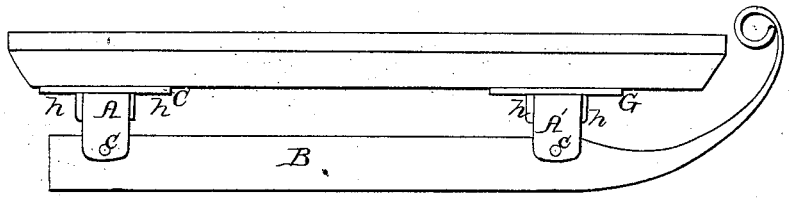
E. Johnson, Jr.

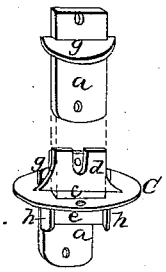
Skate,

No. 48,950, Patented July 25, 1865

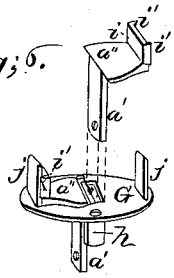
Fig; 1.



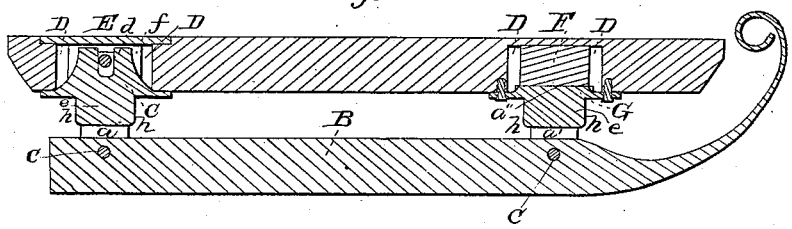
Fig; 5.



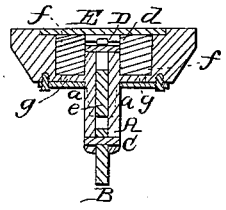
Fig; 6.



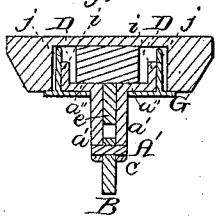
Fig; 2.



Fig; 3.



Fig; 4.



Witnesses;
W. H. Bunnings
A. W. McClellan

Inventor;
Edward Johnson Jun.

UNITED STATES PATENT OFFICE.

E. JOHNSON, JR., OF CLEVELAND, OHIO.

IMPROVED SKATE.

Specification forming part of Letters Patent No. **48,950**, dated July 25, 1865.

To all whom it may concern:

Be it known that I, E. JOHNSON, Jr., of Cleveland, county of Cuyahoga, and State of Ohio, 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, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side view; Fig. 2, a longitudinal section; Figs. 3 and 4, transverse sections; Figs. 5 and 6, detached sections.

Like letters denote like parts in the several views.

My improvement relates to constructing a skate so as to spring or be elastic at the connection of the wood with the runner, as hereinafter described.

Each standard A and A′, Fig. 1, is composed of two pieces or sections, *a a′*, the lower ends of which are riveted to the runner B, as seen at *c*, Figs. 3, 4, so as to form a joint, the upper ends of the sections *a* secured together by a rivet, *d*, Fig. 3, which admits of a space between the sections to receive the shank *e* of the brace-plate C. This plate is secured to the heel of the wood or stock by screws, the upper end being in the cavity D, as is also the upper ends of the sections, as seen in Figs. 2, 3. On the top is fastened the plate E, which is flush with the wood, and against which, on the under side, presses the springs *f f*, which rest upon the collar or shoulders *g g* of the standard, as seen in Fig. 3. By this means the spring is given to the heel. The sections of the standards pass through slots in the brace-plate C, as indicated in Fig. 5, at *c′*. On both sides, at each end of the shank *e*, is formed a lip or flange, *h h*, between which shoulders are placed the sections *a*. By means of said flanges the sections are prevented from moving longitudinally, and laterally are held in place by the shank *e* between the sections. Thus, by the peculiar construction of the entire plate C, the heel of the skate is at all times held in the desired position.

Having described the arrangement of the heel of the skate, that at the toe will now be more fully specified.

Instead of using two springs at the toe, only one is employed, as seen at F, Figs. 2, 4, which rests upon the shoulders *a″ a″* of the sections *a′ a′* and presses up against the top of the cavity or chamber D. From the shoulder on each side extends up at right angles an extension, *i i*, from the ends of which, on both sides, are formed lips or flanges *i′ i′*, Fig. 6. Between said flanges are stems *j j*, which extend up and form a part of plate G. This plate is secured to the wood by screws, and in the plate are slots, through which pass the sections *a′*, as seen in Fig. 4. Between the slots and the sections extends down the shank *e* from the plate G, and forms a part of said plate. At each end of the shank, on both sides, are formed lips or flanges *h*, substantially the same as shown in Figs. 2, 5, and the flanges embrace the sections *a′ a′* in the same way and manner and for the same purpose as before mentioned, and the office of the shank *e* is the same in effect as that described of *e* in Figs. 3, 5.

The plates C and G, being firmly secured to the wood, allow the standards to move or slide in said plates, and by means of the springs in the chambers D, acting upon the standards at each end of the skate, and, as there is a joint formed at *c c*, it follows that the skate will readily adjust itself to the various positions of the skater, and will easily yield to the force and movements of the body without straining.

I do not claim, *per se*, interposing an elastic substance between the runner and stock, for I am aware that this has been previously done.

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

The standards A A′ *a a′*, plates C G, springs F *f*, flanges or guides *h h*, and shank *e*, when the several parts are arranged as herein described and operating as specified.

EDWARD JOHNSON, JR.

Witnesses:

W. H. BURRIDGE,

J. HOLMES.