

(Model.)

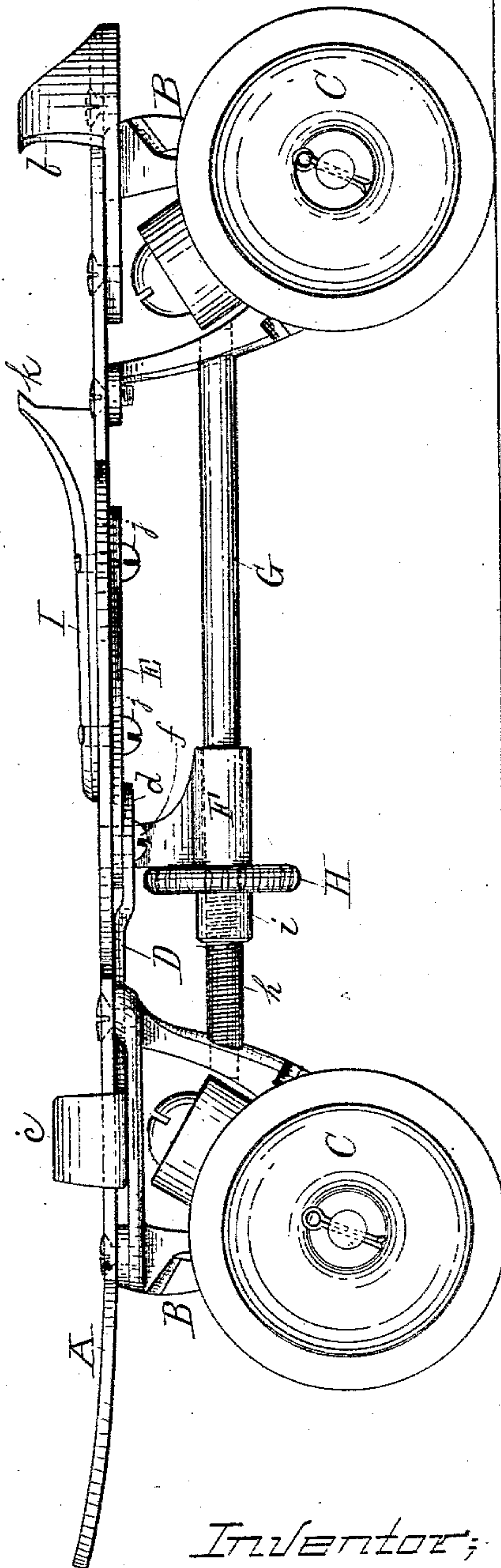
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J. C. HOWE.
CLAMP FOR SKATES.

No. 315,623.

Patented Apr. 14, 1885.

FIG. 1.



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John C. Dewey.

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(Model.)

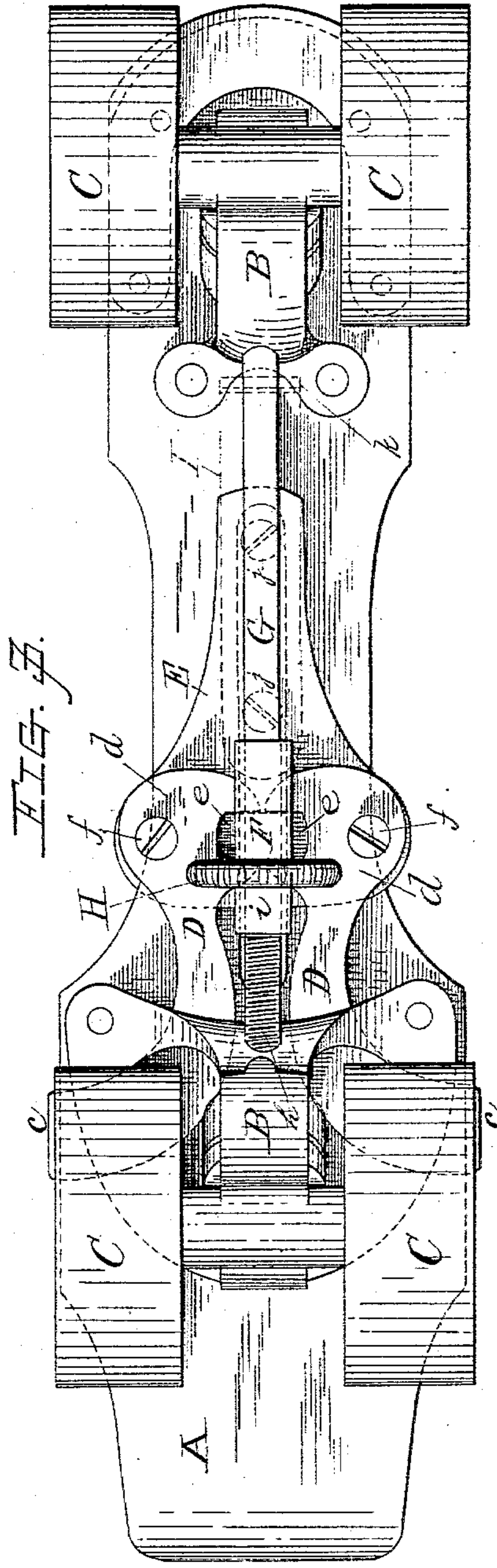
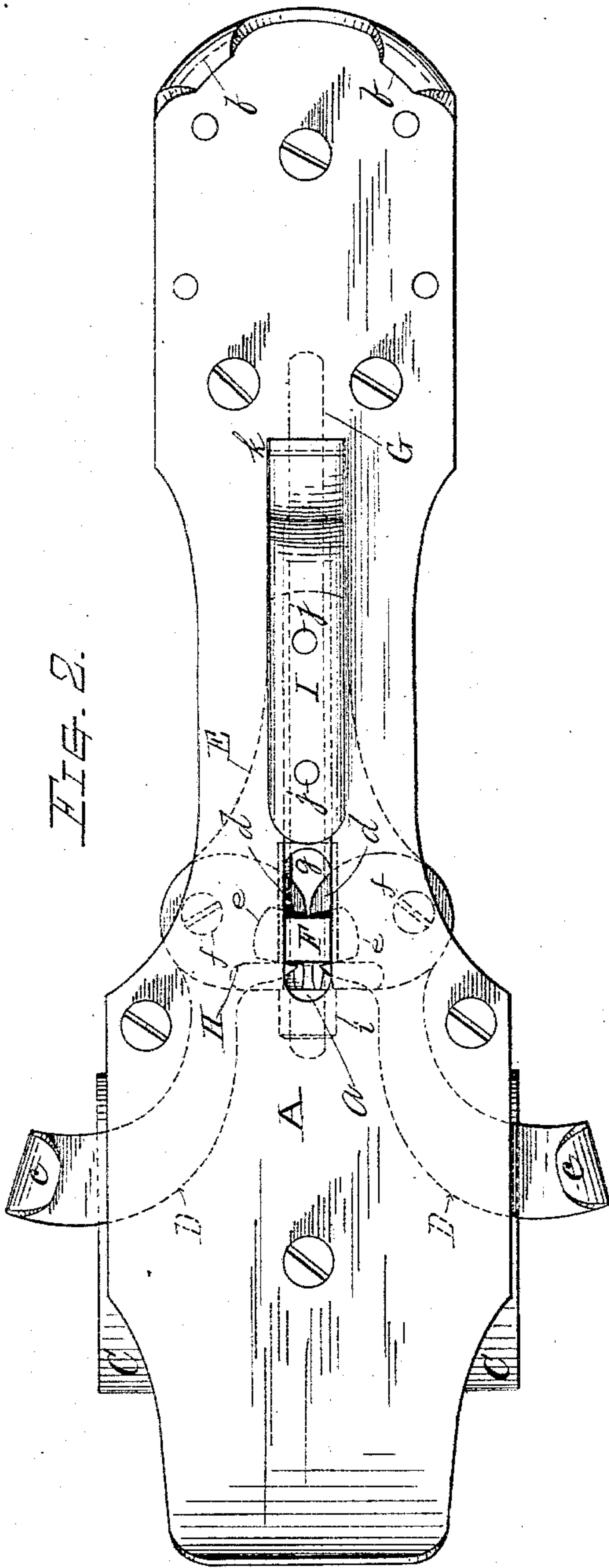
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Martin Roy
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(Model.)

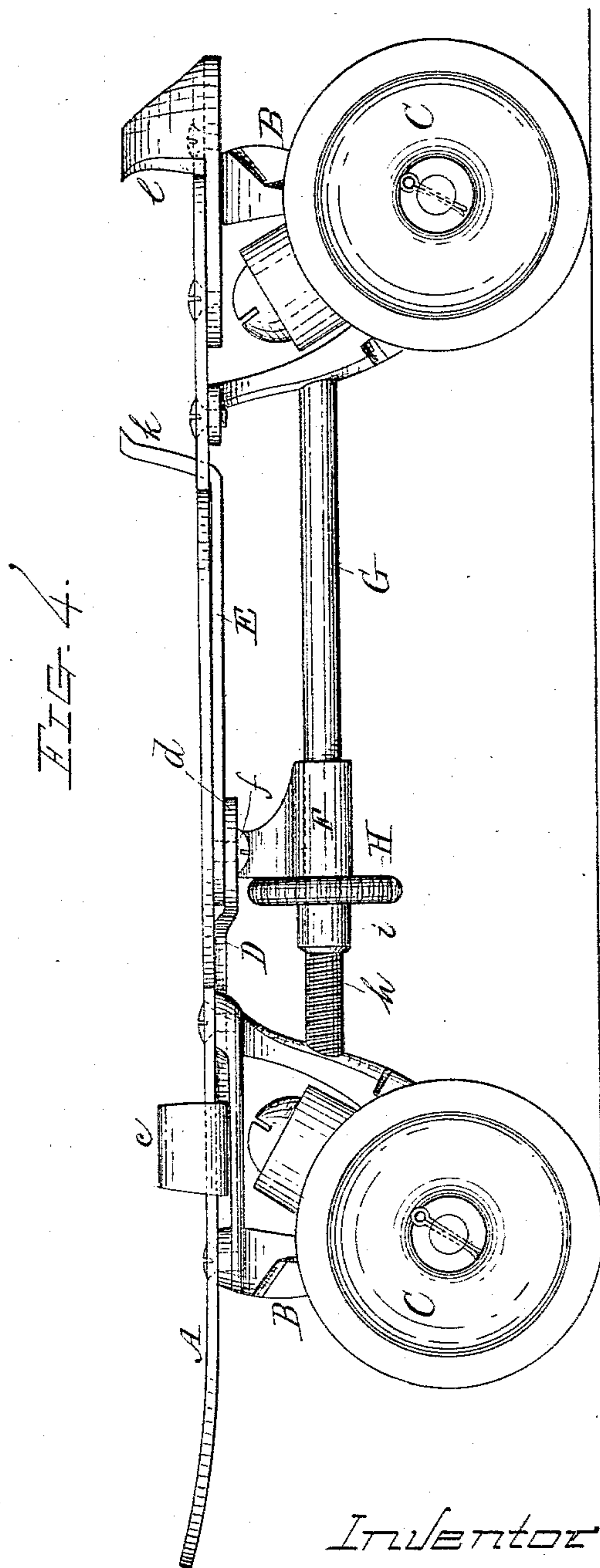
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CLAMP FOR SKATES.

No. 315,623.

Patented Apr. 14, 1885.



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UNITED STATES PATENT OFFICE.

JOHN C. HOWE, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO MARTIN
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CLAMP FOR SKATES.

SPECIFICATION forming part of Letters Patent No. 315,623, dated April 14, 1885.

Application filed June 27, 1884. (Model.)

To all whom it may concern:

Be it known that I, JOHN C. HOWE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Clamps for Skates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and in which—

Figure 1 represents a side view of a roller-skate provided with my clamping device. Fig. 2 is a top or plan view of the skate shown in Fig. 1, the clamps being shown opened preparatory to attaching the skate to the foot. Fig. 3 is a bottom view of the skate shown in Fig. 1, the clamps being shown closed, or in the position they occupy when the skate is on the foot; and Fig. 4 represents a modification of the clamping device, which will be hereinafter fully described.

My invention relates to clamps or a clamping device for skates, by means of which a skate may be securely attached to the foot of the wearer; and it consists in certain novel features of construction, as will be hereinafter fully described, whereby by turning a single nut or its equivalent the skate is securely attached and clamped both to the toe part and the heel of the foot at one operation.

In the drawings, A represents the stock or foot-plate of a roller-skate, in this instance made of metal, and having a narrow slot, *a*, through the central part thereof, for the purpose to be hereinafter stated, and provided with projections *b b*, to bear or press against the rear part of the heel of the foot. The foot-plate A may be made of wood, if desired.

The roller frames or trucks B B may be made in any of the well-known ways, and of any well-known form or construction now in general use, and be attached to the foot-plate A in any suitable manner. In this instance the trucks are attached by screws, as shown. The rollers C C turn on axles mounted in the trucks or frames B B, in the usual manner.

The clamping device consists of the two sole-clamps D D, made of thin metal of substantially the shape shown, with their outer ends, *e e*, turned up for attaching the skate at the

toe part of the foot, said sole-clamps D D being supported in place in this instance by the front roller-truck, B, as shown. The other ends, *d d*, of the sole-clamps D D are provided with notches or slots *e e*, as shown, and are pivoted out of their centers by rivets or screws *f f* to the sliding plate E, and move with said sliding plate E, which moves back and forth under the foot-plate A, in the manner to be hereinafter described, said sliding plate E being made of thin metal. The upper part of the stud F fits into the notches *e e*, and also extends through a slot or opening, *g*, in the sliding plate E and into the slot *a* in the foot-plate A, as shown in the drawings. Said stud F is supported in position by and slides back and forth on the rod G, said rod being secured firmly in any suitable manner under the foot-plate of the skate, in this instance by each end thereof projecting into the trucks B B. Said rod is provided with a thread, *h*, at one end, and a thumb-nut, H, or an equivalent device provided with a thread to turn upon the thread of the rod G, for the purpose of sliding the stud F along the rod G, to tighten up the clamps and to hold said stud F in a fixed position when the skate is clamped to the foot of the wearer.

In connection with the sole-clamps D D is used the sliding plate E, for clamping the heel, to which the sole-clamps D D are pivoted, as before stated. Said sliding plate E is held in place against the lower side of the foot-plate A, in this instance by means of a flat piece of metal, I, which is wider than the slot *a* in said foot-plate, and rests upon said foot-plate, as shown in Fig. 2, being connected with the sliding plate E by means of screws or rivets *j j*, as shown, which extend through the slot *a*, allowing said sliding plate E and the heel-clamp I to move back and forth on the foot-plate A. Said heel-clamp I is turned up at one end, or provided with a projection, *k*, which enters into the front part of the heel of the shoe.

I do not wish to limit myself to the use of the heel-clamp I in connection with the other parts of my clamping device, for said heel-clamp I may be dispensed with, and in lieu thereof the end of the sliding plate E may be bent or turned up so as to project through and

extend over the edges of the slot *a* and form a projection, *k*, to extend into the heel, and also a means for supporting the sliding plate E in position against the under side of the foot-plate A, as clearly shown in Fig. 4 of the drawings, in connection with the stud F, provided with shoulders, which support the other end of the sliding plate E.

From the drawings and the foregoing description the operation of my clamping device will be readily understood. The stud F, which is connected with the sole-clamps D D by extending through the slots or notches *e e*, as before stated, in the ends *d d* of said sole-clamps, as it is moved along on the rod G toward the toe part of the skate, opens the clamps, as shown in Fig. 2, they being pivoted out of their centers, and at the same time draws the sliding plate E—provided with a projection for entering the heel, attached to the sole-clamps D D, and supported in its proper position in the manner before stated—toward the toe part of the skate, so that the parts will be in the position shown in Fig. 2, preparatory to attaching the skate to the foot.

In order to attach the skate to the foot, the stud F is moved along the rod G toward the heel part of the skate by turning the nut H. This operation moves the sliding plate E and forces the projecting end with which it is provided, or the projecting end *k* of the heel-clamp I, secured to the sliding plate E in the manner before stated, into the front part of the heel, and at the same time clamps the skate upon the toe part of the foot by drawing together the ends *e e* of the sole-clamps D D by reason of their being pivoted out of their cen-

ters at their ends *d d*, as shown, and the nut H holds the stud F firmly in position on the rod G and prevents the skate from becoming loosened or unclamped from the foot except at the will of the wearer.

I have shown my clamping device when used in connection with a roller-skate; but it may be used with equally good results upon ice-skates without departing from the principle of my invention, and it may be used upon any form of skate; and I therefore do not limit myself to its use upon the style of skate shown in the drawings or upon any special style or kind of skate.

Having described my invention in clamping device for skates, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. A clamping device for skates, composed of two sole-clamps, D D, pivoted to and moving with the sliding plate E, and plate E, provided with a projection for entering the heel, in combination with means, substantially as described, for operating the clamps, substantially as set forth.

2. The combination, with sole-clamps D D, pivoted to and moving with the sliding plate E, and plate E, provided with a projection, *k*, for the purpose stated, of the stud F, supporting and guiding rod G, and nut H, turning on said rod G, for tightening the clamps, substantially as set forth.

JOHN C. HOWE.

Witnesses:

MARTIN BYE,
JOHN C. DEWEY.