

G. S. Curtis,

Skate.

N^o 32,162.

Patented Apr. 23, 1861.

Fig. 1.

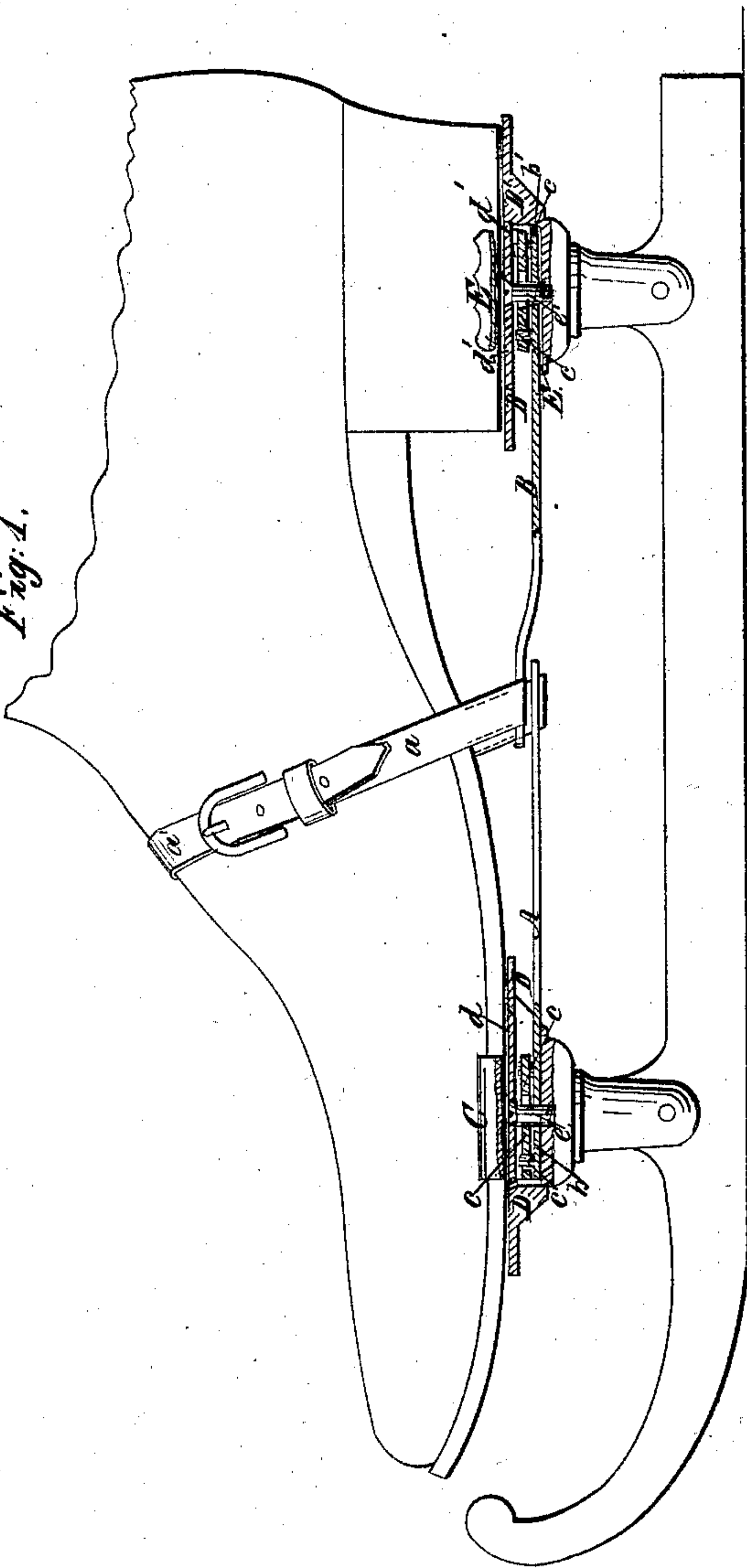
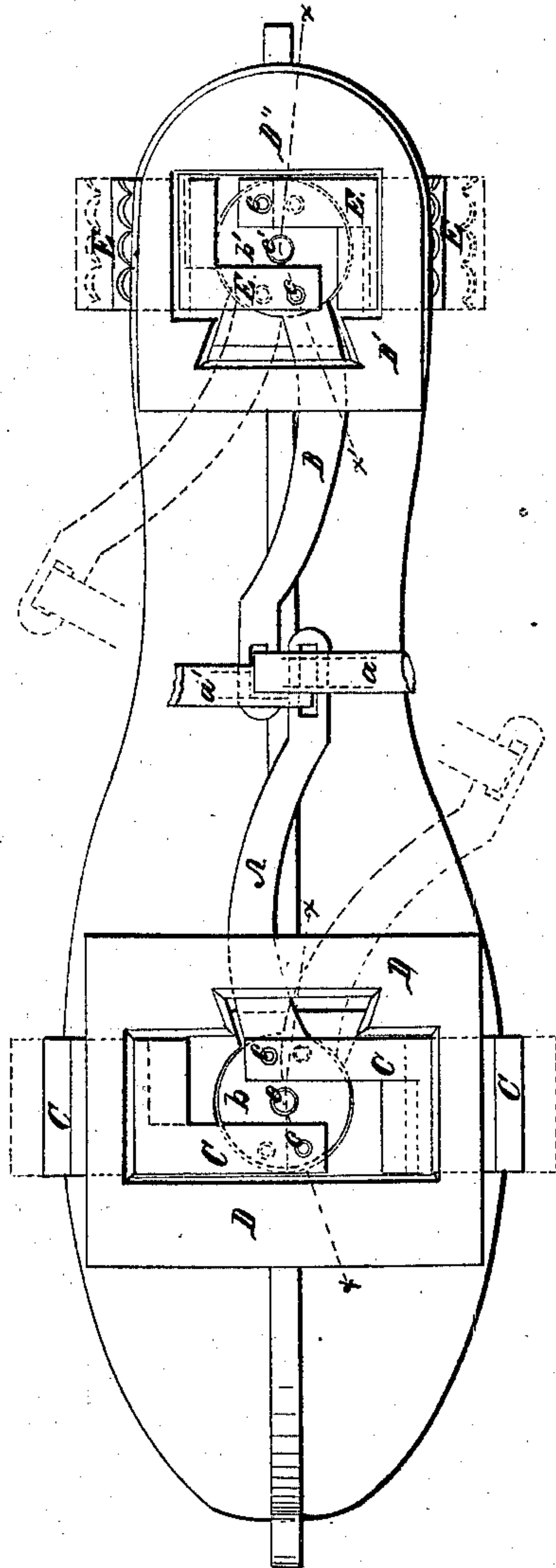


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE S. CURTIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND THOMAS B. BRYAN, OF SAME PLACE.

SKATE-FASTENING.

Specification of Letters Patent No. 32,162, dated April 23, 1861.

To all whom it may concern:

Be it known that I, GEORGE S. CURTIS, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved

5 Clamp-Skate; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

10 Figure 1 is a vertical longitudinal section through the foot stands of my improved skate. Fig. 2 is a top view of the skate of Fig. 1, with the plates removed, which cover the ends of the clamps. This Fig. 2, shows

15 the clamps and levers in two positions. Similar letters of reference indicate corresponding parts in both figures.

This invention is a novel improvement in clamping skates to the soles of boots whereby

20 both pairs of clamps can be operated simultaneously either to close and confine the soles or to open and release the soles of the boots. The nature of my invention consists in giving the lateral sliding movement to the

25 skate clamps by two horizontal levers, which project forward and backward from the heel and sole clamps respectively, and receive straps on their ends which are buckled over the instep of the foot in effecting the clamp-

30 ing of the skate to the boot, all as will be hereinafter described. To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation.

35 A. and B. represent two horizontal curved levers having leather straps *a*, *a'*, secured to their narrow ends which straps are passed over the instep of the foot in attaching the skate to it as will be hereinafter described.

40 These levers A. B. have circular enlargements *b*, *b'*, on one of their ends, each of which circular portions has a hole through its center and two pins *c*, *c'*, projecting from its upper surface at equal distances from

45 said central hole and diametrically opposite each other. These levers may be made of wrought iron and they will vary in length according to the size of the skate to which they are applied.

50 The circular portions *b*, *b'*, each fit into corresponding depressions made in the centers of the plates D. D'. and the ends of the levers or their narrow portions pass out under the back and front edges respectively

levers A. B. which have the straps attached to them approach very near each other in the middle of the skate between the sole and heel plates D. D'.

C. C. and E. E. are the transverse clamps 60 which secure the skate to the boot by grasping the sides of the sole and heel thereof and for this purpose the outer ends of the clamping plates are turned upward, as shown in Figs. 1 and 2, of the drawings. 65 The flat ends of these plates C. C. and E. E. are notched out as shown in Fig. 1, and passed under the sides of plates D. D'. and over their respective circular portions *b*, *b'*, of levers A. B., to which portions *b*, *b'*, the 70 inner ends of the clamping plates are pivoted at *c*, *c'*, as shown in Fig. 1. The plates C. C. and E. E. are of the same width as the recesses into which they fit excepting at their inner ends which pass over the portions *b*, *b'*. The plates *d*, *d'*, (Fig. 1,) fit 75 into the recesses in plates D. D'. and cover the ends of the levers and clamps which are in these plates. These plates *d*, *d'*, are screwed down in place by screws *e*, *e'*, which 80 pass through the centers of the portions *b*, *b'*, and form pivots for the levers A. B. The surfaces of plates *d*, *d'*, are flush with the top surfaces of the plates D. D'. when properly secured down by screws *e*, *e'*, and 85 these two cover plates *d*, *d'*, keep the parts properly pivoted together, so that they will work freely in their depressions in plates D. D'.

The spaces or slots through plates D. D'. 90 through which the levers A. and B. pass are made sufficiently wide to allow these levers to have a free horizontal vibration.

It will be seen that by moving levers A. or B. their clamping plates will be made to 95 approach or recede from each other simultaneously, the distance of movement of these clamping plates C. C. or E. E. will of course depend upon that given to the levers to which they are pivoted. The levers A. and 100 B. are curved in opposite directions to each other so that these levers are moved in opposite directions to effect the clamping of the skate to the boot, at both the sole and heel parts thereof. 105

To secure this improved skate to the boot it is put upon the plates D. D'. and properly adjusted the straps *a*, *a'*, are then passed over the instep of the foot, drawn tightly and buckled. This operation of strapping 110

draws the outer ends of the levers A. B. out laterally in opposite directions and the levers move the clamps up and force them tightly against the sides of the sole and heel of the boot so as to clamp the skate tightly to the boot. Then by loosening the straps *a, a'*, and moving the levers outward both pairs of clamps will be disengaged from the boot and the skate can be taken off.

10 The advantages of this invention are that the skate can be put on and taken off with ease and rapidity, the fastenings will secure the skate properly, and the straps *a, a'*, used with the clamping device will give that tight-

15 ness on the foot which some skaters like to

feel while skating, at the same time the clamps can be easily adjusted to boots of different widths.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is—

The movable clamping plates C. C. and E. E. pivoted to levers A. B. respectively and operated by the straps *a, a'*, substantially in the manner and for the purposes herein set forth.

GEO. S. CURTIS.

Witnesses:

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P. H. WITT.