

(No Model.)

C. F. SULLIVAN.
LOCKING DEVICE FOR SKATES.

No. 344,330.

Patented June 22, 1886.

FIG. 1.

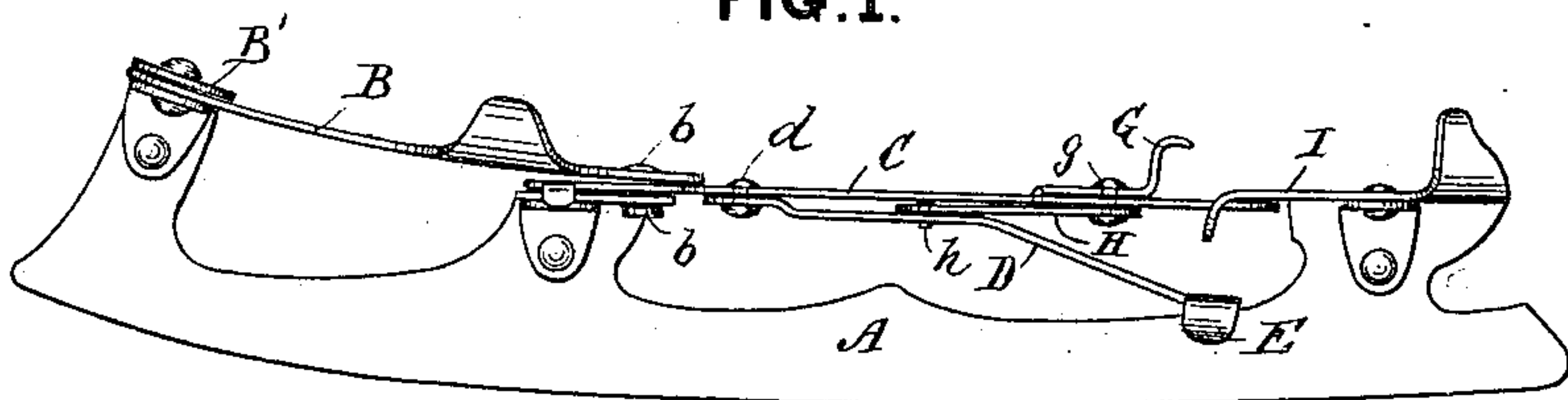


FIG. 2.

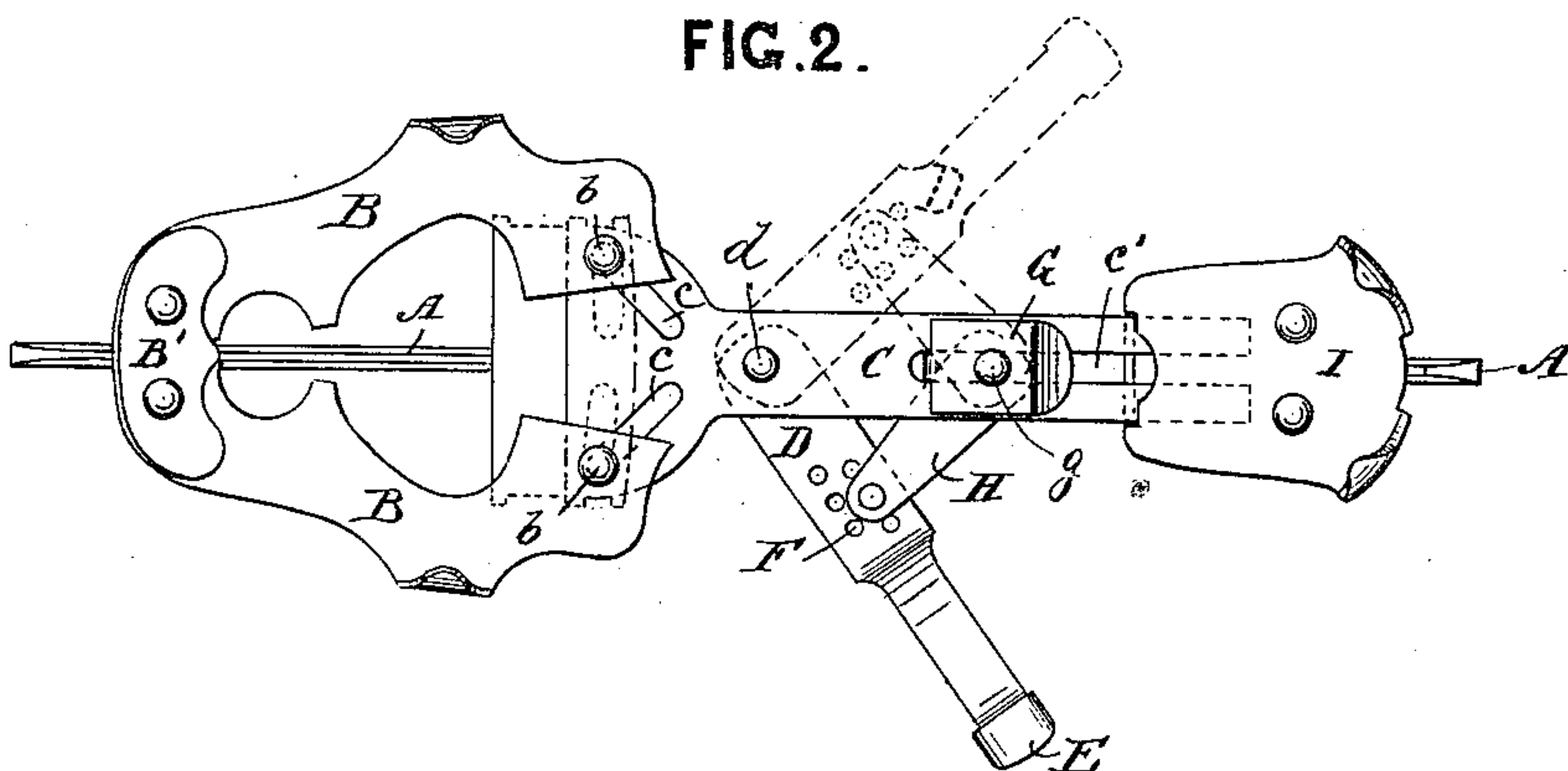


FIG. 3.

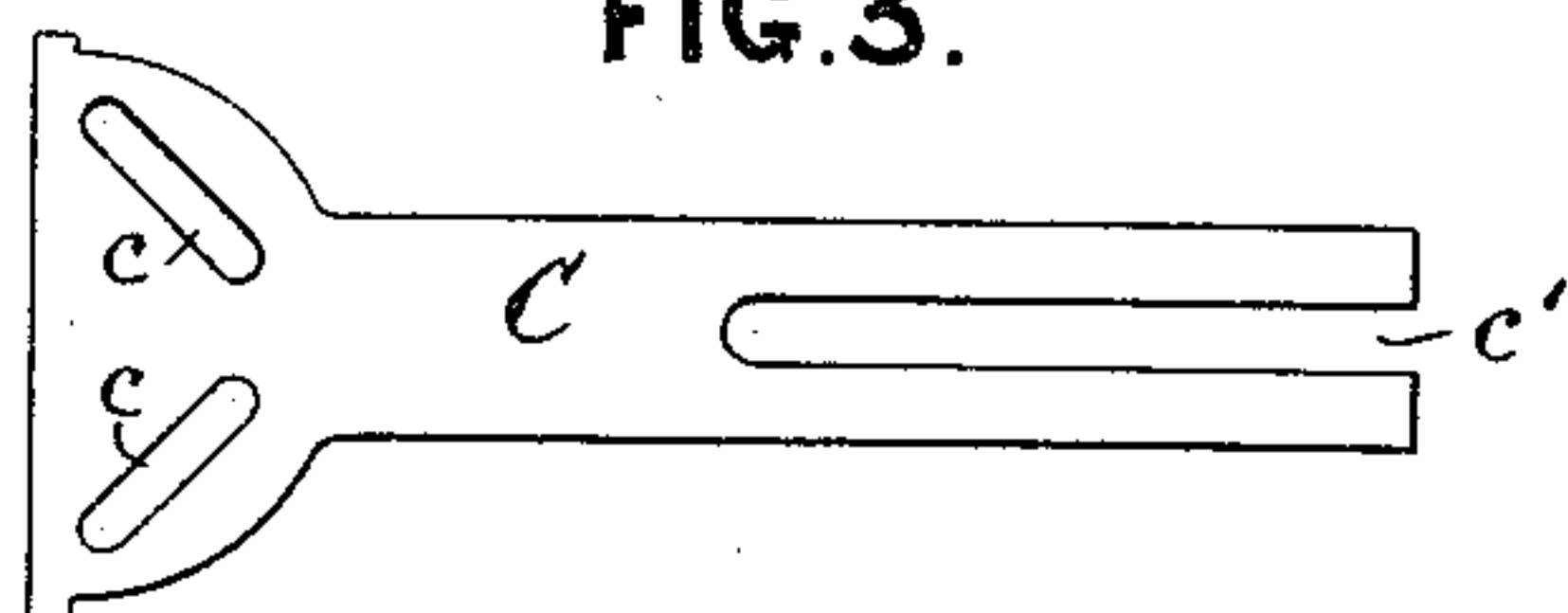


FIG. 4.

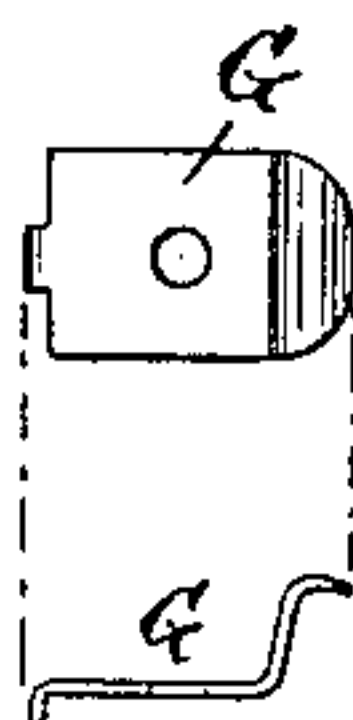


FIG. 5.

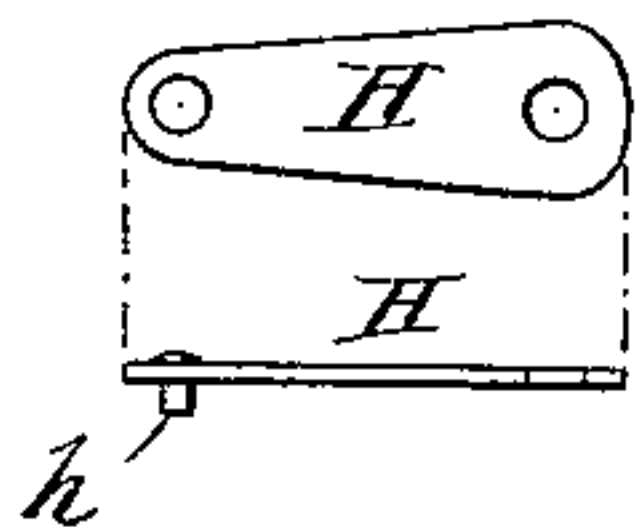
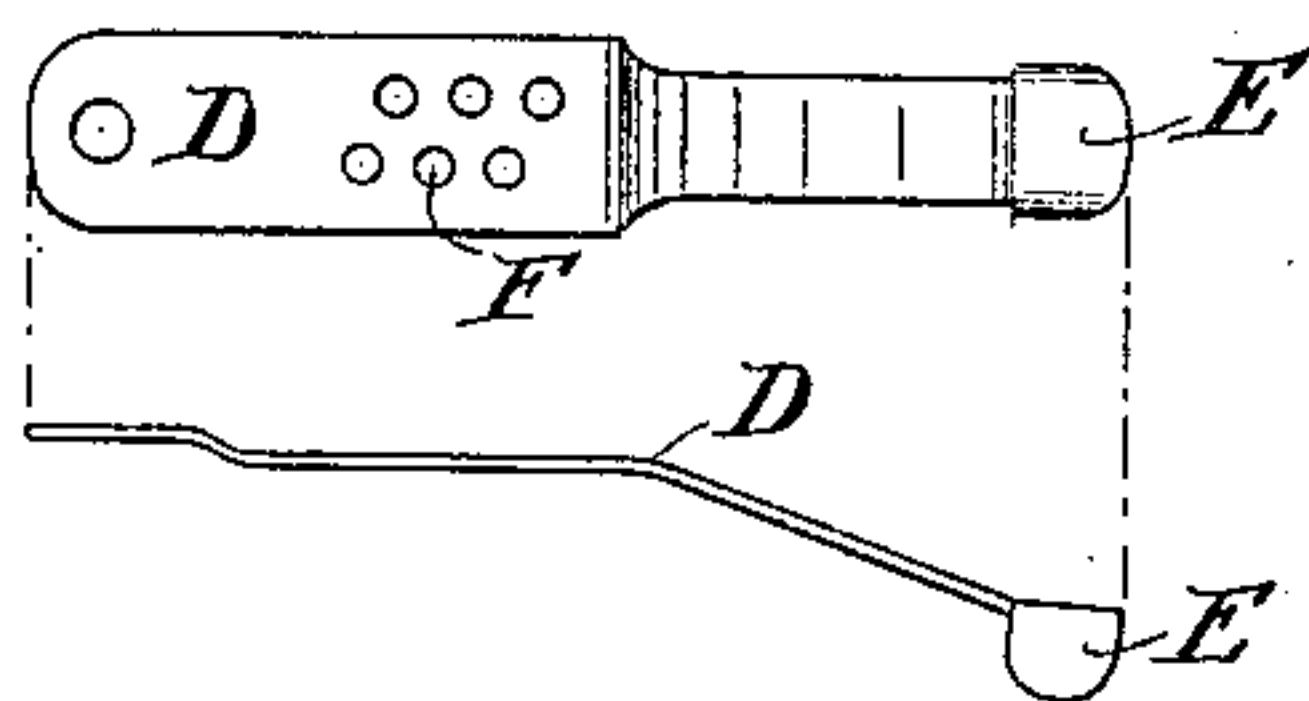


FIG. 6.



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UNITED STATES PATENT OFFICE.

CORNELIUS F. SULLIVAN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO
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LOCKING DEVICE FOR SKATES.

SPECIFICATION forming part of Letters Patent No. 344,330, dated June 22, 1886.

Application filed June 2^o, 1885. Serial No. 170,215. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS F. SULLIVAN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Locking Devices for Skates, of which the following is a specification.

My invention relates to an improvement in that class of skates in which the toe and heel clamps are secured to the boot or shoe by means of a locking-lever. In all such skates, as far as my knowledge extends, the locking-lever is adapted for use in a skate especially for the right and left foot separately.

This is objectionable for many reasons, and it is the object of my invention to obviate the objections; and to this end the invention consists in constructing and arranging the lever and its connections in such a manner and in relation to the toe and heel plates as to enable the lever to be used on a skate for either the right or left foot, and for both.

Referring to the accompanying drawings, Figure 1 is a side view of a skate embodying my invention. Fig. 2 is a top or plan view of the same, showing the clamps in an open position. Figs. 3 to 6 are views in detail of various parts of the skate.

A is a skate-runner.

B B are the clamps for the front portion of the foot, and are pivoted at their front ends to the toe-plate B'. The rear ends of the clamps B B are provided with studs *b b*, that pass through slots in the forward end of a sliding plate, C, the rear ends of which latter pass under and are supported by the heel-plate I, so that when the sliding plate C is moved forward the sole-clamps B B will be expanded, and when drawn backward they will be contracted or drawn together.

D is a spring-lever pivoted to the under side of the sliding plate C at *d*. The rear portion of the spring-lever D is bent downward, as shown in Figs. 1 and 6, and its free end is provided with a catch, E, that engages with the upper edge of the skate-runner, and holds the lever D in position. The forward flat portion of the lever D is provided with a series of holes F, as shown in Figs. 2 and 6.

To the under side of the heel-clamp G is pivoted at *g* a flat connecting-bar, H. (Shown separately in Fig. 5.) On one end of the connecting-bar H is a stud, *h*, made to fit in any one of the holes F in the lever D, according to the size of the boot or shoe to which the skate is to be fitted.

As the lever D is pivoted to the sliding plate C, and the heel-clamp G is guided by the pivot *g*, working in the slot *c'* of the plate C, and the heel clamp and lever D being connected together by the bar H, it will be seen that if the lever D, being open, as shown in Fig. 2, is drawn toward the center of the skate, the heel-clamp will be brought in contact with the heel of the boot or shoe, and then the sliding plate C will be forced forward and draw sole-clamps B B inward to grip the sole of the boot or shoe. The catch E is then sprung over the top of the runner, and thus holds the skate securely on the foot.

The lever D is free to be moved to either side of the skate, as shown in Fig. 2, it being represented in full lines on one side and in dotted lines on the other.

The great advantage of my invention is that all skates of this class can be made exactly alike, and be worn indiscriminately on either foot, thus dispensing with the necessity of having the skate especially adapted for the right and left foot.

I have shown and described my invention as applied to an ice-skate; but it is evident that it is equally applicable for use in a roller-skate where similar clamping devices are employed, a bar or rod being placed longitudinally of the body of the skate, to which the catch E of the lever D can be secured in place of the runner, as shown.

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

1. The combination, with the body of a skate, of the sole and heel clamps, the sliding piece C, connected to the sole-clamps, as described, the lever D, pivoted as described, and provided with a number of perforations, F, and the connecting-bar H, having a stud to enter either of the perforations F, all constructed and relatively arranged substantially as described.

2. The combination, with the sole and heel clamps, the sliding plate C, and the connecting-bar H, arranged substantially as described, of the lever D, pivoted beneath the
5 sliding plate and engaging the connecting-bar, said lever having a catch to hold it in central position, but capable of swinging in either direction to loosen the clamps, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CORNELIUS F. SULLIVAN.

Witnesses:

J. H. ADAMS,
F. N. LOWE.