G. W. EDDY.

Pole and Shaft for Vehicles.

No. 168,464. Patented Oct. 5, 1875.

Fig. 1.

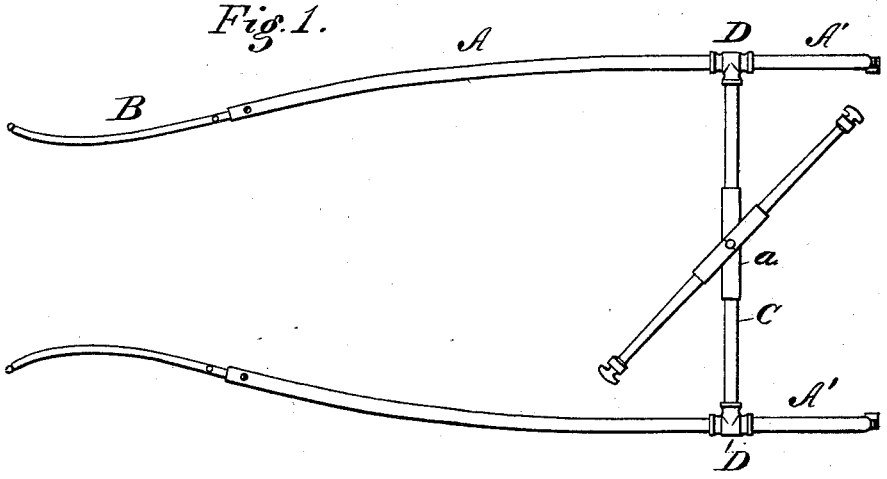


Fig. 2.

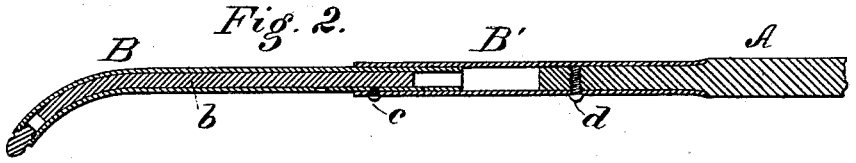


Fig. 3.

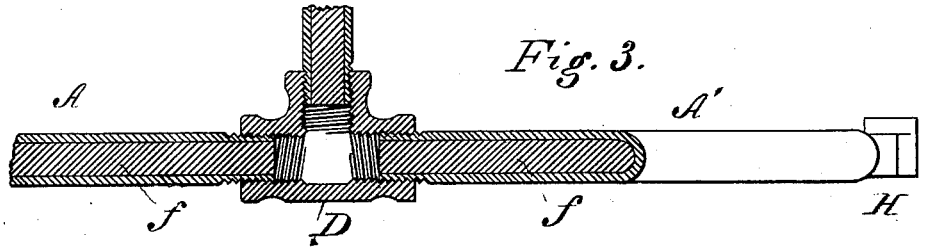
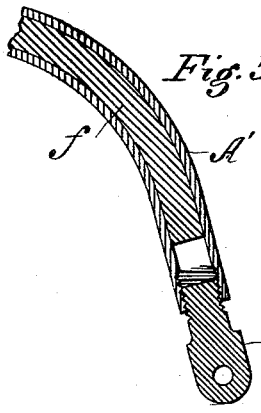


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN POLES AND SHAFTS FOR VEHICLES.

Specification forming part of Letters Patent No. **168,464**, dated October 5, 1875; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. EDDY, of Waterford, in the county of Saratoga and State of New York, have invented certain Improvements in Carriage Thills and Poles, of which the following is a specification:

My invention consists of certain improvements in the construction of carriage-thills or poles, made of tubular metal, in whole or in part, as hereinafter more specifically described.

Figure 1 is a plan view of a pair of carriage-thills having my improvements applied. Figs. 2, 3, and 5 are views of portions of the same, enlarged and shown partly in section to more fully illustrate their construction. Fig. 4 is a plan view of a portion of a carriage-pole with my improvement applied thereto.

It has heretofore been proposed to construct carriage thills and poles of pieces of metal tubing or pipes, but for various reasons they have not as yet proven successful in practice. The object of my present invention is to so improve these articles as to render them more perfect and available.

In constructing a pair of thills on my plan I proceed as follows: If it be desired to make them wholly of metal I provide two pieces of tubing long enough to make the main portion A, as represented in Fig. 1. In like manner I provide two additional pieces, A′, of proper length to form the rear curved portion, and connect the parts A and A′ by a thimble, D, as shown in Fig. 3, the two shafts being connected by a cross-bar, C, which is strengthened at its center by a tubular sleeve, *a*, and has its ends screwed into the tubular projections on the sides of the thimbles D, the screw-threads on the cross-bar C being cut right and left handed, so that by turning the bar C the shafts may be drawn together or separated, thus making them narrower or wider, as may be desired, to adapt them to animals of different sizes. The rear or end pieces A′ have an eye-piece, H, secured thereto, by screwing into or over the end, as shown in Figs. 3 and 5, this being for attaching to the carriage. By having these eye-pieces thus secured to the thills or shafts, they can be turned in their seats in the ends of the parts A′, while the latter, in like manner, can be turned in the thimbles D so as to adjust these parts to the clips or attachments on the axle, according as the latter may be closer together or farther apart.

In order to give to the thill when finished a graceful appearance, their front ends should be smaller than the body, and to accomplish this I make their front ends of a smaller piece of tubing, B, as shown in Figs. 1 and 2, this being first filled with a metal rod or core, *b*, as shown in Fig. 2, to stiffen it and give it the required strength. In connecting these parts I make the front end or piece B so as to slide within the part A, and secure it by set-screws or similar means, which enables the thills to be adjusted in length, as may be required. If desired, the tubular parts A and A′ may be filled with wood, as shown at *f f*, Fig. 3, the wood being inserted before the metal is bent. By this means a lighter tube may be used.

It is obvious that a carriage pole or tongue may be made in the same manner—that is, of tubular metal—with or without being filled in with wood, and may have its front portion reduced in diameter and made extensible, as shown in Figs. 2 and 4. These front portions B may be made of brass tubing or of any other kind desired, and, being plated, will make a very finished and ornamental appearance. The front portions may also be constructed so as to be applied to wooden thills and tongues, thus making them extensible, and at the same time highly ornamental.

In Fig. 2 I have shown the front piece or terminal so applied to a wooden thill, A, there being a tubular piece, B′, secured firmly upon the end of the wooden part A, within which the extensible part B slides, and is secured by a screw, *e*.

In Fig. 4 I have represented the same as applied to a tongue or pole, A, representing the wooden body (broken off) with a tubular piece, B^2, firmly secured thereon. In this case I have represented two extensible or sliding parts, B and B^1, to show that more than one may be used, if desired. Thus it will be seen that this terminal portion B, whether made extensible or not, may be readily applied to wooden thills and poles, either when the latter are first made, or to those already in existence.

Thus the present wooden thills and tongues can be made ornamental, and, if desired, extensible in length also. For this purpose these terminals B, with their tubes B^1, may be made up and furnished to the trade as other portions of carriages now are, ready for use whenever needed. So, too, whenever the end of a thill or tongue is broken off, as frequently happens, these terminals may be applied, and the article thus made as good as new, and far more ornamental.

The great advantages of my plan of constructing these articles, especially when made wholly of tubes, is that they are far more graceful than when made their entire length of one size, and can be adjusted in length, and, in the case of thills, in width also.

It is obvious that in making poles on this plan, they may be constructed to use the detachable neck-yoke, or they may be made with a device attached thereto for supporting the pole, as is now done with the ordinary carriage-poles.

Having thus described my invention, what I claim is—

1. A carriage pole or thills, made extensible by means of the sliding terminal B, substantially as described.

2. In combination with the tubular thills, the adjustable eye-piece H, substantially as set forth.

3. The cross-bar C, connected to the thills A by a right and left hand screw on its ends, for adjusting them in width, as set forth.

4. The tubular terminals B, adapted to fit upon the front end of carriage thills or poles, substantially as shown and described.

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