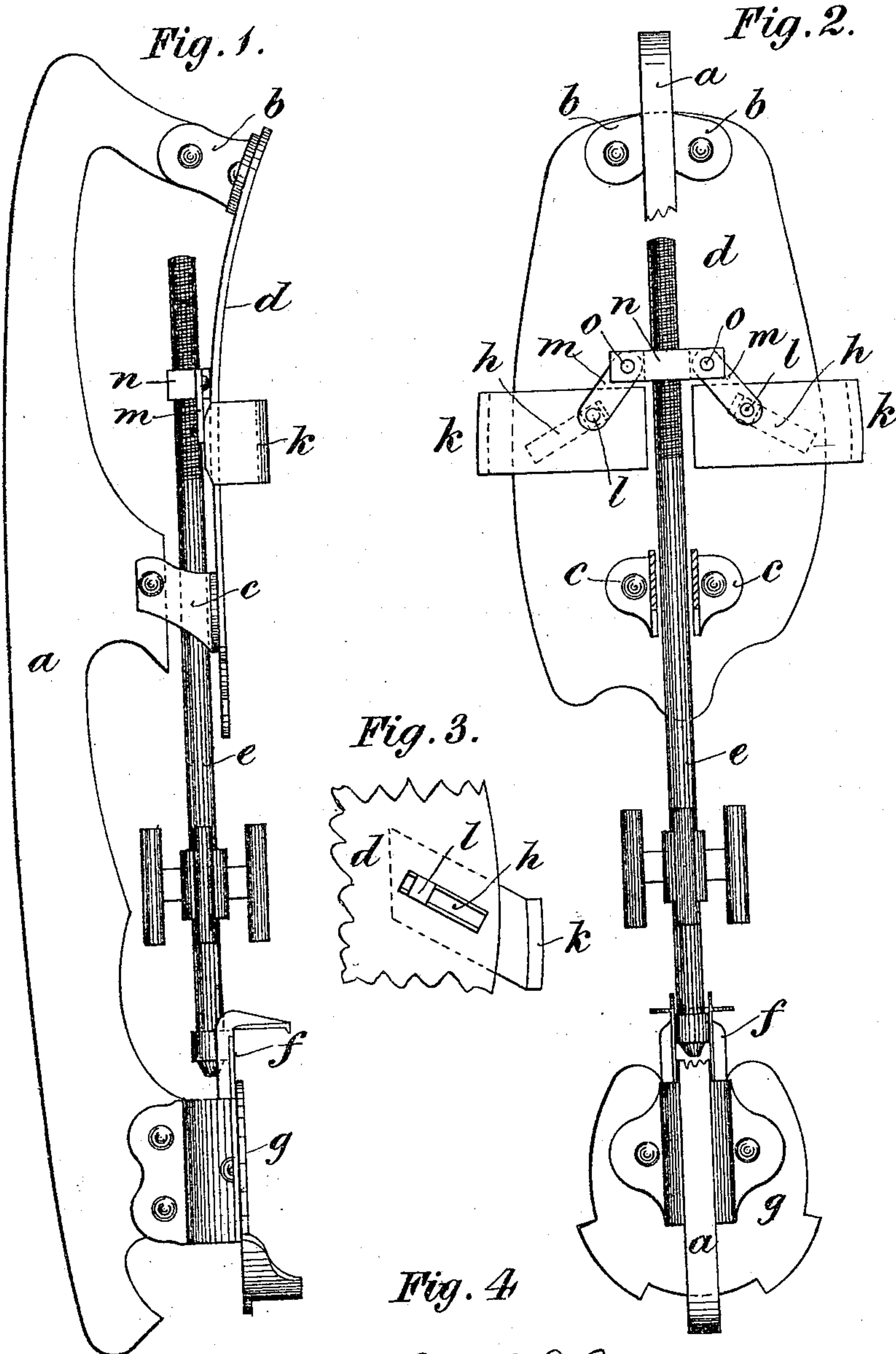


C. BREWSTER.  
SKATES.

Patented June 13, 1876.

No. 178,590.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES BREWSTER, OF MONTREAL, CANADA.

## IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. **178,590**, dated June 13, 1876; application filed April 21, 1876.

*To all whom it may concern:*

Be it known that I, CHARLES BREWSTER, of the city and district of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements on Skates; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention has reference to improvements on mechanism for attaching skates to the boot or shoe of the skater.

In the drawings hereunto annexed, similar letters of reference indicate like parts.

Figure 1 is a side elevation of my invention. Fig. 2 is an inverted plan view with part of runner removed, and Figs. 3 and 4 are details.

Letter *a* is the runner of the skate, to which is attached, by brackets *b* and *c*, the sole-plate *d*, space being left between the brackets *c* for the passage of the spindle *e*, screwed at its forward end, as shown in the drawings, while its rear extremity is received within, and attached to, an eye formed on the neck *f* of the heel-clasp, the attachment of the spindle being made in the ordinary way to allow it to revolve freely. The neck *f* is guided by the brackets attaching the heel-plate *g* to the runner, or in any other suitable manner. In the plate *d* two diagonal dovetail slots, *h*, are formed, in the position shown. These may be at a greater or less angle than that shown in the drawings, which angle has been found to be suitable. *K* are the sole-clamps, attached by pins *l*, having heads agreeing with the dovetail slots *h*, and extending through the clamps *k* a sufficient distance to receive the links *m*,

which are further secured by riveting over the ends, or otherwise securing the links and pins together; but this must be done in such a manner that the pins *l* will form pivots, upon which the links freely rotate. *n* is a screw-nut, made to fit the screw-thread on the end of the spindle *e*, and to it are attached, by pivots *o*, the other ends of the link *m*.

As shown in Fig. 3, the body of the clamp *k* may be set in the same direction as the slot, its upturned end being made parallel with the edge of the plate *d*.

It will be seen that the opening and closing of the clamps *k* are caused by the combined action of the modification of a toggle-joint, consisting of the nut *o* and links *m*, with the inclined slots *h*. It will further be seen that as the clamps *k* open and close they also travel from front to rear, or vice versa, upon the sole-plate *d*.

What I claim is as follows:

1. The combination of the clamp *f*, spindle *e*, toggle-joint *m* and *n*, plate *d*, having inclined slots *h*, and clamps *k*, substantially as and for the purposes set forth.

2. The combination of the toggle-joint *m* *n*, sole-plate *d*, having inclined slots *h*, and clamps *k*, operated substantially as and for the purposes set forth.

Montreal, 11th day of April, A. D. 1876.

C. BREWSTER.

Witnesses:

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