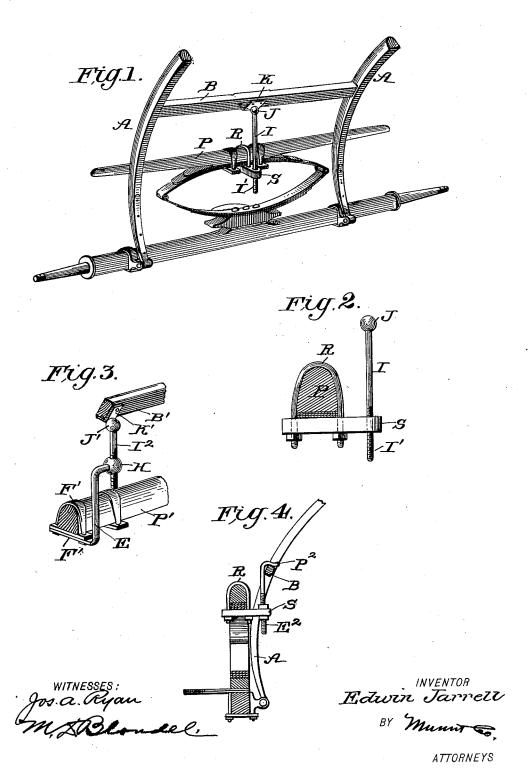
No. 648,870.

## E. JARRELL. Vehicle Shaft Support.

(Application filed Sept. 19, 1899.)

(No Model.)



## UNITED STATES PATENT OFFICE.

EDWIN JARRELL, OF RIVERDALE, KANSAS, ASSIGNOR OF ONE-HALF TO EDWARD E. CORNWELL, OF SAME PLACE.

## VEHICLE-SHAFT SUPPORT.

SPECIFICATION forming part of Letters Patent No. 648,870, dated May 1, 1900.

Application filed September 19, 1899. Serial No. 731,018. (No model.)

To all whom it may concern:

Beit known that I, EDWIN JARRELL, of Riverdale, in the county of Sumner and State of Kansas, have invented a new and useful Im-5 provement in Vehicle-Shaft Supports, of which the following is a specification.

My invention relates to supports for vehicle-shafts, whereby they may be held in an approximately-vertical position, so as to be 10 out of the way when bringing the horse in position for harnessing and to occupy less space when in the carriage-house.

The main object of the invention is a support of this character which will be capable 15 of fine lengthwise adjustment, so as to fit shafts of different shapes or shafts in which the cross-bar is at different distances from the thill-couplings or vehicle-springs.

A further object of the invention is a sup-20 port which will be simple and cheap in construction and of comparatively few parts.

The invention consists in certain details of construction and arrangement of the parts, which I shall first describe and then point out 25 in the appended claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which like characters of reference indicate corresponding parts in all the views in which 30 they occur.

Figure 1 is a perspective view of my invention as applied in use. Fig. 2 is a detail transverse section of the same. Fig. 3 is a detail perspective view of a slightly-modified form, 35 and Fig. 4 is a side view of another modified form.

In the several forms of my invention I utilize the ordinary elliptical or other shaped springs for the vehicle-body for the necessary 40 resiliency of my support, and to this end, as shown in Fig. 1, the support consists of a base-plate S, adapted to receive a clip R, by which it may be attached to the spring-bar P of the vehicle-springs and formed with a 45 screw-threaded opening in which the screwthreaded shank  $\bar{\mathbf{I}}'$  of the supporting-arm  $\mathbf{I}$ works. The upper end of said supportingarm I is formed with a spherical head J, which

is adapted to be forced under an angular 50 wear-plate K, secured in any suitable manner to the cross-bar B of the shafts A. As |

the shafts A are raised the said cross-bar B comes in contact with the head J of the supporting-arm and by reason of the resiliency of the vehicle-springs passes over the said 55 head, whereupon the arm returns to its normal position and holds the shafts raised. A downward pull on the shafts causes the crossbar to pass over the head in the opposite direction.

In the modified form shown in Fig. 3 the base E is formed with a foot F, adapted to pass under and be held to one of the clips F' which secure the spring-bar P' on the vehicle-springs, and the said base is bent at its 65 upper end, so as to bring the screw-threaded bearing H therein in alinement with the middle of the cross-bar B' of the shafts. A screwthreaded arm I2, with a head J' practically similar to the head J, is fitted in said bearing 70 H and is adapted to pass under a wear-plate K' on the cross-bar B', as in the form first described.

As shown in Fig. 4, the threaded shank  ${
m E}^2$ is bent at its upper end and has an upwardly- 75 curved extremity  ${\bf P}^2$ . In this case the shank is so adjusted that the cross-bar of the shafts will pass underneath the bent end of the shank and be held by the downward pressure thereof.

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It will be seen that I have produced supports for vehicle-shafts in which the vehiclesprings may be utilized and in which a threaded shank for the supporting-arm is employed, so that the said arm may be adjusted to a 85 nicety to adapt itself to shafts of different forms and sizes.

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

1. In a vehicle-shaft support, a base adapted for attachment to the vehicle-springs and formed with a threaded bearing, and a rigid supporting arm having a threaded shank fitted in the threaded bearing and having a 95 head arranged for engagement with the crossbar of the shafts, as set forth.

2. In a vehicle-shaft support, a base arranged for attachment to the vehicle-springs and formed with a threaded bearing, and a 100 supporting-arm rigid throughout its length and having a threaded shank fitted in said

bearing and a spherical head adapted to be | forced under the cross-bar of the shafts by the compression of the vehicle-springs, as set

3. In a vehicle-shaft support, a base having a foot adapted for attachment to a clip of the vehicle-springs and a bent upper end formed with a bearing, and a supporting-arm consisting of a shank fitted in said bearing and a spherical head adapted to be forced un-

der the cross-bar of the shafts by the com-pression of the vehicle-springs, as set forth. In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN JARRELL.

Witnesses:

E. E. CORNWELL, Asa M. Black.