

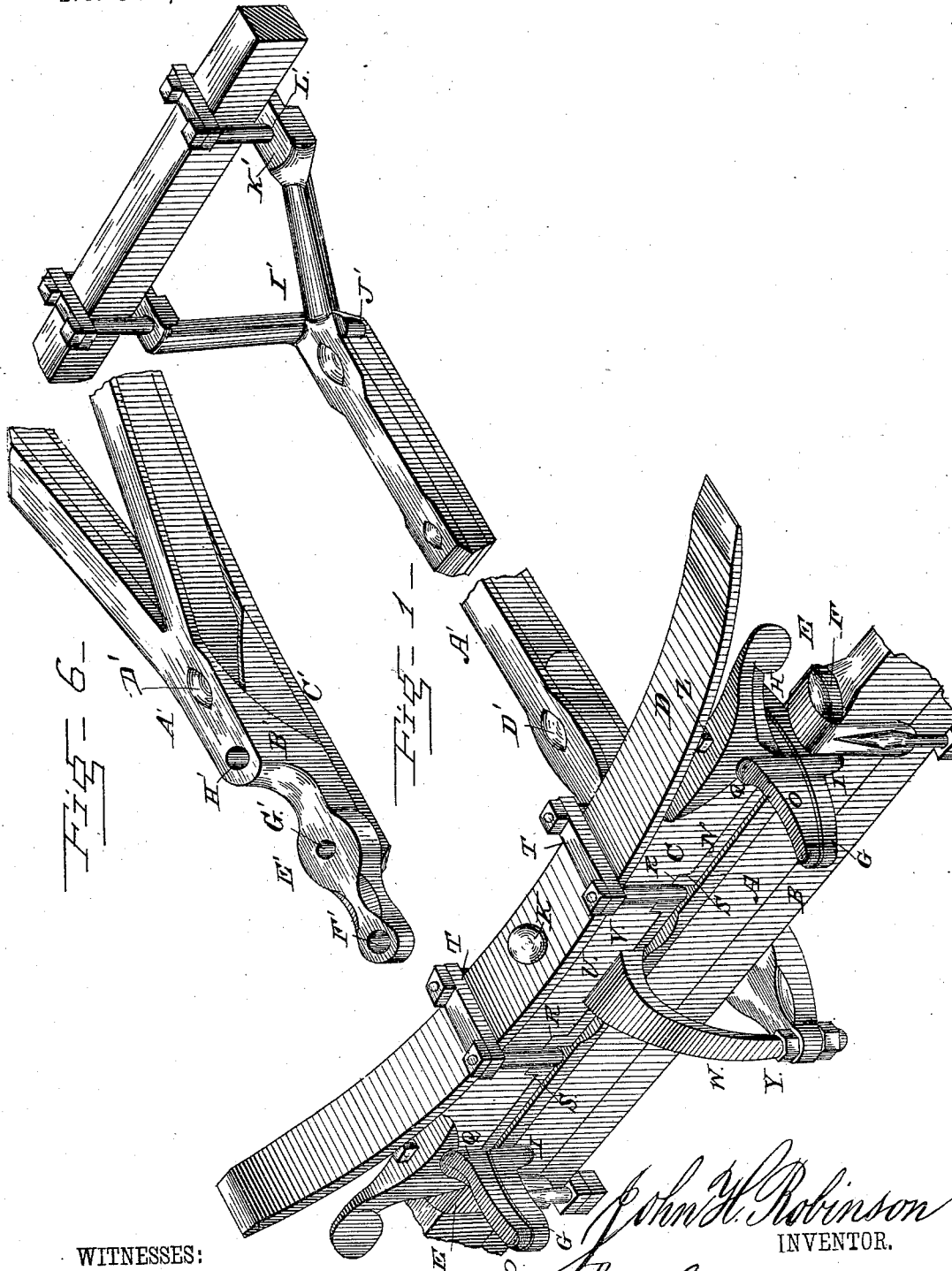
(No Model.)

2 Sheets—Sheet 1.

J. H. ROBINSON.
FIFTH WHEEL FOR VEHICLES.

No. 307,069.

Patented Oct. 21, 1884.



WITNESSES:

Wm. G. Dietrich
John J. Lecher

INVENTOR.

John H. Robinson
By *Louis Bagger & Co.*
ATTORNEYS.

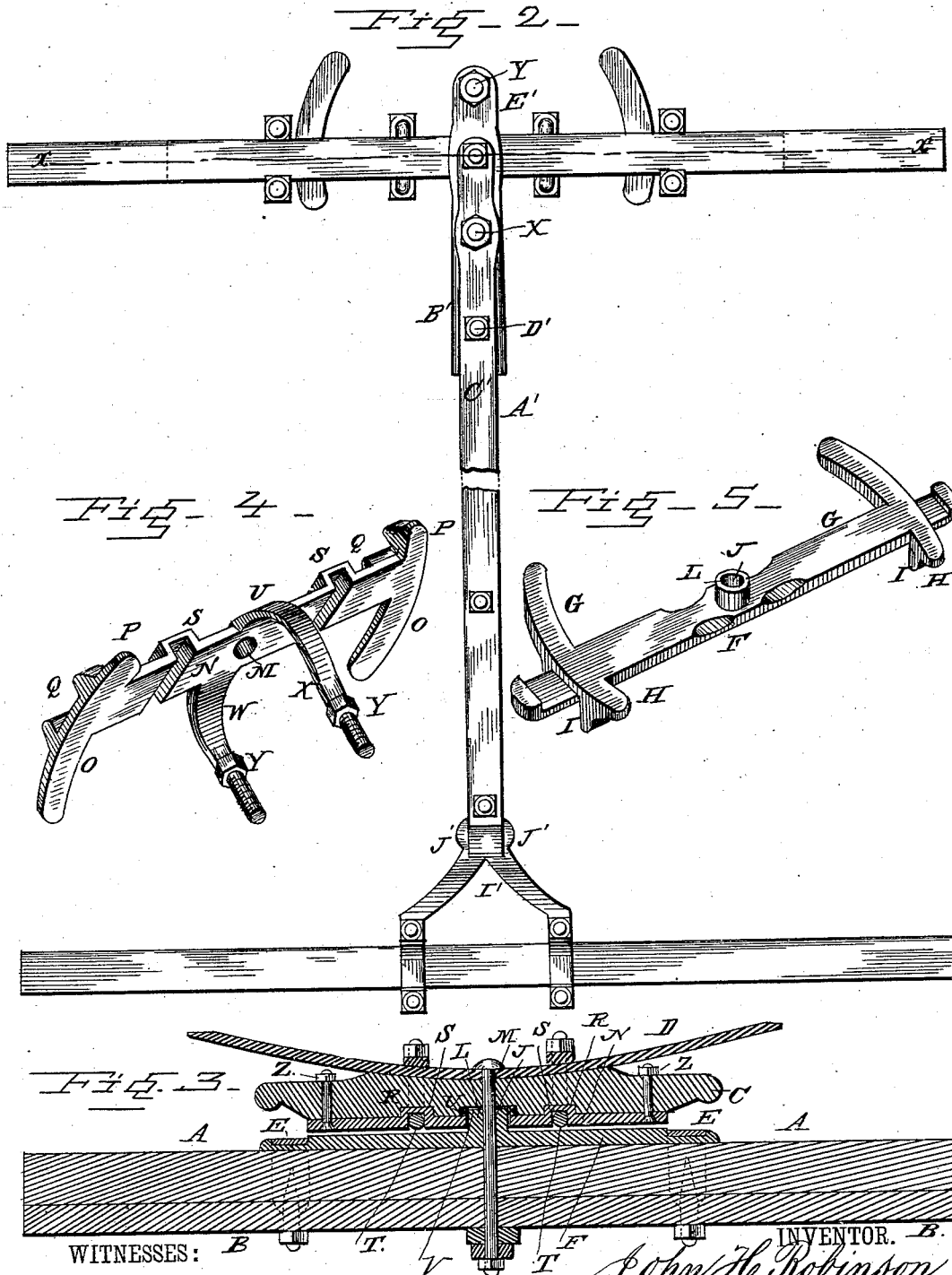
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WITNESSES: *Ed. S. Dieterich*
Spillfacher

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN HENRY ROBINSON, OF FREMONT, OHIO, ASSIGNOR OF ONE-HALF TO
AMBROSE OCHS, OF SAME PLACE.

FIFTH-WHEEL FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 307,069, dated October 21, 1884.

Application filed January 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY ROBINSON, of Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Running-Gear for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of so much of the running-gear of a vehicle as will illustrate my invention. Fig. 2 is a bottom view of the same. Fig. 3 is a vertical section on line $x x$, Fig. 2. Figs. 4 and 5 are views of the fifth-wheel plates seen from their bearing-surfaces, and Fig. 6 is a detail view of the reach.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to fifth-wheels for vehicles; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the front axle-tree; B, the axle-iron; C, the front bolster, and D the front spring; and the axle-tree and the axle-iron are clipped together by means of clips E, which at the same time serve to secure the ends of the lower fifth-wheel plate, F, to the upper side of the axle-tree, which plate has a flat upper bearing-surface. Two segmental projections, G, extend from the front edge of the plate near its ends, the upper sides of which projections are flush with the upper surface of the plate, and two short projections, H, project from the rear edge of the plate, forming continuations of the longer projections, and likewise having flat bearing-surfaces. The lower sides of these projections form shoulders I, bearing against the sides of the axle-tree and clamping it between them, and the middle of the plate has a perforation, J, which extends through the axle-tree and the axle-iron, through which perforation the king-bolt K passes, and the upper end of the perforation forms an upwardly-

projecting thimble or sleeve, L, which fits and turns in a correspondingly-shaped perforation, M, in the center of the upper fifth-wheel plate, N, which is secured to the under side of the bolster. This upper fifth-wheel plate forms at its ends two sets of segmental projections or lugs, O and P, the lower sides of which are flat, flush with the under side of the plate, and sliding upon the flat sides of the projections upon the lower plate, and the upper sides of these projections form shoulders Q, which bear against the sides of the bolster and clamp it. The under side of the bolster has two transverse recesses, R, one at each side of its center about midway between the center and the ends, and the upper fifth-wheel plate forms two upwardly-bent corrugations, S, which fit into these recesses, and into the recesses formed by these corrugations in the under side of the plate the central parts of the clips T, which secure the spring to the upper side of the bolster, fit, their ends passing up on both sides of the bolster and passing through perforations in their respective shackles, where they are confined in the usual manner by nuts. The central portion of the upper fifth-wheel plate forms an enlargement, U, at its upper surface, which enlargement fits into a recess, V, in the under side of the bolster, the bottom of which recess forms the bottom of the recess formed by the perforation M in the plate. Two arms, W and X, project from the edges of the upper plate at the center of the same, and are curved downwardly, having their lower ends screw-threaded and provided with two nuts, Y, each. The ends of the upper fifth-wheel plate are secured to the bolster by means of two nutted bolts, Z, passing through the same, and the heads of the bolts are countersunk in the under side of the plate, so as to be flush with the surface.

A' is the reach, which may be single or bifurcated, and the end of the single reach or the ends of the bifurcated reach are inserted into a socket, B', open at its lower side, where it is covered by a plate, C', and secured by means of nutted bolts D', securing the reach in the socket and the plate over the open side of the same. The forward end of the socket forms a

flat bar, E', having two perforations, F' and G', and the end of the socket has a perforation, H', inside the perforations in the flat bar. The two arms pass through the outer and inner perforation in the socket and its flat bar, and the king-bolt passes through the central perforation, and the nuts upon the threaded ends of the arms bear against the upper and under side of the perforated end of the socket, so that by moving the nuts up or down upon the threaded arms the end of the socket and the flat bar may be raised or lowered, forcing the two fifth-wheel plates more or less close to each other, the axle tree and iron with its lower fifth-wheel plate being clamped by the perforated end of the socket. In this manner, by having the position of the perforated end of the socket adjustable upon the arms, the latter may be raised to take up wear upon the plates, as well as lowered for the purpose of allowing freer play for the plates; and it will be seen that by thus having the axle tree and iron and the lower fifth-wheel plate secured by the end of the socket, and by having the thimble upon the lower plate fit into the perforation or socket in the upper plate, the strain upon the king-bolt is considerably relieved, and the king-bolt may even be entirely removed without interfering with the working of the fifth-wheel, thus removing all danger of the vehicle becoming wrecked by the breaking or loss of the king-bolt.

I' is a bifurcated metallic bar secured to the upper side of the rear end of the reach, and having two downwardly-projecting lugs or lips, J', which bear one upon each side of the end of the reach, preventing it from splitting

and preventing the reach from becoming displaced upon the metallic bar, and the rear bifurcated ends of the metallic bar are curved upward and form clip-shackles K', having perforations L' for the reception of the ends of the clips securing the rear axle-iron to the axle-tree.

I am aware that fifth-wheel plates have been made with a thimble projecting from one plate around the king-bolt and fitting into a recess in the other plate, and I am also aware that bolts have been passed through the upper fifth-wheel plate on both sides of the same and secured in perforations in the forward end of the reach, and I do not claim such constructions, broadly; but

I claim—

The combination of the upper fifth-wheel plate having two curved arms projecting downward from its forward and rear edge and having screw-threaded ends, the axle and lower fifth-wheel plate straddled by the said arms, the reach formed with a shackle or plate at its forward end, having two perforations fitting upon the lower ends of the arms, and two pairs of nuts fitting upon the threaded ends of the arms and bearing against the upper and lower sides of the shackle-plate of the reach, as and for the purpose shown and set forth.

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

JOHN HENRY ROBINSON.

Witnesses:

E. F. DICKINSON,
C. DINEYSON.