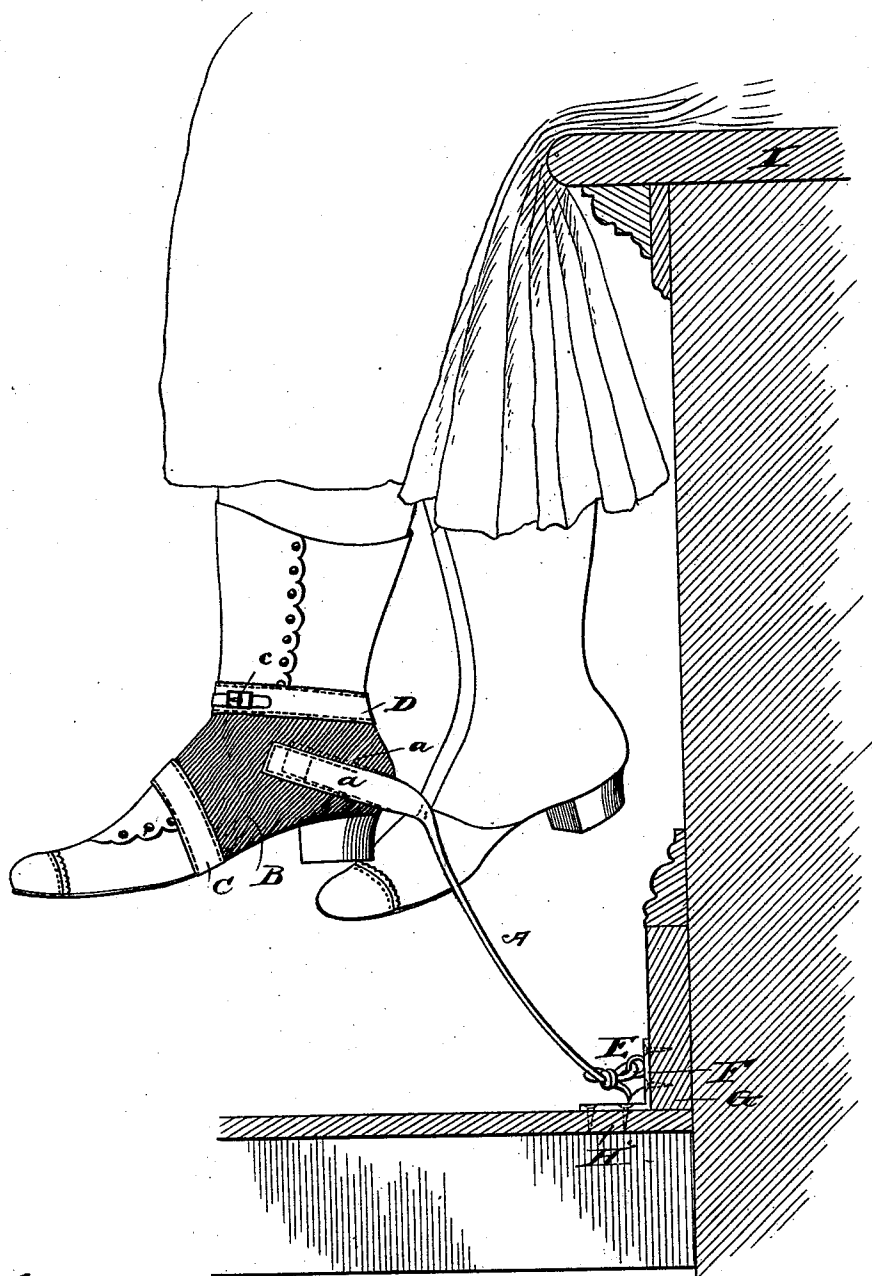


(No Model.)

I. BERNAUER.
SAFETY LINE.

No. 465,446.

Patented Dec. 22, 1891.



Witnesses,
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UNITED STATES PATENT OFFICE.

IVO BERNAUER, OF CHICAGO, ILLINOIS.

SAFETY-LINE.

SPECIFICATION forming part of Letters Patent No. 465,446, dated December 22, 1891.

Application filed March 20, 1891. Serial No. 385,761. (No model.)

To all whom it may concern:

Be it known that I, IVO BERNAUER, of Chicago, Illinois, have invented certain new and useful Improvements in Safety-Lines, of which

5 the following is a specification.

My invention has for its object to provide a safety-line for the use of persons in cleaning windows in the upper rooms of buildings; and it consists in a safety-line having a divided connection, with an attaching-band adapted to be passed around the ankle and instep of the person and having its other end detachably connected to a hook or catch affixed to the base-board or floor on the inside

15 of the wall beneath the window-sill.

The invention affords a sense of security to the person using it, and in case of the accidental loss of balance would prevent the user from falling.

20 The device may be easily constructed and readily applied, and does not mar or deface the wood-work nor present unsightly objects from the exterior of the windows, such as the rods, brackets, &c., now generally used.

25 The drawing shows the invention applied to use, the wall, window-sill, and the floor showing in sectional elevation.

In the drawing, A represents the safety-line, the end of which is preferably bifurcated.

30 The safety-line may be of cordage, leather, or stout webbing, and at one end it is divided into straps *a*, which are sewed or otherwise secured to an attaching-band B, having broad straps C D passed over the instep and ankle, respectively, and provided with buckles *c*, or other fastening means. The line may be made detachable from the band B in any convenient way, so that in moving about from one window to another, or from one room to

40 another, the line may be detached without removing the band B from the foot. One end of the line is made fast to an I-bolt E, affixed by a corner-bracket F to the base-board G and floor H below the window-sill I.

In washing the windows of upper stories 45 the usual position of the person performing the work is to sit upon the window-sill with the feet inside the room and with the face toward the window, the upper and lower sashes being moved up or down in order to bring 50 the glass within reach. In this position there is little real danger of falling; but there is always a sense of insecurity, which is removed by the use of this safety-line. The line may be readily detached from the wall without removing it from the foot, and so occupies but 55 a short time in adjustment to the different windows where the work is being performed.

It will be observed that the line is secured at two points to the attaching-band D, and 60 that these points are on opposite sides of the heel, so that in case of an accident the pull would be both upon the instep and upon the ankle from opposite sides of the heel, so that if a person should be suspended by the line 65 there would be no danger of breaking the limb. The line, however, is usually only of such length as to permit a very limited movement of the foot, and therefore it will be well-nigh impossible for the person using it, even 70 in falling, to withdraw the feet through the window far enough to prevent recovery of balance. The line also serves as a fulcrum or brace against which the force is exerted in maintaining or recovering the balance and 75 permits the user to lean back with both hands disengaged.

I claim—

A safety device for use in cleaning windows, comprising a line having an end thereof 80 secured with an attaching-band, having straps to secure it about the ankle and instep, respectively, and its opposite end adapted to be made fast, substantially as described.

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Witnesses:

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