

CHARLES T. DAY.

Improvement in

KATES.

116935

PATENTED JUL 11 1871

Fig. 1.

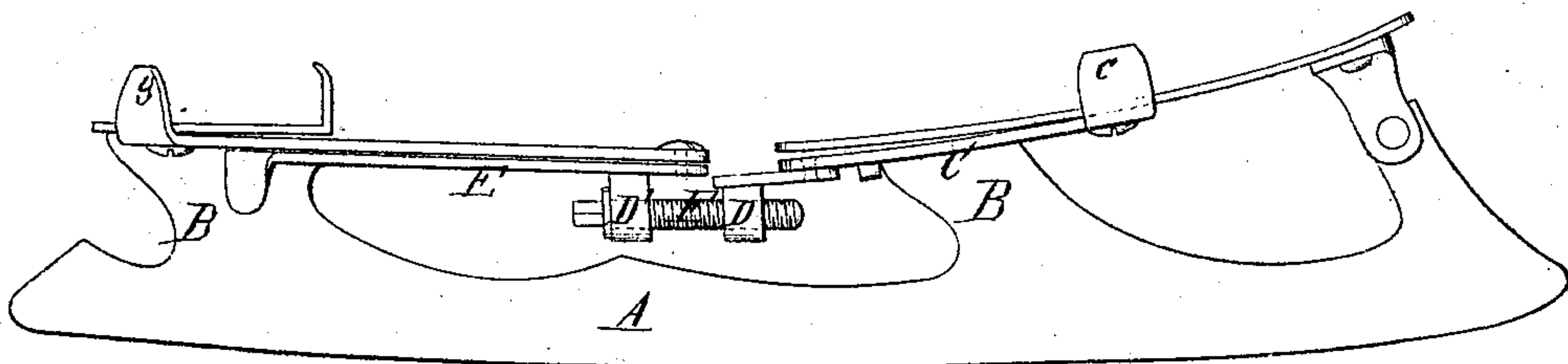
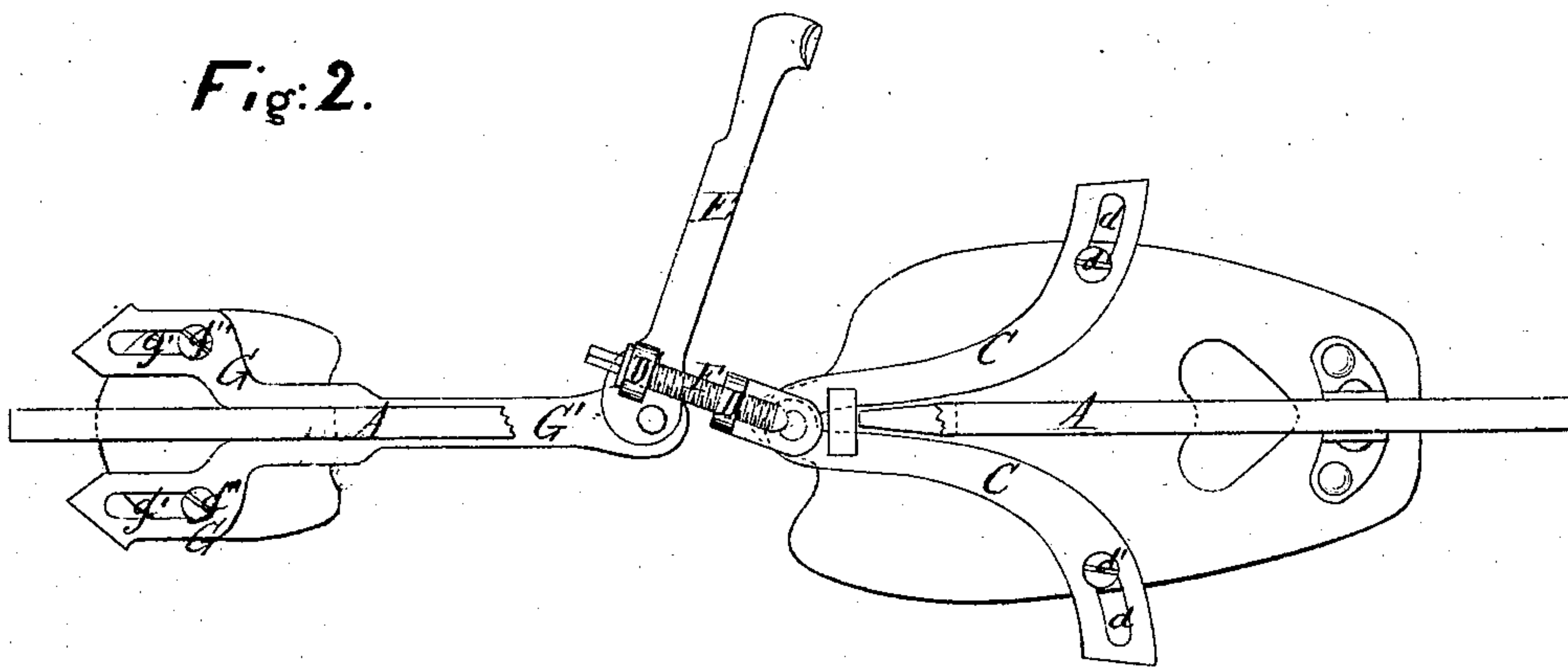


Fig. 2.



Witnesses.

Villette Anderson.
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UNITED STATES PATENT OFFICE.

CHARLES T. DAY, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 116,935, dated July 11, 1871.

To all whom it may concern:

Be it known that I, CHARLES T. DAY, of Newark, in the county of Essex and State of New Jersey, have invented a new and valuable Improvement in Skates; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of my invention. Fig. 2 is an inverted plan view, a portion of the runner being represented as broken away in order to show the working parts.

My invention has relation to certain improvements in skate-clamping devices; and it consists in the construction and novel arrangement of devices whereby the adjusting-screw is enabled to be brought into a convenient position for adjustment by the wearer, and, also, by which the skate is adapted to varying sizes of feet, being readily accommodated to a wide sole and narrow heel or to a narrow sole and large heel.

The pair of heel-clamps is formed in one piece with a sliding bar, to the forward end of which is pivoted a lever or handle, by which it is carried backward and forward. Between the handle of this lever and the pivoted end thereof is swiveled a nut, which receives a screw to connect it with a toggle-joint pivoted to the end of the sole-clamping bars, which are pivoted together.

In the accompanying drawing illustrating this invention, A represents the runner of the skate supporting the sole and heel-plates, respectively, on standards B. C C represent the sole-clamps united by a pivot at their rear ends, whence they extend in curved form forward and outward, and are provided at their ends with jaws *c* to grasp the sole. In the bend of each clamp C is formed a curved slot, *d*, through which a stud or pin, *d'*, on the under side of the toe-plate passes. This pin *d'* is provided with a flanged head, and serves to support the ends of the clamps and to guide them outward and inward when the lever is operated. The pin which unites the clamps C C also connects therewith a toggle-joint, D,

which is provided with a female screw at its end to engage with the tightening-screw F, which is attached to the swivel D', pivoted to the lever E. The end of the lever E is pivoted to the stem of the heel-clamping device. G represents the heel-clamp, consisting of the branching arms *g'''* provided with jaws *g* to clasp the heel, and of the main stem G', by which the arms *g'''* are connected together and with the lever E. These arms *g'''* are slotted at *g' g'* to receive the guiding and supporting-studs *g''* of the heel-plate.

When the lever E is moved outward laterally from the runner of the skate the adjusting-screw and toggle are thrown around in an oblique position, and the head of the screw is thereby presented in a convenient position for the application of the key or screw-driver. At the same time the clamping-bars of the sole are pressed forward and outward, and the heel-clamp is moved backward, for the convenient reception of the parts of the shoe upon which the clamps are to act. When the foot is in place and the screw properly tightened the lever is brought around and inward against the runner, forcing the jaws or teeth of the clamps into the leather of the sole and heel, thus firmly and securely fastening the skate.

As the pivot *z*, by which the lever is attached to the stem of the heel-clamp, is eccentric in its position, and so arranged that, when the lever is closed in against the runner, it will lie without the line of traction connecting the pivots of the toggle D and swivel D', it follows that the lever will be automatically held in against the runner by the pressure of the clamps. Therefore, there is no danger of the lever being thrown outward and tripping the wearer.

Having fully described my invention, I claim—

The eccentrically-pivoted lever E, combined and arranged with the heel and toe-clamps of a skate, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES T. DAY.

Witnesses:

ELIAS F. TAYLOR,
RALPH H. PRIME.