

No. 789,944.

PATENTED MAY 16, 1905.

H. C. SWAN.
FIFTH WHEEL.

APPLICATION FILED JAN. 17, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

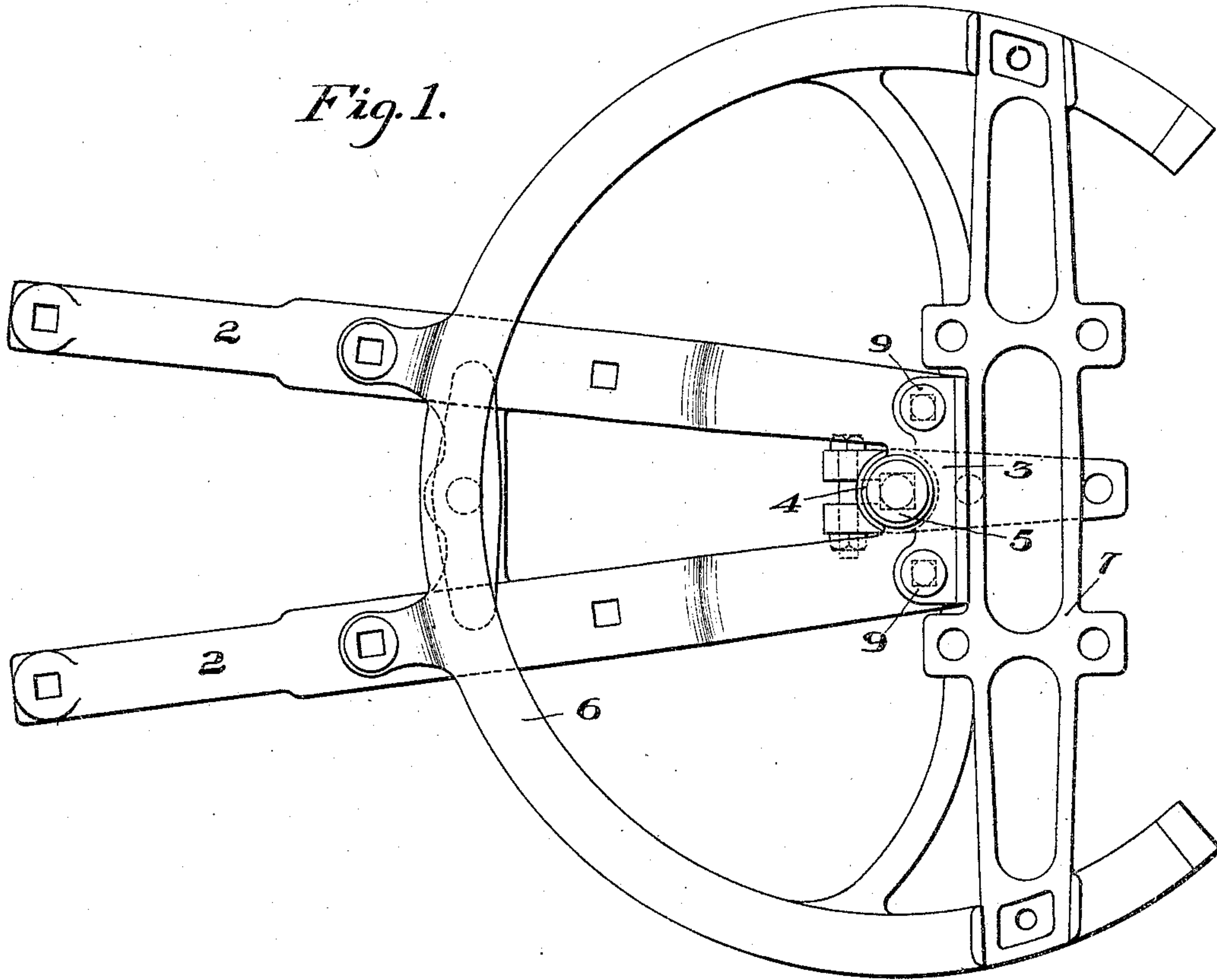
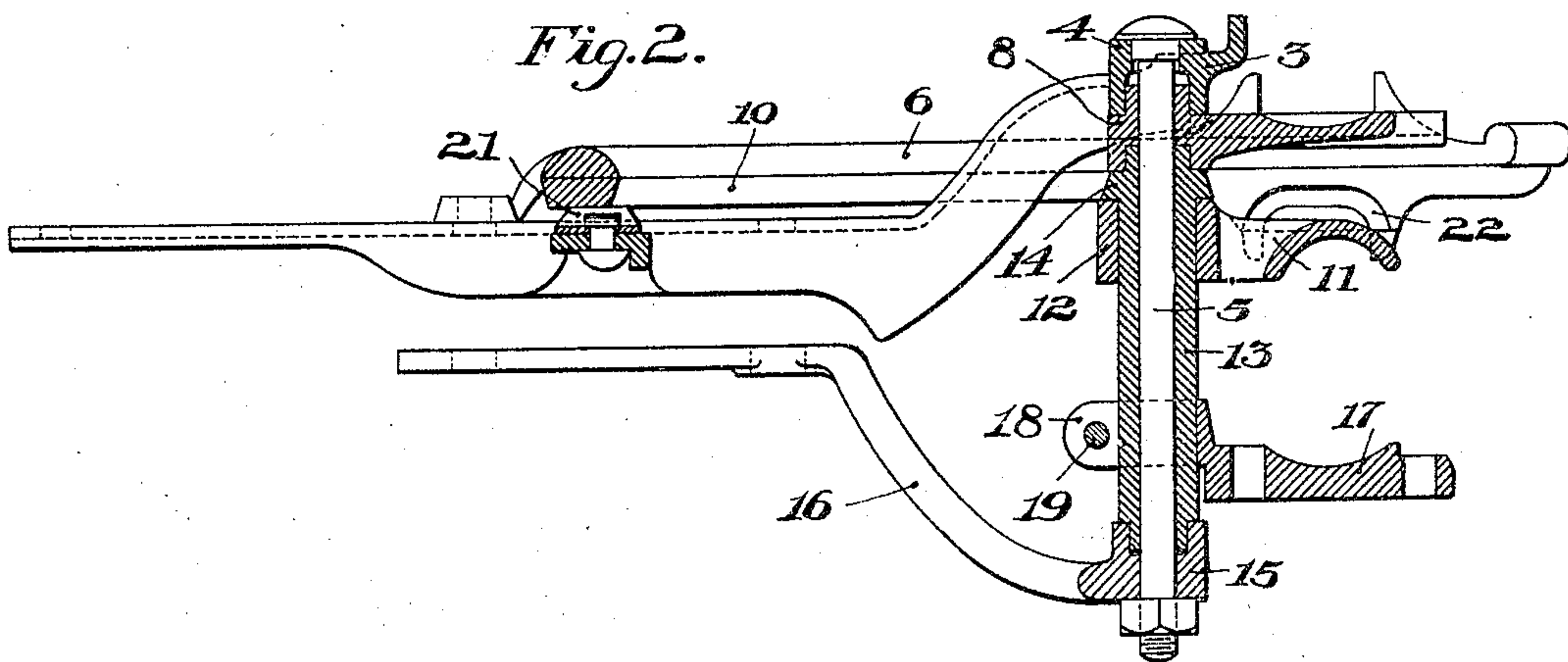


Fig. 2.



WITNESSES

Wm. J. Samaras
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INVENTOR

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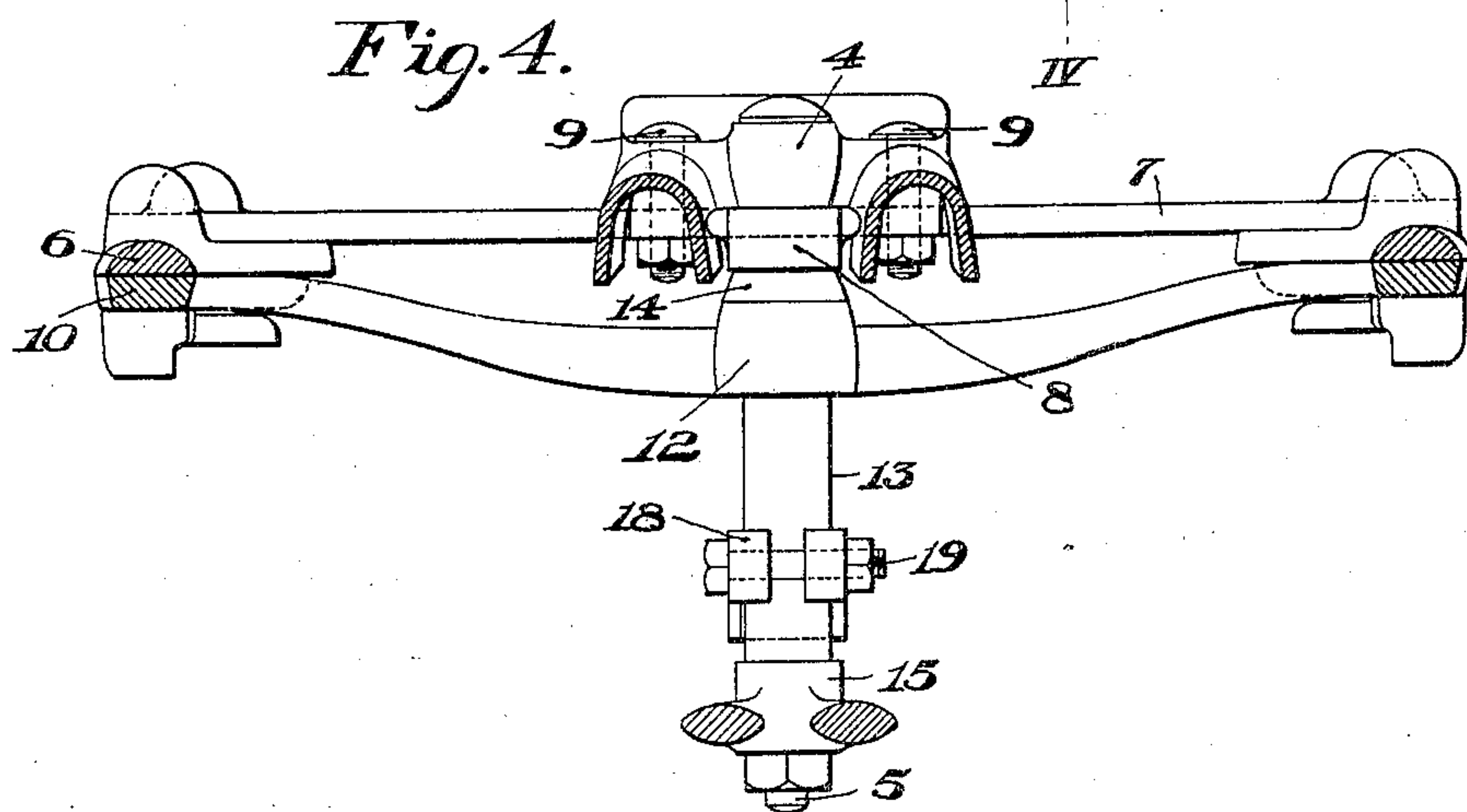
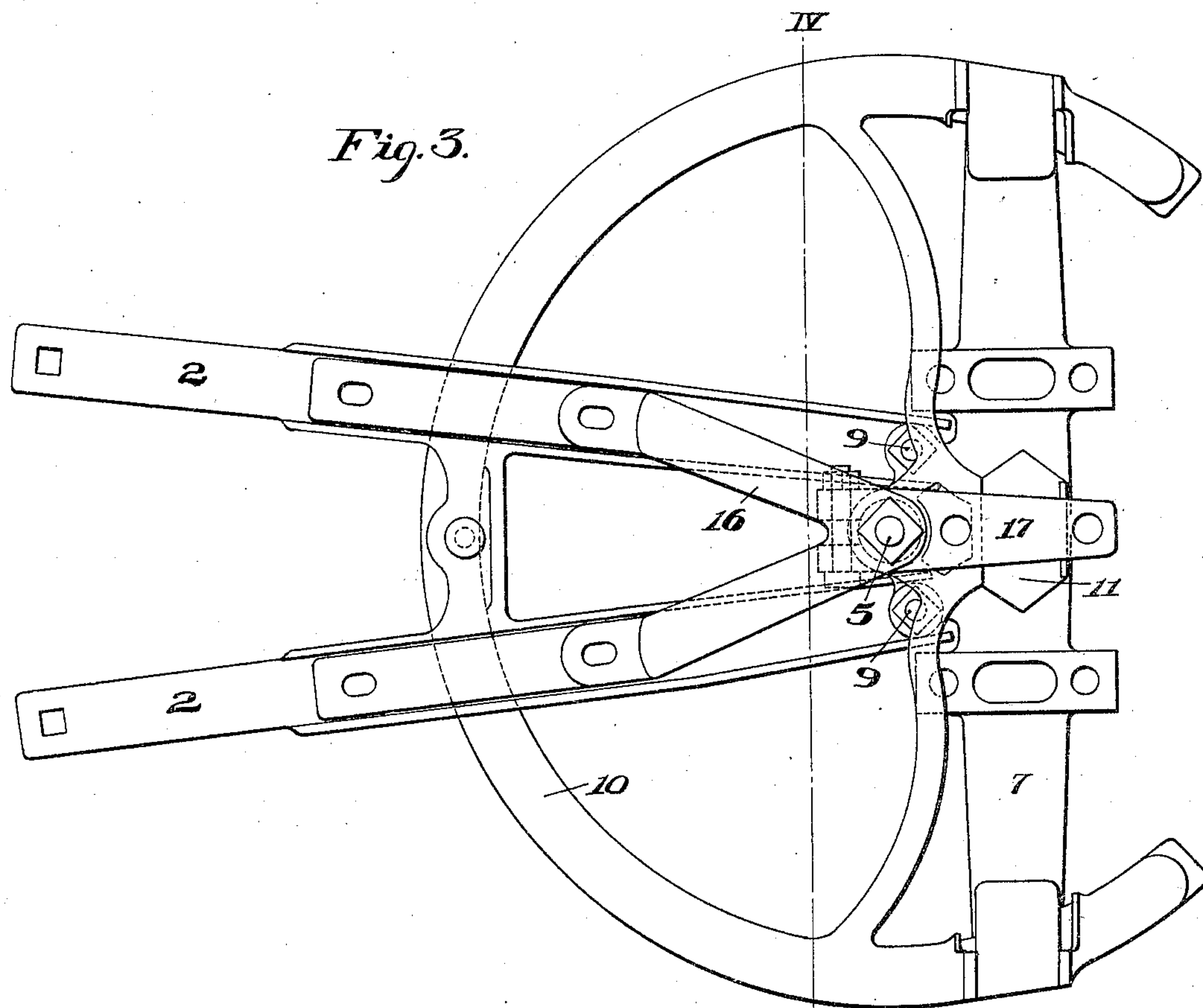
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2 SHEETS—SHEET 2.



WITNESSES

Walter Sammons
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INVENTOR

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UNITED STATES PATENT OFFICE.

HENRY C. SWAN, OF CLEVELAND, OHIO.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 789,944, dated May 16, 1905.

Application filed January 17, 1905. Serial No. 241,453.

To all whom it may concern:

Be it known that I, HENRY C. SWAN, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Fifth - Wheel, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view showing the preferred form of my fifth-wheel. Fig. 2 is a longitudinal vertical section. Fig. 3 is a bottom plan view, and Fig. 4 is a cross-section on the line IV IV of Fig. 3 looking toward the right.

My invention relates to the class of fifth-wheels wherein the king-bolt is located either in front of or in the rear of the axle and is designed to provide an improved axle-tie and an improved arrangement of the king-bolt sleeve and connections.

In the drawings, 2 2 represent the upper perch-irons, which in the form shown extend under the circle-plates and are formed as part of a cast head 3, which fits against the head-block. The head 3 is provided with a hub 4, fitting on the squared or angular upper end of the king-bolt 5. The upper circle-plate 6 is provided with the cross-bar 7, having a rear hub 8 surrounding the king-bolt and secured to the head 3 by the short bolts 9 9, which extend vertically through the head and through lugs on the cross-piece 7. The lower circle-plate 10 is formed with a forwardly-projecting axle-cap 11 and with a hub 12, which fits around the king-bolt sleeve 13 and against an annular projection 14 thereon. The upper end of the sleeve 13 is adapted to fit into the hub 8, and the hub 8 has a corresponding engagement with the hub 4. The lower end of the sleeve 13 fits into the hub 15, from which extend the lower perch-irons 16.

Around the king-bolt sleeve 13 and below the hub 12 is clamped an axle-tie 17, having a split sleeve 18, clamped by bolt 19. This bolt rigidly secures the axle-tie to the lower portion of the king-bolt socket or sleeve and may be secured to the axle.

To prevent rattling, I may provide the spring

21, which is secured to a cross-piece between the upper perch-irons and extends into contact with the lower circle-plate. The forward portions of the lower circle-plate are provided with recesses 22 to receive clips for securing to the axle.

The advantages of my invention result from the use of the axle-tie and, further, from the shouldered king-bolt socket which takes the strain off the bolt. The parts are simple and may be easily cast or otherwise formed and secured in position.

Variations may be made in the form and arrangement of the parts without departing from my invention.

I claim—

1. A fifth-wheel having a king-bolt socket, a vertically-adjustable bottom axle-tie arranged to be secured to the axle and means for removably clamping it around the lower portion of the king-bolt socket; substantially as described.

2. In a fifth-wheel, a king-bolt, a long socket or sleeve surrounding it and having a shouldered upper end, an axle-plate having a hub surrounding the socket and fitting against the shoulder, a lower axle-tie secured to the socket and means for adjusting the axle-tie vertically; substantially as described.

3. A fifth-wheel having perch-irons formed with a hub, an upper circle-plate having a hub, a king-bolt socket having an annular projection interfitting with the upper-circle-plate hub, a lower circle-plate having a hub surrounding the socket below its shoulder and a lower axle-tie removably clamped to the king-bolt socket; substantially as described.

4. A fifth-wheel having a king-bolt, a king-bolt socket surrounding the same and having an upper shoulder, an upper circle-plate having a hub interfitting with the king-bolt socket, a lower circle-plate having a hub surrounding the socket below its shoulder and an adjustable axle-tie removably secured to the king-bolt socket; substantially as described.

5. In a fifth-wheel, a king-bolt, a long socket or sleeve surrounding it, an axle-plate having a hub surrounding the socket, and a vertically-

adjustable axle-tie secured to the socket; substantially as described.

6. In a fifth-wheel, a king-bolt socket, and a pair of axle-ties engaging said socket, at
5 least one of the ties being vertically adjustable and having clamping means; substantially as described.

In testimony whereof I have hereunto set my hand.

HENRY C. SWAN.

Witnesses:

ARTHUR E. BURT,
EMIL W. JAITE.