O. G. Brady,

Skate Attachment.

No. 36,503. Patented Sep. 23 1862.

Fig: 1.

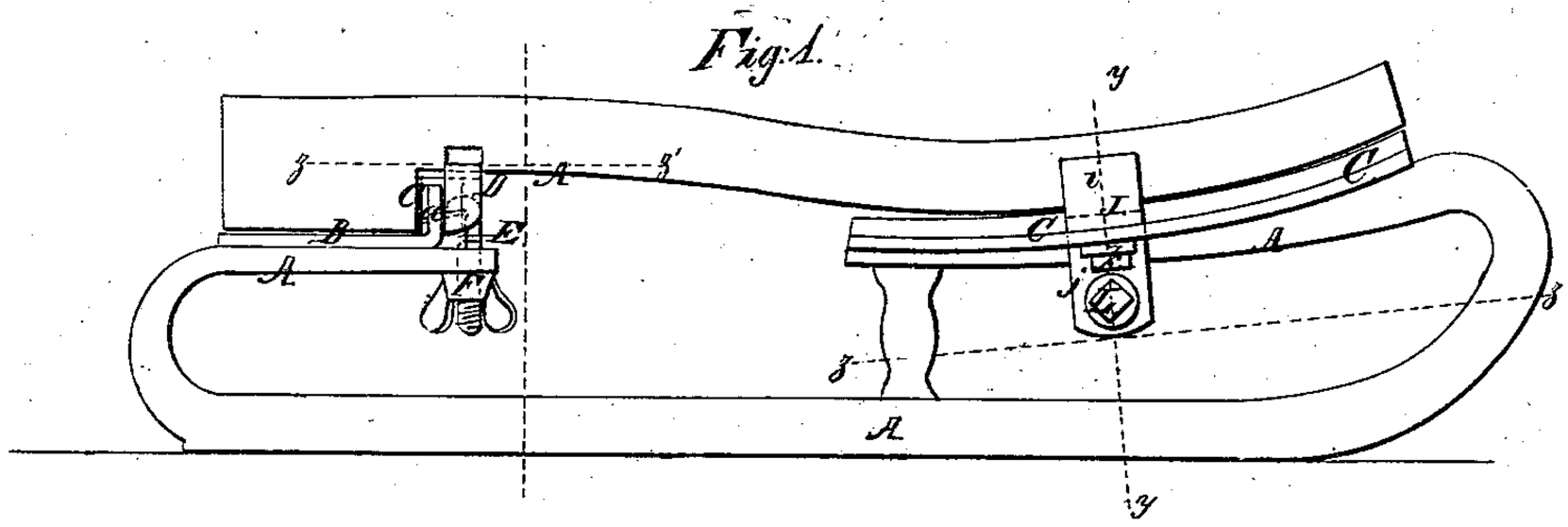


Fig: 2

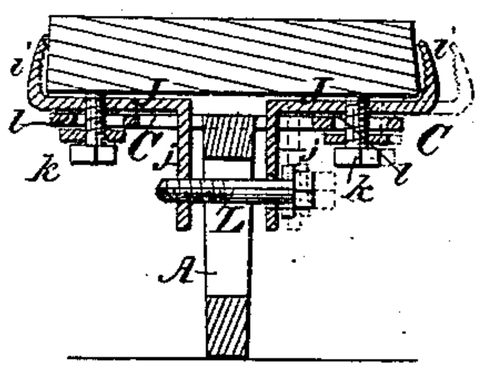
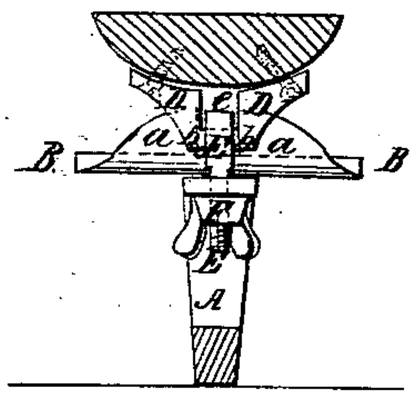


Fig: 3



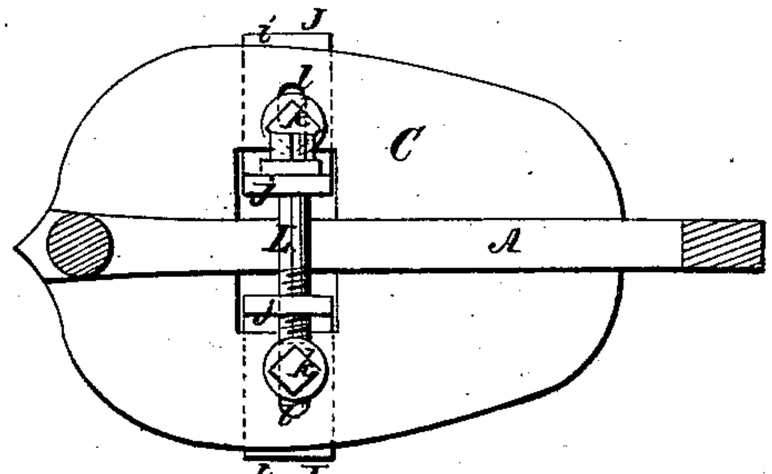
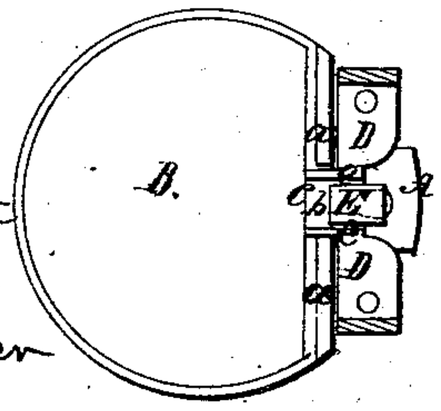


Fig: 5.

Fig: 4.



Witnesses:

L. A. Tucker

Inventor:

Oliver G. Brady

UNITED STATES PATENT OFFICE.

O. G. BRADY, OF NEW YORK, N. Y.

SKATE.

Specification forming part of Letters Patent No. 36,503, dated September 23, 1862; Reissued December 24, 1867, No. 2,819.

To all whom it may concern:

Be it known that I, O. G. BRADY, of the city, county, and State of New York, have invented certain new and useful Improvements in Attaching Skates to Boots; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of a skate iron furnished with my improved fastenings. Fig. 2 is a transverse section through Fig. 1, in the vertical plane indicated by red line *x*, *x*, thereon. Fig. 3 is a transverse section through Fig. 1, in the vertical plane indicated by red line *y*, *y*, thereon. Fig. 4 is a top view of the heel part of the skate of Fig. 1. Fig. 5 is a bottom view of the front attachment.

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

To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A represents the skate iron which is bent in the shape represented in Fig. 1 of the drawings—the ends thereof being turned up and curved over so as to form respectively the heel and sole supports.

B represents the heel stand which is of a sufficient size to give a firm bearing for the heel of the boot; and C, represents the sole stand which may be covered with leather or other suitable yielding substance. These two plates B, and C, are riveted securely to the upper portions of the skate iron A, and they form the supports for the boot, when the skate is secured to it. The front edge *a*, of the heel plate B, is turned up as shown in Figs. 1, 3 and 4 of the drawings, and a slot *b*, is formed in this turned up portion for receiving a tenon projection *c*, which is on a shank plate D, when the skate is secured to the boot, and preventing the boot, at the heel, from having any lateral play on the heel plate B.

E represents a hooked portion which is of a suitable length having a male screw-thread cut on its lower end. This screw portion E, is passed down through a hole which is made vertically through the end of the skate iron in front of the heel plate B, as shown in Figs. 1 and 3 of the drawings and on the lower ends of this hooked screw E, is a thumb nut F. The stem of the hooked screw E, plays loosely through its hole in the heel end of the supporting portion of the skate iron A.

D represents the shank piece which is suitably secured to the shank of the boot directly in front of the heel of the boot as shown in Fig. 1 of the drawings, wherein the red lines represent the sole of a boot to which the skate is fastened. This shank portion D, has an eye *e*, in it for receiving the hook of portion E, as shown in Figs. 1, 3, and 4, and the shank portion D, has also a tenon *c*, projecting from its back surface which tenon abuts closely up against the inside surface of the heel of the boot, leaving a space on each side of the tenon *c*, sufficient to receive the turned up edge *a*, of the heel plate B. Then when the heel of the boot is put upon the plate B, and the tenon *c*, passed into the slot in the edge *a*, the hook on portion E, is passed into the eye *e*, in the shank portion D, and by means of the nut F, the hooked portion E, can be set up tight and the skate secured rigidly to the heel of the boot.

The objection to skates hitherto used having fastenings which secure them to the sole and heel of the boot is, that in the ordinary movements and exertions of skating the heels of the boots are frequently strained and twisted off, but it will be seen from the above description of my improved heel fastening that the skate is not secured to the heel of the boot, but to the shank of the boot in advance of the heel and so near to the heel that the shank will not be strained nor injured in the least. The plate D, which is secured to the shank is not subject to any wear in using the boots for ordinary purposes, and this is another advantage obtained over other skate fastenings which have plates secured to the surface of the heel, and which are soon worn out rendering the fastening useless.

The fastening for attaching the skate to the sole of the boot under the ball of the foot consists of two slotted clamping jaws J, J,—shown in Figs. 1, 2 and 3 of the drawings,—which consist of the serrated gripping portions *i*, *i*, and ear portions *j*, *j*, each of which is formed by turning up one end of a straight piece of metal and turning down the opposite end, as shown in Fig. 2. These clamping plates J, J, are

attached to the top of plate C, by means of set screws *k*, *k*, which pass through transverse slots *l*, *l*, in plate C, and enter the clamping plates J, J. The ears *j j* pass through a large hole which is made through plate C, and the jaws *i*, *i*, project up from each side of this plate C. The slots *l*, *l*, allow the plates J, J, to be adjusted laterally when the set screws *k*, *k*, are loosened. L is an adjusting screw which passes transversely through the ends of ears *j*, *j*. The stem or threadless portion of this screw L, passes loosely through one of the ears *j*, and the screw portion L, is tapped through the other ear *j*. This screw L, is used to adjust the plates J, J, and a square head is formed on it for receiving a key for turning the screw. Now it will be seen that by loosening the set screws *k*, *k*, one or the other of plates J, J, may be adjusted to any desired point, and then secured rigidly to the plate C, by tightening its set screw; thus when the screw L, is turned the loose plate J, only, will be moved. By this arrangement the boot may be set exactly in the center of the skate, and whether the sole of the boot be very much twisted, or straight the plates J, J, can be adjusted so as to bring the foot exactly in the center of the skate.

The operation of securing the skate herein described to the boot is very simple as it is done as follows: The plates B, C, are brought up against the sole of the boot and the portion E is hooked into the eye in shank piece D, then the nut F is screwed up tightly so as to draw the heel of the boot solidly against the plate B; the lip or turned up portion *a*, of the heel plate will now prevent any longitudinal or lateral play of the skate at the heel and the hooked portion E, will keep the parts fixedly in place. The screw L, is now tightened and the jaws *i*, *i*, are made to clamp and hold the sole of the boot down securely to the plate C. Should it be found, when the skate is secured to the boot, that the skate iron is not in the center of the boot, the set screws *k*, *k*, are loosened and the skate iron may be moved to the right or to the left until it is in the center of the boot when one of the screws *k*, is tightened again, thus establishing the skate iron in the desired position. The plate C, is covered on its top surface with a piece of leather or other suitable material which is cut out so as to fit over the transverse portions of plates J, J, which are on top of plate C, thus leaving a smooth surface for the front part of the boot to rest upon.

I do not desire to confine myself to any particular form of skate iron as the fastenings can be readily applied to different shaped irons.

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

The arrangement of the shank piece D, and heel plate B, with the shank of the boot, runner A, and adjustable tightening hook E, as herein shown and described.

OLIVER G. BRADY.

Witnesses:
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L. A. TUCKER.

[FIRST PRINTED 1911.]