

(No Model.)

P. LOWENTRAUT.
SKATE.

No. 597,992.

Patented Jan. 25, 1898.

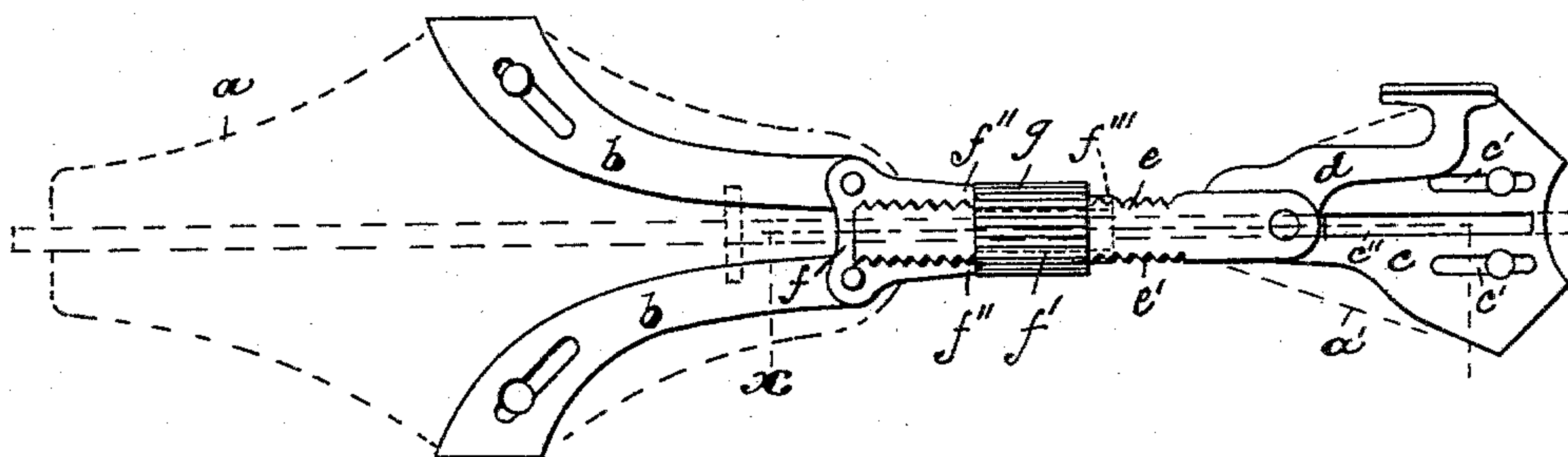


Fig. 1.

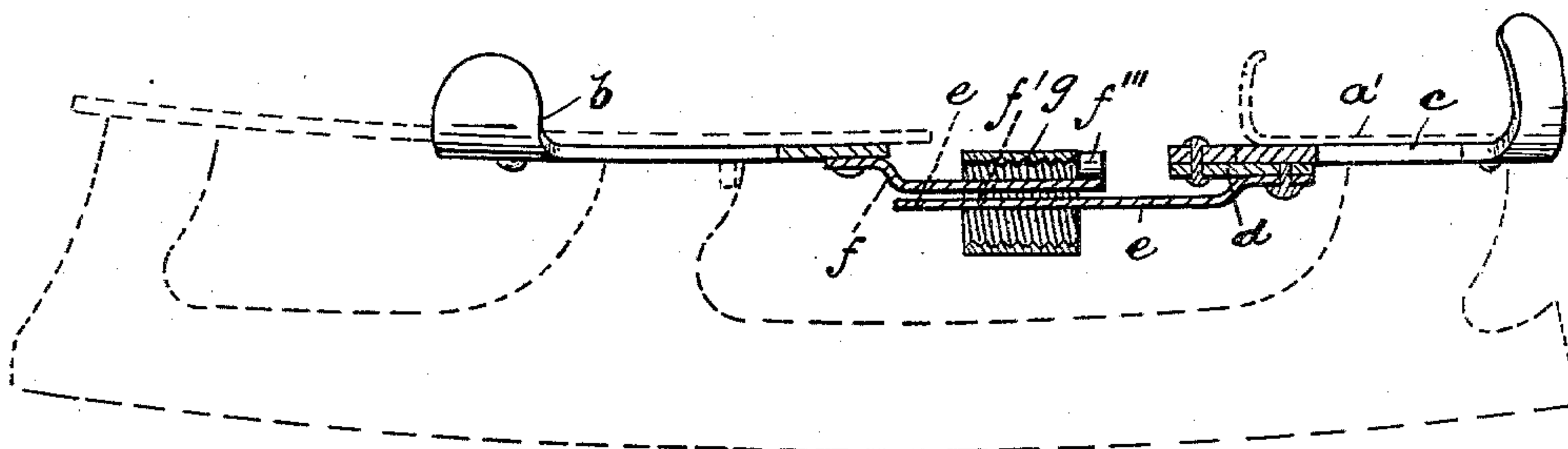


Fig. 2.

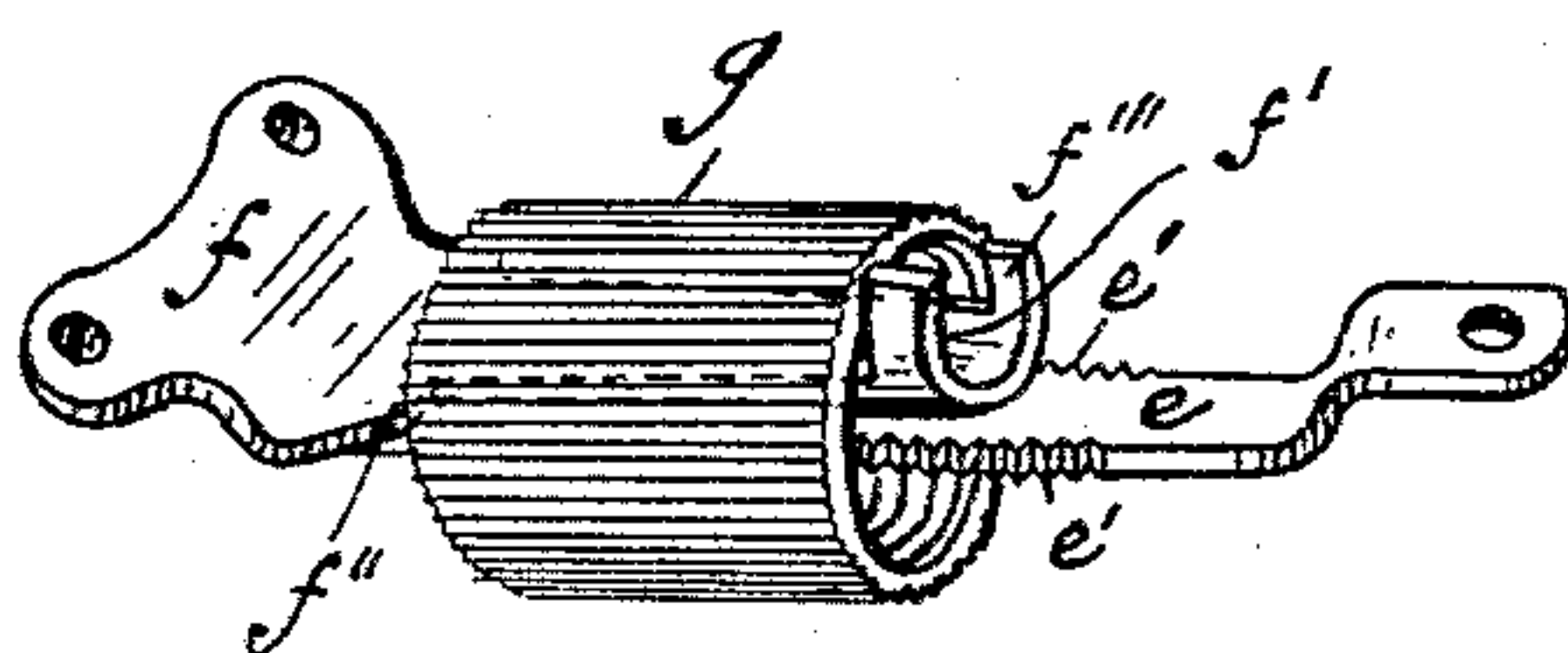


Fig. 3.

WITNESSES:

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Peter Lowentraut, INVENTOR

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UNITED STATES PATENT OFFICE.

PETER LOWENTRAUT, OF NEWARK, NEW JERSEY.

SKATE.

SPECIFICATION forming part of Letters Patent No. 597,992, dated January 25, 1898.

Application filed September 9, 1896. Serial No. 605,230. (No model.)

To all whom it may concern:

Be it known that I, PETER LOWENTRAUT, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Skates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to simplify and reduce the cost of construction and reduce the weight of the skate, render the same less cumbersome in appearance, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved skate and in the combinations and arrangements of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in each of the views, Figure 1 is a plan showing my improvements, the body of the skate being indicated in outline. Fig. 2 is a longitudinal section, taken at line *x*; and Fig. 3 is a detail perspective of the parts to which my improvements specifically relate.

In said drawings, *a* indicates the body of the skate, *b b* the clamps for engaging the sole or forward part of the shoe at the opposite side edges thereof, and *c* the heel-clamp having a longitudinal sliding relation to the heel-plate *a'* of the body portion, said sliding clamp being suitably slotted at *c' c'* to admit of the sliding action. At the under side of said heel-clamp at its forward end is fulcrumed a hand-lever *d*, by means of which the sole and heel clamps are brought into clamping relation. Eccentric to the fulcrumal center of said lever *d* is pivotally riveted a serrated connecting-plate *e*, the teeth *e'* being on the opposite longitudinal edges, as shown in Figs. 1 and 3. The sole-clamps *b b* are curved and slotted divergently, as in-

dicated in Fig. 1, and at their rearward ends are pivoted upon a coupling-plate *f*, having an extension *f'* parallel with the toothed plate. The said extension is reduced in width a little below that of the serrated plate *e* and is provided with stops *f'' f'''*, between which an interiorly-threaded collar *g* is arranged, the threads of said collar corresponding with and engaging the teeth *e'* at the opposite edges of the plate *e*. The said collar surrounds both of the parts *e* and *f'* and holds the two together in proper parallelism and so that when said collar is turned said parts *e f'* are caused to slide longitudinally one on the other to secure a proper adjustment of the clamps to the sole and heel. The collar is peripherally milled or roughened to render the turning operation by the fingers more easy.

The toe-clamp coupling and the heel-clamp connection, being of sheet metal, may be made of considerable width without materially affecting the weight of the skate, and the milled collar inclosing the said coupling and connection may thus be made of larger diameter and yet be light and shell-like, providing increased leverage in adjusting the heel and toe clamps without increasing the weight or reducing the strength of the parts beyond a point of practical operativeness.

The construction thus described admits of certain more or less heavy cast parts being dispensed with and a more direct connection of the clamp *b b* with the lever *d*.

In operation by merely turning the threaded collar the clamps are drawn toward one another or moved in reverse direction to adjust the parts to the size of the skater's boot or shoe, after which the hand-lever is manipulated to effect a clamping of the skate or allow a removal.

Having thus described the invention, what I claim as new is—

The improved skate herein described in which is combined with the toe and heel clamps, a sheet-metal coupling-piece connecting the toe-clamps and having stops at or near the end thereof opposite the toe-clamps, a lever in connection with the heel-clamps, a flat sheet-metal connecting-plate having teeth at its opposite edges, and at one end bearings

for said lever, and an interiorly-threaded collar inclosing both the toe-clamp coupling and heel-clamp connecting-plate, said collar engaging the flat toothed connecting-plate only
5 at its edges to reduce friction and being of a relatively large size diametrically to secure ease in turning, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of August, 1896.

PETER LOWENTRAUT.

Witnesses:

CHARLES H. PELL,
C. B. PITNEY.