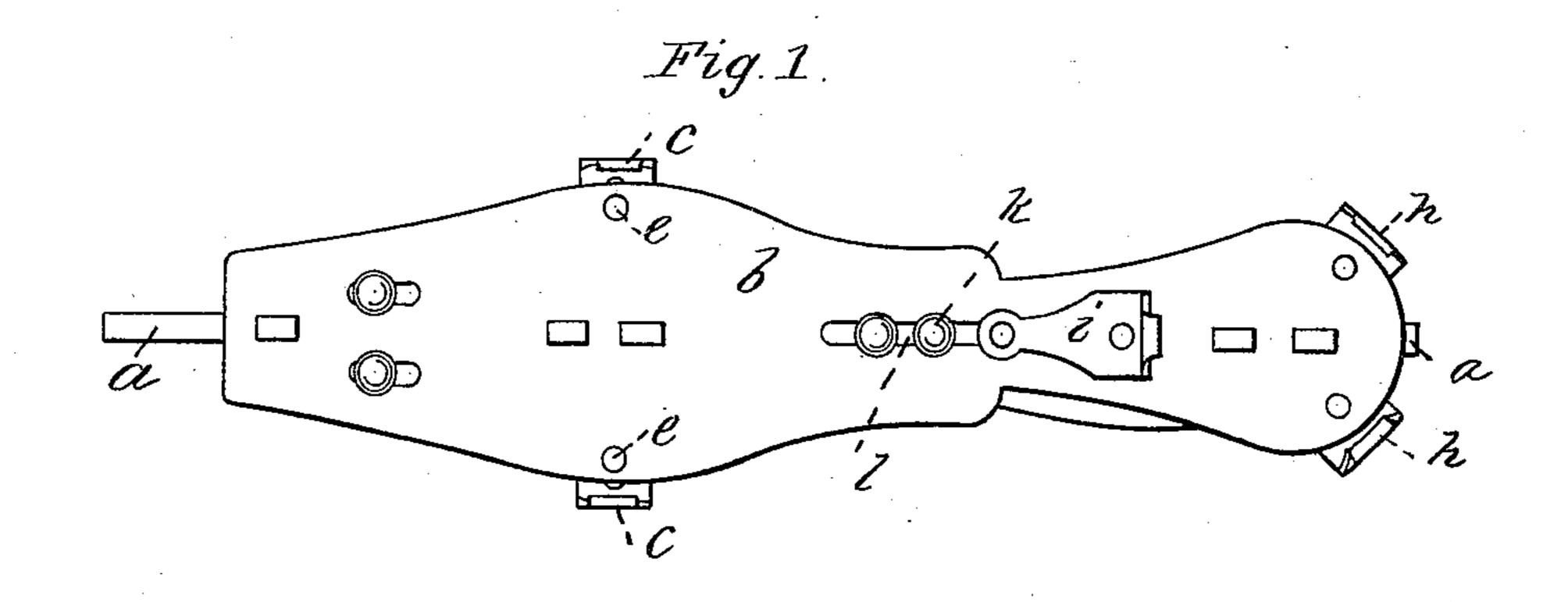
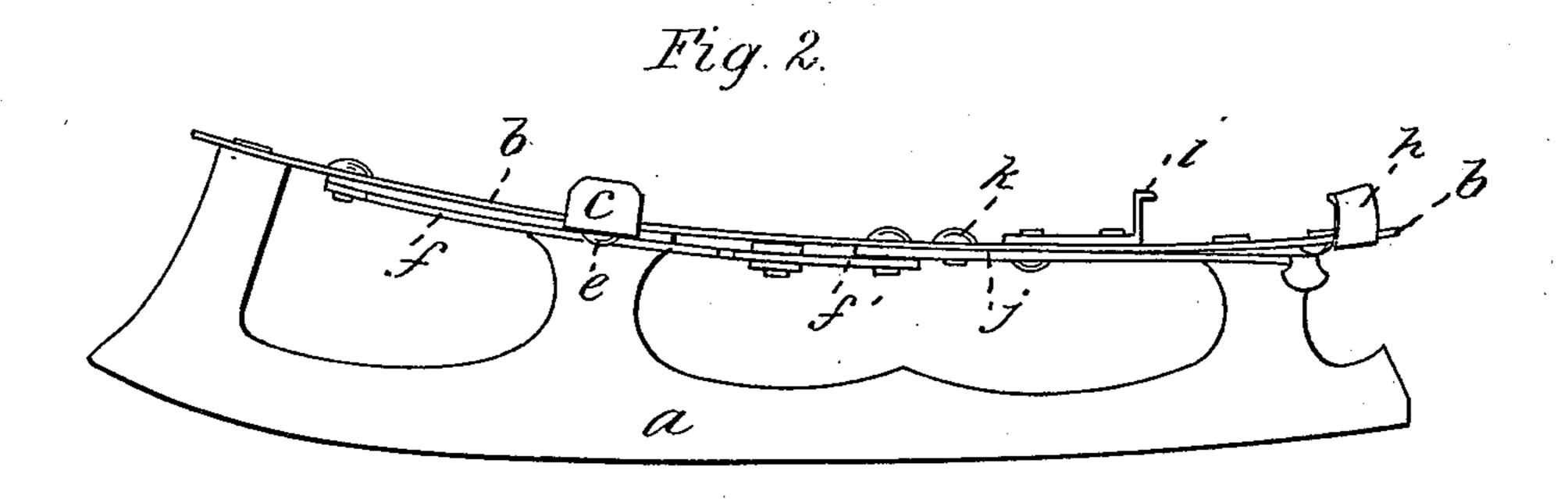
(Model.)

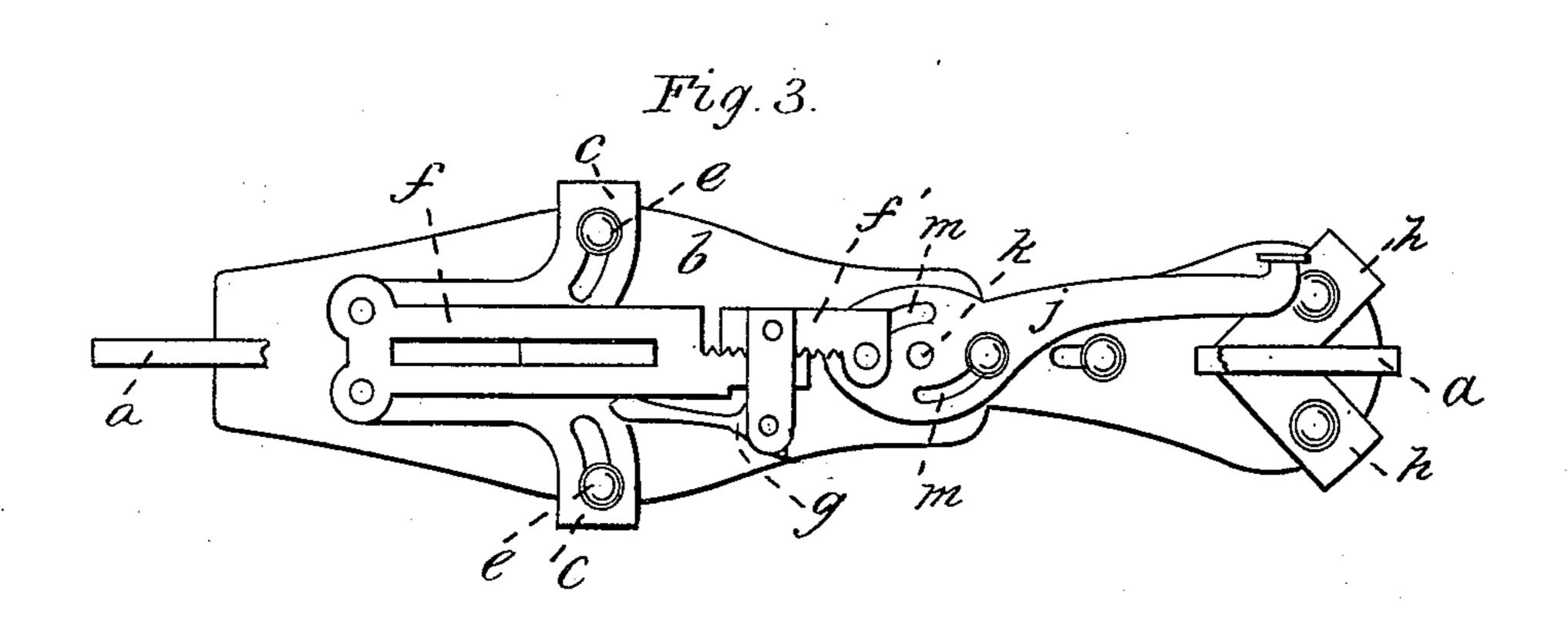
T. TRACY & C. E. HART SKATE.

No. 258,685.

Patented May 30, 1882.







Witnesses. Clessincett. & Smith.

Inventors.

Thomas Tracy
Charles C. Hark
By Mm. E. Simonds
Ally.

United States Patent Office.

THOMAS TRACY AND CHARLES E. HART, OF NEW BRITAIN, CONNECTICUT.

SKATE.

SPECIFICATION forming part of Letters Patent No. 258,685, dated May 30, 1882.

Application filed July 23, 1881. (Model.)

To all whom it may concern:

Be it known that we, Thomas Tracy and Charles E. Hart, of New Britain, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Skates, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a top view. Fig. 2 is a side to view. Fig. 3 is a bottom view, the runner rep-

resented as broken away.

This invention is an improvement in that class of skates which have movable sole and heel clamps operated simultaneously by a de-15 vice placed intermediate of the two sets of clamps—a thing which, thus broadly stated, exists in the prior art; and the invention consists, first, in using for such intermediate means of operating the two sets of clamps a 20 rotating double eccentric disk, which in closing the clamps to their work permits no giving back, as does the lever heretofore used "pivoted out of a central line longitudinally between the clamps;" second, in using for the 25 heel-clamp, in combination with the simultaneously-operated sole-clamps and the intermediate means of operation, a clamp or clamps reciprocating longitudinally of the foot-plate, and taking into the front of the heel of the 30 wearer; third, in making the connecting-rod which runs from the eccentric disk or its equivalent to the sole-clamps in two parts, provided with engaging sets of serrations kept together by a cam, the cam being the new part in this 35 last-mentioned combination.

The letter a denotes the runner as a whole, fastened to the foot-plate b, which is solid for its whole length, by suitable standards.

The letters c c denote duplicate sole-clamps, having each a mortise, through which a headed rivet, e, runs into the bottom of the foot-plate. The rivets e serve as pivots for the sole-clamps, which also have a sliding motion on these rivets. These clamps are jointed by their fore ends to the connecting-rod ff', f denoting one section thereof and f' the other. When this rod is moved backward the sole-clamps are disengaged from the wearer's sole. When it

is moved forward they are caused to engage. The two sections f and f' are serrated where 50 they overlap each other, for the purpose of longitudinal adjustment, and held engaged by the cam g.

The letters h h denote two stationary abutment-clamps for the back part of the heel, 55 which also serve to support the rear standard

of the runner.

idenotes a longitudinally-reciprocating heelclamp, which engages with or disengages from the front of the wearer's boot-heel by moving 60 backward and forward.

The sole-clamp and the movable heel-clamp are simultaneously operated by the double eccentric disk j, which is a disk pivotally hung on the pin k, which has free longitudinal movement in the slot or mortise l in the foot-plate. The disk is provided with a suitable operating-handle, and is provided with the two corresponding eccentric slots, m m, one of which is connected by a pin to the connecting-rod 70 going to the sole-clamps and the other of which is similarly connected to the heel-clamp. Each of the slots m is eccentric for the main part, but is cut on a circle at one end, so that the disk may lock in position when the clamps engage with the sole and heel.

It will be observed that the construction of parts herein described permits the skate to be more symmetrically constructed than does the prior art.

We claim as our invention—

1. In a skate, the movable sole and heel clamps, combined with and operated by the longitudinally-movable double eccentric disk, all substantially as described.

2. In a skate, the combination of the longitudinally-movable eccentric disk j, sole-clamps c c, heel-clamp i, serrated connection rod parts f f, and the cam g, all substantially as described.

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Witnesses:
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