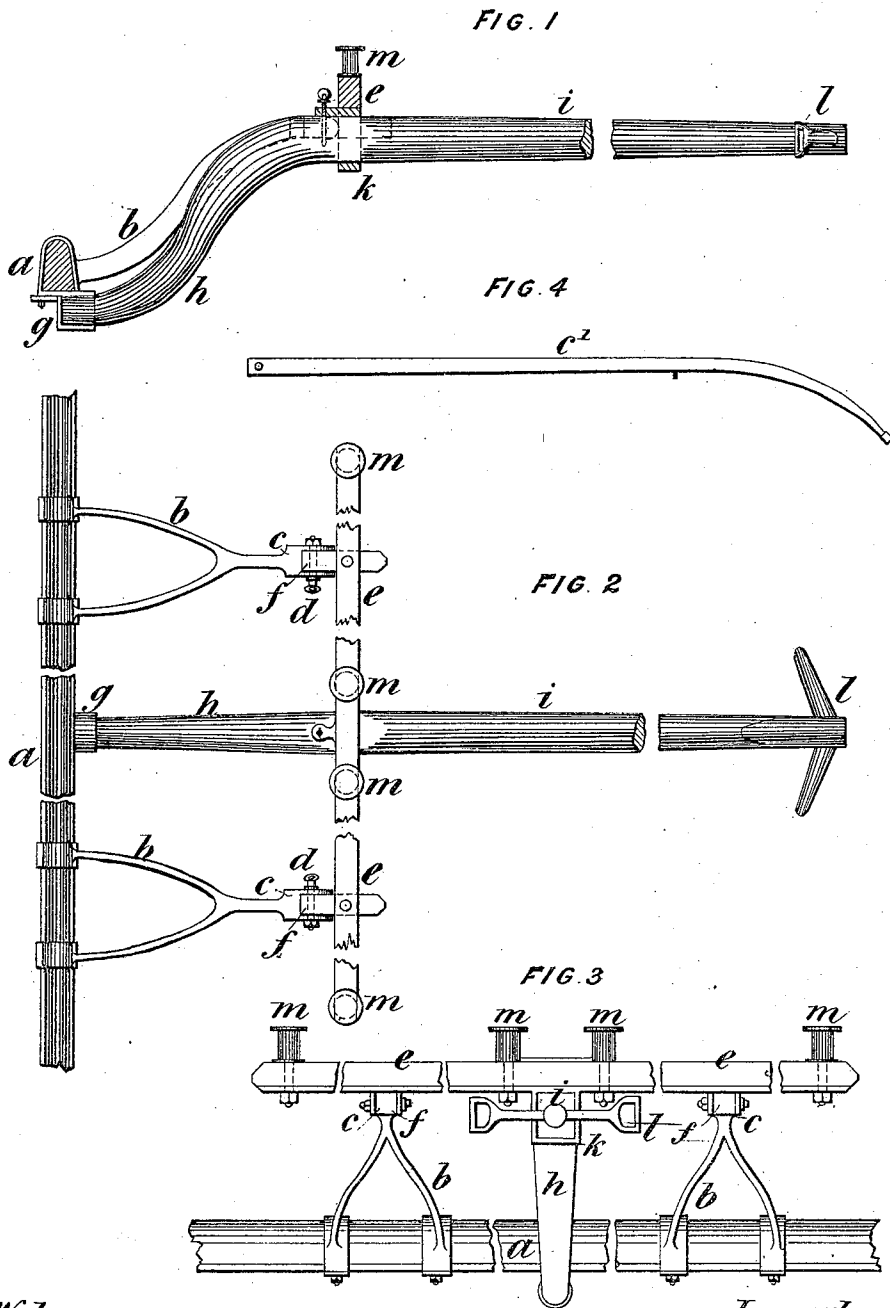


J. MAGUIRE.

Poles and Shafts for Vehicles.

No. 148,224.

Patented March 3, 1874.



Witnesses

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IMPROVEMENT IN POLES AND SHAFTS FOR VEHICLES.

Specification forming part of Letters Patent No. **148,224**, dated March 3, 1874; application filed October 6, 1873.

To all whom it may concern:

Be it known that I, JAMES MAGUIRE, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements on the Attachment of Horses to Vehicles, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention has reference to improvements on the arrangement and construction of the shafts and poles of vehicles, and on the manner of attaching the same.

By my invention, when the single harness, as will be hereinafter described, is used, the horse may be placed much nearer his work than by the ordinary method, and the vehicle, when not in use, will stand in less room, as the shafts may be turned up perpendicular or back to the dash-board. When my invention is used with a pole, the pole is self-supporting, and no weight is thrown on the collars of the horses attached. It also provides a much handier means of changing from single to double harness.

In the drawings hereunto annexed, similar letters of reference indicate like parts; and

Figure 1 represents a side elevation embodying my invention. Fig. 2 represents a plan of Fig. 1. Fig. 3 represents an end elevation of Fig. 1. Fig. 4 represents a side elevation of a single shaft.

Letter *a* is the fore axle (of ordinary construction) of any vehicle. To this are attached the stays *b b*, of any desired configuration, but terminated with sockets *c*, in the position indicated on the drawings. To these sockets *c*, when the vehicle is for single harness, are attached, separately, one on each, the shafts *c'*, of any desired configuration, or, as shown in Fig. 4, secured by a bolt, *d*. This bolt *d* is provided with any suitable enlarged eye or head on the end of it, to form the trace-bearer.

It will thus be seen that the space between the shafts is clear and open right back to the axle, the cross-tree and whipple-bar being dispensed with in this case, thus allowing the horse to be placed much nearer his work.

When the vehicle is not in use, it will readily be understood that the shafts may be turned right back to the dash-board, the bolts *d* serving as the hinges, thereby taking up less room than the ordinary shafts.

When the invention is used for double harness, or for two horses, the single shafts are removed from the sockets *c*. The splinter-bar *e* is then put in the position shown in Figs. 1, 2, and 3, being provided with eyes *f* to engage with the sockets *c*, the same pins *d*, hereinbefore described, serving to connect them. *g* is a socket, arranged, as shown in the drawings, below the axle, but may also be secured to the side of the axle, so that the end of the pole received in it will butt against the axle, as in the ordinary manner; but it may be used in either way without departing from the principle of my invention. It will, however, be readily understood that, when the socket *g* is placed below the axle, instead of at the side, the neck *h* of the pole *i* will require to have a greater curve. Thus in nearly all cases it will be preferable to place the socket *g* by the side of the axle.

This socket *g*, although shown in the drawings as round, may, if desired, be made square, and the neck *h* correspond with and be configured to fit it. I prefer, also, to make the socket tapering, so that the end of the pole will wedge itself tightly therein.

The splinter-bar *e* is provided with a socket, *k*, in the center, of the ordinary construction, to receive and hold in position between itself and the socket *g* the pole *i*, constructed in all other respects in any of the ordinary forms at present in use; but I prefer to terminate it with a yoke, *l*, for attaching to the collars of horses in the ordinary manner.

m are the pins on the splinter-bar for attaching the braces to, and may be of any desired configuration.

What I claim is as follows:

1. The axle *a*, stays *b*, having eyes *c*, and bolts *d*, in combination with the shafts *c'*, substantially as described.

2. The combination of the axle *a*, stays *b*, splinter-bar *e*, and pole *i*, constructed to operate substantially as described.

3. The sockets *g* and *k*, in combination with the stays *b* and splinter-bar *e*, whereby the pole *i* is rendered self-supporting, substantially as described.

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Witnesses:

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