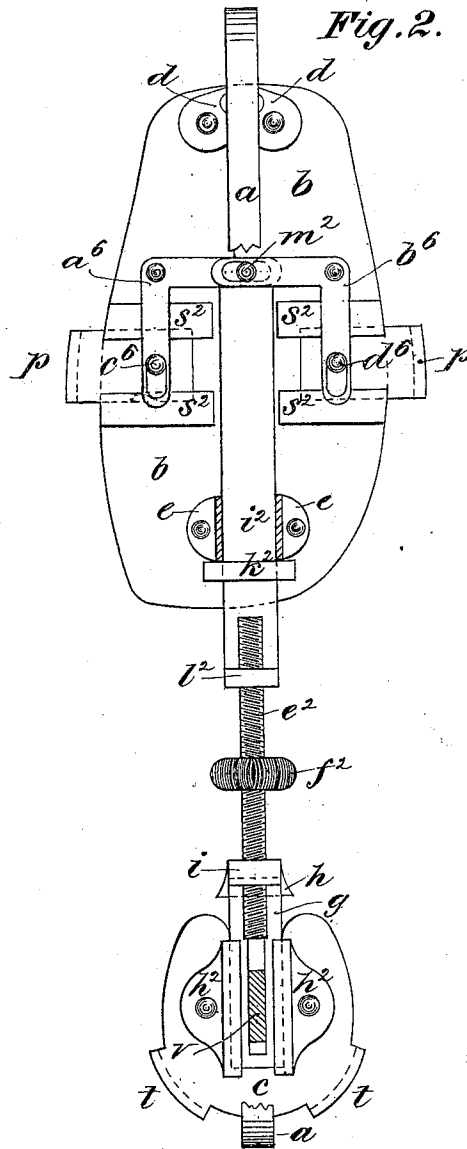
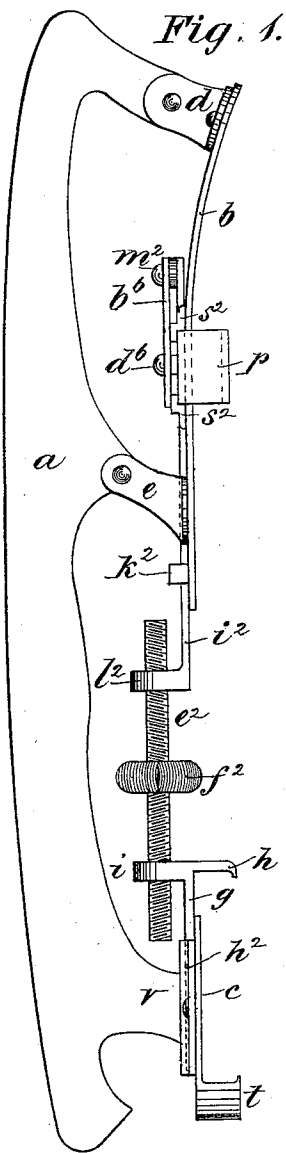


C. G. C. SIMPSON.
SKATES.

No. 179,137.

Patented June 27, 1876.



Witnesses
M. A. Nelson
E. L. Stihwell.

Inventor
Charles G. C. Simpson

UNITED STATES PATENT OFFICE.

CHARLES G. C. SIMPSON, OF MONTREAL, CANADA, ASSIGNOR TO CHARLES BREWSTER, OF SAME PLACE.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 179,137, dated June 27, 1876; application filed April 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES GRAHAM CHAPPELL SIMPSON, of the city and district of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Skates; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention has reference to improvements in the mechanism for attaching skates to the boot or shoe of the skater.

In the drawings hereunto annexed similar letters of reference indicate like parts.

Figure 1 is a side elevation of my invention. Fig. 2 is a plan of the same inverted. *

a is the runner of the skate, to which is attached, by brackets *d* and *e*, the sole-plate *b*, the ends of the brackets *e* attached to the sole-plate being spread sufficiently far apart to admit the passage of the bar *i*² between them, and, if desired, they may be situated to form lateral guides to the bar. *k*² is a staple, in which the bar *i*² slides, guiding and holding it up close under the sole-plate. The sole-clamps *p* are held in guides *s*², attached to the sole-plate. These clamps are provided with pins *c*⁶ and *b*⁶, projecting downward. *a*⁶ and *b*⁶ are bell-cranks, pivoted, as shown, to the sole-plate, one of each of their slotted ends engaging with a pin, *m*², of the bar *i*², and the slots at the other ends engaging with the pins *c*⁶ and *d*⁶. If desired, but one bell-crank and

clasp *p* may be provided, the other clasp *p* being slotted and attached to the sole-plate *b* by a bolt and nut. The heel-plate *c* is attached to the rear riser *v* of the runner by riveting the extremity of the latter in the heel-plate, in the ordinary manner. The plate is made with stationary heel-clamps *t* and an inner longitudinal sliding heel-clamp, *h*, attached on the neck *g*, sliding in guides *h*². This neck *g* is provided with an eye, *i*, and the bar *i*² is provided with an eye, *l*², each screwed to receive the ends of the spindle *e*², rotated by a thumb-and-finger device, *f*². The ends of the spindle *e*² are provided, the one with a right-handed and the other with a left-hand thread, so that by rotating it in one direction the clamp *h* and bar *i* are drawn toward each other, and by rotating it in the other direction they are forced apart, thus opening and closing the clamps.

I am aware that it is not new to operate the clamps by means of bell-crank levers, and do not, broadly, claim such as my invention; but

What I claim is as follows:

The clamps *p* and bell-cranks *a*⁶ *b*⁶, in combination with pins *m*² *c*⁶ *d*⁶, bar *i*², and screw-rod *e*², all constructed and arranged substantially as and for the purpose specified.

Montreal, 17th day of April, A. D. 1876.

CHARLES G. C. SIMPSON.

Witnesses:

M. A. NELSON,
E. L. STILWELL.