

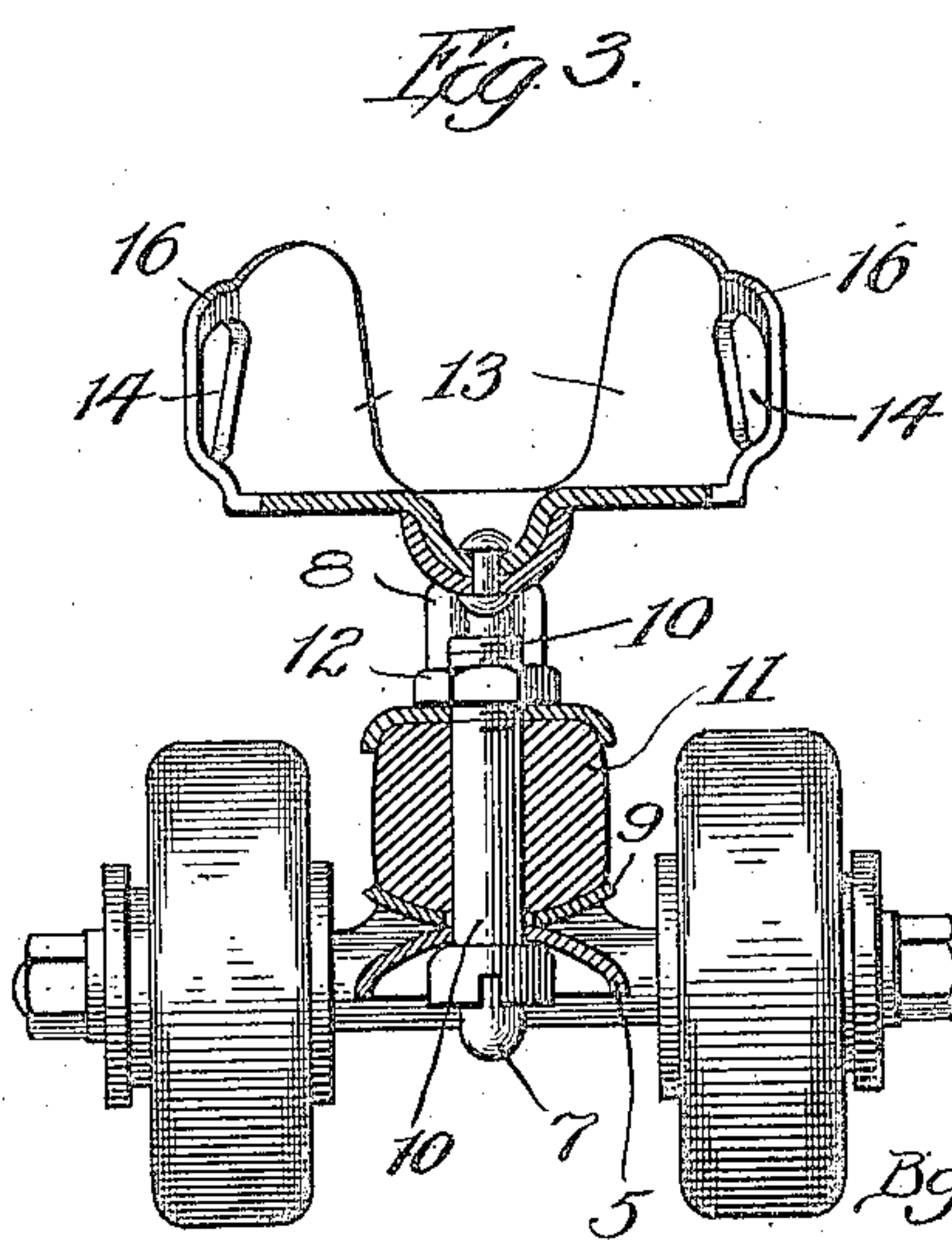
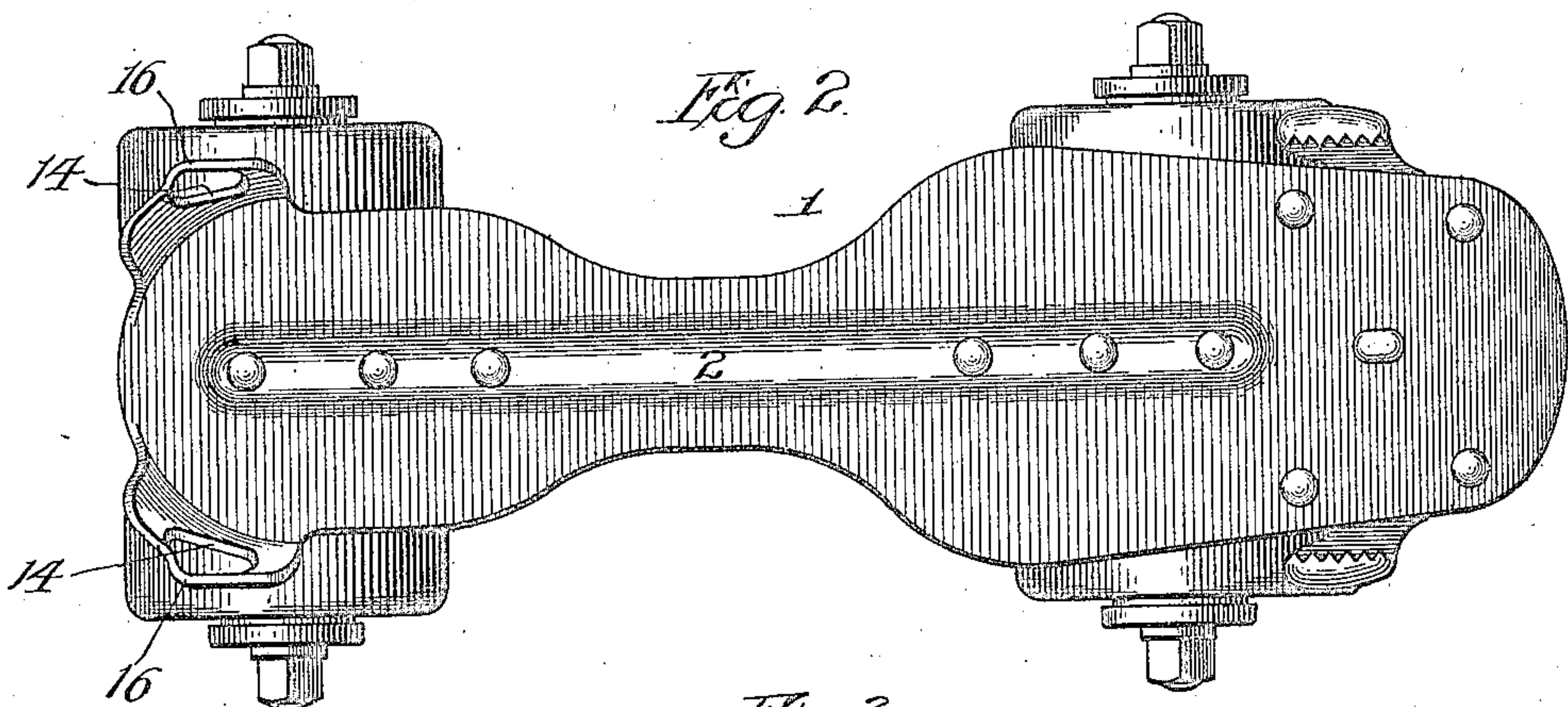
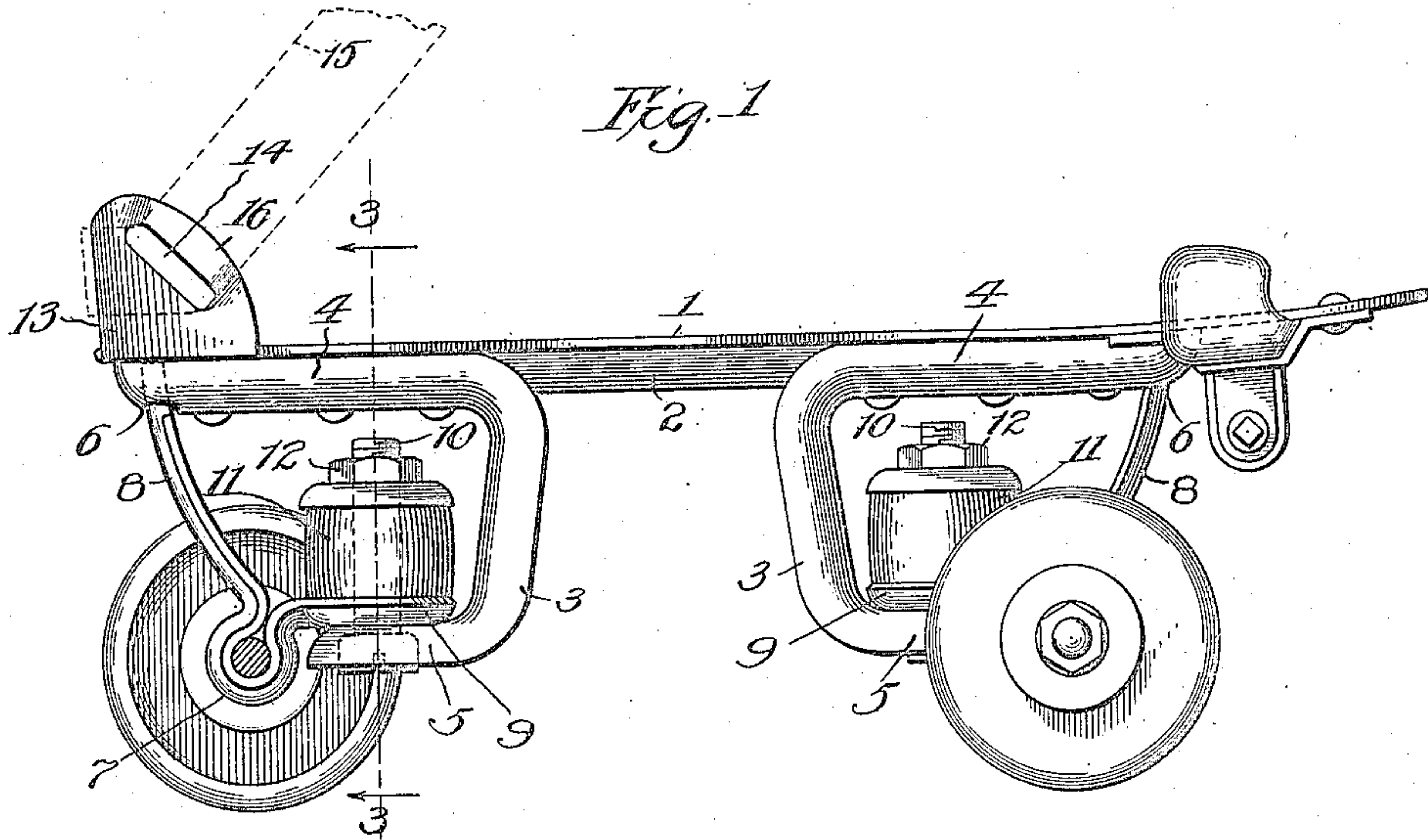
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PATENTED DEC. 31, 1907.

C. M. FAUST & M. B. GROUT.

ROLLER SKATE.

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UNITED STATES PATENT OFFICE.

CLAUDE M. FAUST AND MARTIN B. GROUT, OF CHICAGO, ILLINOIS.

ROLLER-SKATE.

No. 875,165.

Specification of Letters Patent.

Patented Dec. 31, 1907.

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To all whom it may concern:

Be it known that we, CLAUDE M. FAUST and MARTIN B. GROUT, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Roller-Skates, of which the following is a full, clear, concise, and exact description.

Our invention relates to roller-skates, and its object is to provide a simple structure, which is cheap to manufacture and which, nevertheless, possesses increased durability and efficiency.

Our invention contemplates a roller-skate in which the roller-carrier is hung in such manner as to permit the free lateral tilting movement of the foot-plate, without affecting the carrier, which is essential to a perfect control and guidance of the skate.

Our invention further provides a firm but yielding connection between the carrier and the hanger, so as to permit of said lateral tilting and also to support the weight of the skater upon cushions or springs.

These and other features of our invention may be more readily understood by reference to the accompanying drawing, in which

Figure 1 is a side elevation of a roller-skate embodying our invention, one of the wheels being omitted in order to show the structure more clearly; Fig. 2 is a plan view; and Fig. 3 is a section on the line 3—3 of Fig. 1.

Like parts are designated by similar characters of reference throughout the several views.

The foot-plate 1 is preferably provided with a central, longitudinal strengthening rib 2, projecting from its under side. Said rib also serves as a convenient portion of the foot-plate to which to rivet or otherwise secure the hangers 3, 3 at each end of the skate, the heads of the rivets lying in the groove in the upper surface of the foot-plate.

Each hanger 3 consists preferably of a trough-shaped stamping, curved in cross-section, the two ends thereof being bent backward at substantially right angles from the intermediate portion thereof to form arms 4 and 5 of unequal length. The trough-shaped curvature of the hanger 3 is such that the arm 4 fits over the rib 2. Said arm extends from towards the center of the skate to slightly beyond the axle of the roller, also projecting a short distance beyond the end

of the rib 2. The arm 4 is provided with an opening 6, a socket being thus provided beneath the foot-plate at the end of the rib 2.

The intermediate portion of the hanger 3 extends downward from the foot-plate, and the arm 5 extends towards the axle of the roller. The ends of the arms 4 and 5 are thus on opposite sides of the vertical plane of the roller-axle. It will be observed that the arm 5 provides a bracket shelf having a substantially convex upper surface.

The roller-carrier preferably comprises a stamping, bent tightly about the roller-axle as at 7, and having an arm 8 extending upwardly with its end pivoted in the socket 6 formed by the foot-plate and an opening near the end of the hanger 3. On the opposite side of the roller-axis, the roller-carrier is provided with an extension in the form of a plate 9 having a curved or convex bottom which rests upon the similarly curved upper surface of the arm 5. The plate 9 and the arm 5 are united by a bolt 10, such union permitting a slight rolling motion between the plate 9 and its supporting shelf 5. The carrier being thus pivoted at one end in the socket 6 and having at the other end a pivotally-movable bearing on the shelf 5, it is obvious that the foot-plate 1 can be tilted without affecting the carrier, when the skater shifts his weight in guiding the skate.

In order to provide a spring or cushioning connection between the carrier and the hanger, I preferably place a cushion 11 of rubber or other suitable material around the bolt 10, said cushion lying between the plate 9 and the nut 12. It is obvious that the weight upon the foot-plate 1 will be transmitted through the hanger 3 and bolt 10 so as to bear upon the cushioned upper surface of the plate 9. It is also obvious that the cushion 11 acts as a spring washer around the bolt 10 to connect the parts 5 and 9 securely yet yieldingly, to permit a still freer tilting of the plate 1. The double effect due to the compression of the cushion upon the side on which the weight is shifted and also to the slight rolling of the parts 5 and 9 on each other readily permits of the desirable tilting of the plate 1 in guiding the skate.

It will be particularly noted that there is nothing rigid about the connection between the carrier and the body of the skate and that thus the parts are not liable to injury by a sudden or severe strain placed upon them.

In previous constructions it has been common to connect the carrier to the foot-plate by a bolt which is threaded in said plate. With such rigid connection, there is a liability of the bolt being bent or broken by an excessive or sudden tilting of the foot-plate. In our invention, the bolt 10 being free at its upper end will, in case of such unusual tilting of the plate 1, be itself moved and be free, therefore, from any liability to injury.

The foot-plate 1 is provided as usual with a heel guard 13 provided upon opposite sides with slots or eyes 14 for receiving the usual strap 15. The part 16 about each slot is bent outwardly so as to form a channel within which the strap 15 lies, said strap thus extending through said slot without the usual sudden bending of the strap around the sharp edges of the slot. It is apparent that with this construction of the heel-guard, the wear of the strap 15 is greatly increased.

Though we have shown and described the preferred embodiment of our invention, it is obvious that the several features constituting the same, may be modified in many respects without departing from the spirit thereof.

What we claim is:

1. In a roller-skate, the combination with the foot-plate, of a hanger extending downward from said foot-plate, said hanger having a convex upper surface at its lower end, a roller-carrier provided with an arm extending upward and pivoted at its end beneath said foot-plate and with a carrier-plate with a convex surface bearing on the convex end of said hanger, and means for connecting said carrier-plate to the end of said hanger, whereby their convex surfaces may have a rolling bearing on each other.

2. In a roller-skate, the combination with the foot-plate, of a hanger extending downward from said foot-plate, said hanger having an angular, horizontal extension or shelf with an approximately convex upper surface, a roller-carrier provided on one side of the roller-axle with an upwardly extending arm, pivoted beneath said foot-plate, and on the other side thereof with a carrier-plate having a convex bottom surface overlying the upper surface of said shelf, and a bolt pivotally connecting said carrier-plate to said shelf.

3. In a roller-skate, the combination with the foot-plate, of a hanger extending downward from said foot-plate, said hanger having a convex upper surface at its lower end, a roller-carrier provided with an arm extending upward and pivoted at its end beneath said foot-plate and with a carrier-plate with a convex surface bearing on the convex end of said hanger, and a yielding pivotal connection between said carrier-plate and the end of the hanger.

4. In a roller-skate, the combination with the foot-plate, of a hanger extending down-

ward from said foot-plate, said hanger having an angular, horizontal extension or shelf with an approximately convex upper surface, a roller-carrier provided on one side of the roller-axle with an upwardly extending arm pivoted beneath said foot-plate, and on the other side thereof with a carrier-plate having a convex bottom surface overlying the upper surface of said shelf, and a bolt, provided with cushioning means, for yieldingly connecting said carrier-plate to said shelf.

5. In a roller-skate, the combination with a foot-plate, of a hanger extending downward from said foot-plate, said hanger having an angular, horizontal extension or shelf, a roller-carrier provided on one side of the roller-axle with an upwardly extending arm pivoted beneath said foot-plate, and on the other side thereof with a horizontal plate overlying said shelf, a bolt extending upwardly through said horizontal plate and shelf, a nut upon the free end of said bolt, and a cushion interposed between said nut and said horizontal plate.

6. In a roller-skate, the combination with the foot-plate, of a hanger extending downward from said foot-plate, said hanger having an angular, horizontal extension or shelf with an approximately convex upper surface, a roller-carrier provided on one side of the roller-axle with an upwardly extending arm pivoted beneath said foot-plate, and on the other side thereof with a carrier-plate having a convex bottom surface overlying the upper surface of said shelf, a bolt extending upwardly through said carrier-plate and shelf, a nut upon the free end of said bolt, and a cushion interposed between said nut and said horizontal plate.

7. In a roller-skate, the combination with a foot-plate, of a roller-carrier pivoted thereto at one side of the roller-axis, said roller-carrier having a carrier-plate projecting from the other side thereof in an approximately horizontal plane, a hanger extending downwardly from said foot-plate, an angular, horizontal extension of said hanger projecting beneath said carrier-plate, a bolt extending upwardly through the overlying portions of said carrier and hanger, a nut upon the free end of said bolt and a cushion interposed between said nut and said carrier-plate.

8. In a roller-skate, the combination with a foot-plate, of a roller-carrier pivoted thereto at one side of the roller-axis, said roller-carrier having a carrier-plate projecting from the other side thereof in an approximately horizontal plane, said carrier-plate having a convex lower surface, a hanger extending downwardly from said foot-plate, an angular, horizontal extension of said hanger projecting beneath said carrier-plate, said extension having a convex upper surface, a bolt extending upwardly through the overlying portions of said hanger and carrier, a nut upon

the free end of said bolt and a cushion interposed between said nut and said carrier-plate.

9. In a roller-skate, the combination with
5 a foot-plate having a central longitudinal rib projecting from its under side, of a hanger comprising an intermediate portion having at its ends angular parallel arms of unequal length, said hanger being curved in cross sec-
10 tion, means for securing the longer of said arms to said foot-plate with the concave surface of said arm fitting over said rib, said arm projecting beyond said rib and being provided near its end with an opening forming a
15 socket beneath said foot-plate, a roller-carrier provided on one side of the roller-axle with an arm extending upwardly and articu-

lating in said socket, and on the other side thereof with a carrier-plate having a convex bottom surface overlying the upper surface 20 of the shorter arm of said hanger, a bolt extending upwardly through said carrier-plate and said shorter arm of the hanger, a nut upon the free end of said bolt, and a cushion interposed between said nut and said hori- 25 zontal plate.

In witness whereof, we hereunto subscribe our names this 29th day of August, A. D., 1907.

CLAUDE M. FAUST.
MARTIN B. GROUT.

Witnesses:

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