

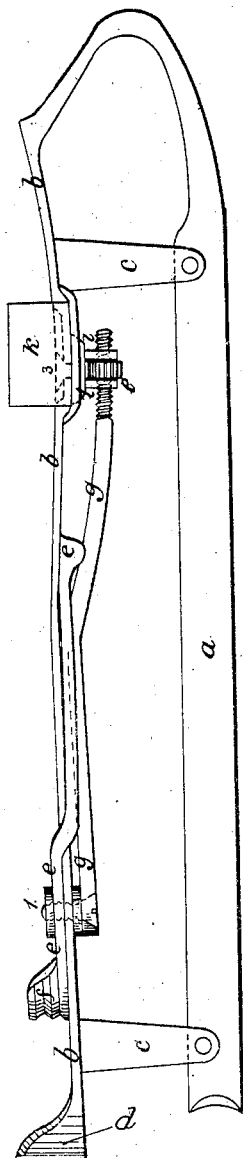
E. Murray,

Skate.

N^o 19832.

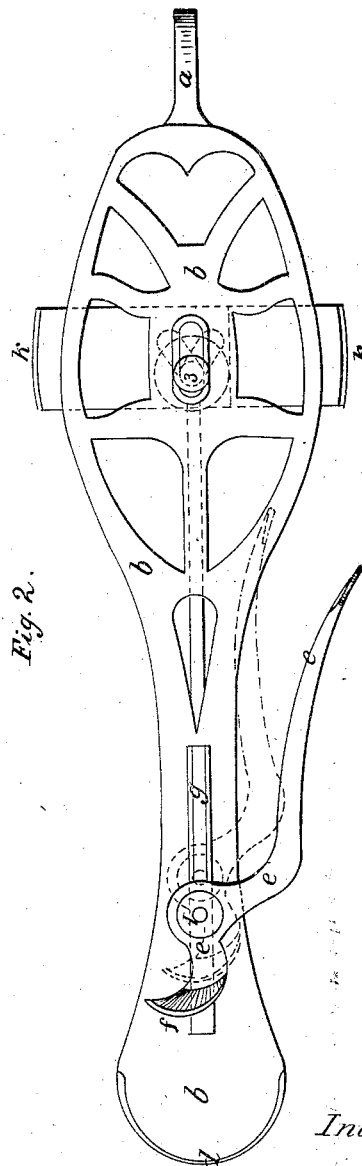
Patented Sep. 5, 1865.

Fig. 1.



Witnesses
Linnell W. Snell
Chas H Smith

Fig. 2.



Inventor
Edgar Murray

UNITED STATES PATENT OFFICE.

EDGAR MURRAY, OF NEW YORK, ASSIGNOR TO WM. J. COOMBS, OF
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IMPROVEMENT IN SKATES

Specification forming part of Letters Patent No. **49,832**, dated September 5, 1865; antedated
September 1, 1865.

To all whom it may concern:

Be it known that I, EDGAR MURRAY, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Skates; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a side elevation of my said improved skate, and Fig. 2 is a plan thereof.

Similar marks of reference denote the same parts.

The nature of my said invention consists in a clamping-lever for the heel, sustained by an adjustable rod, which rod actuates clamps that grasp the sides of the boot-sole when the said lever is turned to press upon the heel.

My device is cheap, simple, and durable.

In the drawings, *a* is the runner of the skate, attached to the sole-piece *b* by suitable studs or supports, *c c*.

d is the heel-piece at the end of *b*, against which the boot-heel is clamped by the action of a lever, *e*, having a cam-shaped end, *f*, that takes against the front portion of the heel when said lever *e* is turned into the position shown by dotted lines in Fig. 2. The fulcrum *l* of this lever *e* is formed by a stud passing through a slot in the sole-piece *b*, and connecting to the end of the bar *g*, that runs along beneath the foot-piece *b*, and has at its forward end a screw and nut, *i*, by which the position of the clamping end *f* of the lever *e* can be adjusted relatively to the clamps *k k*, that grasp the sides

of the sole, so as to adapt the parts to different characters and shapes of soles and heels on the boots to which the skate is attached. The clamps *k k* are fitted to slide transversely of the skate, moving in recesses formed for them on the under side of the sole-piece *b*. In these clamps *k k* are diagonal slots receiving a pin, *3*, that extends from the jaws *l*, that receive between them the nut *i*.

It will now be understood that the lever *e* clamps the heel by the cam-shaped end *f*, and through its fulcrum *l* and rod or bar *g* actuates the pin *3*, that moves the clamps *k k* to grasp the boot-sole at the edges thereof.

In place of having one pin, *3*, to actuate the clamps *k k*, the jaws *l* may be formed upon a sliding plate having diverging grooves to draw in the said clamps *k*.

The lever *e* may be retained by a spring-catch or other device, if required, so that it will not be liable to turn when in use.

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

1. The lever *e*, formed with the cam-shaped clamp *f*, in combination with the rod or bar *g*, adjustable as set forth.

2. In combination with the said lever *e*, clamp *f*, rod *g*, and nut *i*, the clamps *k k*, acting at the sides of the boot-sole, as set forth.

In witness whereof I have hereunto set my signature this 23d day of January, 1865.

EDGAR MURRAY.

Witnesses:

THOS. GEO. HAROLD.

CHAS. H. SMITH.