W. Race,

Skate,

No. 46,497. Patented Feb. 21, 1865.

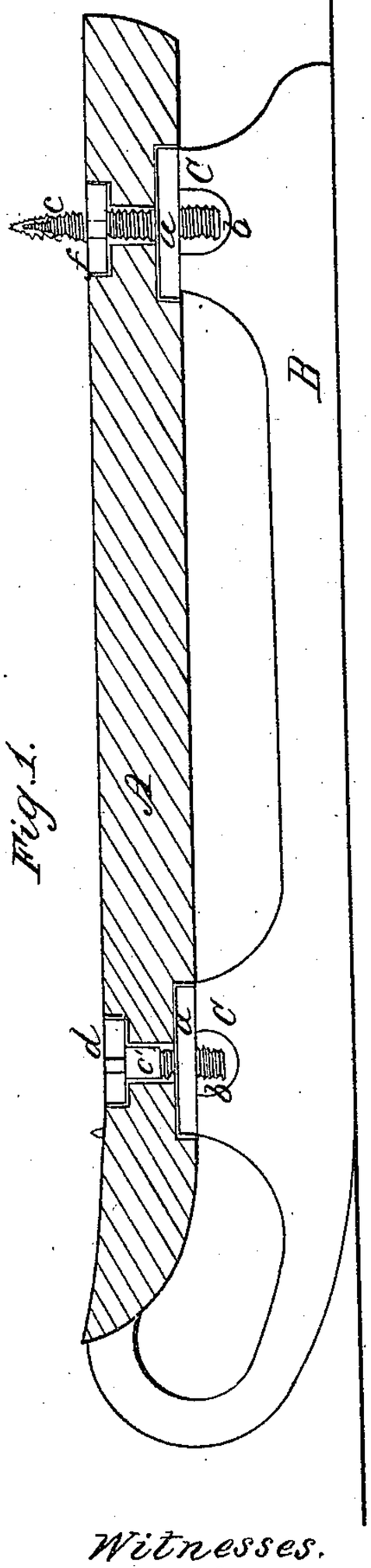

Fig. 1.

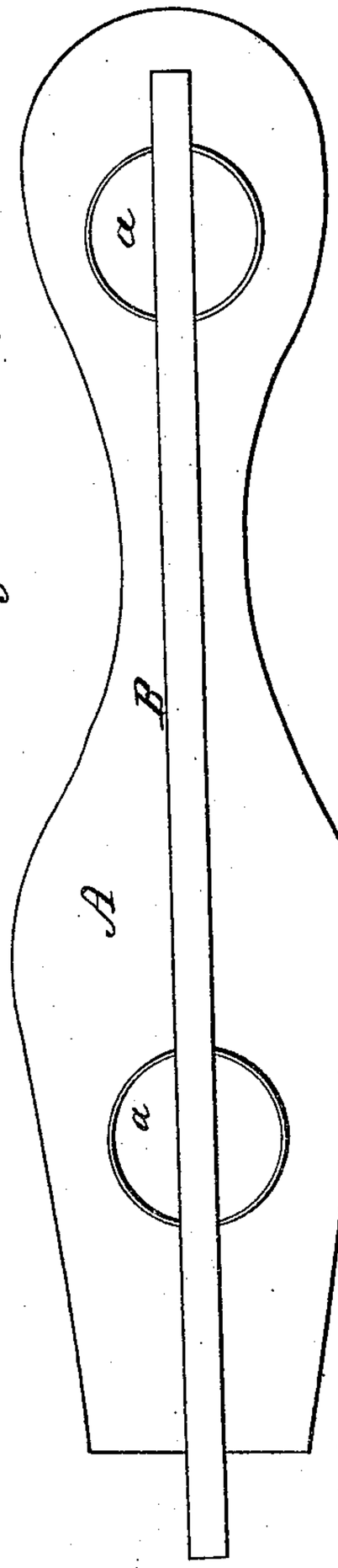

Fig. 2.

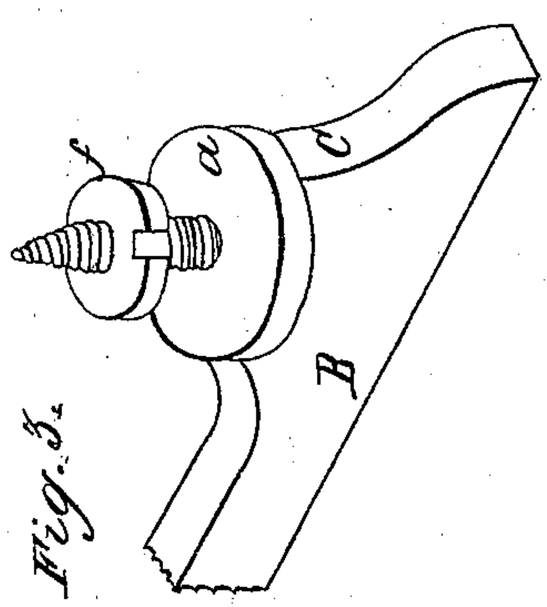

Fig. 3.

Witnesses.
R. F. Osgood.
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UNITED STATES PATENT OFFICE.

WASHBURN RACE, OF LOCKPORT, NEW YORK.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. **46,497**, dated February 21, 1865.

To all whom it may concern:

Be it known that I, WASHBURN RACE, of Lockport, in the county of Niagara and State of New York, have invented a new and useful Improvement in Skates; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a central longitudinal section of the wooden bed with the skate-runner and connecting parts in elevation. Fig. 2 is a bottom view; Fig. 3, a perspective view of the parts forming the rear fastening detached.

Like letters of reference indicate corresponding parts in all the figures.

My invention consists in the employment of an independant heel-screw in connection with the standard of a skate-runner and the wooden bed in such a manner that the screw serves the double purpose of securing the parts together and adjusting higher or lower to compensate for the enlargement of the hole in the boot in which it rests, as hereinafter set forth.

As represented in the drawings, A is the wooden bed or foot support, which may be of any ordinary construction, and B is the skate-runner, which I make of iron substantially of the shape represented. The runner has in front and rear, as usual, two standards, C C, and these are respectively provided with plane bearings *a a*, of suitable extent to firmly support the wooden bed, as shown clearly in the drawings. When the bed is secured thereon, it will be seen that the bearings are so broad that the strain or leverage on the wood is in a great degree obviated, and therefore there is less danger of splitting. In most skates the metal passes through the wood in the center, and the bearings, if any, on the under side of the bed are so narrow, that the inclination of the foot in skating has the tendency to split the wood or to loosen the fastening.

The standards C C are each provided with an opening, *b*, Fig. 1, for the purpose of allowing the fastening-screws to pass down through the wood centrally, and that of the heel to adjust higher or lower, as will presently be described. The wooden bed is secured to the front standard simply by a screw, *c'*, which screws through the bearing *a*, and is provided with a head, *d*, counter-sunk in the upper surface of the wood and clamping the parts together. The rear fastening is arranged somewhat differently, the screw *c* being independent and having a thread cut its whole length, and serving the double purpose of a fastening-screw and a heel-screw for entering and holding in the boot. It passes down through the wood and screws into the bearing *a*, as in front, but it has on top of the wood a nut, *f*, by which the parts are clamped together. By this arrangement it will be seen that a double effect is attained, viz.: first, a simple and effective fastening is secured, by which the bed and runner are rigidly coupled; and, secondly, the screw *c*, which also serves as the heel-screw, is adjustable higher or lower at pleasure, as indicated by red lines, Fig. 1, so as to adapt its projection to different-sized skates, as well as to compensate for the increase of size of the hole or socket, into which it screws in the heel of the boot. As the hole or socket becomes worn or enlarged the screw can be gradually raised, thus securing at all times a firm connection between the foot and skate. The screw *c* being simply a plain screw without a head, it can be easily replaced at any time without difficulty. It will be seen that there is a particular combination and adaptation of parts in this device which renders one dependent on another.

A recapitulation presents the following advantages: The bearings *a a* furnish a broad support to the wood, so that it is not liable to split, while the openings *b b* allow the coupling-screws to pass down through centrally, and to adjust higher or lower, and the whole, being formed with the runner B in a single piece, is easily and economically made. The heel screw *c*, by being adjustable higher or lower relatively to the bed A, is adapted to any size skate and to compensate for the enlargement or wear of the hole in which it screws in the heel.

The combination of the heel-screw *c* with the bearing *a* and nut *f* furnishes a secure coupling of the bed and runner.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the heel-screw *c* bearing *a*, and nut *f* with the bed A and runner B, substantially as and for the purposes herein specified.

WASHBURN RACE.

Witnesses:
S. R. C. MATHEWS,
E. STANLEY RACE.