T. Almond,

Skate.

No. 103,822. Patented June 7. 1870.

Fig. 1.

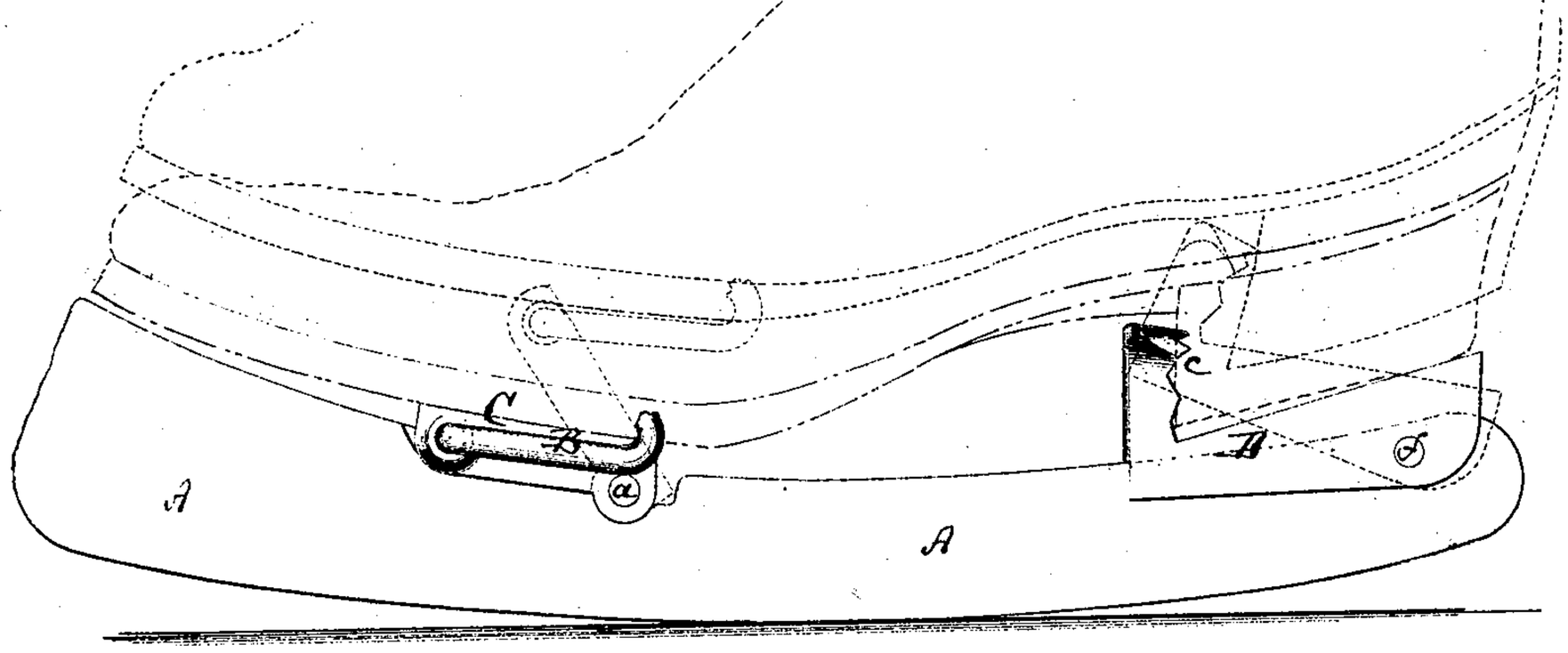
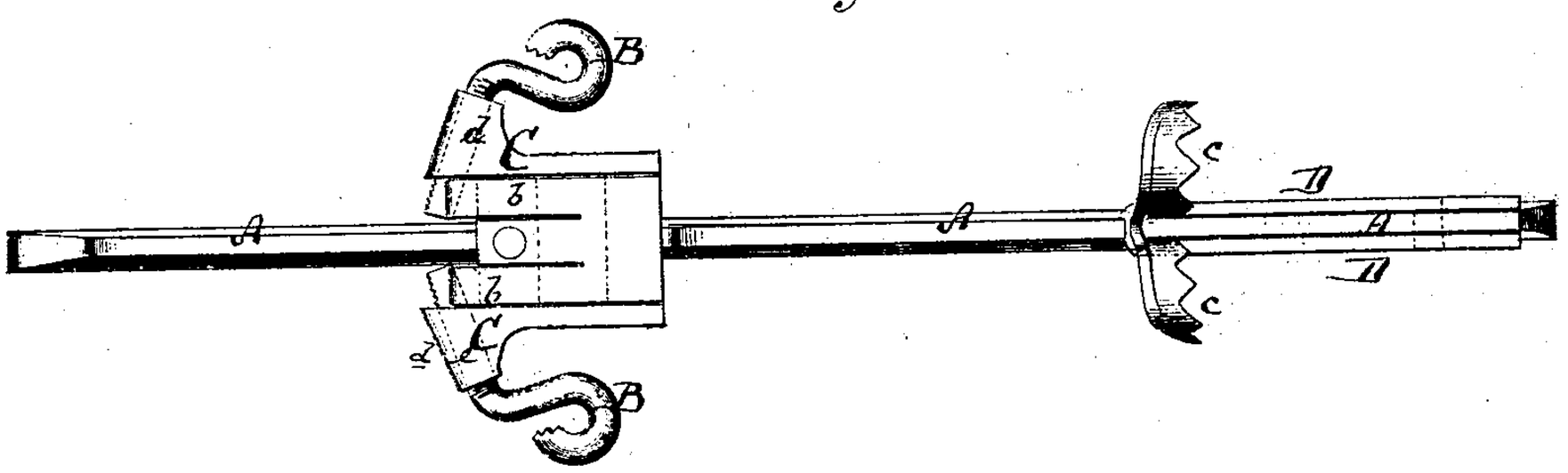


Fig. 2.



Witnesses:

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THOMAS ALMOND, OF FITCHBURG, MASSACHUSETTS.

Letters Patent No. 103,822, *dated June* 7, 1870.

SKATE FASTENING.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, THOMAS ALMOND, of Fitchburg, in the county of Worcester and State of Massachusetts, have invented a new and improved Skate Fastening; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a side view of my improved skate fastening.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new device for clamping skates to the soles or heels of boots or shoes. The invention consists in the use of adjustable toe-clamps, and of a heel jaw, all pivoted directly to the skate runner, so that the latter can be secured to the boot or shoe without the use of straps or projecting levers.

My improved fastening is exceedingly simple and reliable, and can be adjusted to boots of suitable size. The skates can be put on without difficulty, and still more readily detached.

A, in the drawing, represents the skate runner, to which my improved fastening is applied.

The front fastening consists of two jaws, B B, which are screwed into opposite ends of a plate or holder, E, that is, by a pin, *a*, pivoted to the front part of the runner.

The shanks of the jaws B can be screwed into the plates C, so as to stand more or less far apart, to fit wider or narrower soles.

Their screw shanks are flattened on one side, so that they can be locked at an angle to the plate C by means of springs, *b b*, as shown.

The nuts, *d*, which are formed on the plate C, for the reception of the screw shanks, are inclined backward, that is to say, their outer ends project backward, as shown in fig. 2. Besides this, their inner ends are somewhat lower than the outer.

The jaws are thereby held at such an angle that, as they are swung down, they will be contracted against the sole to take a firm hold. The downward slant of the nuts *d* provide, however, that the jaws are most contracted, first, before they are brought in line with the plate C. Thereby the tendency to tighten them is produced, when the runner is drawn from the foot, and spontaneous removal of the runner is thus prevented.

To the rear part of the runner is pivoted a plate, D, with backward projecting teeth, *c*, at its upper end. The skate is applied by swinging the plates C and D up above the edge of the runner, as indicated in dotted lines in fig. 1.

The jaws B are then adjusted apart, to fit against the edges of the sole, and are thus applied to the sole, while the teeth *c* are put against the front of the heel. Then the plates C and D are swung down upon the top edge of the runner. As, by this motion, the angles, both of the plates C and A and of the jaws B or C, are caused to cease, while, in rear only, the plate D alone is swung down, the jaws B will be moved further from the teeth *c* than they were before, and the said teeth will, consequently, be driven into the heel, thus firmly fastening the skate to the boot or shoe. At the same time, the jaws will be contracted, while being swung down, and will bite firmly against the edge of the sole, to lock the front end of the runner.

When the skate is applied, as in fig. 1, the front ends of the plates C D rest on the runner. By pulling the front end of the runner down, or by striking against the back end of the same, in case it projects beyond the pivot *f* of the plate D, the skate is detached, as, by either process, the pivoted ends of the jaws will be carried down to spread them.

The springs *b* serve to lock the jaws in proper position for application.

The jaws B, instead of being screwed into nuts *d*, may have the nuts formed on them, and be screwed to fixed pins on C with equal effect, or they may otherwise be fastened to equivalent inclined devices on plate C.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. A plate C C, transversely pivoted or otherwise secured to the runner, having the jaw-sockets *d e*, arranged at an oblique angle to the runner, so that the jaws will be caused to close on the boot by the obliquity of their sockets, as set forth.

2. The jaws B, screwed into a pivoted plate C, to be adjustable, substantially as herein shown and described.

3. The heel-plate D D, embracing the runner A, and transversely pivoted thereto, having the serrated plate *c c* in front thereof, and constructed as set forth, to afford a heel-seat where the pressure of the weight and the backward movement of the runner will both tend to hold it firmly in position.

4. The spring *b*, arranged on the pivoted plate C, to hold the jaws B at an angle to said plate, as set forth.

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