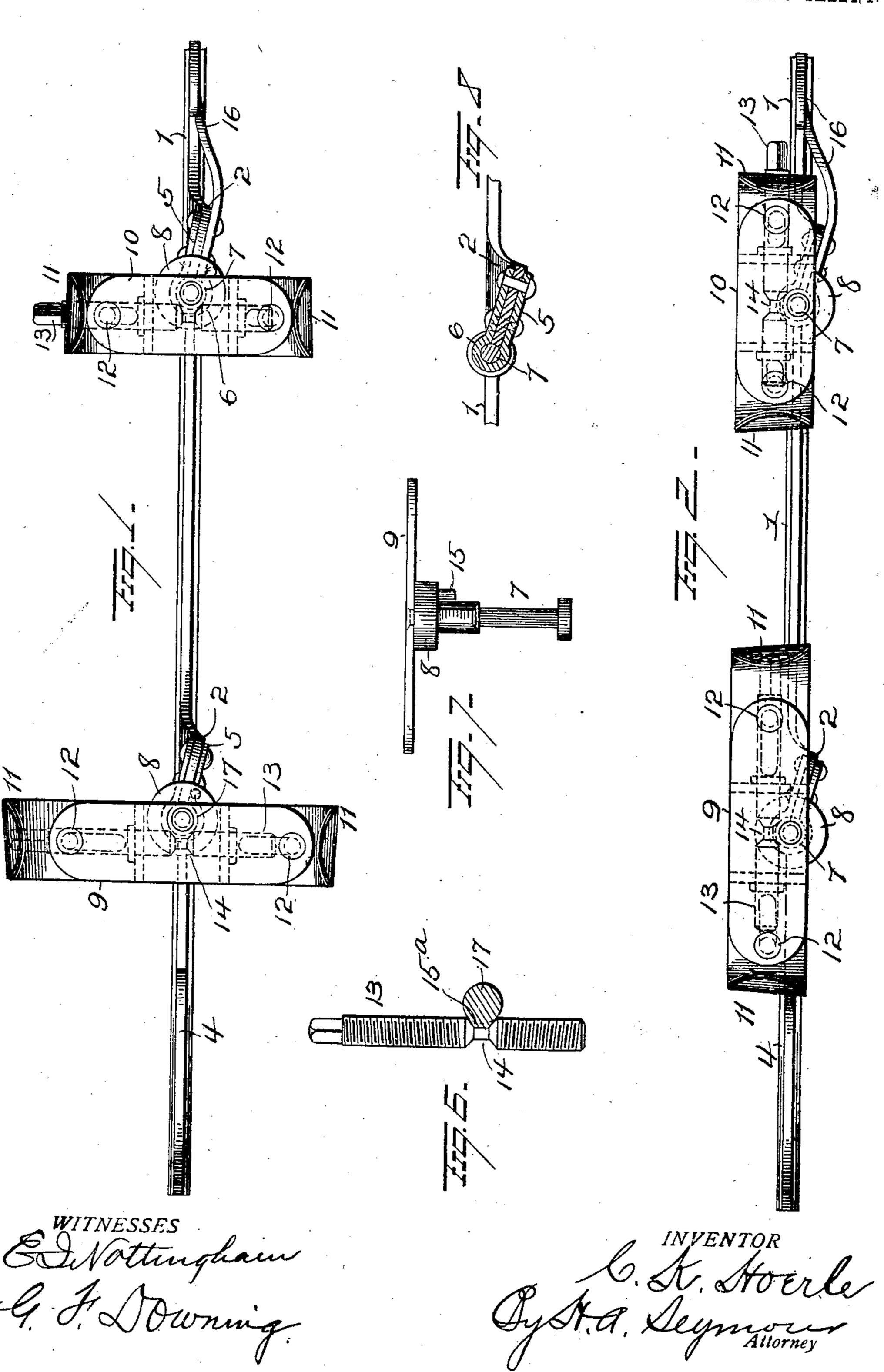
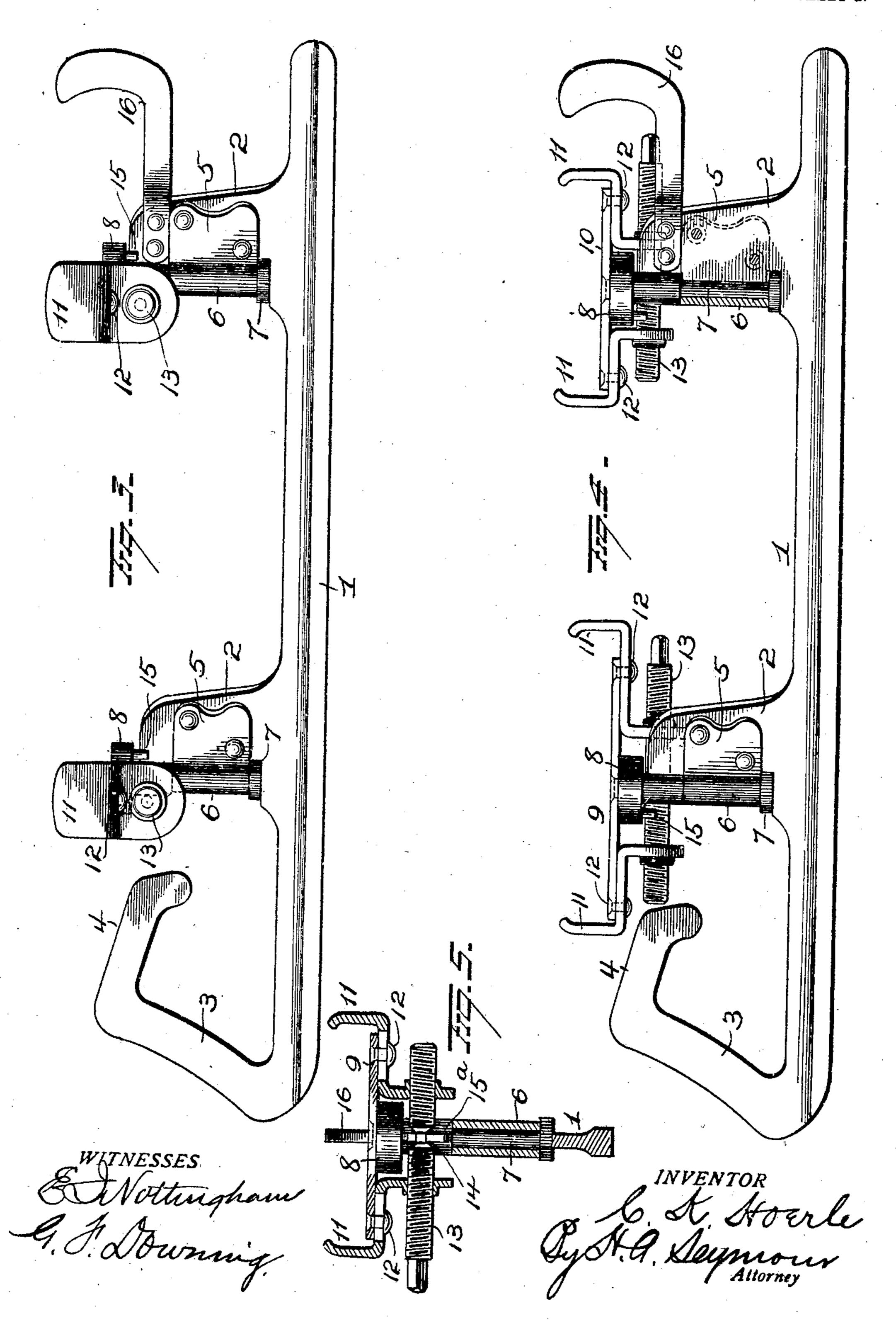
## C. K. HOERLE. SKATE. APPLICATION FILED JAN. 25, 1907

2 SHEETS-SHEET, 1.



## C. K. HOERLE. SKATE. APPLICATION FILED JAN. 25, 1807.

2 SHEETS-SHEET 2



## UNITED STATES PATENT OFFICE.

CHRISTIAN K. HOERLE, OF TORRINGTON, CONNECTICUT.

## SKATE.

No. 863,605.

Specification of Letters Patent.

Patented Aug. 20, 1907.

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Application filed January 25, 1907. Serial No. 354,099.

To all whom it may concern:

Be it known that I, Christian K. Hoerle, a resident of Torrington, in the county of Litchfield and State of Connecticut, have invented certain new and useful Im-5 provements in Skates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in skates, the 10 object of the invention being to provide an improved skate in which the foot and heel rests may be swung around in line with the runner and occupy but small space in packing and shipment.

A further object is to provide a skate of minimum 15 weight, yet strong and durable and neat and attractive in appearance.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more 20 fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view illustrating my improved skate in position for use. Fig. 2 is a similar view showing the skate folded for packing into a small space. Figs. 3 and 4 are views in 25 side elevation of Figs. 1 and 2 respectively, and Figs. 5, 6, 7, and 8, are views of various details of construction.

1 represents the skate runner having uprights or standards 2 integral therewith and an integral toe piece 3 having a toe rest 4 formed at its upper end. Straps 5 are 30 secured at their ends to opposite sides of the uprights 2 and form at the front of the standards, vertical bearing sleeves 6 providing rotary mounting for vertical journals, spindles, or shafts 7. The journals 7 are made with an annular groove or contracted portion to receive 35 the straps 5 and prevent longitudinal movement of the journals, and the lower ends of the journals have thrust bearings on the upper edge of the runner 1, to compel the latter to sustain the weight on the journals.

The upper ends of journals 7 are provided with en-40 larged heads 8 and the heel and toe cross bars 9 and 10 respectively are secured on said heads. Clamping bars 11 are movably mounted on rivets 12 on the under face of bars 9 and 10 and are adjusted by screws 13 such as in common use for the purpose. Said screws 13 are pro-45 vided between their ends with annular grooves 14 into which lugs or projections 15<sup>a</sup> on journals 7 project to prevent any longitudinal movement of the screws and compelling the screws to move the clamps at both sides an equal distance when the screws are turned.

The heads 8 are made with depending lugs 15 to en-50

gage the standards or uprights 2 and limit the rotary movement of the journals in one direction, so as to cause the cross bars 9—10 to be disposed approximately at right angles to the runner and in position for use. The lugs 15 do not, however, interfere with the turning of 55 the journals in the reverse direction to dispose the cross bars approximately in alinement with or parallel to the runner so that they will be made to occupy very small space and thus permit the skates to be packed in a comparatively thin box or package.

A rearwardly projecting hook bar 16 is secured to the rear upright 2 and serves to confine the heel between the heel clamps as it limits the rearward movement of the heel on the heel cross bar.

A great many changes might be made in the general 65 form and arrangement of the parts described without departing from my invention, and hence, I do not restrict myself to the precise details set forth but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my in- 70 vention.

Having fully described my invention, what I claim as new and desire to secure by Letters-Patent is:—

- . 1. In a skate, the combination of a pivoted foot support clamps carried by said pivoted foot support, and a screw 75 for operating said clamps, the pivot pin of the foot support engaging the screw to prevent longitudinal movement of the latter.
- 2. In a skate, the combination with an upright, of a foot rest having pivotal connection therewith, means for 80 limiting the turning movement of the foot rest, and adjustable clamps connected with and carried by said foot rest.
- 3. In a skate, the combination with uprights, of journals having pivotal connection with said uprights, cross bars 85 secured on said journals, and adjustable foot clamps on said bars.
- 4. In a skate, the combination with a runner and uprights on said runner, of journals having pivotal connection with said uprights, heads on said journals, cross bars 90 secured on the heads, adjustable foot clamps on the bars, and means for limiting the turning movement of the journals in one direction to dispose the cross bars at right angles to the runner but permit turning movement in the other direction to dispose the cross bars approximately in 95 alinement with or parallel with the runner.
- 5. In a skate, the combination with a runner and uprights on the runner, of vertical journals having thrust bearings on the runners, metal straps bent forming bearings for the journals, secured to the uprights, and located 100 in annular grooves in the journals holding the latter against longitudinal displacement, enlarged heads on the upper ends of the journals, cross bars secured on the heads, adjustable foot clamps on the bars, and means for limiting the turning movement of the journals in one direction to 105 dispose the cross bars at right angles to the runner.

6. In a skate, the combination with vertically disposed rotary journals, cross bars secured on the journals, and clamps movably mounted on the cross bars, of screws engaging the clamps and constructed to adjust them, and projections on the journals located in annular grooves in the screws preventing longitudinal movement of the latter.

7. In a skate, the combination with a runner having uprights thereon, of a toe piece on the forward end of the runner having a toe rest thereon, a rearwardly projecting

heel engaging hook secured to the rear upright, and sole 10 and heel supporting cross bars having pivotal mounting on the uprights.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

CHRISTIAN K. HOERLE.

Witnesses:

DWIGHT W. POST, WILLIAM CLARK.