

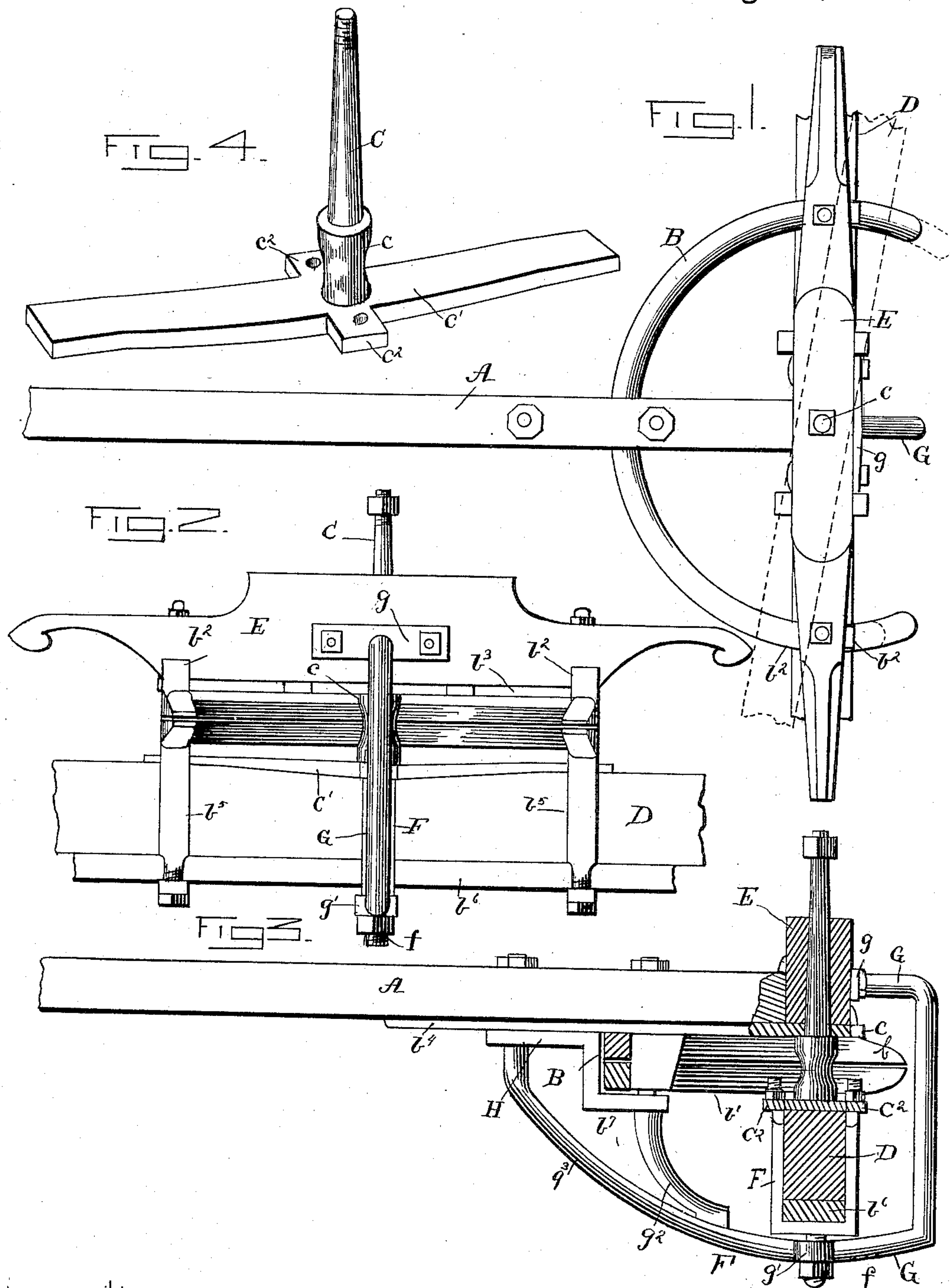
(No Model.)

L. C. FULLER.

FIFTH WHEEL.

No. 324,827.

Patented Aug. 25, 1885.



WITNESSES:
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FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 324,827, dated August 25, 1885.

Application filed August 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, LEVI C. FULLER, a citizen of the United States, residing at Fayette, in the county of Howard and State of Missouri, have invented certain new and useful Improvements in Fifth-Wheels; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention is a fifth-wheel for a wagon or other vehicle, and it has the following objects: to construct and arrange the king-bolt in such manner that while not running through the axle, and consequently weakening the same, it will make a stronger connection therewith than in any usual construction; to so construct and arrange the king-bolt, axle, and lower circle of the fifth-wheel that they will essentially form and act as one piece to modify and arrange all the parts; so that if the king-bolt breaks the remaining parts will tend to keep in proper position and in working condition, partially supplying its place.

In the construction of the invention the king-bolt has its lower end widened out into a horizontal strap which lies upon the upper surface of the axle, and is held firmly down thereon by a clip, the arms of which pass up and grip in the sides of the axle and have their threaded ends firmly bolted to the edges of said strap. The ends of the lower circle of the fifth-wheel are firmly bolted to the axle over the ends of the strap. The head-block and coupling-pole are bound together by a brace passing below and connected to the axle, and the several parts are modified and arranged in a manner hereinafter described.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of the invention. Fig. 2 is a front view, and Fig. 3 a longitudinal section, of the same. Fig. 4 is a perspective view of the king-bolt.

In the accompanying drawings, A is the coupling-pole between the front and rear axles. B is the fifth-wheel. C is the king-bolt. D is the axle, and E is the head-block,

fixed as usual to the front end of the coupling-pole.

The fifth-wheel B is composed of the usual upper and lower semicircular parts, b and b' , respectively, the former of which is fixed to the head-block E by the lugs b^2 b^2 , two of which arise near each end of the part b and clasp the head-block at equal distances on each side of its center, and proper bolts, which pass down from the upper surface of the head-block between said lugs and engage on the part b . An iron strap, b^3 , lies on the lower surface of head-block, with its ends between the lugs b^2 on each side. The said strap has a central arm, b^4 , which is fixed to and runs out to a proper distance on the under surface of the coupling-pole. The lower part, b' , of the fifth-wheel is secured to the axle by long clips b^5 b^5 , situated below the clips b^2 b^2 and clasping the axle on each side. The said clips at each end are held in place by a base-plate of usual construction and nuts screwed on the threaded ends of the clips b^5 .

A bar, b^6 , lies on the lower surface of the axle between it and the other base-plates, serving to keep it from being bruised by the latter.

b^7 is a lug standing horizontally at right angles from the inner edge of the upper part, b , of the fifth-wheel, and sufficiently thick to have its lower surface flush with the lower surface of the part b' . The said lug has through it a central vertical opening, for a purpose hereinafter explained.

The king-bolt C is passed upward through an opening in the strap b^3 and the head-block, and has an enlarged portion, c , the upper end of which forms a shoulder, on which is supported the strap b^3 .

The lower end of the king-bolt joins and forms one piece with a strap, c' , which lies upon the upper surface of the axle and has its ends between the clips b^5 , separating the part b' of the fifth-wheel from the axle.

c^2 c^2 are lugs on the edges of the strap C, opposite each other and the king-bolt, and provided with vertical openings, for a purpose hereinafter explained.

F is a clip having its arms passing up and clasping the axle. The upper ends of the said arms are threaded and pass through the open-

ings in the lugs c^2 , in which they are secured by proper nuts, as shown.

f is a threaded stem formed on and depending centrally from the lower end of the clip F.

5 G is a brace, the front end of which is formed into a horizontal plate or strap, g , which is secured to the front surface of the head-block by proper bolts. The brace G passes horizontally forward a short distance from the said
10 strap, bends vertically downward to a point below the lower end of the clip F, and then turns backward and engages by an eye, g' , over the threaded stem f' , upon which it is secured by a proper nut. The brace thence
15 runs backward and upward, dividing into two arms, g^2 and g^3 , respectively. The front arm, g^2 , passes upward through respective openings in a piece or strap, H, hereinafter described, the lug b^7 , the arm b^4 , and the coupling-pole
20 A, and is secured above the latter by a nut on its threaded upper end. The rear arm, g^3 , passes upward through openings in the piece H, the arm b^4 , and the coupling-pole A, and is secured above the latter similarly to the
25 front arm.

The strap H has its rear end lying against the under surface of the arm b^4 , with its lower surface held in place by a proper shoulder on the arm g^3 of the brace G. It thence runs forward to the rear edge of the fifth-wheel, bends
30 vertically downward against said edge, turns horizontally forward along the lower surface of the lower part, b' , of said wheel, and has its front end held in place against the under surface of the lug b^7 by a proper shoulder on the
35 arm g^2 , bearing against its lower surface.

The advantages of the construction are: The clip F by its construction and arrangement acts as one piece with the king-bolt, and
40 its use avoids the necessity of the latter passing through the axle, and consequently weakening the latter at its central part. Moreover, by clasp- ing the axle on both sides, it prevents the king-bolt from turning or twisting on the
45 same. The clip F and the king-bolt made in one piece with the strap c' , the ends of which are tightly bound between the lug b^5 , render the construction between the lower part, b' , of

the fifth-wheel and the axle remarkably strong and secure, and cause all the aforesaid parts 50 to act as if made in one piece. The brace G makes the connection between the coupling-pole and head-block very stiff, particularly in a vertical direction. It also, by binding against the lower end of the clip F, keeps the head- 55 block down toward the axle, and makes the upper and lower parts of the fifth-wheel bear properly against each other.

Should the king-bolt be broken, the bearing of the lower part of the fifth-wheel on the 60 vertical part of the strap H, and the bearing of the lug b^7 on the arm g^2 , passing through it, together with the connection of the brace G with the clip H, would tend to keep all the parts in place and in working condition. 65

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the coupling-pole, the fifth-wheel consisting of part b' and part 70 b , the latter having lug b^7 , the brace G, having arm g^2 , extended up through lug b^7 and the pole, and the strap H, secured at its rear end by the rear end of the brace and at its forward end by the arm g^2 , substantially as set forth. 75

2. The combination of the fifth-wheel having its section b provided with a lug, b^7 , the strap H, having a vertical wing held close to the rear side of the fifth-wheel and a horizontal wing extended forward under said wheel 80 and close to the under side of the lug b^7 , and the brace G, having an arm, g^2 , projected upward through the strap H, lug b^7 , and the pole, and secured, substantially as set forth.

3. The combination, with the reach and the 85 fifth-wheel having its upper section provided with a depending lug, b^7 , of the strap H, connected at one end with the pole, and having its other end extended under and secured to the lug b^7 , substantially as set forth. 90

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

LEVI C. FULLER.

Witnesses:

A. J. FURR,

WM. M. PATTERSON.