

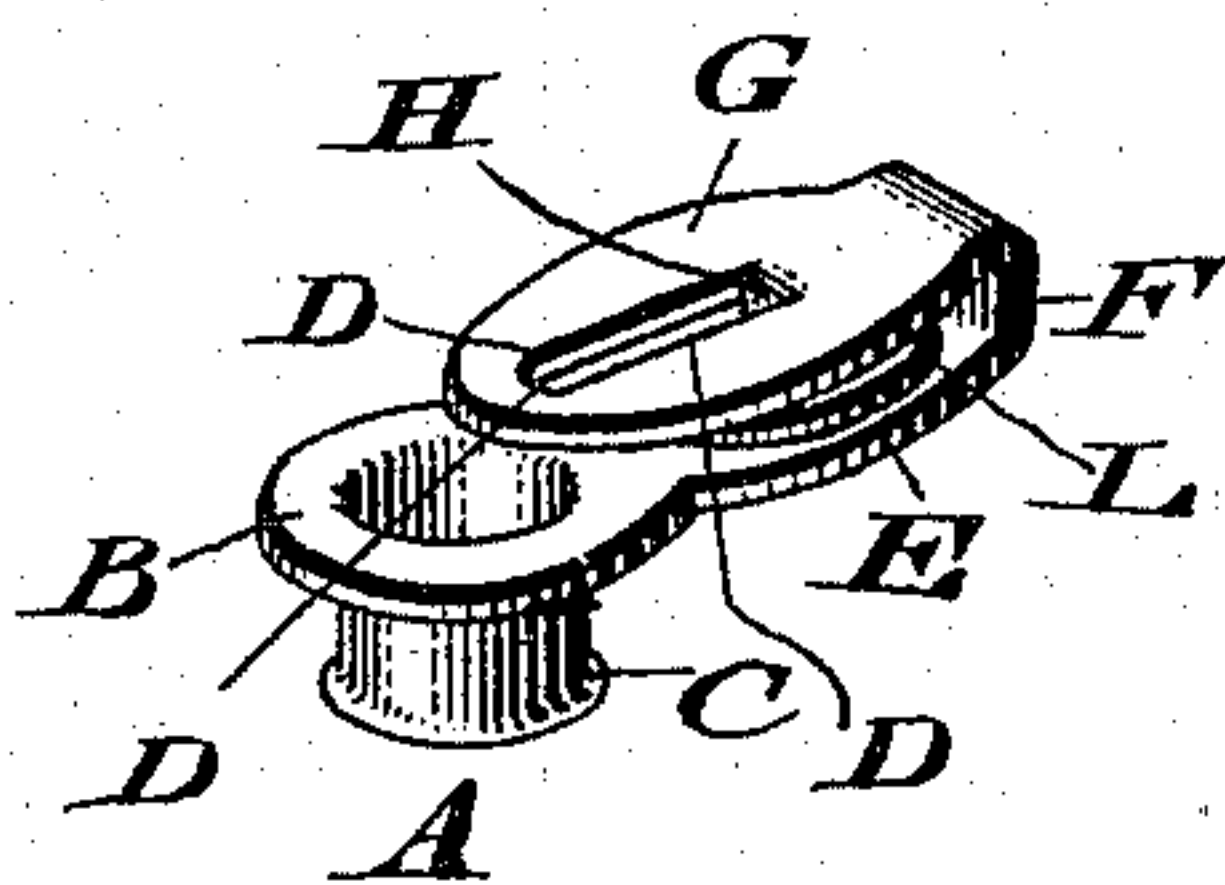
(No Model.)

W. C. LEIBER.  
FASTENER FOR SHOES, &c.

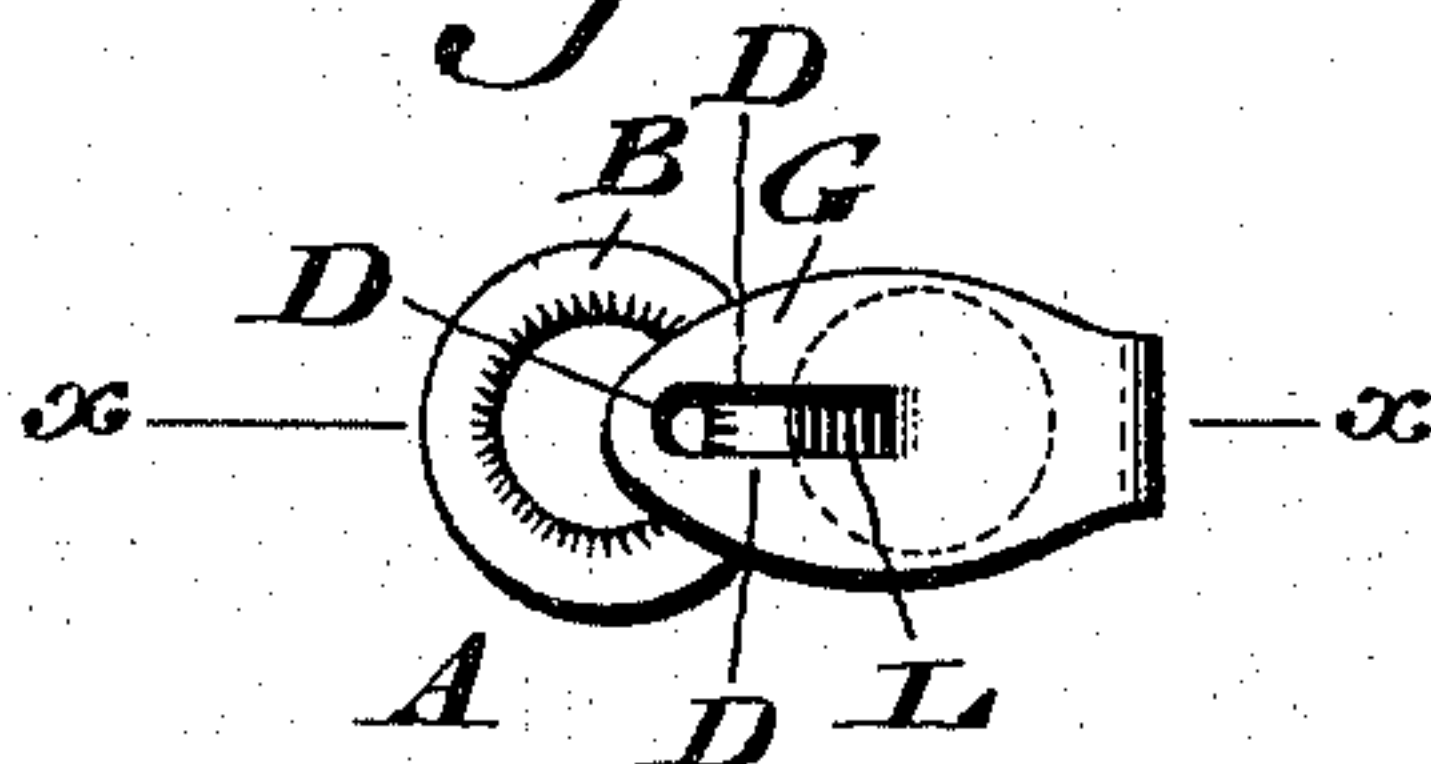
No. 571,450.

Patented Nov. 17, 1896.

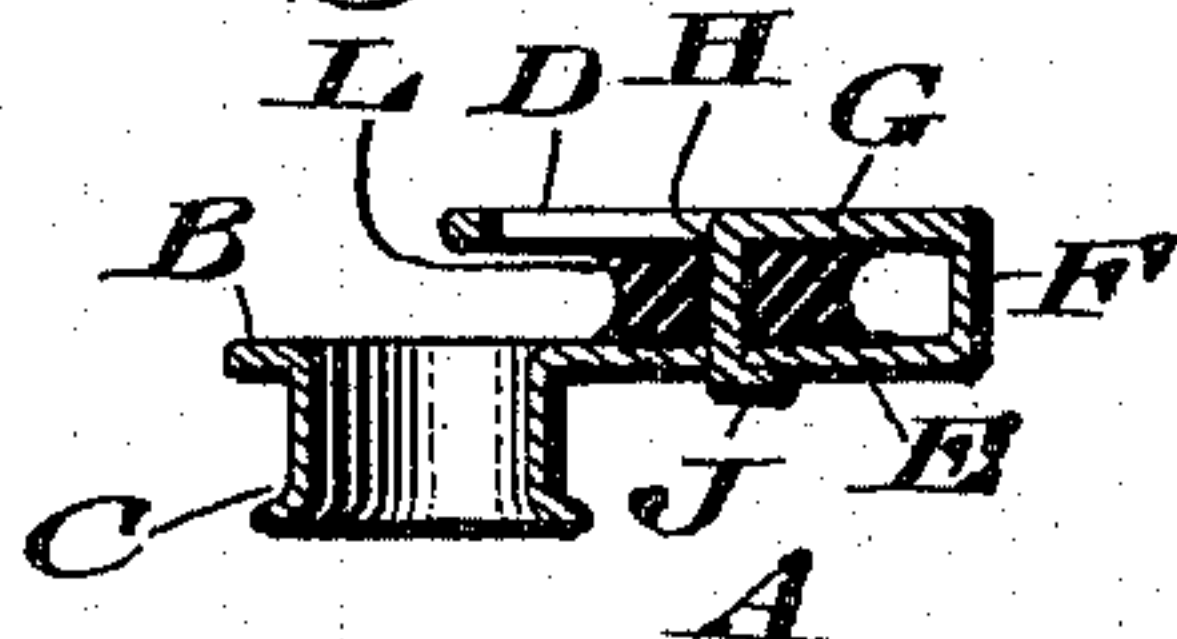
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM C. LEIBER, OF PHILADELPHIA, PENNSYLVANIA.

## FASTENER FOR SHOES, &c.

SPECIFICATION forming part of Letters Patent No. 571,450, dated November 17, 1896.

Application filed February 29, 1896. Serial No. 581,242. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. LEIBER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Fasteners for Shoes, Leggings, &c., which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to an improvement in fasteners for shoes, leggings, &c.; and it consists of a device attachable to a shoe, legging, &c., the same carrying a friction-roller around which a string or lace may be passed, thus easing the motions of the string or lace and avoiding rapid wearing out of the same, and rendering the shoe, legging, &c., more comfortable.

It also consists in forming the axle for said roller integral with the bearings thereof, thus reducing the expense and weight of the article, and more reliably retaining the roller in position.

It also consists in forming the securing-eyelet of the device integral with the bearings of the axle of said roller, thus increasing the strength of the parts and reducing the expense thereof.

Figure 1 represents a perspective view of a fastener embodying my invention. Fig. 2 represents a top or plan view thereof. Fig. 3 represents a section thereof on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the fastener for a shoe, legging, &c., the same consisting of the flange B, the eyelet C, the elbow E F G, extending laterally from said flange B, the axis H, and the pulley L, which is mounted on said axis, said parts, excepting said pulley, being formed integral of sheet metal or other suitable material. The axis H is formed by cutting a three-sided slit D in the member G of the elbow, and then bending and deflecting the material inclosed by the walls of said slit toward the member E, passing it through the latter and securing it thereto by the clench J, which retains the axis in position and prevents separation of the members E and G of the elbow, it being evident that the device is light, strong, inexpensive, and effective. This also leaves the top of the member G smooth and unobstructed, so that catching of a string

thereon is permitted. Furthermore, as the fastener is necessarily made of light metal and it is difficult to connect a separate axis so as to endure the lateral strain to which it is subjected, it is evident that the axis H bent from the member G and remaining an integral portion of the same and having its end secured to the under member E, possesses great strength, it is prevented from being torn out, the members G and E cannot separate, and the roller L retains its position.

The securing end or clench J is beneath the fastener, and so the string is not liable to catch thereon. The eyelet C will be headed on the proper part of the upper of a shoe or other article to which it is applied, the flange and head of said eyelet being on opposite sides of the upper or flap to which said eyelet is secured, it being seen that a shoe, legging, or other string or lace is passed around the pulley, thus easing the motions of the same and consequently rendering the wear of the shoe, &c., more comfortable, while the string or lace is prevented from wearing out rapidly, the advantage of which is evident.

I am aware that it is not new to form a shoe-fastener with a pulley or roller thereon. Neither is it new to form a bearing for said roller integral with the body of the fastener, and neither of these features do I claim *per se*; but I am not aware that it is old to form of a single blank a fastener having a tubular stud at one end with a flanged top, an elbow extending laterally from said flange and having on its top limb a cut-out portion bent downwardly and passed through an opening in the lower limb, thereby forming a bearing or axle for a pulley or roller.

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

An elbow, an eyelet on one member thereof, a pulley between the members of said elbow, and an axle for said pulley, said eyelet being an integral portion of the member from which it projects, and said axle being an integral portion of one member of the elbow, removed from the same, bent toward the other member and firmly connected therewith, said parts being combined forming an improved fastening for shoestrings, &c.

WILLIAM C. LEIBER.

Witnesses:

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