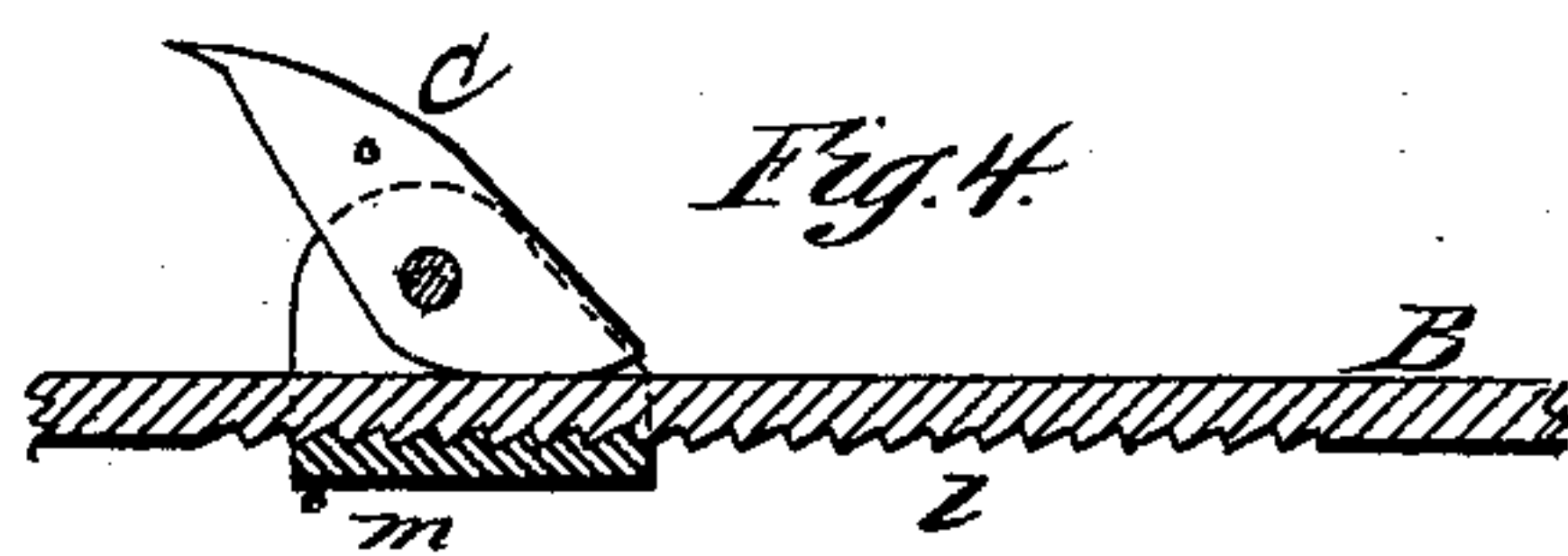
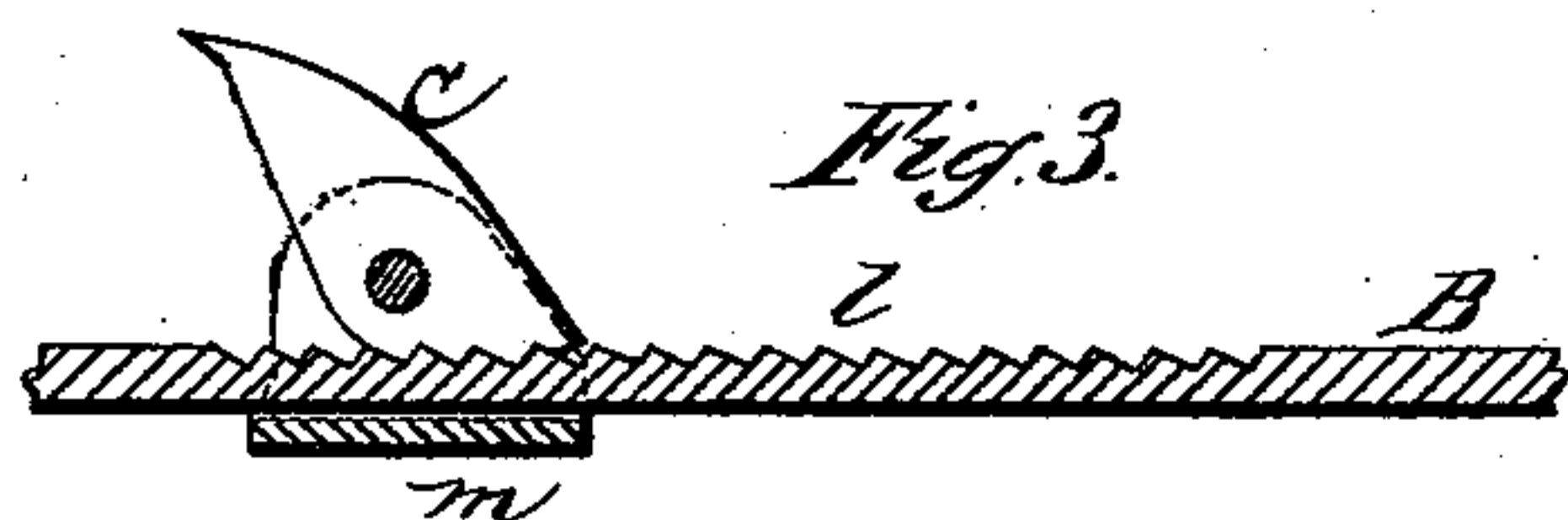
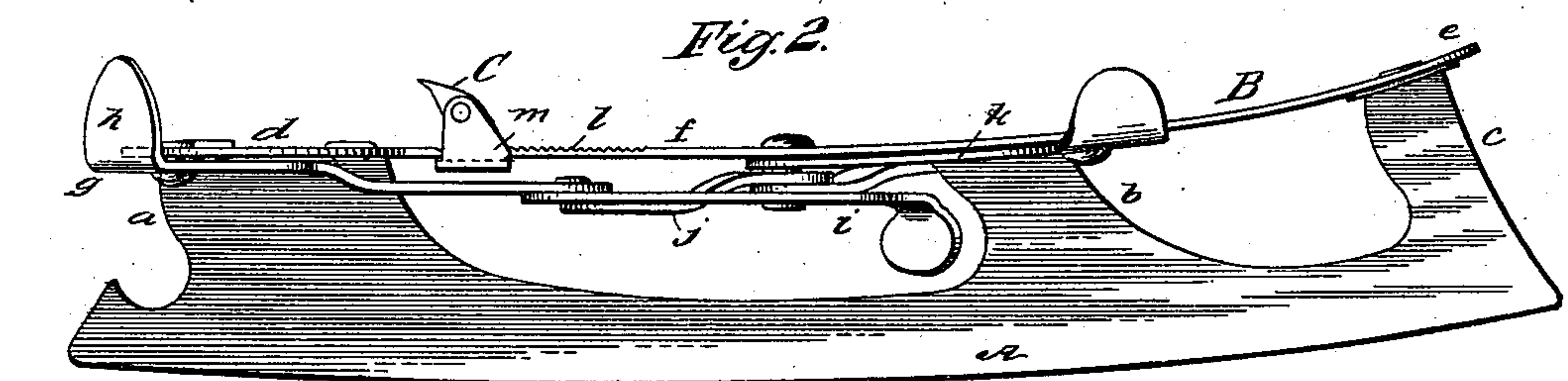
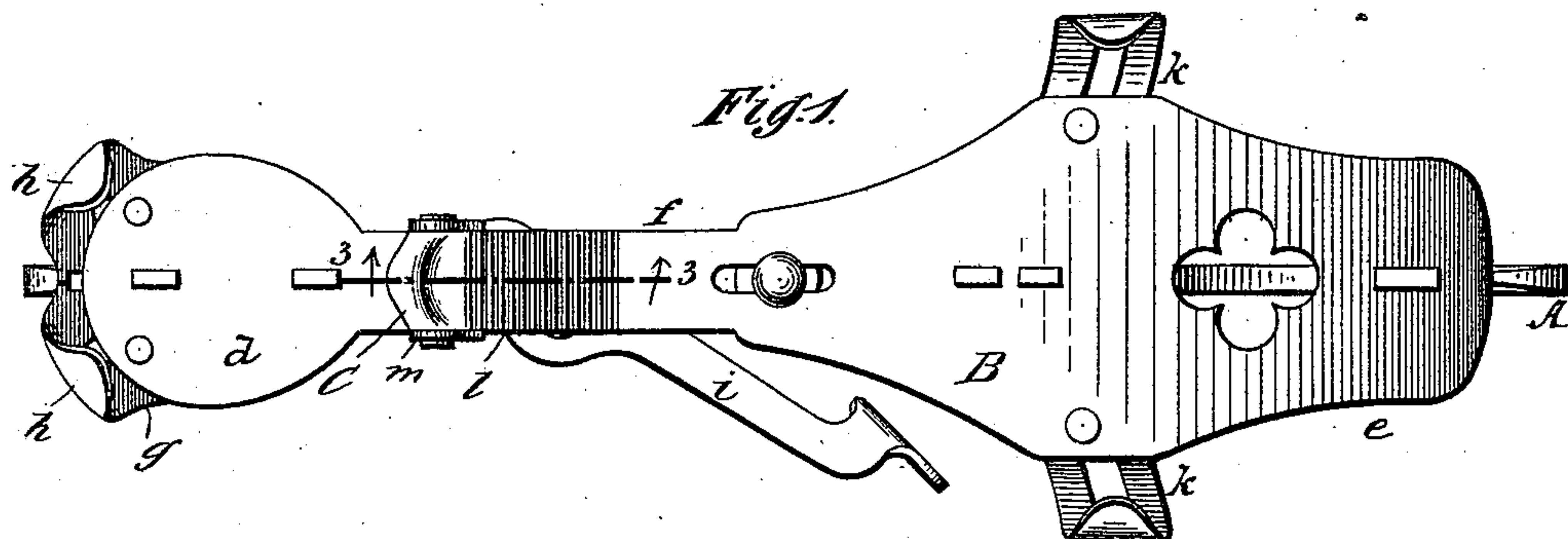


(No Model.)

H. D. CARRYL.
SKATE.

No. 539,667.

Patented May 21, 1895.



WITNESSES:
John A. Rennie.
G. M. Hopkins.

INVENTOR
H. D. Carryl
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY D. CARRYL, OF NEW YORK, N. Y.

SKATE.

SPECIFICATION forming part of Letters Patent No. 539,667, dated May 21, 1895.

Application filed October 16, 1894. Serial No. 526,052. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. CARRYL, of New York city, in the county and State of New York, have invented a new and Improved Skate, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a plan view of my improved skate. Fig. 2 is a side elevation. Fig. 3 is an enlarged longitudinal section taken on line 3 3 in Fig. 1, and Fig. 4 is a longitudinal section of a modified form.

Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to construct a skate which may be readily applied to shoes having long or short heels, and which, when so applied, will remain firmly attached to the shoe without danger of becoming accidentally loosened.

My invention consists in a skate having a runner of the ordinary form, to which is secured a sole plate having a narrow portion connecting the heel supporting portion and the portion on which the ball of the foot rests, the said narrow portion being provided with an eccentric dog which engages the forward side of the heel and clamps the narrow part of the sole plate.

The runner A is provided with the arms *a*, *b*, *c*, provided on their upper ends with projections which pass through holes in the sole plate B, and are riveted, thereby attaching the sole plate firmly to the runner. The sole plate B is formed of the heel portion *d*, the toe portion *e*, and the narrow portion *f* connecting them. Under the plate is placed the heel clamp *g*, provided with ears *h* for embracing the heel, and extending forward and connected by the eccentric lever *i* with the link *j*, to which are pivotally connected the sole clamps *k*. The clamping mechanism thus described is practically the same as that already in use, the only difference being that the adjusting screw for adapting the skate to feet of different lengths is omitted, thereby effecting a saving in the cost of manufacture.

In the form illustrated in Figs. 1, 2 and 3, the upper surface of the narrow portion of the sole plate is corrugated or grooved transversely, forming ratchet teeth *l*, and a plate

m bent twice at right angles embraces the narrow portion of the sole plate B, and between the upwardly projecting ends thereof is inserted an eccentric dog C, which is pivoted on a rod running through the ends of the plate *m* and through the dog. The dog in this case is provided with ratchet teeth on its curved surface, which engage the teeth *l* of the sole plate. The upper end of the dog C is provided with an angular lip for engaging the front edge of the heel.

In the modification shown in Fig. 4, the ratchet teeth are formed on the under side of the narrow part of the sole plate B, and the part of the plate *m* which contacts with the ratchet teeth is provided with teeth for engagement with the teeth of the plate B. The ratchet teeth on the eccentric dog C' are omitted in this case.

By means of an eccentric dog of this description, a smooth sole plate B and smooth plate *m*, the clamping may be effected by friction and pressure only. Therefore I do not confine myself to the exact construction herein described.

The skate is applied to the foot in the usual way. The plate *m* is moved backward until the dog C engages the heel, when the heel and sole are clamped by turning the clamping lever *i*.

The advantages claimed for my improvement are, cheapening of the manufacture, and simplifying and facilitating the operation of clamping the skate in the position of use; also its adaptation to a large or small heel, and the automatic adjustment of the skate to its proper relation relative to the foot.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a sole plate having a narrow part between the front and rear portions of a slide formed of a plate having right angled ends extending in the same direction and embracing the edges of the narrow part of the sole-plate, and an eccentric dog, pivoted between the ends of the angled plate, and a sharp edge for engaging the front of the heel and provided with a convex eccentric surface for clamping the sole-plate

against the angled plate, substantially as described.

2. The combination with a sole-plate having a serrated narrow part between the front and rear portions of a slide formed of a plate
5 having right angled ends extending in the same direction and embracing the edges of the narrow part of the sole-plate, and an eccentric dog pivoted between the ends of the

angled plate, and a sharp edge for engaging the front of the heel and provided with a serrated convex eccentric surface for clamping the sole-plate against the angled plate, substantially as described.

HENRY D. CARRYL.

Witnesses:

R. W. AMIDON,
EDWARD G. KENNEDY.