

(No Model.)

W. C. VANNEMAN.

ROLLER SKATE.

No. 298,323.

Patented May 6, 1884.

Fig. 1.

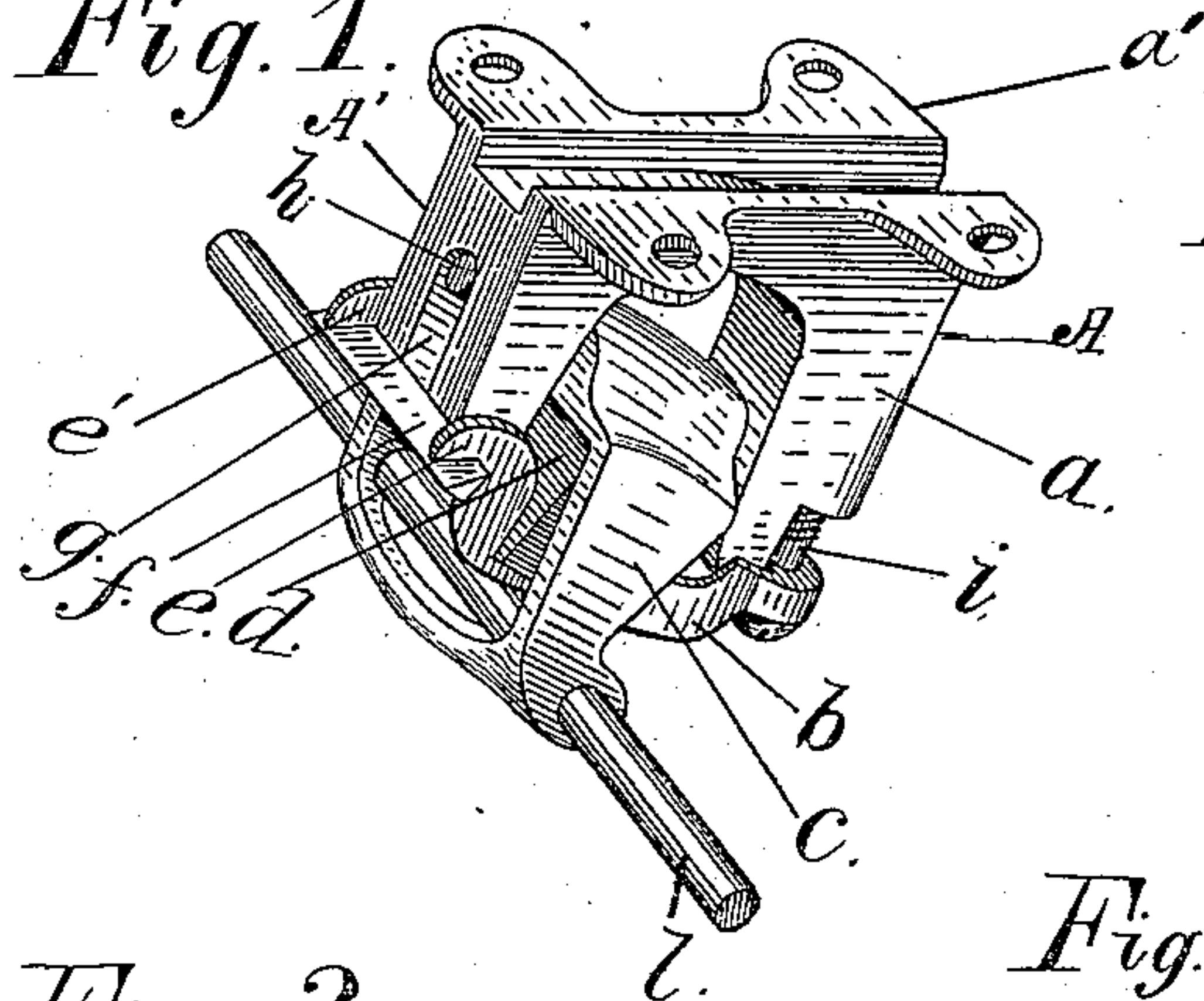


Fig. 2.

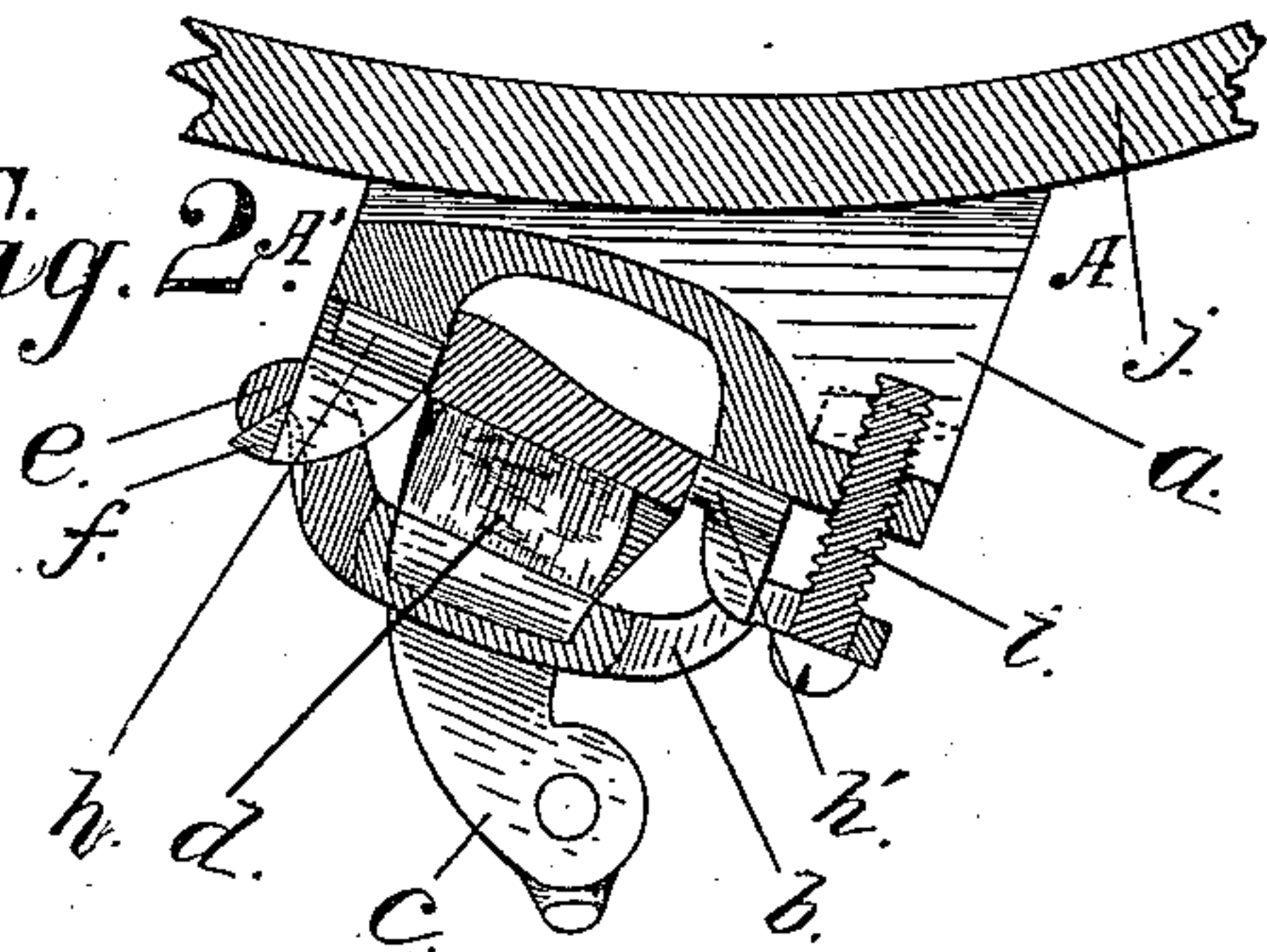


Fig. 3.

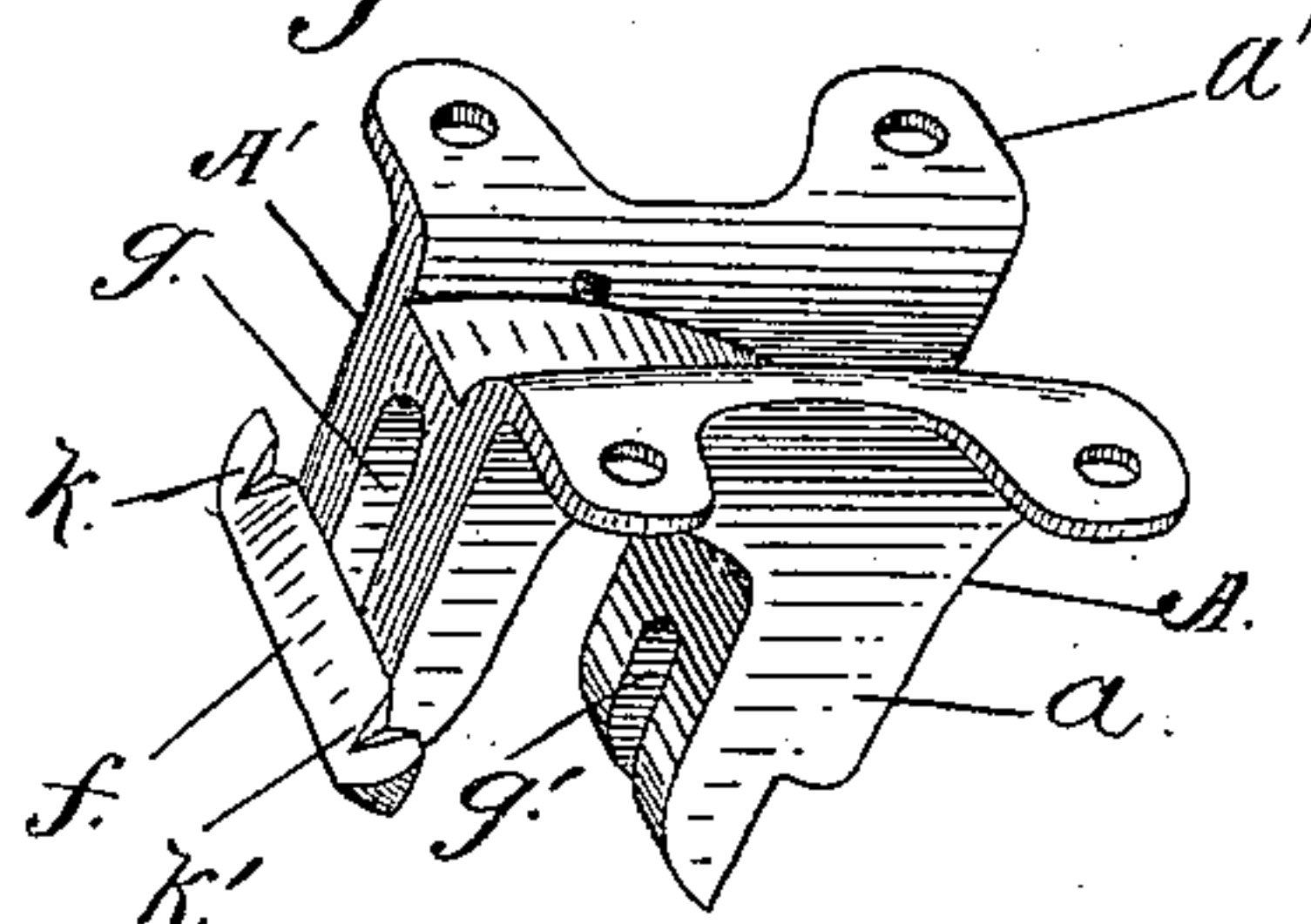


Fig. 4.

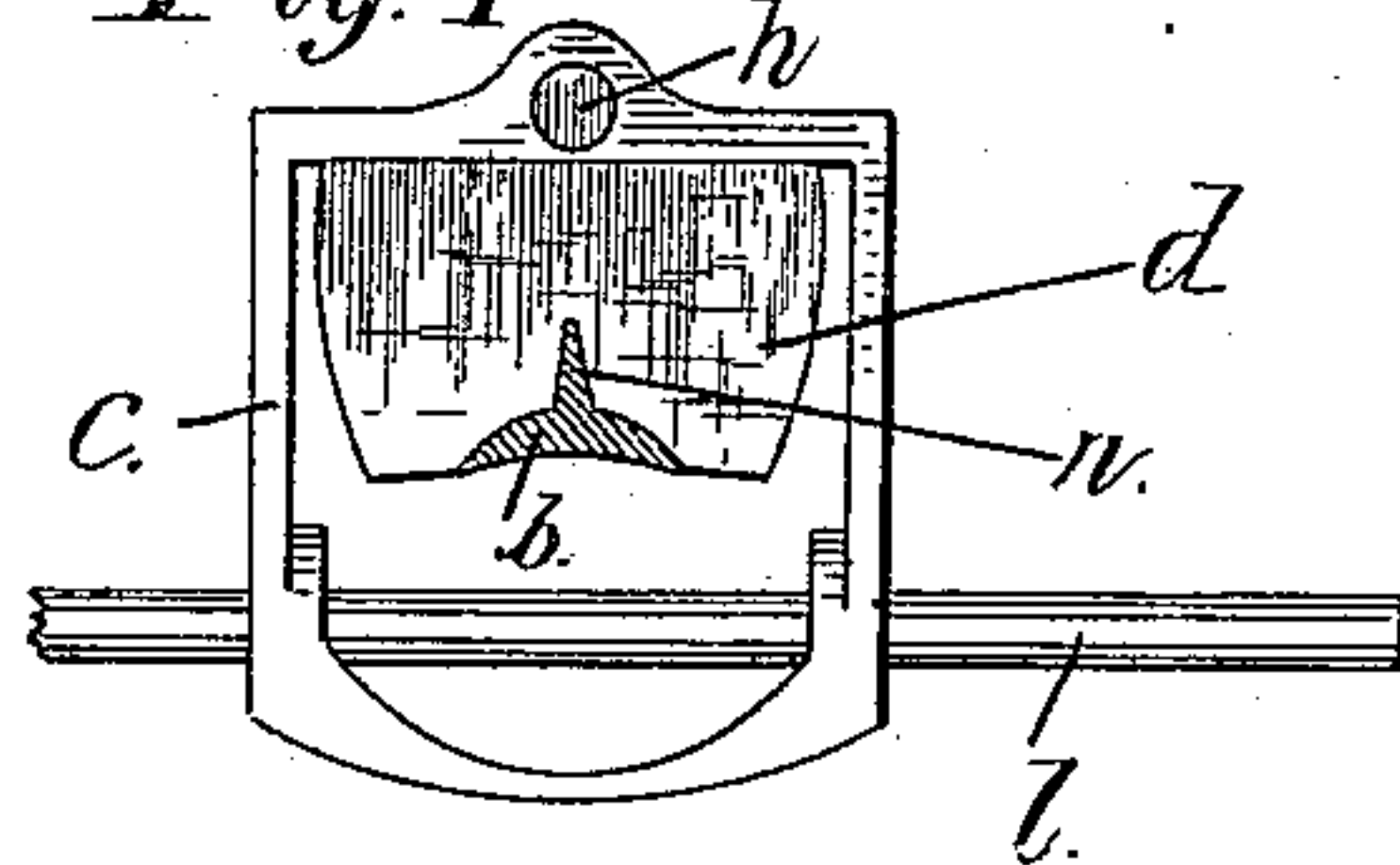


Fig. 5.

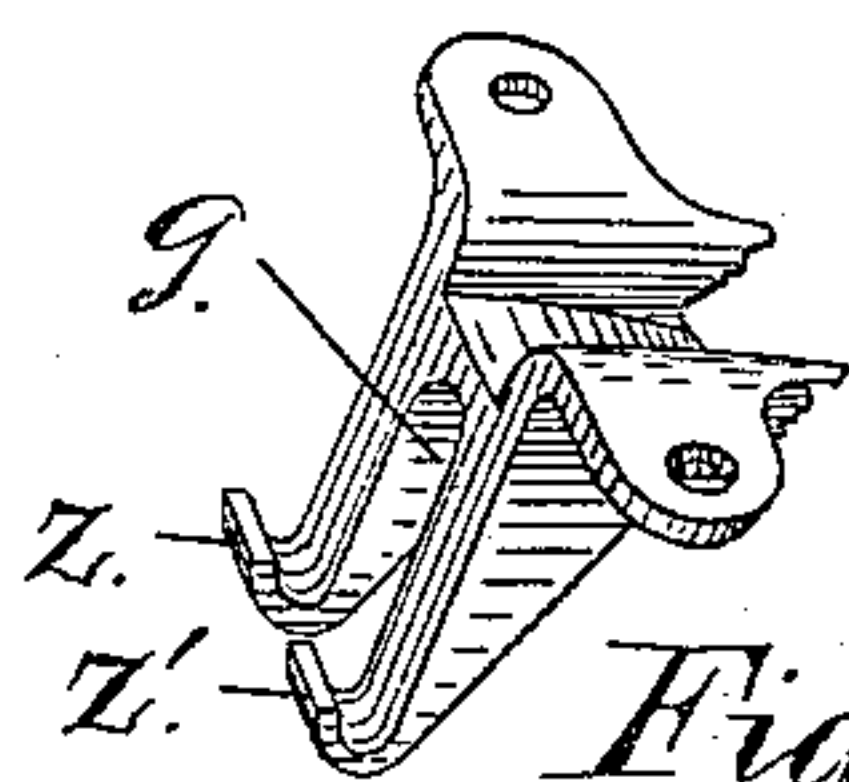
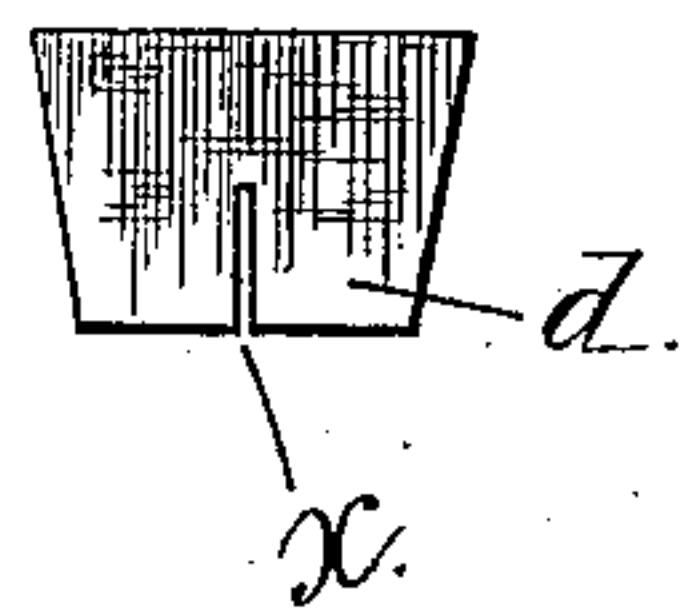


Fig. 6.

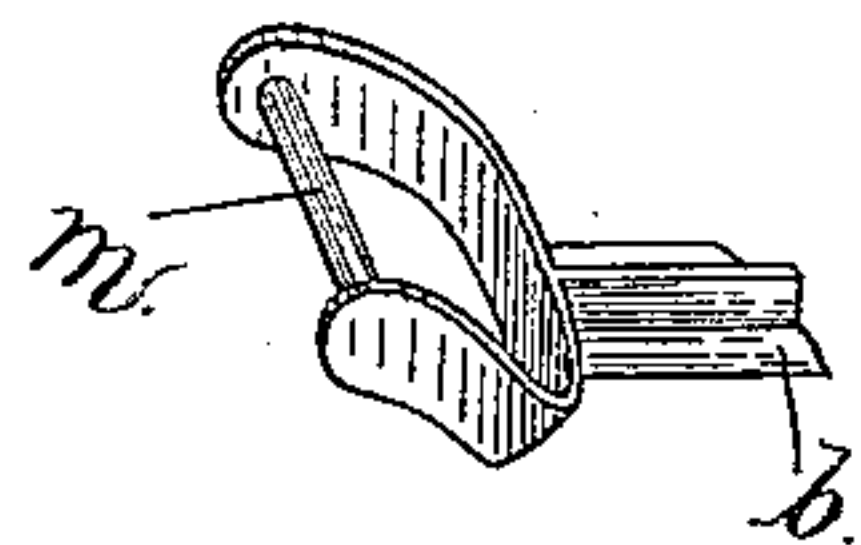
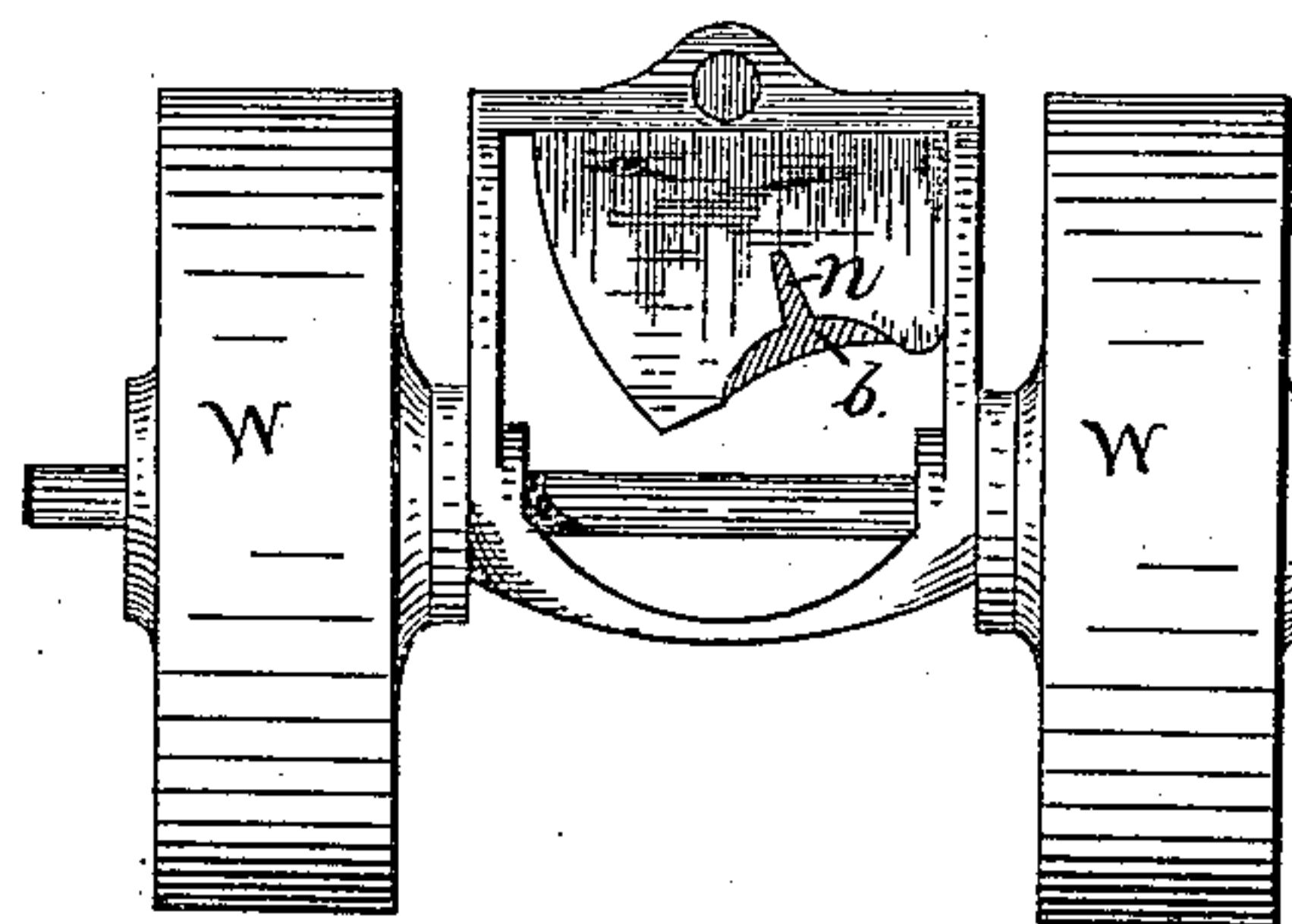


Fig. 7.



UNITED STATES PATENT OFFICE.

WILLIAM C. VANNEMAN, OF RICHMOND, INDIANA.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 298,323, dated May 6, 1884.

Application filed January 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. VANNE-
MAN, a citizen of the United States, residing
at Richmond, in the county of Wayne and
5 State of Indiana, have invented certain new
and useful Improvements in Roller-Skates, of
which the following is a specification, refer-
ence being had therein to the accompanying
drawings.

10 My invention relates to that class of roller-
skates in common use for parlor and rink skat-
ing.

My invention consists in the novel construc-
tion of the trucks used and in the fewer num-
15 ber of pieces required.

In the drawings which accompany this speci-
fication, forming part of the same, Figure 1 is
a perspective view of the hanger and truck
frame and axle and bed-plate. Fig. 2 is a lon-
20 gitudinal vertical section of the hanger and
truck frames, showing the spring in position;
also the bed-plate. Fig. 3 is a perspective
view of the hanger-frame. Fig. 4 is a vertical
cross-section of the truck-frame. Fig. 5 is a
25 front elevation of the rubber spring. Fig. 6 is
a perspective of the front end of the hanger-
frame and bed-plate, showing another form of
connecting the same. Fig. 7 is an elevation
of the truck, truck-frame, and spring when
30 the spring is thrown sidewise by the action of
the hanger-frame; also showing the form of the
washer used to retain the wheel upon the axle
and the manner of their use. Fig. 8 is a per-
spective view of the bed-plate.

35 In Fig. 1, *a* represents the hanger-frame, in
which *a'* is the top surface, to which is attached
the foot-piece, and which is provided with
screw-holes admitting screws to secure the
same.

40 Depending from the surface *a'* are lugs or
projections, forming the ends of the hanger-
frame *A A'*, as shown in Fig. 3. The pro-
jection *A* is furnished with a vertical slot or
opening, *g'*, which receives the pivot *h'* of the
45 truck-frame *c*. (Seen also in Fig. 2.) The pro-
jection *A'* has a similar slot or opening, *g*, which
is closed at its lower end by a horizontal tri-
angular cross-bar, *f*, rigidly attached to the
lower ends of the projection *A'*. The edges
50 of the cross-bar *f* are furnished with V-shaped
notches outside of its point of contact with the

projection *A'*, which receive and support the
ends *e e* of the bed-plate *b*. The ends *e e* of
the bed-plate *b* are recessed to fit the notches
k k' of the cross-bar *f*.

55 *i*, Fig. 1, is a temper-screw passing through
an opening in the end of the bed-plate *b* at *p*,
and engaging in a screw-thread in the projec-
tion *A* of the hanger *a*, as seen in Fig. 2.

60 *d*, Fig. 1, is a rectangular rubber spring rest-
ing upon the bed-plate *b*, and pressing against
the top bar of the truck-frame *c*, provided
with a vertical slot, *x*, Fig. 5. The lower
portions of the truck-frame *c* are provided
with holes to receive the axle *l*. The truck- 65
frame *c* is provided with pivots *h h'*, which
have their bearings in the slots *g g'* in the
hanger-frame *a*, and upon which the hanger-
frame *a* and the foot-piece to which it is at-
tached are permitted an oscillating motion by 70
the action of the operator. The bed-plate *b*,
Fig. 8, is constructed of a horizontal bar, *b*,
having an upward-projecting rib, *n*, (shown
in Fig. 4,) a lateral opening, *o*, and loop *p* at
one end of the bar, and semicircular jaws *e e*, 75
provided with notches *k²*, at the opposite end,
each end being elevated above the bar *b*, the
jaws *e e* having their bearing in the horizontal
cross-bar *f*, while the opposite end is support-
ed by the head of the temper-screw *i*, by the 80
action of which screw it is permitted a verti-
cal motion, increasing or diminishing the press-
ure upon the spring *d*, which rests upon it,
and which is held in place by the rib *n* being
inserted in the slot *x*, Figs. 4 and 5. 85

In Fig. 7, *l* represents the axle, *w w* the
wheels, and *q* the washer; *r*, the linch-pin. *s*
is a raised projection on the face of the washer
q, the projection being highest in the central
portion, where the axle protrudes, at which 90
place it is cut away to allow a vertical linch-
pin to be inserted.

In Fig. 6 the front end, *A'*, of the hanging
frame is provided with curved arms *z z'*, and
the end of the bed-plate has a rod, *m*, secured 95
horizontally between the jaws *e e*, which, when
placed in the curved arms *z z'*, produces an-
other form of support for that end of the bed-
plate in which it is conveniently hinged. When
the truck-frame is placed in position, with the 100
jaws *e e* resting upon the cross-bar *f*, the screw
i is inserted in the loop *p*, and screwed into

its thread in the projection A, the head of the screw *i* resting against the under surface of the loop *p*, and thus raising that end of the bed-plate. The spring *d*, being attached, as shown, to the upper surface of the bed-plate, is brought in contact with the under surface of the cross-bar which forms the top of the truck-frame *c*, and as the screw *i* is turned home the pressure on the spring is increased as may be required.

It will be seen that the hanger-frame *a*, the truck-frame *c*, and the bed-plate can be readily detached and disconnected by removing the temper-screw *i*, and that when these parts are in working position more or less density can be imparted to the spring *d* by means of the temper-screw *i*.

I am aware that it is not new to combine a pressure-plate with the roller-support, said pressure-plate being pivoted at one end, and adjustable at the other end by an adjusting-screw, and which I do not claim.

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

1. In a roller-skate, the hanger-frame provided with pendent lugs at opposite ends, with a space between the lugs to receive a truck-frame, said lugs being slotted vertically to receive the axles of the roller-supporting truck, substantially as described.

2. In a roller-skate, the bed-plate formed at one end with the forked arm, at the opposite end with the openings *o* and *p*, and between the two ends with the bar *b*, provided with the longitudinal rib *n*, substantially as described.

3. The combination of the hanger-frame provided with pendent lugs slotted vertically, and having at the end a support for a bed-plate, a truck-frame adapted to have an axle connected therewith, and provided with piv-

ots having their bearings in said vertical slots, and a bed-plate connected with said hanger-frame below the pivots of said truck-frame, substantially as described.

4. The combination of the hanger-frame, the truck-frame having a laterally-yielding connection therewith, a bed-plate below said truck-frame, and a spring-cushion between said bed-plate and truck-frame to restore said truck-frame to its normal position when relieved from strain, substantially as described.

5. The combination of the hanger-frame, the truck-frame having a laterally-yielding connection therewith, a bed-plate below said truck-frame, a spring-cushion between said bed-plate and truck-frame, and means for adjusting said bed-plate to tighten or loosen the connection between the parts, substantially as described.

6. The combination of the hanger-frame provided with pendent lugs slotted vertically, and having at the end a support for a truck-frame, a truck-frame provided with journals having their bearings in said slotted lugs, a bed-plate connected with the hanger-frame below the bearings of the truck-frame, a spring-cushion interposed between said truck-frame and bed-plate, and a screw for tightening the connection between said parts, substantially as described.

7. In a roller-skate, the combination, with the wheel and axle, of the washer *q*, provided with the projection on its face, and a linchpin to the axle to one side of the projection, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. VANNEMAN.

Witnesses:

A. K. DEETS,
W. T. DENNIS.