

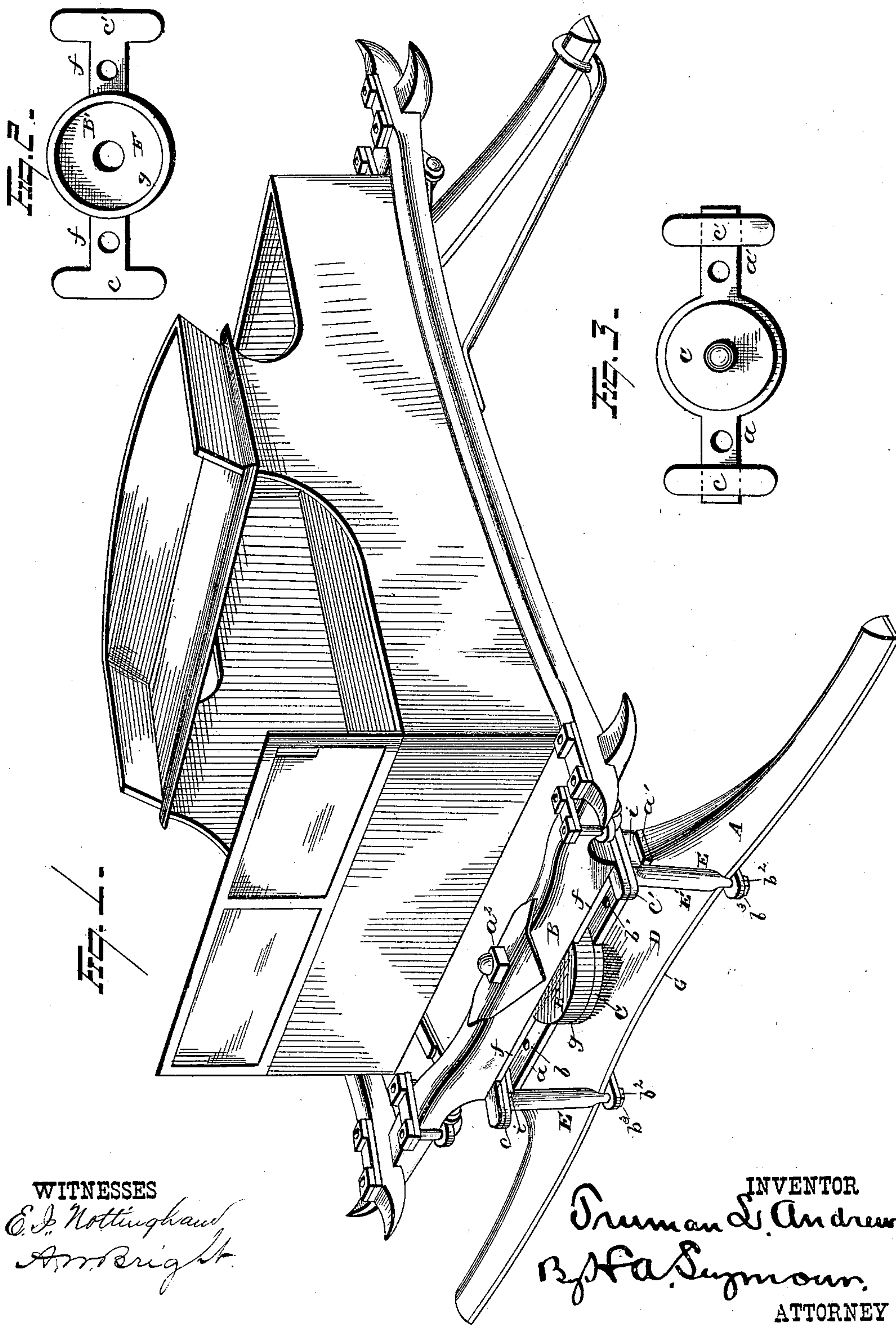
(No Model.)

2 Sheets—Sheet 1.

T. L. ANDREWS.
Fifth Wheel.

No. 231,140.

Patented Aug. 17, 1880.



WITNESSES
E. J. Nottingham
Am. Bright

INVENTOR
Truman L. Andrews
B. H. Seymour
ATTORNEY

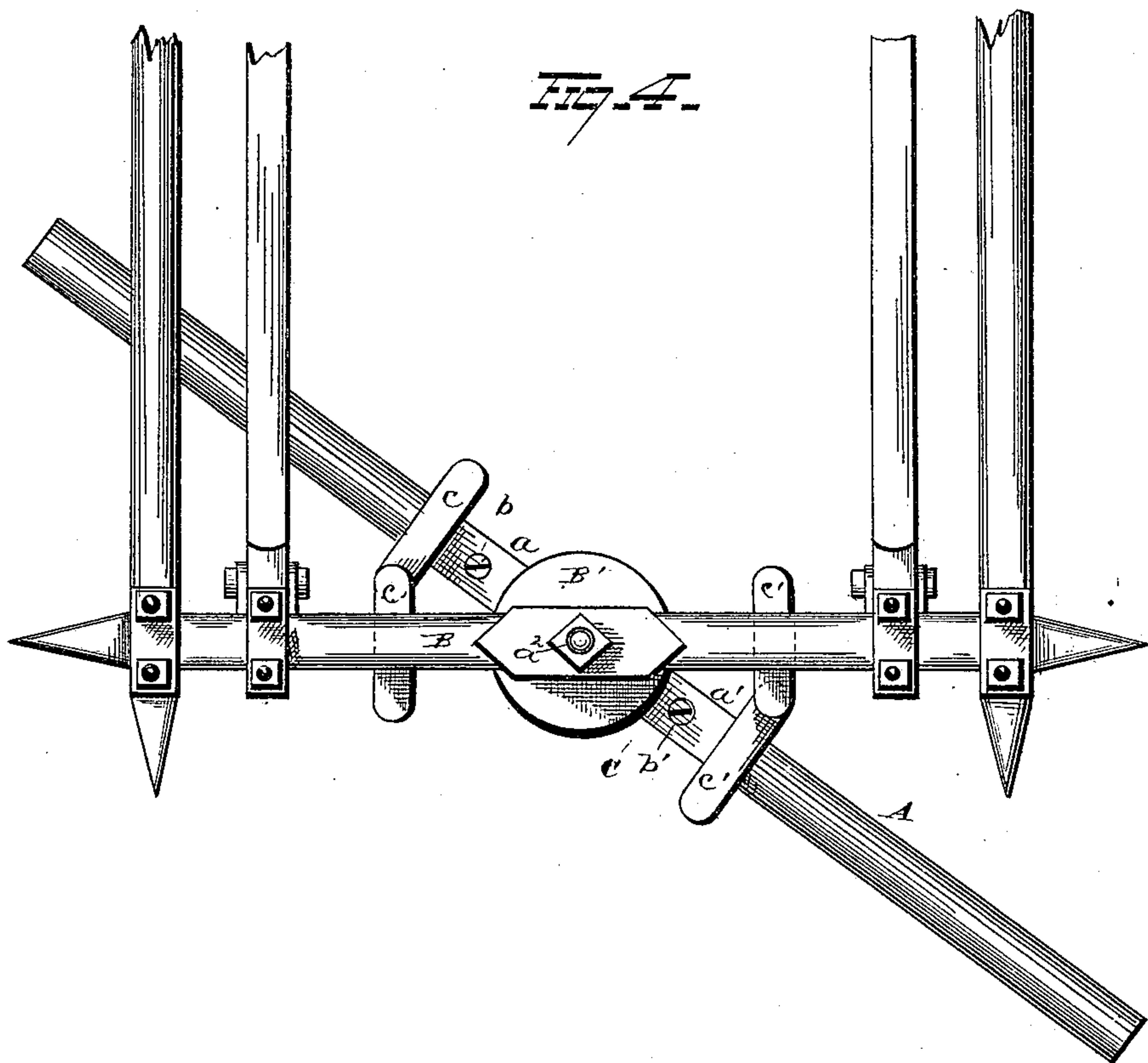
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INVENTOR
T. L. Andrews
By A. S. Symon
ATTORNEY

UNITED STATES PATENT OFFICE.

TRUMAN L. ANDREWS, OF COLD BROOK, NEW YORK.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 231,140, dated August 17, 1880.

Application filed June 1, 1880. (No model.)

To all whom it may concern:

Be it known that I, TRUMAN L. ANDREWS, of Cold Brook, in the county of Herkimer and State of New York, 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in fifth-wheels, and is particularly designed for carriages and buggies provided with side bars and springs; but it will be found equally efficient in vehicles of the older and more common forms of construction.

The advantages aimed at and accomplished in my invention are a diminution of the strain upon the king-bolt, the decrease in number of the component parts of a fifth-wheel, thereby offering less surface to the wearing action of sand and dust, and the effectual prevention of careening by a novel clip and plate-bearing.

With these ends in view, my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view, in perspective, of my invention. Fig. 2 is a view of the bolster-plate. Fig. 3 is a view of the axle-tree plate; and Fig. 4 is a plan view, showing the position of the parts when the wheels are cramped.

A represents the front axle-tree of a side-bar vehicle, and B the bolster thereof. C is the axle-tree plate, and is made of wrought or malleable iron. This plate is secured to the bed D of the axle-tree by screws or bolts $b b'$, passed through the laterally-projecting arms $a a'$ of the plate, and is further secured in position by the clips E E', which latter serve the double purpose of securing the plate to the axle and affording support for the bolster-plate arms $c c'$. These clips E E' are passed over the extreme ends of the arms $a a'$, and are retained in this position by the clip-plate b^2 , passed under the iron axle-bar G, and the nuts b^3 , which are screwed to the ends of the clip which project through the plate. To the top of each clip is riveted a transverse supporting piece or

plate, i , upon which rests the cross-pieces $c c'$ of the T-shaped arms of the bolster-plate. To the center of this circular bearing or axle plate the king-bolt is secured, being preferably forged thereto, and having its upper end formed with a screw-thread to receive the nut a^2 , which fastens the bolster and axle together, and which retains the two plates in bearing position upon each other.

Bolster-plate B' is secured to the bolster by screws or rivets D', which pass through the arms $f f$. This bolster-plate consists of a circular bearing, F, with a depending annular flange, g , and laterally-projecting T-shaped arms $f f$ and cross-pieces $c c'$, which latter have bearing upon the transverse clip-plates i .

By this novel arrangement all possibility of careening is removed, and much strain, which would otherwise fall on the king-bolt, is thus avoided.

The plate C is so formed as to fit within the flange g , and thus constitute a circular box-like bearing, into which sand and dust cannot enter and wear the parts, and one which may sustain violent shocks and wrenches without being dislocated.

An advantage is gained by forging or otherwise incorporating the king-bolt with the lower plate, inasmuch as it cannot be shaken loose and rattle, and being fastened to the top of the bolster, while the nut which retains it cannot of itself work loose, it is very easily accessible to removal when it is desired to separate the parts.

It will be seen that the transverse clip-plate and the cross-piece of the T-shaped arm of the bolster-plate are of sufficient length to allow the wheels to be cramped to the utmost without separating entirely, and as they are very rigidly secured, as long as they rest on each other, even though the bearing is slight, their efficiency as supports is unimpaired.

Heretofore fifth-wheels have been very complicated in construction, offering great surface to the wearing action and dust, liable to get out of order, and difficult to repair.

By my invention I have done away with all superfluous mechanism and have reduced the fifth-wheel to the simplest construction possible consistent with strength, durability, and efficiency. Shocks and wrenches, no matter

how violent, cannot disturb the king-bolt, so thoroughly is it protected, no place of admission is left whereby sand and dust can clog or wear the bearings, and all careening motion is
5 effectually prevented.

I would have it understood that I do not limit myself to the exact form of construction shown and described, but hold myself at liberty to make such slight changes and alterations as come within the scope and spirit of
10 my invention.

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

15 The combination, with the axle-tree plate C, having a circular bearing-plate formed with an annular flange, a raised central portion, and a

king-bolt, and clips serving to secure the axle-tree in place, said clips having transverse plates riveted thereto, of the bolster-plate B',
20 provided at its ends with transverse arms *c c'* and central cup-shaped bearing, the flange of said cup-shaped bearing resting against the annular flange of the axle-tree bearing and engaging the periphery of the raised central portion thereof, substantially as set forth.
25

In testimony that I claim the foregoing I have hereunto set my hand and seal this 19th day of May, 1880.

TRUMAN L. ANDREWS. [L. S.]

Witnesses:

A. B. COONRAD,
G. W. FENNER.