

No. 635,407.

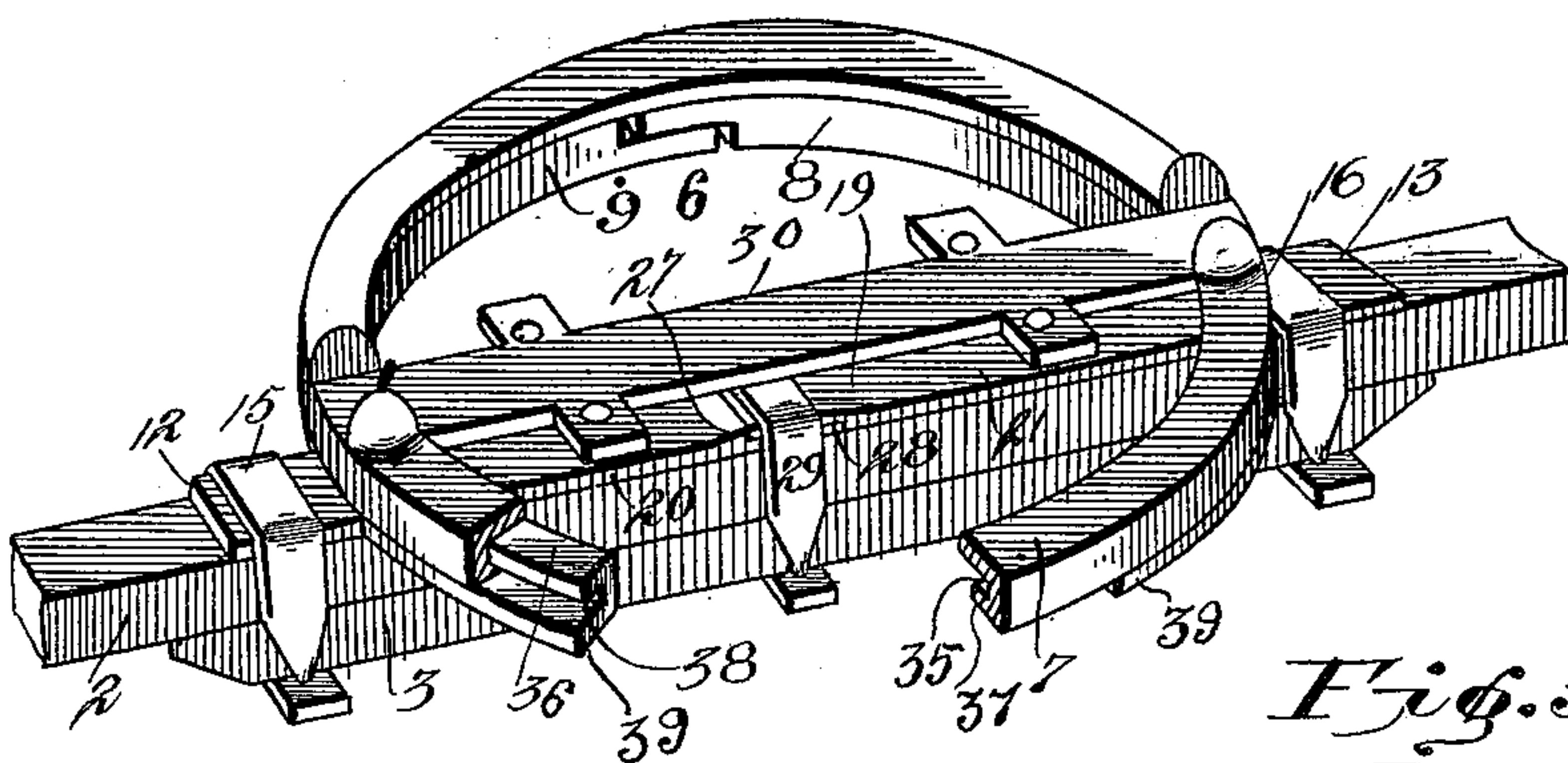
Patented Oct. 24, 1899.

J. L. TAYLOR.  
FIFTH WHEEL.

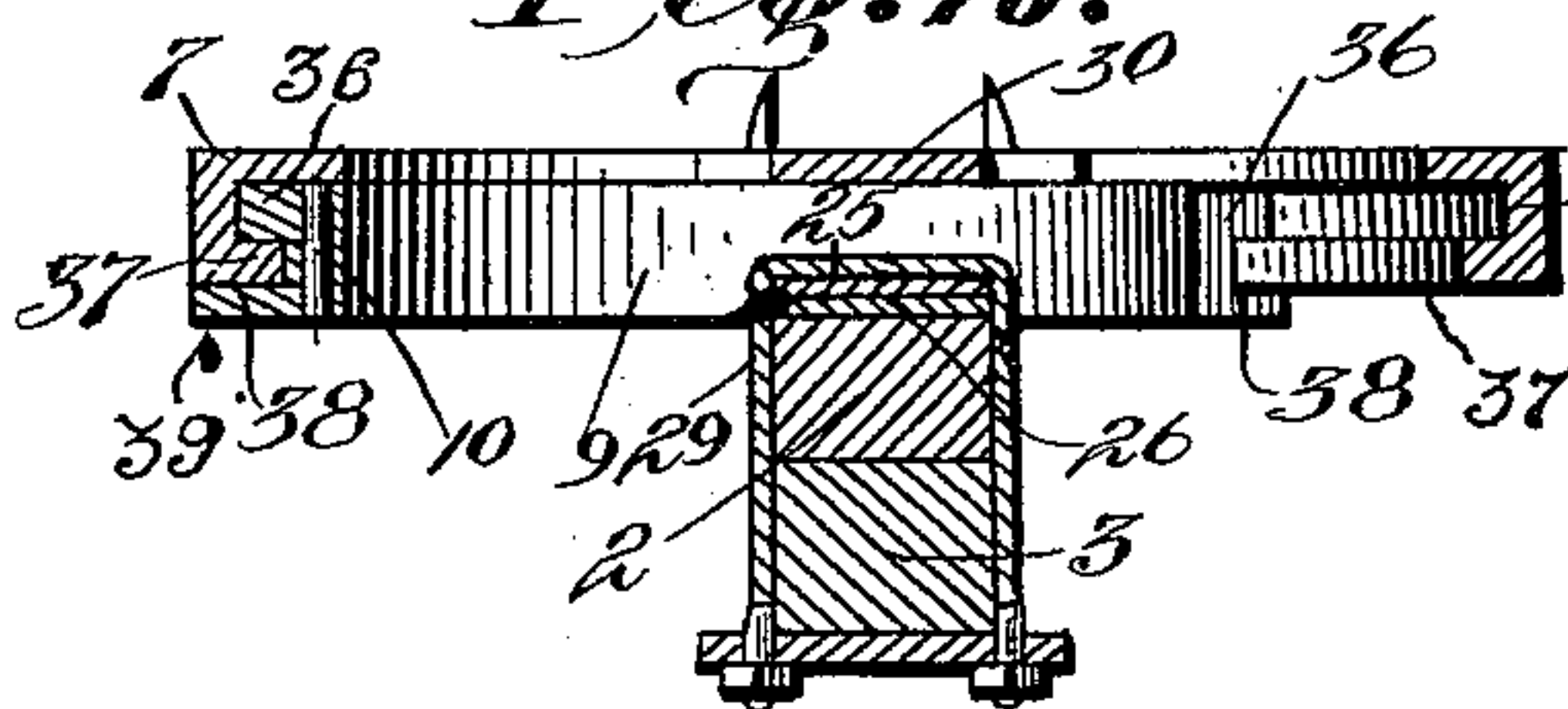
(Application filed Mar. 6, 1899.)

(No Model.)

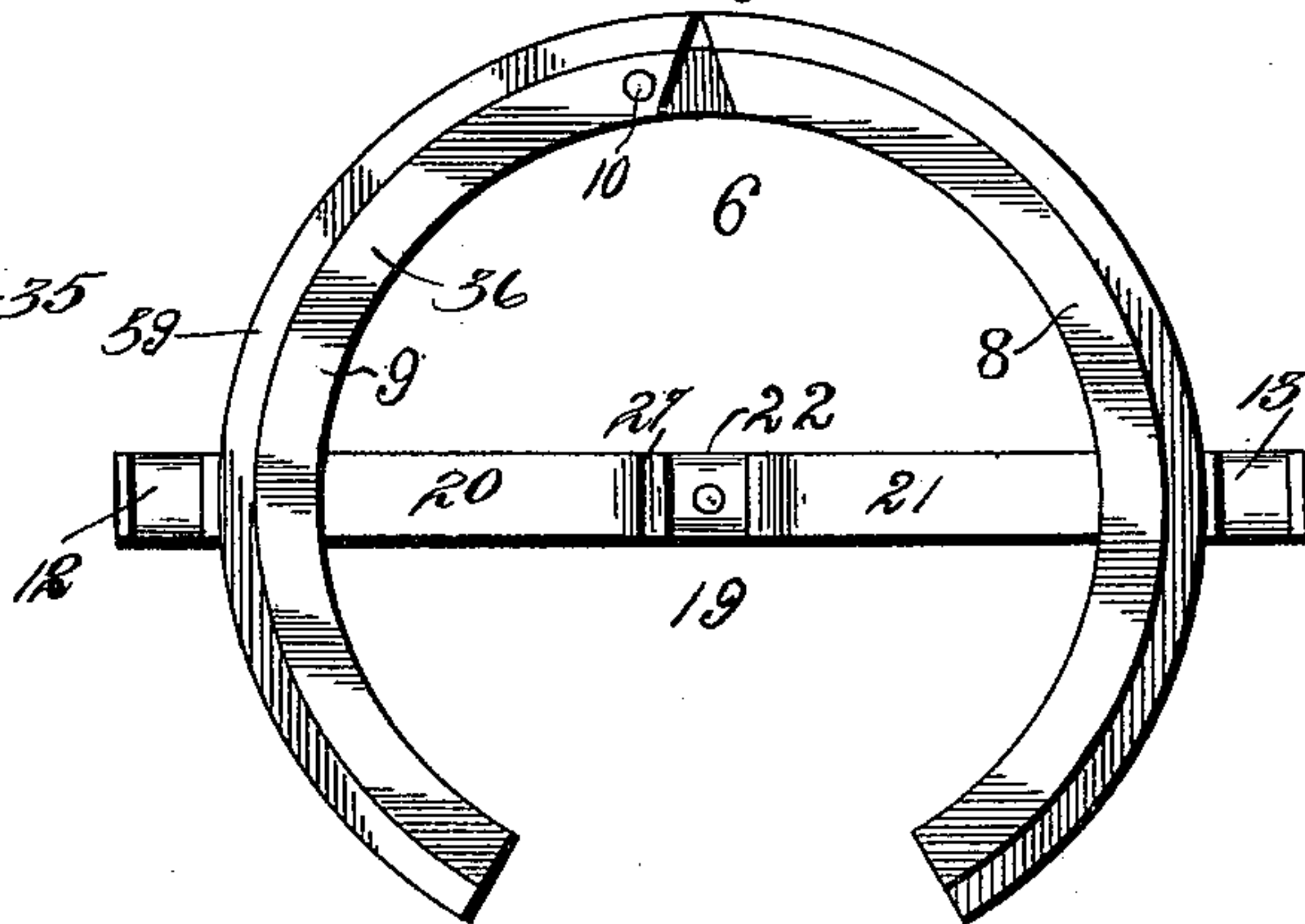
*Fig. 1.*



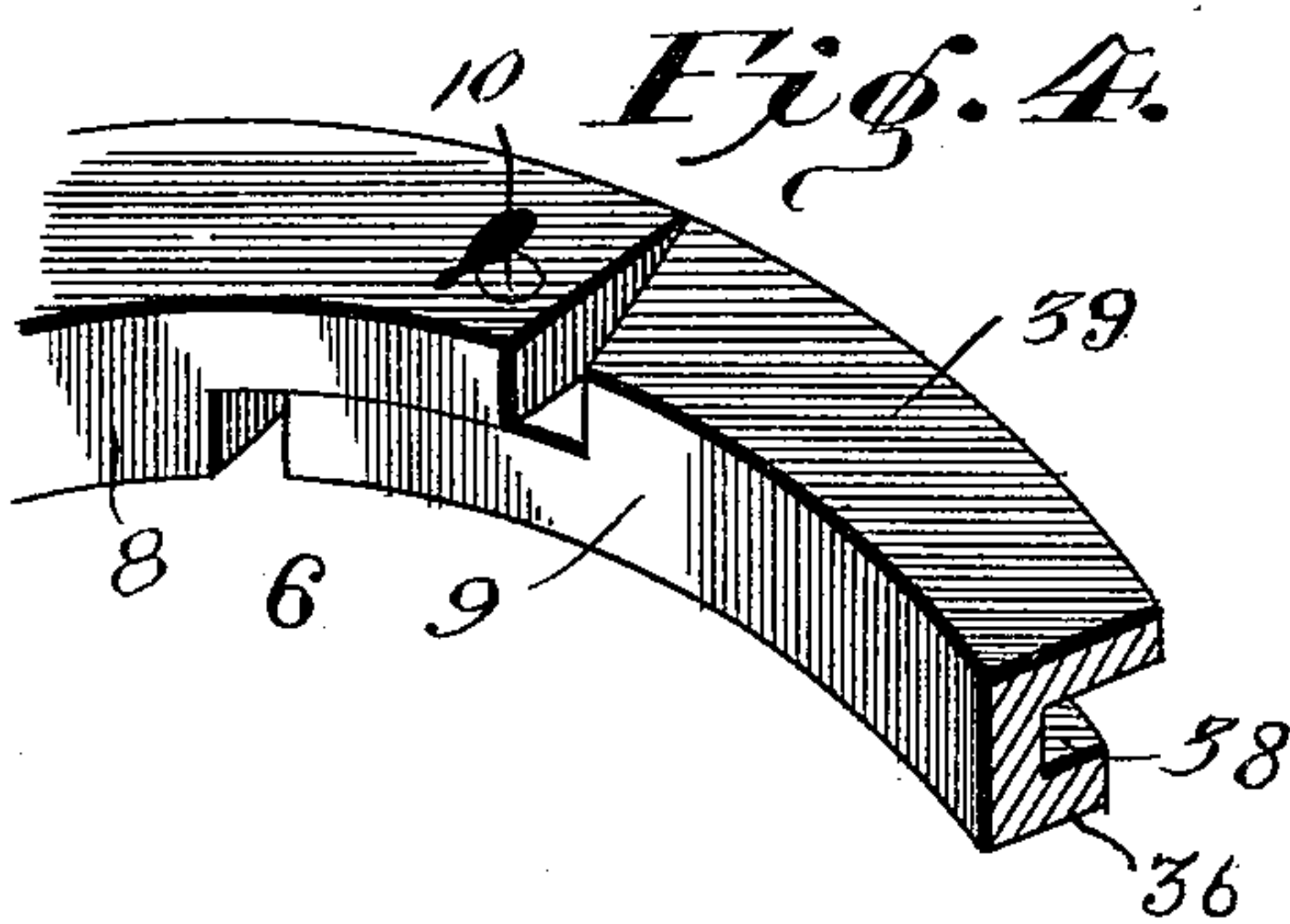
*Fig. 2.*



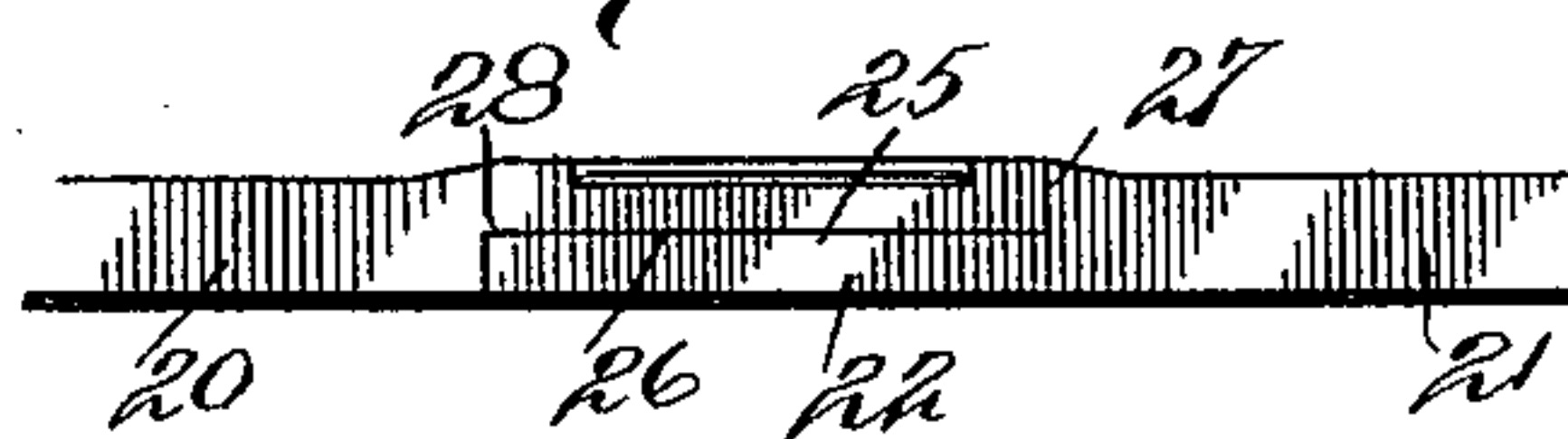
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN L. TAYLOR, OF WEST SUPERIOR, WISCONSIN.

## FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 635,407, dated October 24, 1899.

Application filed March 6, 1899. Serial No. 707,953. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. TAYLOR, a citizen of the United States, residing at West Superior, in the county of Douglas and State of Wisconsin, have invented a new and useful Fifth-Wheel, of which the following is a specification.

This invention relates to that class of fifth-wheels in which king-bolts are dispensed with; and the object of the invention is to provide a simple, efficient, and easily-operable device of this character in which the several parts can be quickly assembled and disassembled and one in which any up-and-down movement of the two main sections thereof is absolutely prevented.

My improved fifth-wheel in the embodiment thereof illustrated in the drawings includes two sections, one of which is supported by the other for turning movement, and one of said sections consisting of two jointed parts and a cross-bar connecting said parts and having a joint. In the present instance the two main sections of the wheel are connected for coöperation by a tongue-and-grooved joint, by reason of which the proper relation of the same is insured, and the lower section of the device consists, preferably, of a parti-annular member of two hinged parts which are connected by a cross-bar having at its middle a lap or equivalent joint, such construction permitting the assemblage and disassociation of the parts with rapidity, and the lap-joint referred to serves to maintain the two members of the parti-annular section in proper assembled position.

With these ends in view the invention consists in the novel construction and disposition of parts to produce an improved fifth-wheel of the class set forth, as will be hereinafter fully described and claimed.

The invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of my improved fifth-wheel with part of the upper section broken away to more plainly show the construction. Fig. 2 is a cross-section of the same. Fig. 3 is a top plan view of the lower section. Fig. 4 is a detail perspective view, on a larger scale, of a portion of the lower section inverted, more plainly showing the joint

connecting the two parts. Fig. 5 is a detail view, on an enlarged scale, of the joint between the two parts of the cross-bar of the lower section.

Similar characters refer to like parts in all the drawings.

My improved fifth-wheel is applicable to any of the ordinary kinds of four-wheeled vehicles, and I have represented it in the drawings as attached to the front axle of such a vehicle, (designated by 2, the axle-stock by 3,) my improved fifth-wheel, which is designated by 5, being located between and secured, respectively, to the spring-block of the vehicle and the axle.

My improved device includes in its construction two superposed main sections, as 6 and 7, the lower part 6, which is preferably secured to the axle-stock 3, being parti-annular and represented as consisting of a three-quarter circle in two substantially equal parts 8 and 9, connected at their meeting ends by a suitable joint, the pivot 10 being represented for this purpose. The parti-annular section is provided at diametrically opposite places on its periphery with the oppositely-disposed lugs or extensions 12 and 13, adapted to be secured to the axle 2 and block 3. For the purpose of holding the part 6 in position I have represented a pair of strap-clips 15 and 16, which are adapted to straddle the lugs 12 and 13, the block 3, and axle 2, said clips being maintained in position by the usual nuts engaging the threaded legs or branches of the clips. The lower section 6 embodies a radial cross piece or bar 19, disposed preferably in alinement with the lugs 12 and 13 and made in two parts, as 20 and 21, connected by a suitable joint, as 22. The joint 22 is shown as being of the lap kind. The parts 20 and 21, as shown in Fig. 5, are cut away or reduced near their inner ends and upon the upper and lower sides thereof, as at 25 and 26, and the faces of these reduced portions are normally in engagement, as represented in Fig. 5, the construction specified producing upon the parts 21 and 22 the shoulders or abutments 27 and 28, against which the ends of the reduced portions are adapted to abut, thereby to prevent endwise or longitudinal movement of the two parts 20 and 21. The said last-mentioned parts are maintained in their



normal or working position by any convenient means, the strap-clip 29 being shown for this purpose and being adapted to straddle the cross-piece 19, adjacent to the joint, and its legs being provided with threaded ends to be engaged by nuts, which are turned on said threaded ends to hold the cross-piece firmly in place. The upper section 7 is provided with a transverse bar 30, by which said part can be secured to the pillow-block of the vehicle, any convenient means being employed for this purpose, and also has on the inside thereof an annular groove or channel 35, preferably rectangular in cross-section, to receive the correspondingly-shaped tongue 36 on the under and turning section 6, it being evident from inspection of Fig. 1 that the upper section 7 is circular or annular. When the parts are in assembled position, as indicated in Figs. 1 and 2, the tongue 36 snugly fits in the groove 35, the upper and lower walls of the latter forming bearing-surfaces for the part 6, which it is understood turns with the front truck. This construction also prevents any sidewise movement or wobbling of the part 6, and to further insure this advantage the part 7 is provided with a tongue 37, fitting in the groove 38, formed above the extended flange 39 on the lower or turning part 6, thereby forming a duplex joint.

The parts are shown in assembled positions in Figs. 1 and 2, and to disunite the same the clips 15 and 16 are first removed, after which the clip 29 is detached, so that the two sections 20 and 21 can be spread apart at their meeting edges sufficiently to permit the parts 8 and 9 to swing toward each other, this operation carrying the tongue 36 out of the groove 35. When the tongue 36 is out of its groove, the body of the vehicle can be lifted clear of the truck. To assemble the parts, this operation will of course be reversed.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

1. A fifth-wheel, including two sections, one of which is supported upon the other, and one of said sections consisting of two jointed parts and a bar connecting said parts and having a joint.

2. A fifth-wheel, including two sections, one of which is supported by the other and

connected by a tongue-and-grooved joint, and one of said sections consisting of two jointed parts and a bar connecting said jointed parts and having a joint.

3. A fifth-wheel, including two superposed sections, one of which consists of two pivoted parts and a cross-bar connecting said parts and having a joint.

4. A fifth-wheel, including two sections, one of said sections consisting of two jointed parts and a bar connecting said jointed parts and provided with a lap-joint.

5. A fifth-wheel, consisting of two parts connected by a tongue-and-grooved joint, one of said sections consisting of parts pivotally connected.

6. A fifth-wheel, consisting of two sections connected by a duplex joint, one of said sections consisting of two jointed parts connected by a cross-bar provided with a joint.

7. A fifth-wheel consisting of two superposed parts or sections connected by a duplex tongue-and-grooved joint, one of said sections being made up of two pivoted parts, substantially as described.

8. A fifth-wheel consisting of two interlocked superposed sections, one of which consists of parts pivotally connected, substantially as described.

9. A fifth-wheel consisting of two sections connected by a tongue-and-grooved joint, one section consisting of two jointed parts connected by a jointed cross-bar and adapted to be secured to the axle, the other section being of one piece and having a cross-bar adapted to be secured to the head-block.

10. A fifth-wheel consisting of two sections connected by a tongue-and-grooved joint, one section consisting of a circular single piece, the other of two jointed parts connected by a jointed cross-bar, the jointed section sliding on and around the inside of the single section.

11. A fifth-wheel consisting of two sections, one section being made of a circular single piece and having a groove around its inner face, the other section consisting of two parts hinged together and having a tongue around its outer face which is adapted to slide in the groove of the outer section.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN L. TAYLOR.

Witnesses:

GEORGE E. DIETRICH,  
W. J. PATTON.