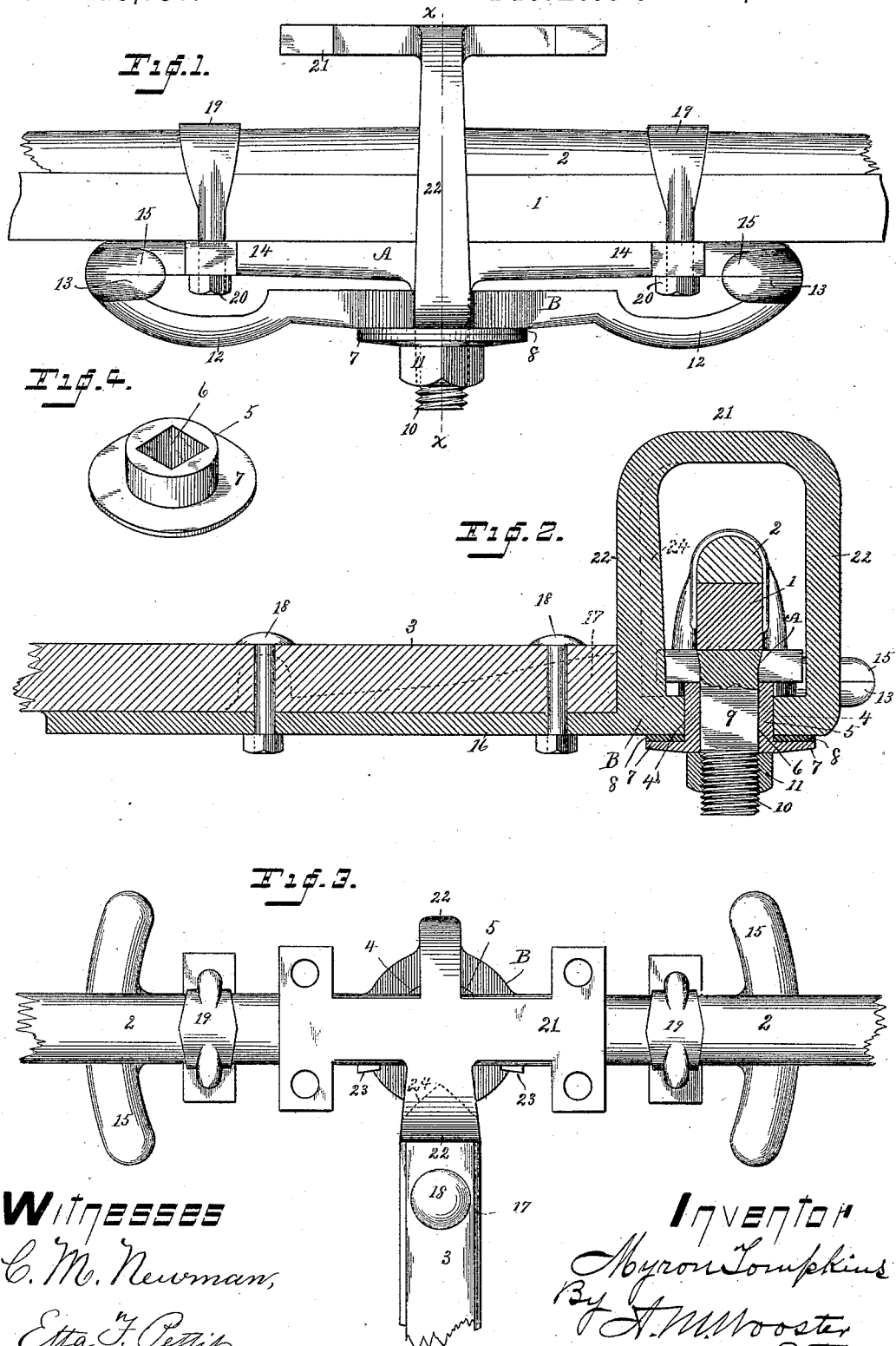


(No Model.)

M. TOMPKINS.  
FIFTH WHEEL.

No. 419,736.

Patented Jan. 21, 1890.



WITNESSES

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# UNITED STATES PATENT OFFICE.

MYRON TOMPKINS, OF ATTICA, OHIO.

## FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 419,736, dated January 21, 1890.

Application filed June 5, 1889. Serial No. 313,124. (No model.)

*To all whom it may concern:*

Be it known that I, MYRON TOMPKINS, a citizen of the United States, residing at Attica, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Fifth-Wheels; 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 present invention is a carrying forward and development of the principles described and claimed in my former Letters Patent, No. 337,460, dated March 9, 1886, and has for its object to simplify and cheapen the construction and to increase strength, while at the same time the operation of the device in use is improved.

With these ends in view I have devised the simple and novel construction, of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to denote the several parts.

Figure 1 is an elevation of a front axle, illustrating the application thereto of my novel fifth-wheel; Fig. 2, a cross-section of the axle, &c., on the line *xx* in Fig. 1, showing the reach in longitudinal section; Fig. 3, a plan view corresponding with Fig. 1; and Fig. 4 is a view of a sleeve detached, which is carried by the upper member and on which the lower member turns.

The device consists, essentially, of two castings or members, the upper of which I designate as a whole as A, and the lower as a whole as B.

1 denotes the iron portion of the axle, 2 the wood portion, and 3 the reach, these parts being of the ordinary or any preferred construction.

It will of course be understood that the exact shape of the castings or members A and B is not of the essence of my invention. The lower member is provided with a central opening 4, which receives a sleeve 5, having an angular central opening 6 and a flange 7. The upper member rests upon this flange, as is clearly shown, a washer 8 being preferably interposed to insure ease of movement.

9 denotes a king-bolt, which is made integral with the upper member and extends

downward therefrom. The upper portion of this bolt is made angular to correspond with opening 6 in the sleeve, the lower end of said bolt being rounded and threaded, as at 10.

11 denotes a nut engaging said thread, whereby the parts are held in position.

12 denotes a cross-piece forming part of the lower member, which is provided at its outer ends with plates 13, which may be of any suitable length and are curved in an arc of a circle.

14 denotes a cross-piece forming a portion of the upper member, which is provided at its outer ends with plates 15, corresponding in shape and size with plates 13. The inner faces of these plates engage each other, being finished smoothly, so that they will work smoothly in use.

16 denotes an arm forming a portion of the lower member, and which extends backward to receive the forward end of the reach. This arm is preferably provided with side pieces 17, (see Fig. 3 and dotted lines in Fig. 2,) between which the reach is firmly held, the reach being secured to the arm by bolts 18.

19 denotes clips of ordinary construction, by which the upper member is secured to the axle. The lower ends of these clips are threaded and pass through openings in said upper member, (see dotted lines in Fig. 1,) the axle and upper member being rigidly secured together by nuts 20. In my present construction the ordinary head-block is dispensed with, the spring (not shown) being bolted directly to a plate 21, supported by upwardly-extending arms 22, which inclose the axle but leave ample room for turning without the axle coming in contact with said arms.

23 denotes lugs on the back of cross-piece 14, which are adapted under certain circumstances to come in contact with surfaces 24 on the inner side of the rear arm 22, serving as stops to limit the oscillation of plates 13 and 15, constituting the fifth-wheel proper. These stops prevent the possibility of marring the finish of the axle should the wagon be cramped closely, as in turning in a limited space.

As already indicated, the plate, arms, cross-piece 12, &c., are all formed in a single piece, the construction being exceedingly simple,

but giving the greatest possible amount of strength. It will be seen that the entire weight is upon plate 21, and that it is supported from the under side of the axle. The drawing-strain, however, (the clips by which the thills or pole is attached not being shown,) is directly upon the axle, and is transmitted by the plates constituting the fifth-wheel proper to the lower member, so that in practice the strain is equalized. This is an important feature, as it removes in a great measure the strain from the king-bolt. It will be seen, moreover, that should the king-bolt break serious consequences could not follow, as the axle would still be held by the front arm 22. It will be noticed, furthermore, that no bolts pass through the axle, so that it is not weakened in the slightest.

Having thus described my invention, I claim—

1. A fifth-wheel consisting, essentially, of a lower member adapted to be connected to the reach and having a plate to receive the spring and plates 13 at its outer ends, and an upper member adapted to be attached to the axle and having plates at its outer ends engaging plates 13, and a king-bolt which passes through the lower member, substantially as described.

2. A fifth-wheel consisting of a lower member adapted to be attached to the reach and having plates 13 at its outer ends and a central opening, a sleeve in said opening, having an angular central opening and a flange on its under side, an upper member adapted to be attached to the axle and having plates at its outer ends engaging plates 13, and a king-bolt made angular and engaging the opening in the sleeve.

3. A fifth-wheel consisting of a lower member adapted to be attached to the reach and having arms 22, which inclose the axle and support a plate for the spring and at its outer ends plates 13, an upper member adapted to be attached to the axle and having plates engaging plates 13, and a king-bolt which passes downward through the lower member.

4. A fifth-wheel consisting of a lower member adapted to be attached to the reach and having arms 22, which loosely inclose the axle and carry a plate to receive the spring, plates 13 at its outer ends, and a central opening 4, a flanged sleeve in said opening having an angular central opening, an upper plate adapted to be attached to the axle and having plates engaging plates 13, a king-bolt squared to engage the opening in the sleeve and threaded at its lower end, and a nut engaging said thread.

5. A fifth-wheel consisting of a lower member adapted to be connected to the reach and having plates 13, and a plate to receive the spring supported by arms 22, one of said arms having surfaces 24 and an upper member adapted to be attached to the axle and having plates at its outer ends engaging plates 13, a king-bolt passing through the lower member, and lugs 23, adapted to engage surfaces 24, as and for the purpose set forth.

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

MYRON TOMPKINS.

Witnesses:

C. M. LINK,  
GEO. H. HAMILTON.