

(No Model.)

C. L. WEYAND.
SHOE ATTACHMENT.

No. 518,682.

Patented Apr. 24, 1894.

Fig. 1.

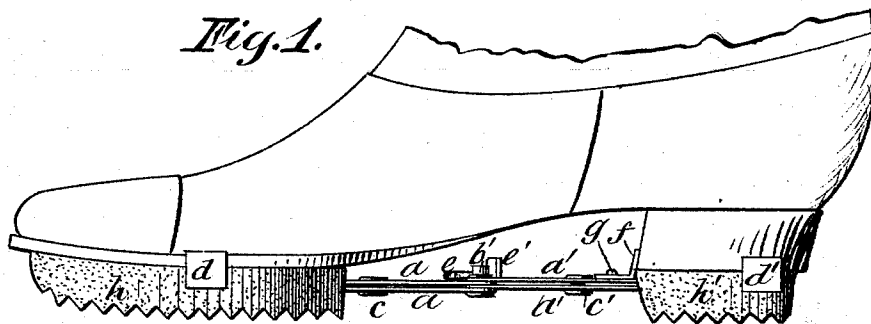


Fig. 2.

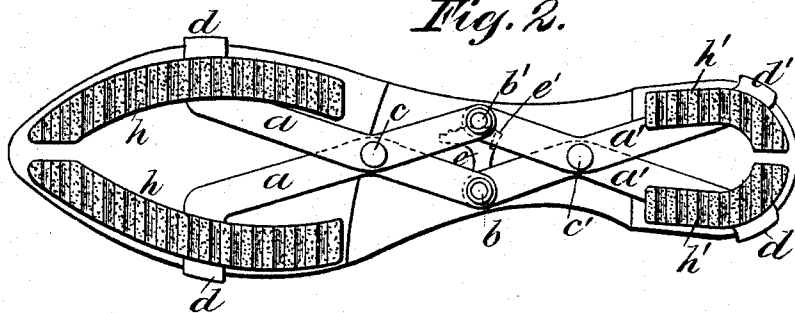
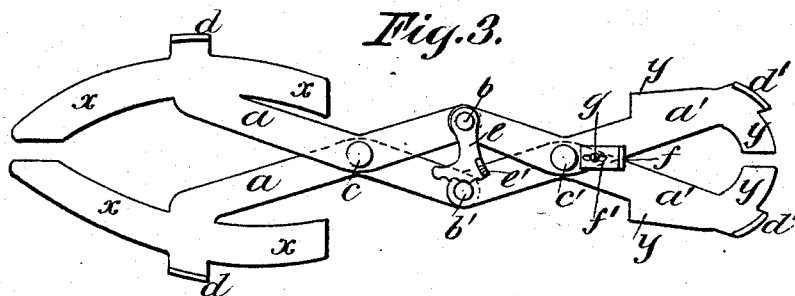


Fig. 3.



Witnesses:

D. W. Gardner,
Harry C. Green

Inventor:

Charles Louis Weyand
by William Canavan
his Atty.-

UNITED STATES PATENT OFFICE.

CHARLES LOUIS WEYAND, OF NEW YORK, N. Y.

SHOE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 518,682, dated April 24, 1894.

Application filed December 11, 1893. Serial No. 493,320. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LOUIS WEYAND, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Shoe Attachments, of which the following is a specification.

This invention relates to certain new and useful improvements in shoe attachments, and particularly to storm-shoes, ice-creepers, skates, &c., where it is desirable to afford means for readily and securely clamping the device to the boot or shoe, and as readily detaching the same, when desired.

The object of the said invention is primarily the production of a storm-shoe, adapted to raise the foot of the wearer above the ordinary deposits of rain, mud, slush, &c., with means for removably securing the same to a boot or shoe, which latter mechanism is also capable of use on ice-creepers, skates, &c.

Referring to the accompanying drawings, illustrating a storm-shoe and its attaching mechanism, in the several figures of which like parts are similarly designated, Figure 1, is a side elevation of my invention, showing the same clamped to a shoe. Fig. 2, is a similar bottom plan view; and Fig. 3, is a top plan view of the device detached, and without the protective blocks.

a, a, a', a' , are two pairs of arms of levers pivotally connected at b, b' , each arm being curved inwardly to overlap its mate, to which it is secured by the pivots c, c' . The outer or free end of each arm is upset, or bent at right-angles, forming lugs or clamps d, d, d', d' , to engage respectively the sole and the heel of a boot or shoe, and each of said arms is also provided with the plate or strip x, x, y, y , (Fig. 3,) of appropriate configuration, and preferably integral with said arms, although they may, of course, be separate and riveted thereto, if desired.

Any suitable or appropriate means may be used to move and hold the arms or levers a, a, a', a' , in their clamped position, but I prefer to extend or prolong the rivets b , and b' , and journal upon one of them (*e. g.* the rivet b) the cam-shaped piece e , preferably notched or serrated upon its cam face, as shown, and provided with the thumb-piece or lug e' . Ob-

viously, by turning said cam e , it will impinge upon the opposite rivet b' , thus forcing the inner ends of the pivoted arms apart, and drawing together the outer and free ends thereof, thus causing the lugs or clamps d, d, d', d' , thereon to firmly grip the sole and heel of the shoe; one of the notches in cam e , engaging the rivet b' , when the clamping operation is completed, and securing the device from accidental displacement.

It will be found that the attaching mechanism above described is sufficient for all ordinary purposes, but, if desired, additional clamps may be provided for the front of the heel, either by prolonging the curved heel-plates y, y , and upsetting the ends thereof, or, the right-angled strip f , having the elongated slot f' , through which the screw g , passes into a screw-hole tapped into the upper lever a' , may be used, &c.

h, h, h', h' , are protective blocks of rubber, felt, or other suitable material, preferably molded, sewed, cemented, &c., to completely surround the plates or strips x, x, y, y , which are therefore embedded in said material, as illustrated in Fig. 1. Obviously, however, the said protective strips may be molded or cut to conform to the contour of said plates x, x, y, y , and be riveted or cemented to the bottom or wearing surface thereof only.

When my invention is embodied in ice-creepers, each of the plates x, x, y, y , are provided with a number of spikes or spurs, formed in any usual and ordinary manner, which then take the place of the protective blocks h, h, h', h' , and which require no illustration nor further description.

It will be obvious from the foregoing, that my invention with slight structural changes, is also applicable to skates, and other objects to be removably secured to boots or shoes. Many changes and alterations may be made in the device without departing from the principle and scope of my invention, and I do not wish to limit myself to the particular means herein shown and described (*i. e.* the cam e) for moving and holding the levers to and in their clamped position, as manifestly other and equivalent means may be employed with equal effectiveness.

What I claim as new, and desire to secure by Letters Patent, is—

1. In shoe attachments, four arms or levers, each curved inwardly toward its middle portion to overlap its mate, said arms being pivotally connected at the point of overlap in pairs, and the two pairs being pivotally connected; lugs at the free ends of said arms, and means for moving and holding the same to and in their clamped position, substantially as described. 30
2. The combination with four arms or levers, each curved inwardly toward its middle portion to overlap its mate, said arms being pivotally connected at the point of overlap in pairs, the two pairs being pivotally connected, and provided with lugs at their free ends, of a clamp for the front of the heel, and means for moving and holding said arms to and in their clamped position, substantially as described. 35
3. The combination with two pairs of curved arms or levers pivoted together, and provided with lugs at their free ends, of a serrated cam located at one of the pivotal connections of said pairs of levers, and adapted to be engaged with a projection upon the opposite pivotal connection, thus moving and holding the free ends of said levers to and in their clamped position, substantially as described. 40
4. The combination of four pairs of arms or levers, each curved inwardly toward its middle portion to overlap its mate, said arms being pivotally connected at the point of overlap in pairs, the two pairs being pivotally connected, provided with lugs at their free ends and carrying strips or plates; protective surfaces for said strips or plates, and means for moving and holding said arms to and in their clamped position, substantially as described. 45
5. The combination with two pairs of curved levers pivoted together, and provided with lugs at their free ends, of strips or plates carried by said levers and provided with protective surfaces; a clamp for the front of the heel, and a serrated cam located at one of the pivotal connections of said pairs of levers and adapted to be engaged with a projection upon the opposite pivotal connection, thus moving and holding the free ends of said levers to and in their clamped position, substantially as described. 50

Signed at New York, in the county of New York and State of New York, this 9th day of December, A. D. 1893.

CHARLES LOUIS WEYAND.

Witnesses:

AUGT. CRUIKSHANK,
FREDERIC CARRAGAN.