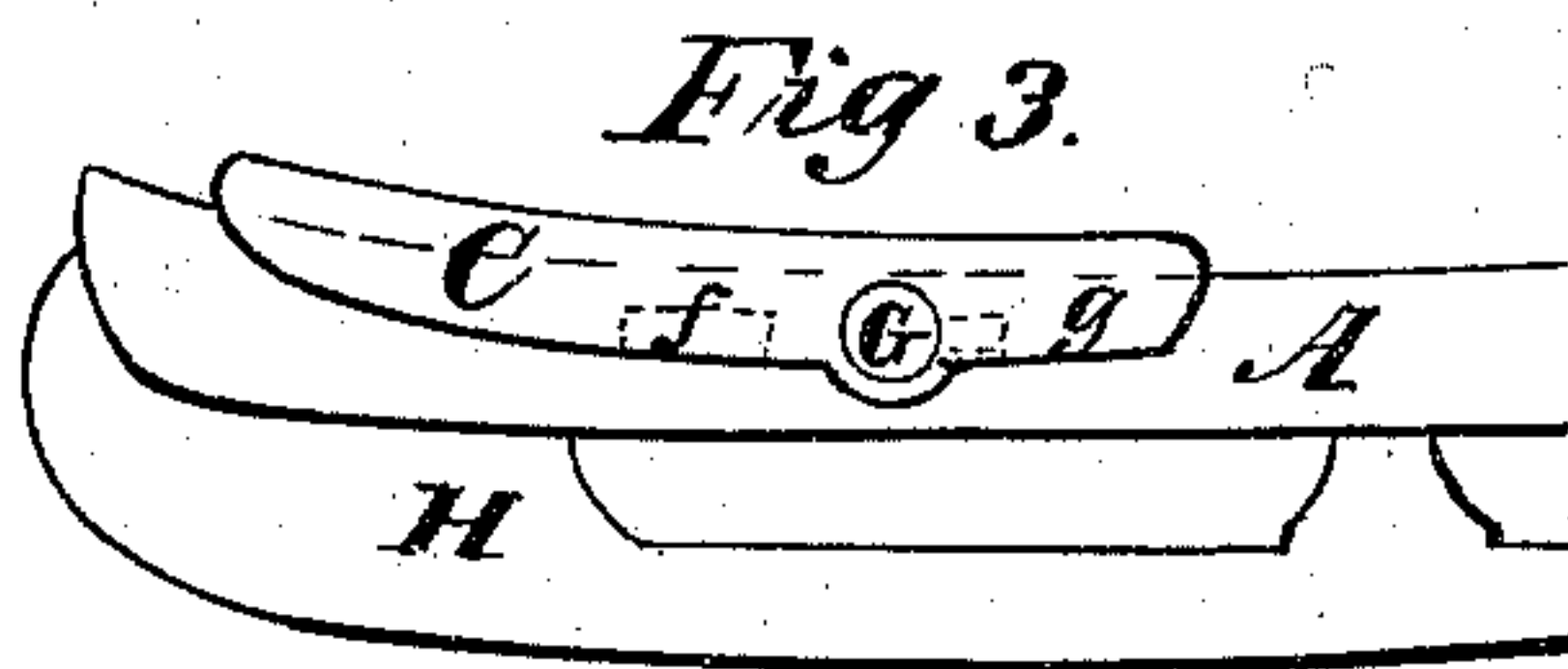
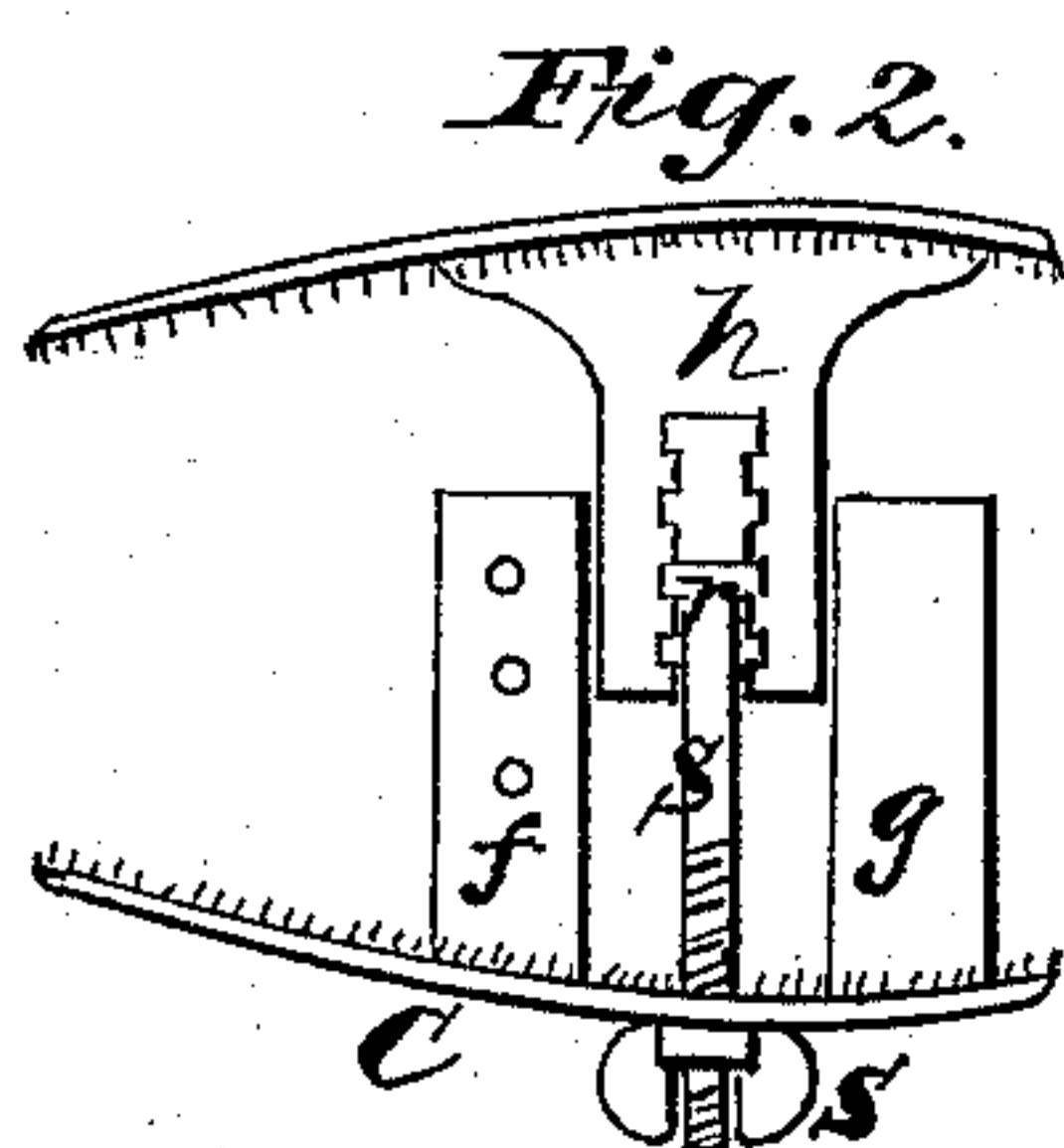
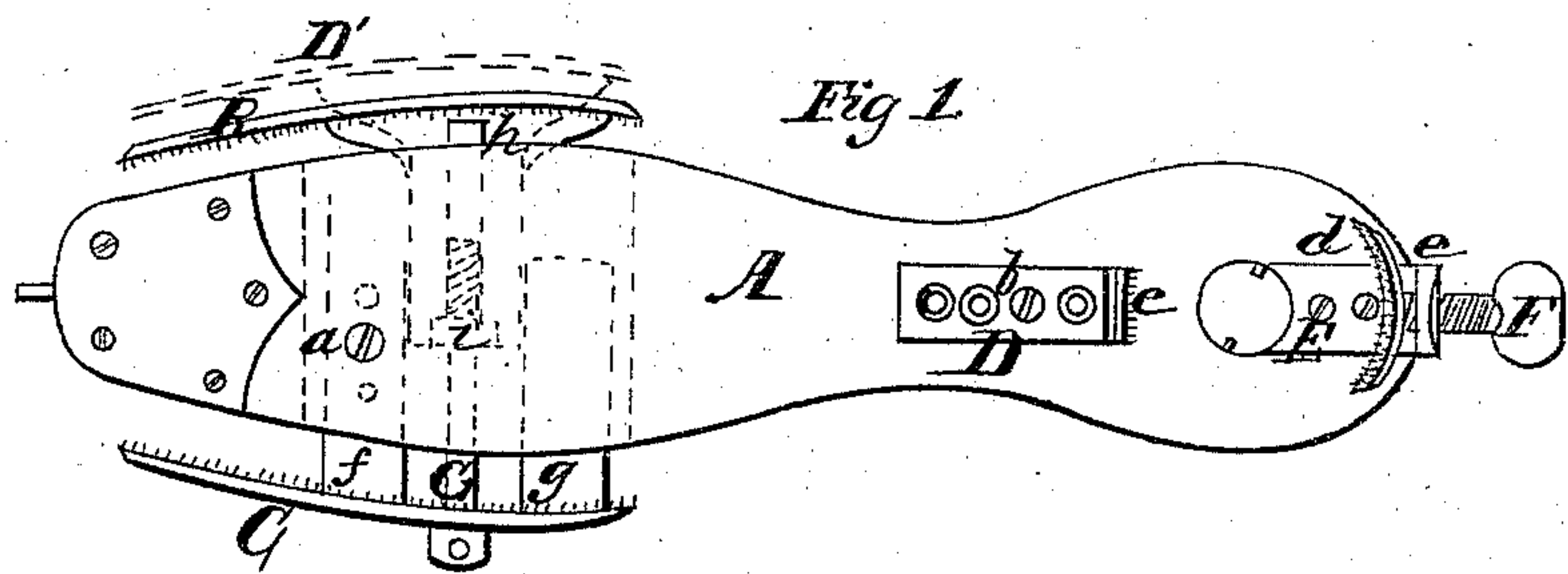


*H. N. Gallagher,*  
*Skate Fastening.*  
*N<sup>o</sup> 43,488.                      Patented July 12, 1864.*



*Witnesses:*  
*Asah Billings*  
*W. H. Rogers*

*Inventor:*  
*H. N. Gallagher*  
*By *Wm. C. Loughborough**

# UNITED STATES PATENT OFFICE.

H. N. GALLAGHER, OF GENEVA, NEW YORK.

## SKATE-FASTENING.

Specification forming part of Letters Patent No. 43,488, dated July 12, 1864.

*To all whom it may concern:*

Be it known that I, H. N. GALLAGHER, of Geneva, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Skate-Fastenings; 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 top view of my invention. Fig. 2 is a side elevation of the front portion of the skate. Fig. 3 is a plan of another modification of the front or side fastenings, B and C. Fig. 4 is a view of the pin for turning the clamping-screw G.

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

This invention relates to that class of skates having heel and side fastenings; and it consists in the employment of such fastenings when they have a rasp-like or otherwise roughened surface on the clamping portions, which clasp the edge of the sole of the boot, and is thereby adapted to any thickness of sole or height of heel; also, in pivoting one of the arms of one of the side clamps to the skate in such a manner that the said clamps shall adjust themselves to the shape of the boot and its relative direction to the skate, and also in providing the pivoted arm with several holes, whereby the fastenings or clamps may be set for any width of sole.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

A in the drawings represents the foot-piece of an ordinary skate. The bent plate E is bedded into A, where it is secured by screws or otherwise, and the clamping-screw F is tapped through the raised end *e* of the plate, and is pivoted through the curved clamping-plate *d*, the concave face of which is roughened. The rear face of the raised portion *c* of the adjustable plate D is also roughened, and the plate has several holes to receive the screw *b*, whereby it may be adjusted to the different-sized heels. The side clamps, B and C, are provided with arms *h*, *f*, and *g*, which keep them

in position when applied. The arms *f* and *g* of the outside clamp, C, is placed in the mortise through the foot-piece A, where it is pivoted by the screw *a*. The inside clamp, B, is then placed in position and the clamping-screw G is screwed through the nut *i*, which connects the ends of the arms *h* of clamp B. The clamps B and C should project above the upper face of the foot-piece, as seen in Fig. 2, only far enough to clasp the edge of a thin sole without reaching the "upper." That portion of these clamps which comes in contact with the boot-sole is also roughened.

This skate is secured to the boot by clamping the heel with the set-screw F and by turning the screw G, which is done with the pin *n*, when the two clamps will conform to the shape of the sole by swinging upon the pivot *a*, there being a little play between the arms of the two clamps and between them and the mortise to enable them to change their relative position to each other, and also to the skate. If desired, the clamps may be coupled together adjustably, as seen in Fig. 3, by making several notches in the arms *h* and providing the threaded stem S with a head, *r*, to fit in said notches. In this construction a nut, *s*, is used, which need not be detached except to make changes in the length of the stem, which is done by removing the nut and withdrawing the clamp B far enough to permit the head *r* to be placed in a notch nearer the clamp to shorten it, or nearer the end of the arms to lengthen it, when the parts may be replaced. They should be made in pairs, so as to place the screw on the outside of the skate.

I claim—

1. Making the side clamps, B and C, self-adjusting laterally by pivoting them to the foot-piece A, as set forth, and for the purpose described.

2. Providing the pivoted clamp C with several adjustments laterally, substantially as shown, and for the purpose specified.

H. N. GALLAGHER.

Witnesses:

W. A. VANVRANKEN,  
PHINEHAS PRUITY.