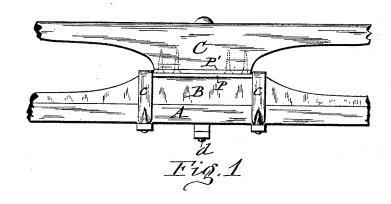
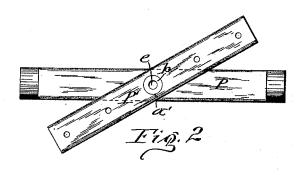
(No Model.)

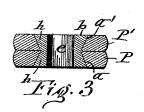
H. A. MOYER.
BOLSTER PLATE.

No. 491,783.

Patented Feb. 14, 1893.







WITNESSES: J.J. Laasz. Mark W. Llewey

Harrey a. Moyer
By Shure, Laurrhluse
his ATTORNEYS.

## UNITED STATES PATENT OFFICE.

HARVEY A. MOYER, OF SYRACUSE, NEW YORK.

## BOLSTER-PLATE.

SPECIFICATION forming part of Letters Patent No. 491,783, dated February 14, 1893.

Application filed December 15, 1890. Serial No. 374,733. (No model.)

To all whom it may concern:

Be it known that I, HARVEY A. MOYER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and use-5 ful Improvements in Bolster or Fifth-Wheel Plates, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the pivotal con-10 nection of the head-block and front axle of a vehicle. And the object of the invention is to relieve the king-bolt from shearing strain at the junction of the head-block and axle. And to that end the invention consists in the 15 novel construction and combination of parts hereinafter fully described and set forth in the claim.

Referring to the annexed drawings, Figure 1 is a front view of the central portion of the 20 front axle with the head-block or bolster mounted thereon, Fig. 2 is an enlarged detached plan view of the axle-bed plate and bolster plate pivoted thereto by my improved device for protecting the king-bolt as afore-25 said, and Fig. 3 is a vertical transverse section through the center of the pivotal connection of the aforesaid plates.

Similar letters of reference indicate corresponding parts.

A— represents the front axle of the vehi-cle,—B— the usual wooden bed-piece mount-ed on said axle, and —C— the head-block pivoted to said bed-piece and axle. Between the head-block and bed-piece are usually inter-35 posed two metal wear-plates -P- and -P'one of which is fastened to the top of the bedpiece —B— by means of clips -c-c— as shown in Fig. 1 of the drawings, and the other plate is fastened to the underside of the head-40 block usually by means of bolts or screws as indicated by dotted lines. The pivoting of the head block or bolster is usually effected by the king-bolt —d— passing down through the parts —C—B— and —A— and through perforations in the intervening plates —P—

P'. Experience has proven the fact that said

construction and combination of parts subjects the king-bolt to both a lateral and shearing strain at the point where it passes through the plates -P-P'-, and in consequence 50 thereof the king-bolt has been broken. All of these defects are obviated by my present invention which consists in reaming out the king-bolt-holes in the two plates so as to bevel said holes throughout their depths gradually 55 contracting the same to the adjacent faces of the plates, and inserting therein a rivet and upsetting or heading the ends of the rivet so as to closely fit to the bevels of the holes. In this manner the rivet receives the shape of 60 two frusta of cones joined at their small ends, and thus forms a most effective tie of the two Vertically through the center of said rivet I drill a hole for the reception of the king-bolt -d— which passes through the 65 head-block or bolster -C—, plates -P'-P—, bed-piece —B— and axle —A.

The rivet —b— is to be fitted sufficiently loose in one or both plates to allow the same

to turn on said rivet. It will be observed that by tying the plates -P-P'— to each other in the form shown and described the king-bolt is entirely relieved from lateral as well as shearing strains.

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Having described my invention, what I 75 claim as new and desire to secure by Letters Patent, is:-

The combination, with the front axle and head-block, of the plates —P—P'— provided with eyes —a—a— beveled throughout their 80 depths with the narrower ends at the adjacent faces of the plates, the rivet -b - of the form of two frusta of cones joined at their small ends and perforated at the center, and the king-bolt passing through said rivet, substan- 85 tially as set forth.

In testimony whereof I have hereunto signed my name this 11th day of December, 1890. HARVEY A. MOYER. [L. s.]

 ${f Witnesses:}$ 

MARK W. DEWEY, H. M. SEAMANS.