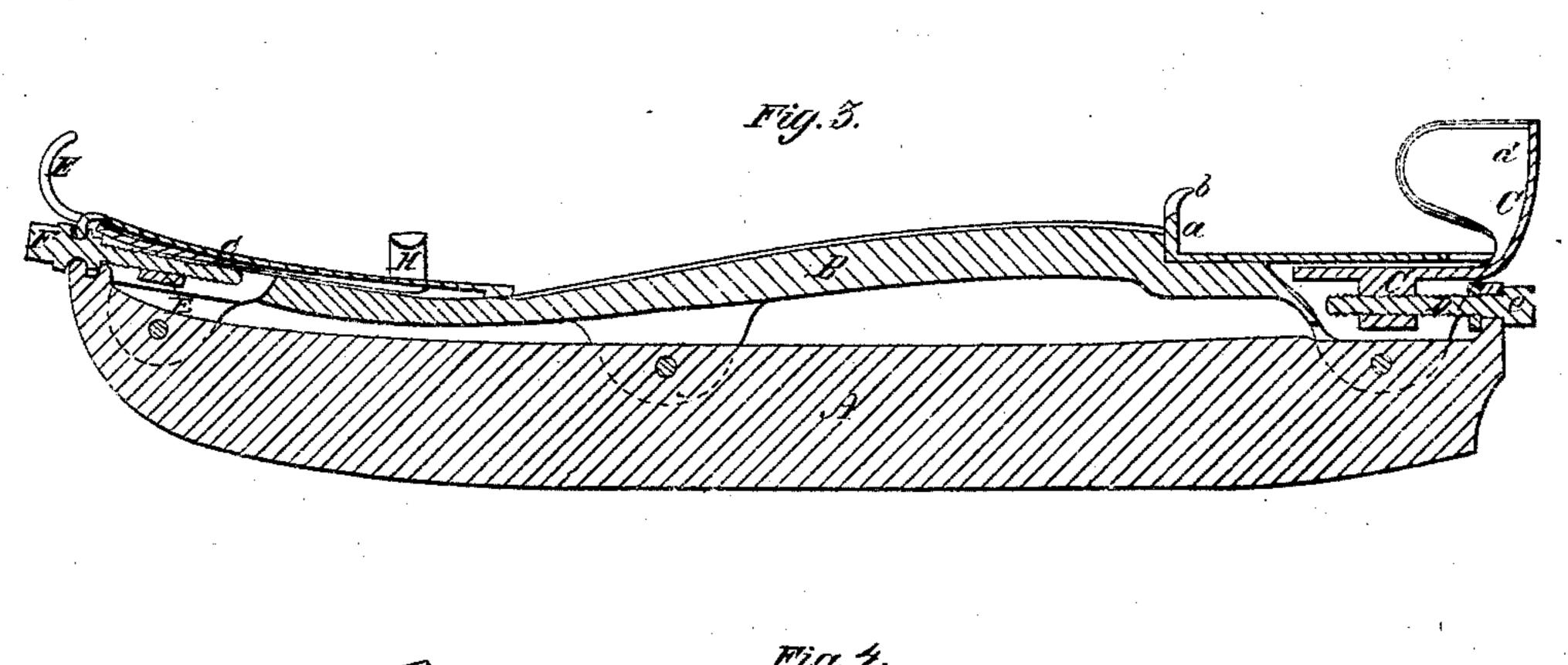
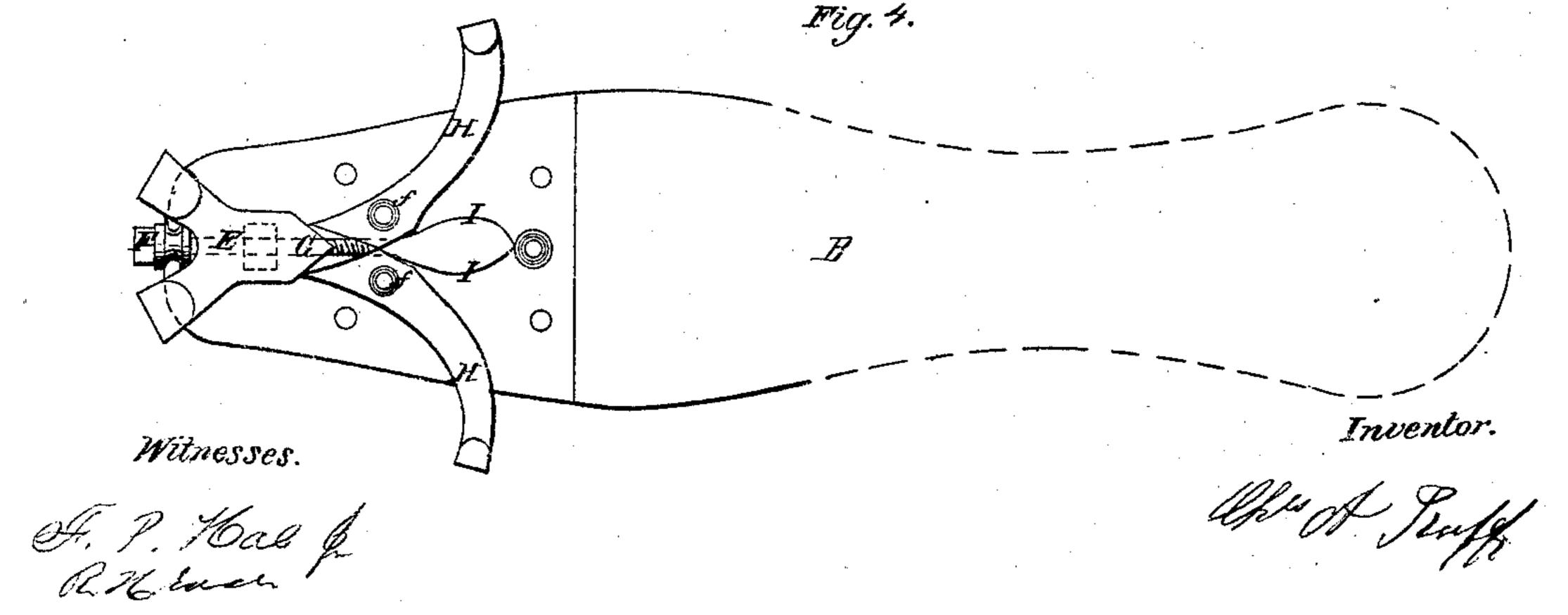
Skate.

Now 1 Patented Feb. 7 1860.

Fig. 2.

Fig. 2.





## UNITED STATES PATENT OFFICE.

CHARLES A. RUFF, OF BOSTON, MASSACHUSETTS.

## SKATE.

Specification of Letters Patent No. 27,074, dated February 7, 1860.

To all whom it may concern:

Be it known that I, Charles A. Ruff, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Skate; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure, 1, denotes a top view. Fig., 2, a side elevation, and Fig., 3, a longitudinal section of it. Fig., 4, a top view of the toe clamp, its wedge and the lateral clamps as applied to the foot rest of the skate.

The nature of my invention consists principally in an improved skate as made or provided with clamping devices by which it may be clamped substantially as hereinafter described to the edge of the sole or to the edges of the sole and heel of a boot or shoe.

It also consists in the combination and arrangement of a toe clamp, two lateral lever clamps and a wedge screw to operate together substantially as hereinafter described

25 scribed. In the drawings, A, exhibits the runner and, B, the foot rest to which said runner is fastened. I usually construct the said foot rest of metal and in the form as shown 30 in the drawings. It is provided with a shoulder, a, for the front of the heel of a boot to rest against, such shoulder being furnished or not as occasion may require with spurs or hooks, b, b. At the rear part 35 of the heel or within the heel part of the foot rest, I apply a movable clamp, C, so as to be capable of being slid longitudinally in the foot rest and to be moved by means of a screw, D, arranged within the said rest and 40 the runner as shown in the drawings. The said screw I furnish with a squared or prismatic head, c, to which a key may be applied for the purpose of effecting its rotations, so as to move the clamp either toward 45 or away from the shoulder or heel abutment, a. The said clamp, C, may be provided with spurs d, d, to enter the curved edge of the heel of a boot when applied to the skate and the clamp is pressed against

shown in the drawings. The inner end of the shank of the said toe clamp I make in the form of a wedge, G, to extend between the inferior arms of two lever clamps, H, H.

50 such heel. Furthermore at the toe of the

foot rest, I arrange a toe clamp, E, and a

screw, F, to operate the same, such being as

The said clamps are arranged within and made to project laterally from the foot as shown in the drawings, each of said lateral clamps being free to turn upon its fulcrum, f. 60

Between the two clamps H, a spring, I, is arranged so as to force their superior arms apart from one another. By applying a key to the screw of the toe clamp and revolving such screw so as to force the clamp 65 inward, the wedge of the clamp at the same time will be caused to actuate the lever clamps in such manner as to make their superior arms approach one another. Each toe clamp and each lateral clamp is turned 70 upward or hooked so as to clasp and hook around the edge of the sole of a boot when applied to the foot rest and such clamp is forced toward the sole.

By means of my invention, a skate may be 75 securely fastened to the edges of the sole of a boot without the necessity of a strap being carried around the foot of the wearer of the boot. It is well known that when a skate is confined to a person's foot by means 80 of buckles and straps carried over or around the foot, the circulation of blood in the foot is liable to be and often is very much impeded. My invention obviates this difficulty.

I do not claim the application of leather straps to a skate, and to go or be wound around the foot, and the shoe or boot of a person in order to affix such skate to the shoe or boot: Nor do I claim applying a 90 screw to the skate so as to screw into the heel of the boot of the wearer, but

What I claim is—

1. An improved skate as made or provided with clamping devices by which it 95 may be clamped substantially as described to the edge of the sole or bottom edge of the sole and heel of the shoe or boot of a person.

2. I also claim the combination and arrangement of the toe clamp, the lateral lever 100 clamps, the wedge and the screw to operate substantially as described.

3. I also claim the combination of the movable toe clamp with the heel abutment, a, and the adjustable toe clamp, such clamps 105 being provided with screws or equivalents for moving them as described.

CHLS. A. RUFF.

Witnesses:

R. H. Eddy, F. P. Hale, Jr.