

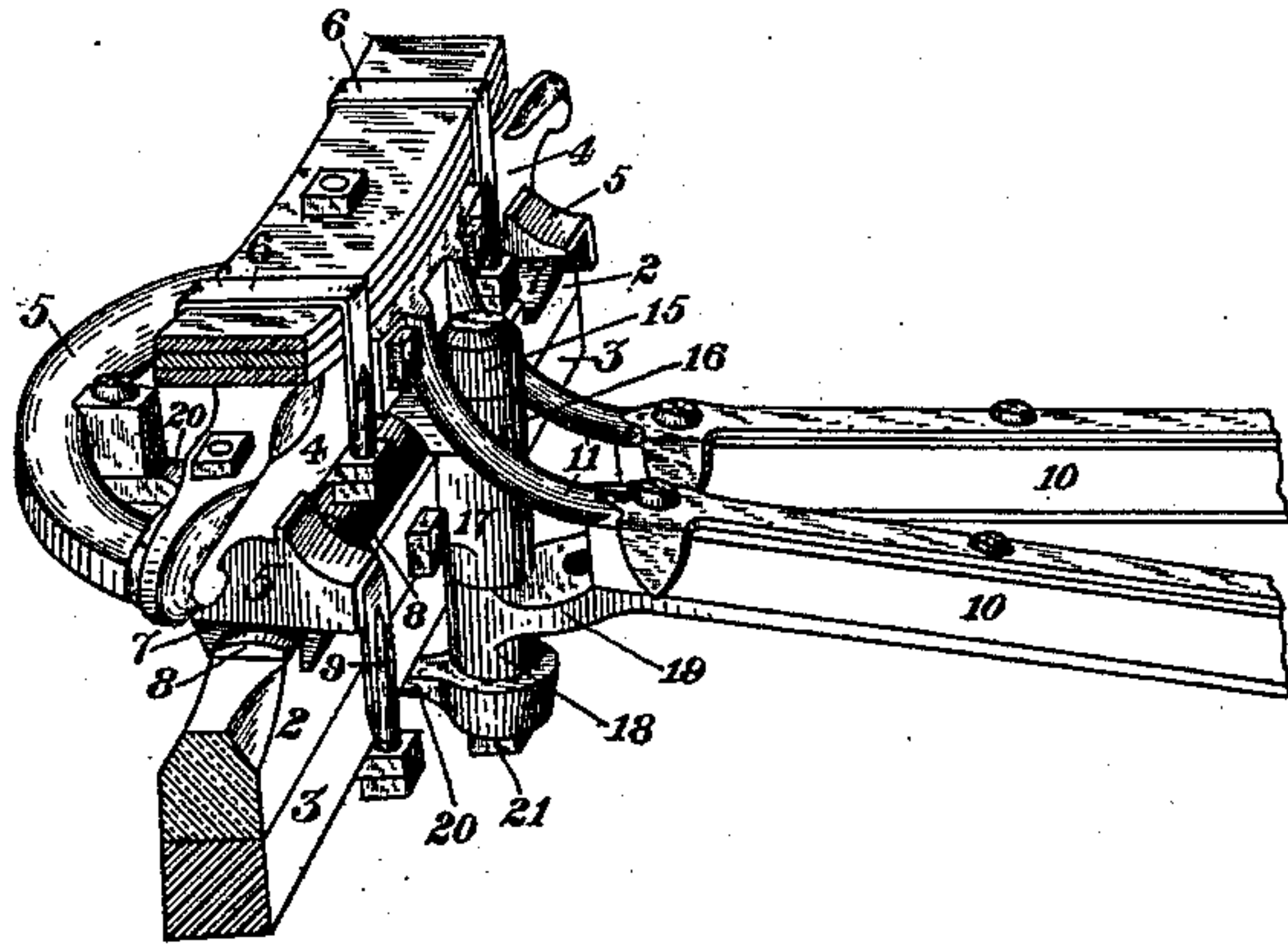
(No Model.)

J. KNAPP.  
FIFTH WHEEL.

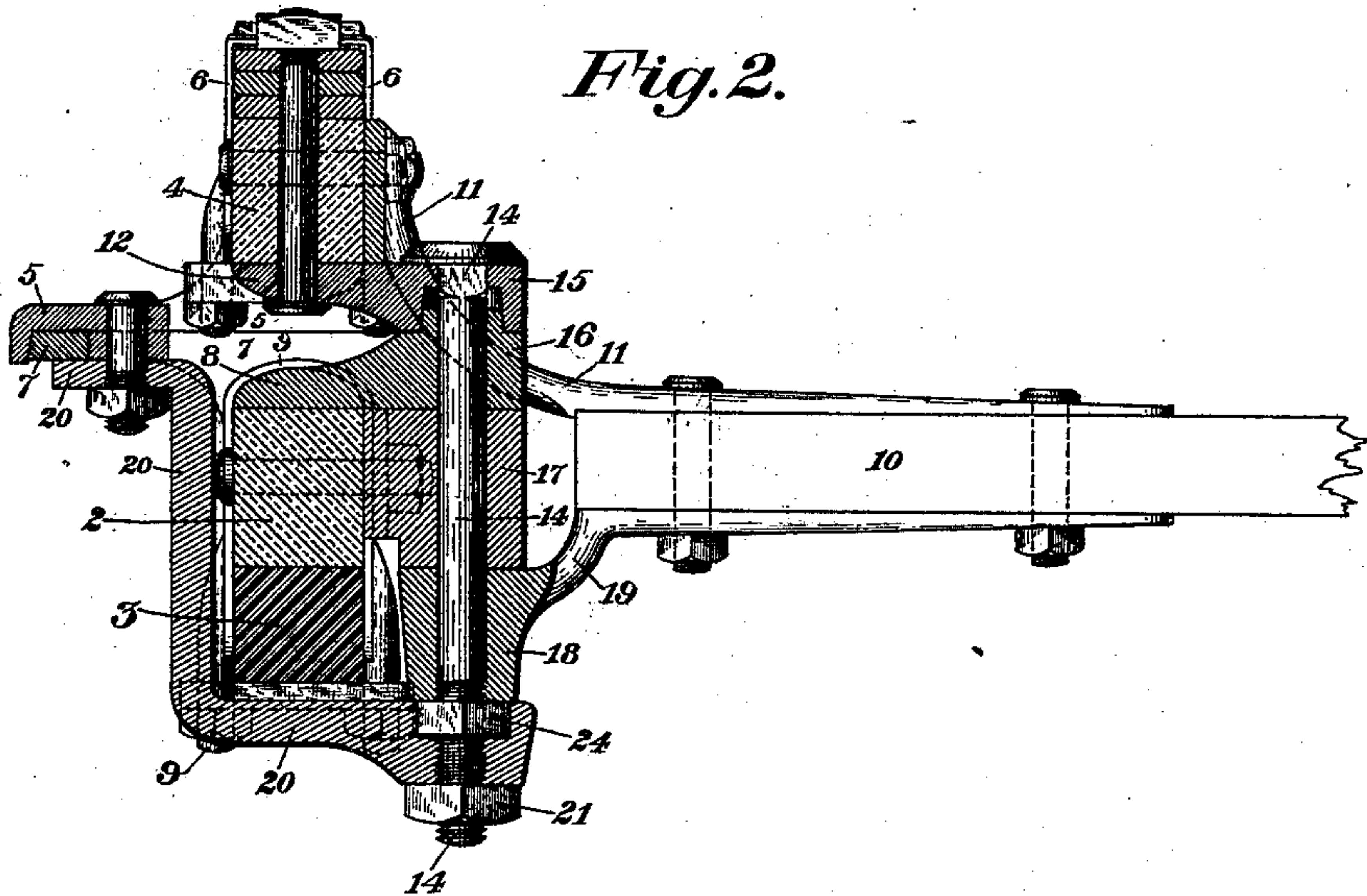
No. 358,399.

Patented Feb. 22, 1887.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*Nathaniel A. Gill*  
*J. M. K. Smith*

*Inventor.*

*Jacob Knapp*  
*by Russell W. Allen*  
*his Attorneys*



# UNITED STATES PATENT OFFICE.

JACOB KNAPP, OF CINCINNATI, OHIO, ASSIGNOR TO W. W. GRIER, OF HULTON, PENNSYLVANIA, AND SECHTER & CO., OF CINCINNATI, OHIO.

## FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 358,399, dated February 22, 1887.

Application filed July 30, 1886. Serial No. 209,544. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB KNAPP, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Fifth-Wheels for Vehicles; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view illustrating my invention, and Fig. 2 is a vertical longitudinal section through the plane of the king-bolt.

In the drawings, 2 represents the axle-bed, 3 the front axle, and 4 the head-block, on the under side of which is the saddle or cross-piece 12 of the upper circle-plate, 5, of the fifth-wheel, which is secured to the head-block by clips 6. The lower circle-plate, 7, is secured to the axle by a saddle, 8, and clips 9, and the outer edge of the upper circle-plate has a depending flange which fits over and covers the front of the lower circle-plate, the purpose of the flange being to exclude dirt from the bearings of the fifth-wheel.

10 10 are the reach-bars, which are secured to the head-block by stay-bars 11, preferably screwed to the top of the reach-bars, and curved upward from the front ends of the reach-bars to the head-block, to which they are bolted.

The king-bolt 14 is arranged back of the axle and head-block in the following-manner: A collar or hub, 15, projects back from the saddle 12 of the bolster, and immediately beneath it is a similar collar or hub, 16, which projects from the saddle 8. These collars are male and female, the collar 15 having a square hole to receive the king-bolt, and having a square neck to prevent its turning. They are preferably made integral with their respective saddle-bars. Below the collar 16 is a third collar or hub, 17, which is bolted to and projects from the rear side of the axle-bed, and below this is a fourth collar or hub, 18, which is attached to the reach-bars by stays or braces 19. The bores of these several collars are all in alignment, and together form the bearings of the king-bolt, which passes through them.

A brace or stay, 20, extends from the lower

end of the king-bolt below the collar 18, under the axle to the middle portion of the fifth-wheel, where it is bolted to a backwardly-projecting lug of the upper circle-plate, a portion of the brace constituting a lip, preferably extending forward under and in contact with the under side of the lower circle-plate, which it serves to guide and to steady. The brace is secured to the king-bolt by a nut, 21, screwed in place below the eye of the brace, which encircles the king-bolt. A nut, 24, fitting within a square recess in the brace 20 around the king-bolt, bears on and supports the collar 18. The brace 20 serves to strengthen the parts of the fifth-wheel. It unites the king-bolt securely to the circle-plates, and thus prevents rattling, and enables the king-bolt to be set back of the axle with more security and strength than is possible with other forms of fifth-wheel.

While the manner of joining the reach-bars and the axle and head-block to the king-bolt by means of the four collars, which I have shown and described, is convenient and neat, I do not desire to limit the scope of my invention strictly to the specified arrangement and number, since obviously they may be altered somewhat without departing from the spirit of my invention. In place of and as equivalent for the reach-bars a single reach-bar or perch may be substituted.

I claim—

1. The combination, with the circle-plates of a fifth-wheel, of a king-bolt back of the axle, the collar 17, connecting the king-bolt and axle-bed, the collar 15, encircling the king-bolt above the collar 17 and connecting the axle-bed and king-bolt, the reach, and a collar, 18, encircling the king-bolt below the collar 17 and connecting the reach and king-bolt, substantially as and for the purposes described.

2. The combination of a fifth-wheel, a head-block and axle, a king-bolt back of the axle, a collar or hub connecting the head-block with the king-bolt, and the collar or hub connecting the axle with the king-bolt, substantially as and for the purposes described.

3. The combination of the circle-plates of a fifth-wheel, a king-bolt situate back of the

axle, and a brace extending from the king-bolt to the upper circle-plate, substantially as and for the purposes described.

4. The combination of the circle-plates of a fifth-wheel, a king-bolt situate back of the axle, and a brace extending from the king-bolt to the upper circle-plate and having a lip projecting under the lower circle-plate, substantially as and for the purposes described.

5. The combination of the circle-plates of a fifth-wheel and a king-bolt situate back of the axle, the upper circle-plate having a depending flange which covers the lower circle-plate, substantially as and for the purposes described.

6. The combination of a fifth-wheel having a king-bolt back of the axle and a brace or stay extending from the king-bolt to the forward part of the fifth-wheel, said brace having a recess around the king-bolt and a contained nut on the king-bolt, substantially as described.

In testimony whereof I have hereunto set my hand this 9th day of July, A. D. 1886.

JACOB KNAPP.

Witnesses:

SAML. S. CARPENTER,  
J. KNIEMUELLER.