

B. GALLAGHER.

Improvement in Skates.

No. 131,948.

Patented Oct. 8, 1872.

Fig. 1.

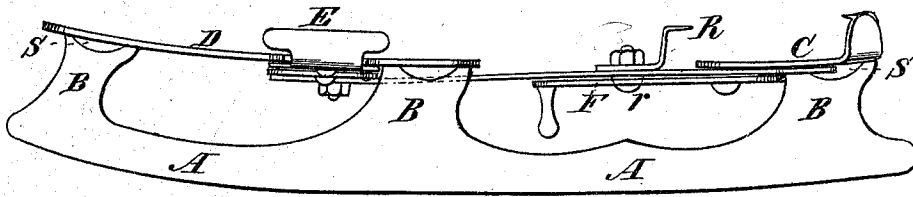


Fig. 2.

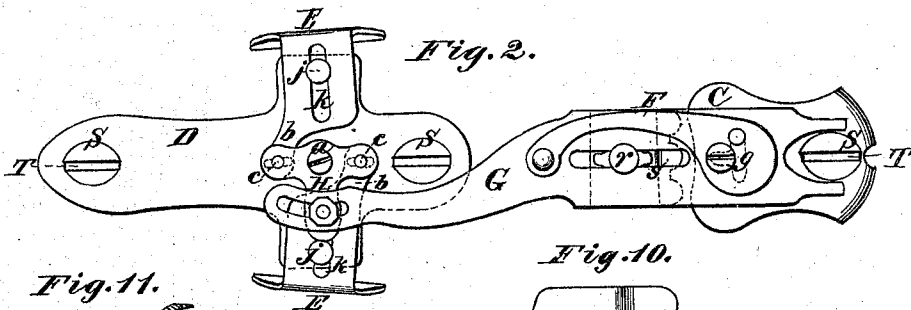


Fig. 11.

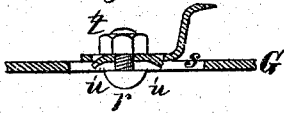


Fig. 10.

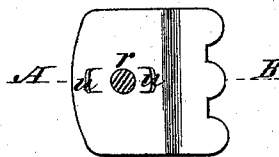


Fig. 3.

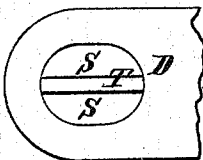


Fig. 4.



Fig. 5.



Fig. 6.

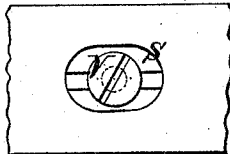


Fig. 7.

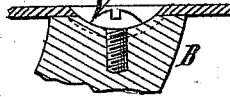


Fig. 8.

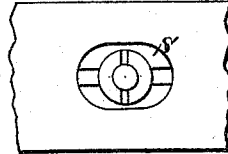
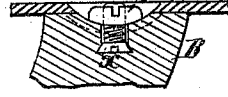


Fig. 9.



Witnesses.

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UNITED STATES PATENT OFFICE.

BERNARD GALLAGHER, OF ST. JOHN, NEW BRUNSWICK.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 131,948, dated October 8, 1872.

To all whom it may concern:

Be it known that I, BERNARD GALLAGHER, of St. John, New Brunswick, have invented a new and useful Improvement in Skate-Fastenings, of which the following is a specification:

Nature and Objects of the Invention.

The nature of my invention relates to skate-fastenings for the purpose of securing the runner to the sole and heel plates in a manner as will now be shown and described.

On the drawing, Figure 1 is a side view of my improved skate; Fig. 2 is a bottom view of the sole and heel plates, without showing the runner; Figs. 3, 4, 5, 6, 7, 8, and 9 show detailed views and sections of different modes for attaching the runner to the sole and heel plates; Fig. 10 is an enlarged view of the jaw R; and Fig. 11 is a section over the line A B taken on Fig. 10.

Similar letters refer to similar parts wherever they occur on the drawing.

This my invention is an improvement on my former patent, No. 108,581, dated October 25, 1870, and consists mainly in raising blisters on the under side of the sole and heel plates. Said blisters are each cut through with a slot-hole, wherein the upper part of the runner rests. The sides of the slotted blisters serve as supports for the runners. The runner may be attached to the sole and heel plates by riveting, or by means of screws, or screws and nuts, as may be desired.

A is the runner of the skate in one piece, with which is made the uprights B B B that support the heel and toe plates. C is the heel-piece and D is the sole-piece, both of which are stationary, attached to the uprights B B B. E E are the clamps by which the skate is fastened to the sole of the boot. These clamps are operated in and out from the center line of the skate by means of the lever F, connecting-link G, and double-crank piece H. The latter is supported and allowed to turn around the screw or rivet *a* attached to the under side of the sole-plate D. The clamps E E hook onto the pins *i i* of the double crank-piece H, for which purpose the extreme inner ends *b b* of the clamps E E are provided with transverse slot-holes *c c*, shown in dotted lines on Fig. 2.

The object of these slot-holes *c c* is to allow the clamps E E to adjust themselves automatically around the pins *j j*, so as to fit and grasp the sides of any desired-shaped sole, whether the same is parallel or tapering toward the toes. The clamps E E are provided with slot-holes *k k*, by means of which and the pins *j j* the clamps E E are guided as they are moved in or out. The forward end of the connecting-bar G is provided with a curved slot through which a screw and regulating-nut attaches said bar to a projecting arm of the double crank H, at a point midway between the pins *i i*. The lever F operates the bar G forward and back by means of the pin *o* working in the right-angled slot *q*, as shown in Fig. 2. The jaws E E and R are simultaneously operated by means of the lever F, so as to grasp firmly the sole and heel of the boot at the same time. The jaw R can be adjusted forward and back by means of the screw *r* projecting through a slot-hole, *s*, made in the connecting-bar G. The screw *r* is provided at the top with a nut, *t*, by which means the jaw R is held firmly to the connecting-bar G. To prevent the jaw R to turn around the bolt *r* I press down two lips, *u u*, Figs. 10 and 11, that project down in the slot-hole *s*. The lips *u u* are made of the same width as the slot-hole *s*, by which arrangement the jaw R is guided steadily in its motion on the connecting-bar G. The uprights B B are attached to the sole and heel plates C D in the following manner: I raise blisters S S on the under side of the plates C D, and cut the said blisters with a slot, T, through which the upright B projects, and I rivet the upper end of said uprights B B firmly in the slot T, whereby the plates C and D are strongly attached to the uprights B B B. The perforated blister S projects downward on each side of the upright B, and by this means holds it firmly in place. Instead of riveting the uprights B B to the blisters S S, I sometimes tap the uprights B B and insert a screw, V, from above, as shown in Figs. 6 and 7, or I make a dovetail in the upper end of the uprights B B and secure the plates C and D thereto by means of a dovetailed screw, X, and a nut, Y, as shown in Figs. 8 and 9.

Having thus fully described the nature, con-

struction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. The raised blisters S S on the under side of the sole or heel plates, provided with slot-holes for the purpose of attaching the sole and heel plates D C to the uprights B B B, in a manner as herein set forth.

2. In combination with the blisters S S, the arrangement of riveting the uprights B B to the sole and heel plates, or the arrangement of the screw V or the dovetailed screw X and

nut Y, for the purpose and in a manner set forth.

3. The construction and arrangement of the lips *u u* on the jaw R, in combination with the slot-hole *s* in the connecting-bar G, for the purpose and in a manner as herein set forth and described.

BERNARD GALLAGHER.

Witnesses:

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WM. H. HUTCHINSON.