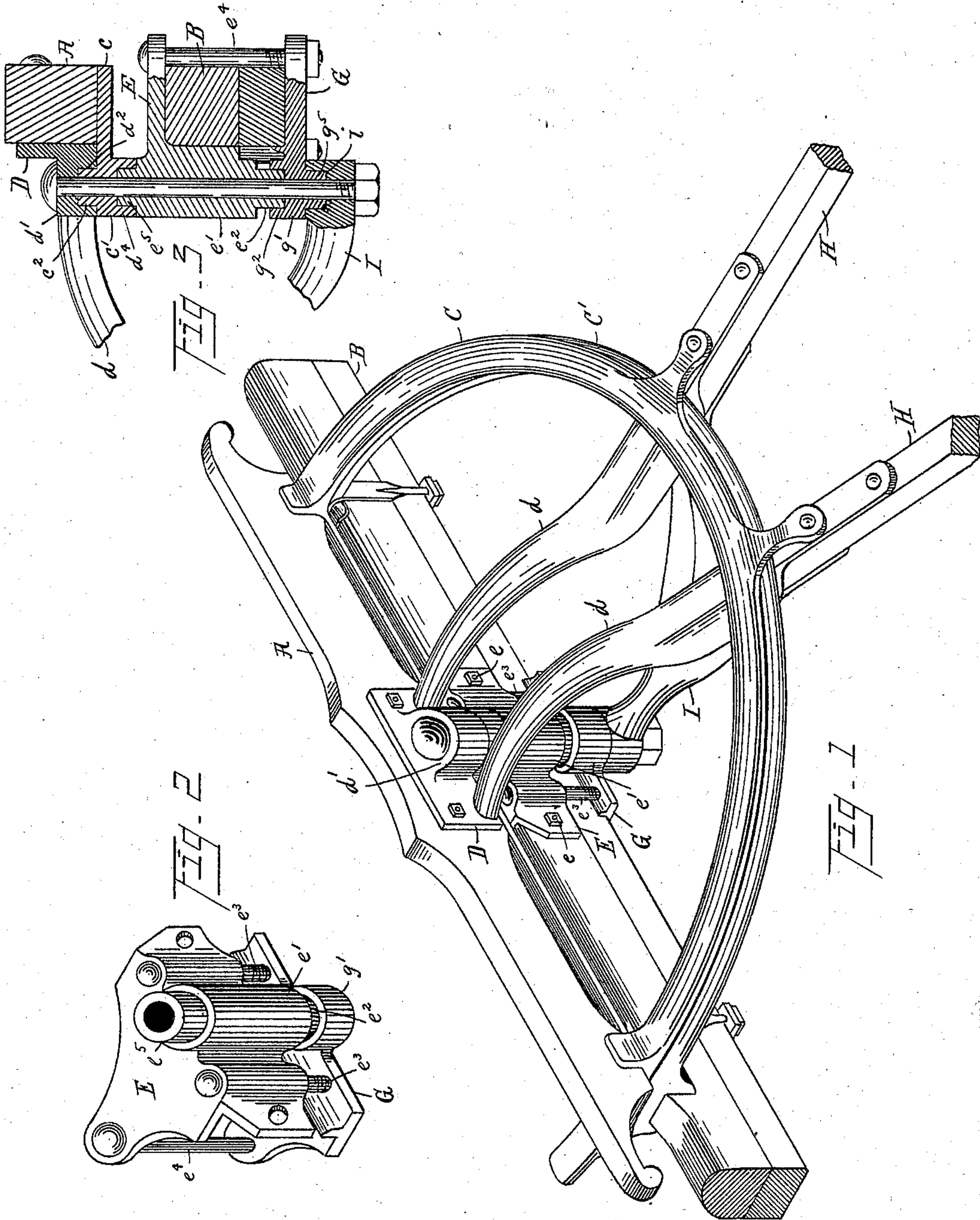


(No Model.)

H. C. SWAN.
FIFTH WHEEL.

No. 575,437.

Patented Jan. 19, 1897.



Witnesses.

H. Griewold
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UNITED STATES PATENT OFFICE.

HENRY C. SWAN, OF OSHKOSH, WISCONSIN.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 575,437, dated January 19, 1897.

Application filed February 13, 1896. Serial No. 579,165. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. SWAN, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Fifth-Wheel Mechanism for Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in fifth-wheel mechanism for vehicles.

The object of my invention is to improve the construction of devices of this character, and particularly the king-bolt socket, so as to make them strong, firm, and durable without using a clip king-bolt, and at the same time to give the appearance of a clip king-bolt when viewed from the front.

In the drawings, Figure 1 is a perspective view of a fifth-wheel device containing my invention. Fig. 2 is a perspective view of the parts which constitute what I term the "movable" member of the king-bolt socket in its best form, and Fig. 3 is a longitudinal vertical section through the king-bolt socket.

Referring to the parts by letters, A represents the head-block, B the front axle, and C and C' the top and bottom circle-plates, which are secured by any suitable means to the head-block and axle, respectively.

A plate D, which is bolted to the rear side of the head-block, is provided with two rearwardly-projecting arms d d , which curve downward and pass beneath the circles and are secured to the reach H. Between these arms and at the middle of the head-block is a rearwardly-projecting lug d' , integral with said plate and having a vertical hole to receive the king-bolt.

The head-block plate c , which is preferably an integral part of the top circle, is also provided with a rearwardly-projecting lug c' , which interlocks with the lug d' by means of the socket d^2 in one, which receives the end c^2 of the other. These two lugs connected substantially as described constitute the upper fixed member of the king-bolt socket; but

either might be omitted without making any substantial change in the construction of said socket.

An angle-plate E lies against the middle of the top and rear sides of the axle. Horizontal bolts e pass through the vertical part of said angle-plate and the axle and assist in making a firm fastening between said parts. On the rear side of the vertical part of the angle-plate is a lug e' . A yoke-plate G, which lies against the under side of the axle, is also provided with a lug g' on its rear side, and the lugs e' and g' interlock by means of the socket g^2 in one, which receives the end e^2 of the other. The yoke-plate G and angle-plate E are secured together and upon the axle by means of two vertical bolts e^3 e^3 behind the axle and one bolt e^4 in front thereof. The two lugs e' and g' form what I term the "movable" member of the king-bolt socket, and both are perforated to receive the king-bolt.

A brace I is connected at its rear end to the reach, and on its front end a boss is formed which lies below the lug g' and forms the lower fixed member of the king-bolt socket.

The movable member of the king-bolt socket interlocks with the upper movable member through the cylindrical recess d^4 in one member, which receives the cylindrical end e^5 of the other; and a similar interlocking engagement between the movable member of the king-bolt socket and the lower fixed member is formed through the cylindrical end g^5 of one, which enters the cylindrical recess i in the other.

The king-bolt passes through the fixed and movable members of the king-bolt socket and holds them in the described relation to each other; but it is clear that although the parts are pivoted together as described the joint is strong and firm, and there is no transverse strain upon the king-bolt.

On the rear part of the upper circle are one or more arms which are secured to the reach, whereby they help to hold the circles in the described relation to one another.

Having described my invention, I claim—
In fifth-wheel mechanism, the combination of the axle, an angle-plate E lying against

the top and rear side of the axle, having a rearwardly-extended and vertically-perforated lug integral with the vertical part of said angle-plate, with a yoke-plate G which lies against the bottom of the axle and is provided with a rearwardly-extended and vertically-perforated lug g' which interlocks with the lug e' , and vertical bolts which connect said plates E and G in front of and behind

the axle, substantially as and for the purpose is specified.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY C. SWAN.

Witnesses:

E. L. THURSTON,
L. F. GRISWOLD.