

(Model.)

M. C. HENLEY.
ROLLER SKATE.

No. 245,950.

Patented Aug. 23, 1881.

Fig. 1.

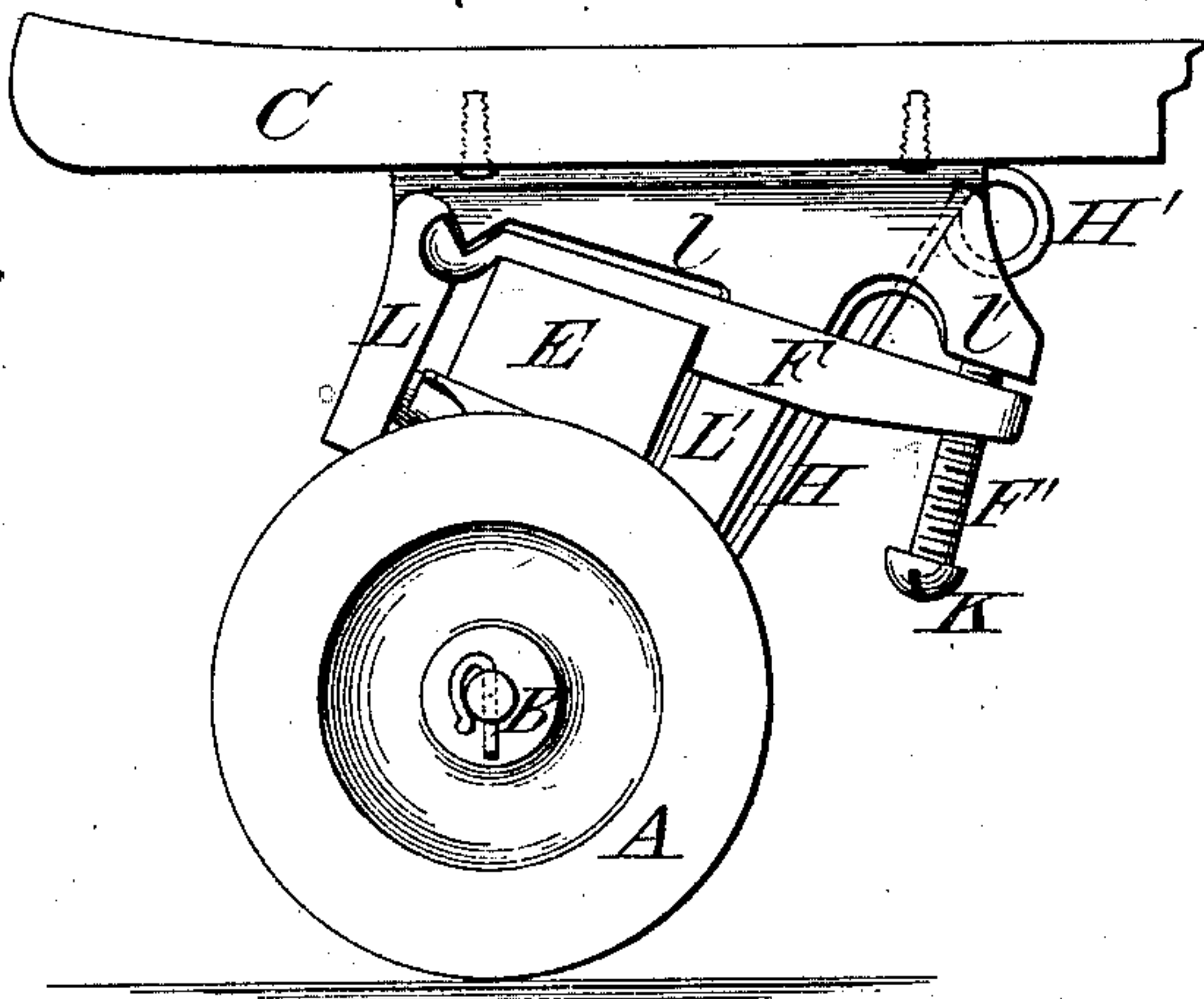


Fig. 2.

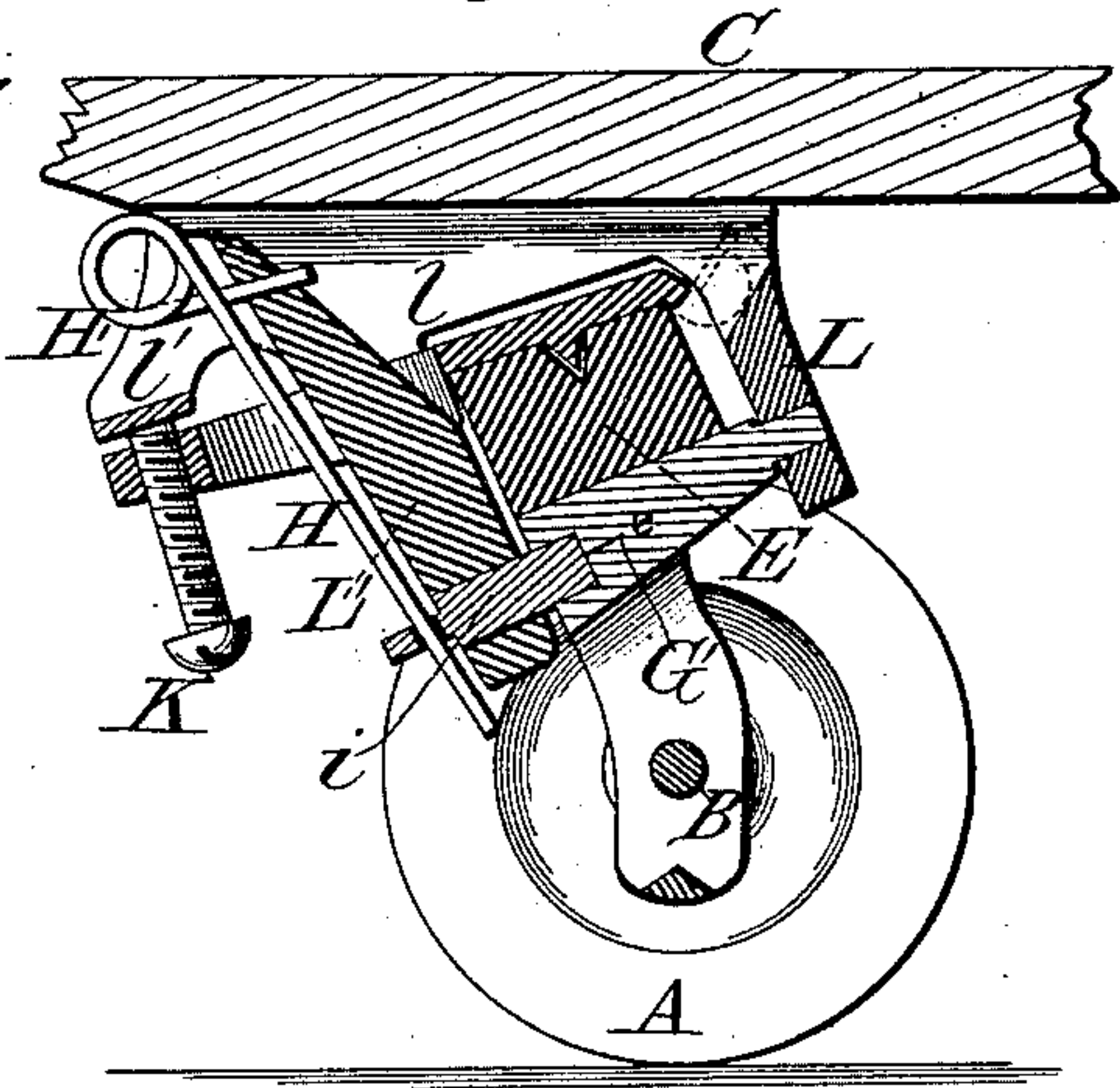


Fig. 3.

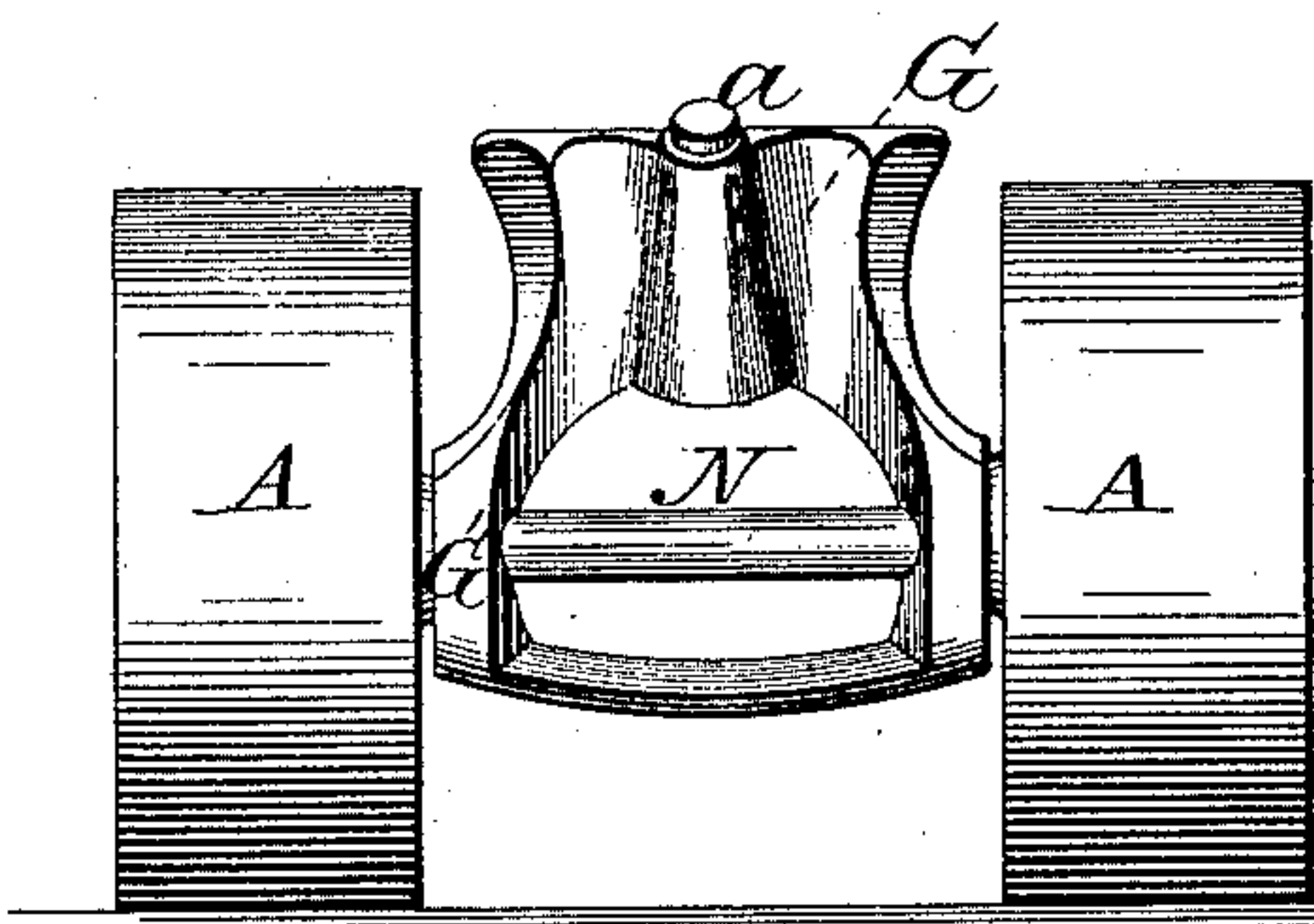
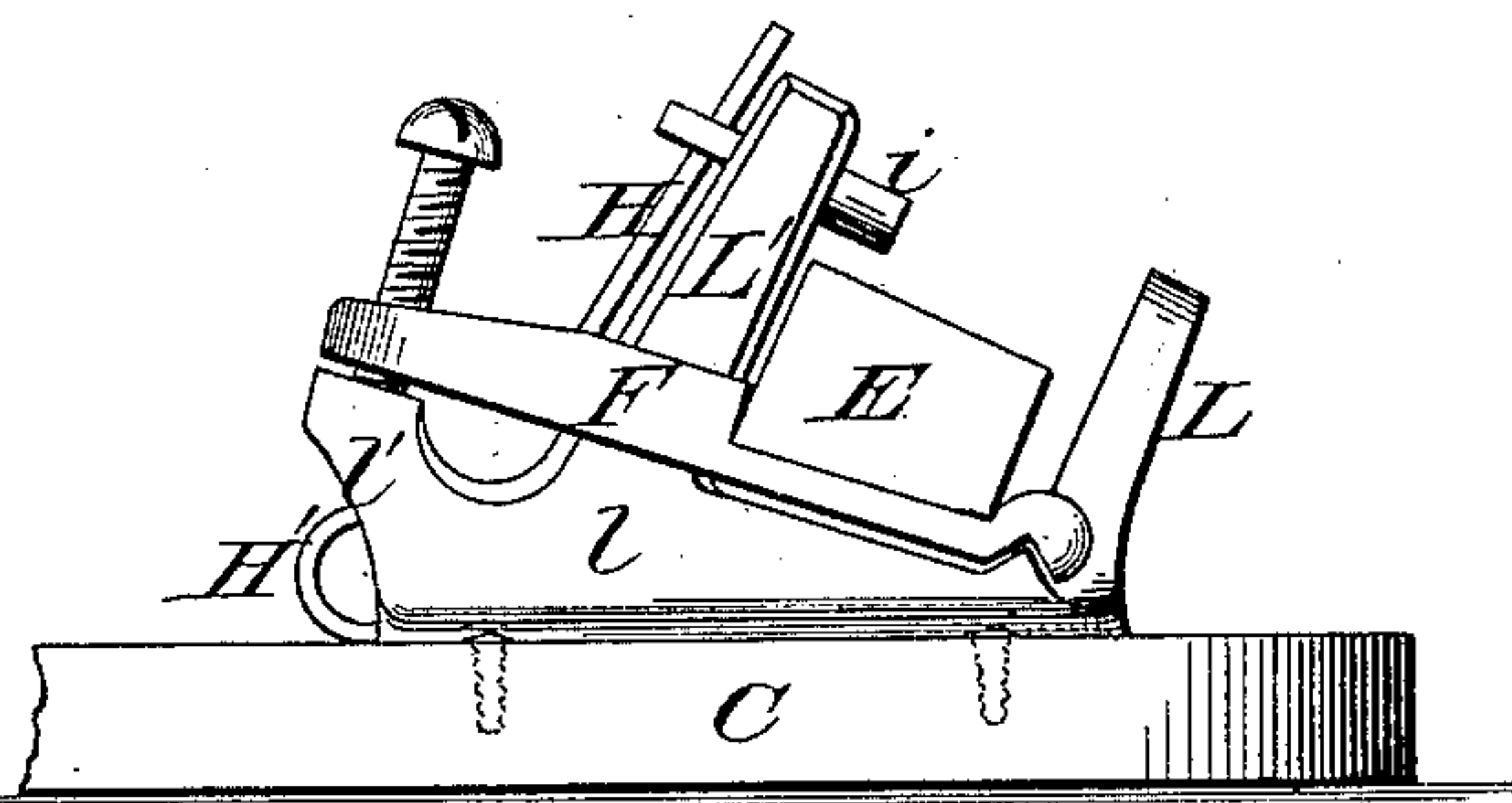


Fig. 4.



Witnesses:
M. J. Dennis
W. H. Conner

Inventor:
Micajah C. Henley

UNITED STATES PATENT OFFICE.

MICAJAH C. HENLEY, OF RICHMOND, INDIANA.

ROLLER-SKATES.

SPECIFICATION forming part of Letters Patent No. 245,950, dated August 23, 1881.

Application filed May 23, 1881. (Model.)

To all whom it may concern:

Be it known that I, MICAJAH C. HENLEY, of Richmond, Wayne county, Indiana, have invented certain new and useful Improvements in Roller-Skates; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the drawings which accompany this specification, forming a part thereof, and to the letters of reference marked thereon.

My invention consists in making the axle upon which the hanging frame of the foot-piece rests, and upon which it oscillates, detachable and capable of being easily and quickly removed while the skate is on the foot, by this means allowing the trucks and truck-frame to be detached from the upper portion of the skate.

My improvement further consists in securing the said axle firmly in position by a lever-spring.

The nature of my improvement consists in the employment of an independent adjustable pressure-plate in conjunction with a rubber spring, by which the rigidity of the rubber spring is graduated, and its flexibility made to conform to the weight of the wearer by means of a temper-screw operating on the said pressure-plate.

It further consists in the use of a removable axle or pivot-pin, in combination with a spring and lever, said axle or pin connecting the truck-frame with the foot-piece, and permitting them to be disconnected at the will of the wearer without being removed from the foot.

In the drawings, Figure 1 is a side elevation of the front end of the skate. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is an end elevation of the truck or wheels and frame. Fig. 4 is an inverted plan of the platform of a section of the skate, showing the metallic frame by which the trucks are attached to the skate-platform, and the detachable axle and spring in position.

Like letters refer to like parts.

In Fig. 1, C is the platform or foot-piece of the skate. A is the wheel. B is the axle on which the wheel revolves.

L L' are supports secured to the platform of the skate, as shown in Fig. 2, the inside surfaces of which are parallel to each other, and

are constructed at an angle with the plane of the platform C, L being the shorter. These supports L L' are united at the top by a plate, l, upon which the platform rests and to which it is secured. The support L is made shorter than L', producing an angle in the bearings. The plate l, which forms the top of the frame, in connection with the supports L L', is extended forward in the form of a curved lug, l', which forms a bearing for and receives the point of the temper-screw K.

F is a pressure-plate, pivoted at the rear end on a V-shaped rib on the plate l, the corresponding end of the pressure-plate F being provided with a recess across it of the shape and form corresponding with the rib upon which it rests, and which allows a perpendicular motion of the opposite end.

The lower surface of the plate F is provided with a recess traversing its width to receive and retain in place a rectangular spring; and K is a temper-screw working in the end of the pressure-plate, which is provided with a thread forming a nut for said screw, by which a greater or less pressure is given to the spring E. The screw K has its point resting on the lug l'.

The pressure-plate is constructed with an opening or slot, in which the support L' is fixed, and which also incloses the lever H of the spring H'. The pressure-plate F is allowed a vertical motion on the support L', which at the same time prevents a lateral motion.

E is a rectangular spring, made of rubber or other suitable material, placed in a position between the under surface of the pressure-plate F and the upper surface of the truck-frame G', which is fitted to receive it. By the elasticity of the spring a lateral rocking motion is permitted in the platform of the skate, at the will of the operator, and which is graduated and regulated by the density imparted to the spring E by the action of the temper-screw K on the pressure-plate F. The support L has a hole in its lower portion to receive a lug, a, attached to the upper surface of the truck-frame G'. The support L' is provided with a similar hole in corresponding position to receive the axle i.

The upper plate of the truck-frame G' has an opening, e, at a point opposite to the lug a, in which the end of the axle i, after passing

through the support L', is received. The lug
 a and the axle i thus form bearings upon which
 the platform and the devices attached are per-
 mitted a lateral rocking motion. The axle i
 5 is formed with an eye at its outer end to re-
 ceive the lever H of the spring H', which is
 attached to the rear end of the plate l. The
 truck-frame G' is in stirrup form, the upper
 portion made with a plain surface, the front
 10 of which is provided with a lug, a, and the rear
 of which has an opening, e. The sides of the
 truck-frame, near the lower part, are bored to
 receive the axle of the truck upon which the
 wheels revolve, and constitute the bearings
 15 of the frame G' of the truck, and also serve as
 shoulders for the inside of the wheels. N is the
 axle, having its bearings in the sides of the
 truck-frame G', and provided with openings
 at the ends to receive such devices as may be
 20 required to confine the wheels.

I am aware that a pressure-plate has been
 used in connection with a temper-screw operat-
 ing on its surface to give greater density to the
 spring, in which the screw only operated in one
 25 direction; but it will be seen that in this case
 the end of the pressure-plate is both raised
 and lowered by the action of the screw K, while
 the opposite end is at rest.

I am also aware that a set-screw has been
 used in the hanger-frame, the point of which 30
 formed a pivot upon which the rocking motion
 of the upper portion of the skate was permitted,
 whereas the axle i, as herein described, forms a
 stronger and more durable bearing, and is held
 rigidly in position by the spring H' and lever H, 35
 allowing it to be withdrawn quickly and without
 the use of tools, thus disconnecting the trucks
 from the foot-piece without removing the skate
 from the foot.

Having thus fully described my said inven- 40
 tion, what I claim as new, and desire to secure
 by Letters Patent, is—

1. The pressure-plate F, pivoted at one end
 and adjustable at the opposite end, provided
 with a recess on its lower surface, and con- 45
 structed with a slot or opening, in the man-
 ner and for the purpose as herein described.

2. The combination of the temper-screw K,
 the pressure-plate F, and bearing l', as set forth.

3. The combination of the axle i, spring H', 50
 and lever H, in the manner and for the pur-
 poses as set forth.

MICAJAH C. HENLEY.

Witnesses:

W. T. DENNIS,
 C. J. GEIER.