEY. SHOE LACE FASTENING.

No. 493,202.

Patented Mar. 7, 1893.

Frig. 2.



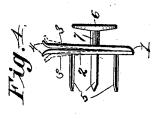
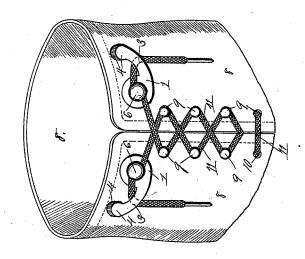




Fig. 1.



Witnesses: I. G. Lischer Jaw L. Condrow

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## UNITED STATES PATENT OFFICE.

DITE. H. ABNEY, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-THIRD TO GEORGE W. ROSE, OF SAME PLACE.

## SHOE-LACE FASTENING.

SPECIFICATION forming part of Letters Patent No. 493,202, dated March 7, 1893.

Application filed April 12, 1892. Serial No. 428, 763. (No. model.)

To all whom it may concern:

Be it known that I, DITE. H. ABNEY, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Clasps for Shoe-Strings, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to clasps for retaining to the free ends of the lacing-strings of shoes, and which are also equally adapted for attachment to various other articles of wearing-apparel, such as corsets, negligé shirts, and the like; and the objects of my invention are to produce a clasp which shall be simple, strong, durable and inexpensive in construction, and neat and ornamental in appearance, and also capable of securely retaining the free end of the lacing string or cord without possibility of lacerating the same, and which, furthermore, shall cause no inconvenience to the user.

A further object of my invention is to produce a clasp which, in addition to the advantages above enumerated, shall be capable of ready application to and detachment from the shoe or other article of personal wear, without necessitating the use of special implements or machinery, and also without requiring the service of a skilled assistant or workman.

To the above purposes, my invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which:

front portion of a laced shoe with my improved clasps applied thereto. Fig. 2 is an inner side elevation of a portion of the upper of the shoe with one of my improved fasteners applied thereto; the said view showing the attaching devices for the clasp. Fig. 3 is a detached perspective view of one of my improved clasps. Fig. 4 is an edge view of the

o In the said drawings, 1 designates the body-portion or base of the clasp, said body-portion cient flexibility to enable the arms to be bent

or base being preferably of disk-form, and entirely closed, and also of any suitable or preferred dimensions, according to the particular kind of articles of personal wear to 55 which the clasp is to be applied. As shown, this body-portion or base consists of a front portion 1 and a rear portion 2 which is placed in direct contact with the rear side of the front portion 1 and which is secured thereto 60 by the margin 3 of the said front portion; the said margin 3 being bent or spun in such manner as to embrace the margin of the rear portion 2. It is to be understood, however, that these two portions 1 and 2 may also be se- 65 cured together in any other suitable or preferred manner, as by riveting, soldering, or

The base or body portion 1 is formed with two lateral and parallel spring-arms 3 which 70 constitute the clasping members of the device, and which are preferably of precisely similar form. Each of these clasping-arms is preferably united integrally at its inner end with the body-portion or base 1, and is in the 75 form of a fragment of a spiral, so that said arms extend obliquely outward and upward from the body-portion or base 1 and in the same plane therewith.

It is to be particularly observed that the 80 clasping arms 3 are wholly and entirely outside of and away from the body-portion 1 of the clasp, such arms extending laterally from the body-portion in the same plane as the face of said body-portion, and being united 85 only at their inner ends to one side of said body-portion. These two arms are entirely separate from each other throughout their length, and their resiliency causes said arms to normally press closely against each other, 90 as shown. The outer extremities of these arms 3 are formed with oppositely divergent ends 4, which serve as guides to direct the free end of the lacing string or cord between the arms, as hereinafter explained. From 95 the rear or inner surface or side of the base or body-portion 1 extend a number of attaching-arms 5 which are of any suitable or preferred metal or other material combining sufficient strength for securely connecting the 100 device to the shoe or other article, with suffior clinched, so as to retain the device in its required position, as hereinafter explained.

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6 designates a stud or head, the stem or shank 7 of which is united, either integrally or otherwise, to the body-portion or base 1 preferably at the center of the same, and which projects horizontally outward from said body-portion or base; the said head or stud being preferably formed integrally with the outer end of the stem or shank 7, but being permissibly suitably secured to said shank, if preferred.

Referring now to Figs. 1 and 2, 8 designates the front upper portion of a laced shoe, 12 the lacing-opening of the same, 9 the usual lacing-hooks, 10 the lacing eyes or holes, and 11 the lacing string or cord. The lacing string or cord is shown as first passed through the usual eyes or holes 10 and then as crossed and laid around the lacing-hooks 9 in the usual manner. After the lacing cord or string has been so laced, its free ends are frequently much too long, for sightliness or convenience, and in such event, the free ends of the string

are wound several times around the shanks or stems 7 of the heads or studs 6, until the desired length of string is taken up. The remaining ends of the string are now inserted between the divergent guide-extensions 4,
and are forced downward between the clasping spring-arms 3. Said spring-arms thus securely retain the free ends of the string, and absolutely prevent all possibility of the ends

curely retain the free ends of the string, and absolutely prevent all possibility of the ends becoming detached accidentally either from between the clasping-arms, or from the studs 6.

It is to be observed that, when the user at-

taches the clasps to the shoe or other article, a number of slight openings are made at the proper points, with a common pen-knife, a scissors-blade, or the like, and the flexible arms of the clasps are inserted into said openings and bent against the inner surface of the material of which the article is composed, as shown in Fig. 2. When the article to which the clasps have been thus attached becomes worn out, the flexible arms are simply bent back into straight position, and the clasps may then be readily detached from the article.

It is to be further understood that the clasps may be made either of plain or suitably ornamented metal, or other suitable material, either plated, japanned, or otherwise treated, as desired. When used upon corsets, negligé shirts, or other garments, the position and opseration of the clasps are substantially the same as that above described, and it will be seen that the clasps are so attached that the arms 3 shall extend obliquely upward from the bodyportion of the clasp as shown, and in the same plane therewith. It is obvious, also that but a single clasp may be employed in situations where but a single binding cord or string is used, as in reticules, bags, grips, and the like;

it being my intention to apply the clasp or clasps to all classes of devices using lacing 65 or binding cords or similar attachments.

From the above description, it will be seen that I have produced a clasp which is simple, strong, durable, and inexpensive in construction, and capable of application to a great 7c variety of articles both for wearing apparel and other purposes; that the clasp is readily applied to and detached from the article, without requiring the use of special implements or machinery, or the services of skilled 75 workmen, and that the clasp securely retains the free ends of lacing or binding cords or strings, and also takes up all superfluous lengths of said cords or strings.

It is to be further observed that, by virtue 80 of the described form and relative positions of the parts composing the clasp, the free end of the lacing string or cord is securely retained between the clasping-arms 3 in such manner as to render any injury to or laceration of the string or cord utterly impossible.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A clasp for shoes, other articles of wear, 90 &c., comprising a closed body-portion or base, a stem or shank projecting outwardly from said body-portion, a head or stud carried at the outer end of said stem or shank, and a pair of parallel spring-arms extending wholly 95 outside of and laterally from and beyond the body-portion, at one side thereof, and in substantially the same plane as the body-portion, and having divergent outer ends operating as guides, and a number of flexible attachingarms projecting inwardly from the body-portion, substantially as set forth.

2. A clasp for shoes, or other articles of wear, &c., comprising a closed body portion or base, formed of similar adjacent leaves, a pair of 105 parallel spring arms integral with and extending wholly outside of and laterally from and beyond the body-portion, at one end thereof curving upwardly and outwardly to conform exteriorly one with the other and in 11c substantially the same plane as the body portion, and having divergent outer ends serving as guides, a stud passing centrally through the body-portion at the side of the union of the inner ends of the spring arms with the 115 side of the body portion, and a number of inwardly extending and flexible attaching arms, projecting from the body portion, substantially as described.

In testimony whereof I affix my signature in 120 the presence of two witnesses.

DITE. H. ABNEY.

Witnesses:
JNO. L. CONDRON,
H. E. PRICE.