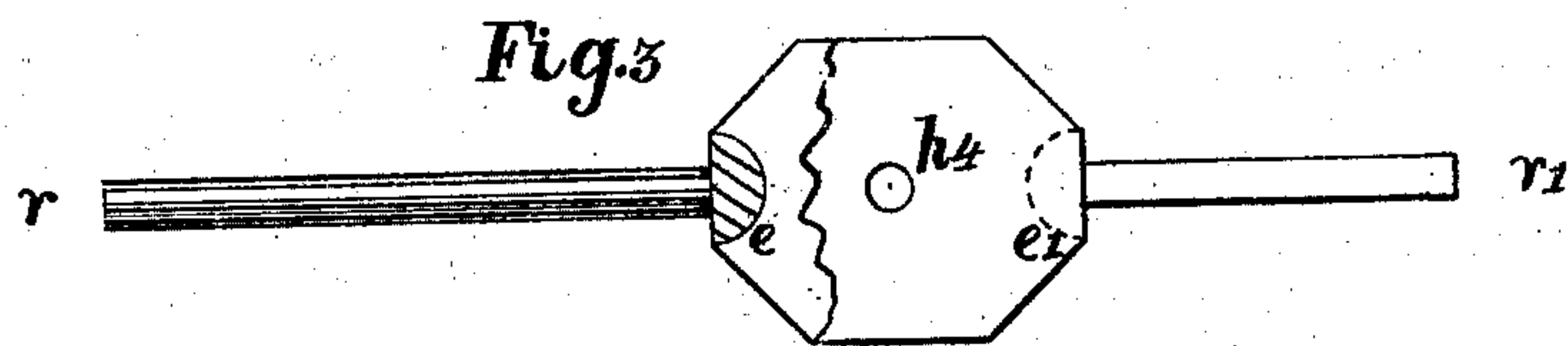
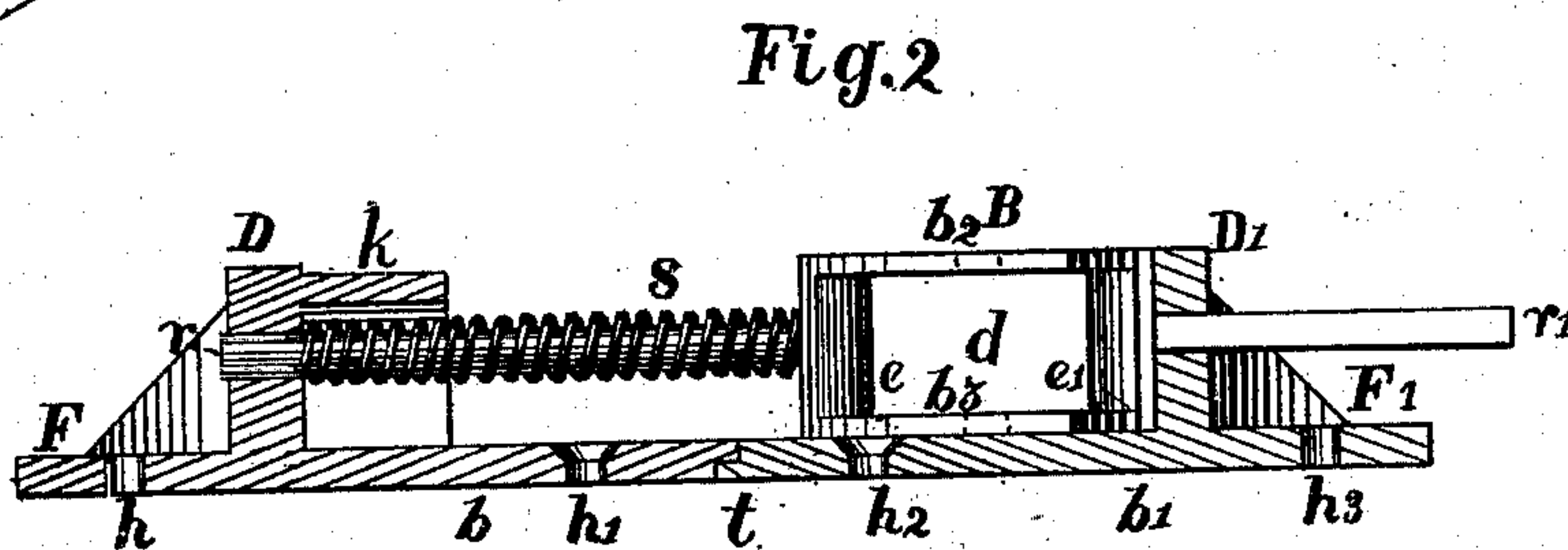
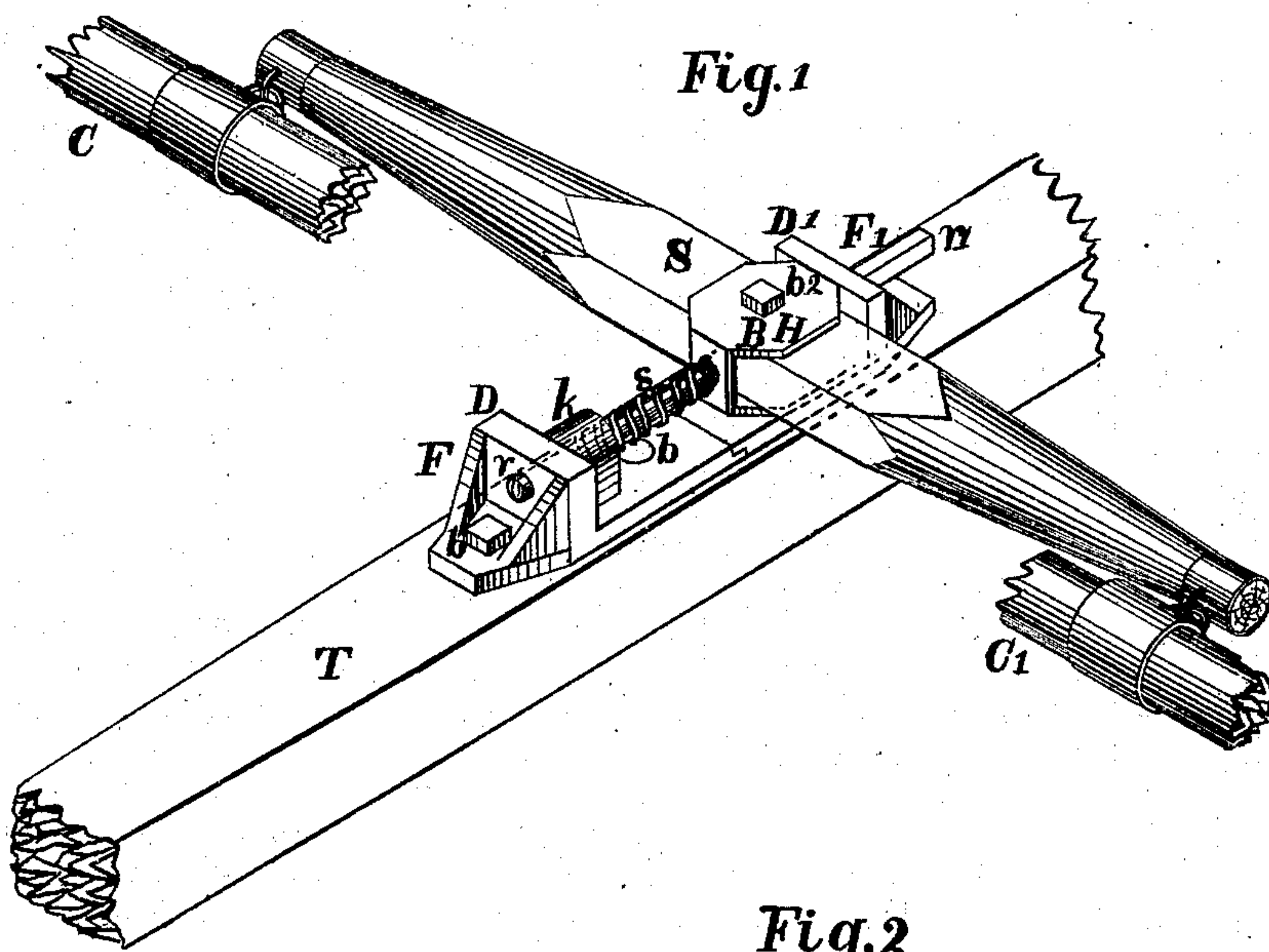


M. D. NELON.  
Draft Attachment for Vehicles.

No. 198,666.

Patented Dec. 25, 1877.



Attest

C. Walton Jr.  
Jos. Ziegle.

Inventor

Michael D. Nelson,  
per Wm. Hubbell Fisker  
Atty.



# UNITED STATES PATENT OFFICE.

MICHAEL D. NELON, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO SAMUEL L. YOURTREE, OF SAME PLACE.

## IMPROVEMENT IN DRAFT ATTACHMENTS FOR VEHICLES.

Specification forming part of Letters Patent No. **198,666**, dated December 25, 1877; application filed  
March 12, 1877.

*To all whom it may concern:*

Be it known that I, MICHAEL D. NELON, of the city of Cincinnati, in the State of Ohio, have invented certain new and useful Improvements in Draft Attachments for Vehicles, of which the following is a specification:

This invention relates to that class of draft attachments having a spring so connected with the whiffletree as to bring the weight of the load, in starting, gradually upon the draft-animals; and consists in the combination of an open-sided box or holder, in which the whiffletree is pivoted by a bolt, a spring, guide-rods, and supports therefor, so arranged as to be used with either a double or single tree, and with or without a tongue.

In the accompanying drawings, Figure 1 is a perspective view of an evener, and of a portion of a vehicle-tongue provided with my invention. Fig. 2 is a central vertical longitudinal section of the same; and Fig. 3 is a top view of the evener-holder and its attendant rods, the front edge of the said holder being broken away to show the form of the ends of the holder.

The tongue of the vehicle is indicated by the letter T, both ends of the tongue being broken off, and only that portion thereof being shown which is necessary to the illustration of my invention. That end of the tongue which is connected with the vehicle would be on the right hand in the drawing if the tongue were fully drawn.

s is the evener, to each end of which one of the whiffletrees C C' is attached in suitable manner. The evener-holder B consists of a frame,  $b^2 b^3 e e'$ , of which top  $b^2$  and bottom  $b^3$  consist of broad flat sheets of metal, preferably octagonal or oval, and the ends  $e e'$  are thick from top to bottom at their middle, and rounded off at each side. The object in thus shaping the ends is this: The ends must be thick at the center, so as to respectively afford a proper hold for the rods  $r$  and  $r'$ , and are rounded so as to prevent the evener from being injured by meeting a sharp corner when one of the draft-animals starts in advance of the other, and draws his end of the evener ahead.

The evener is placed within the holder,

the vertical center of both coinciding, and a bolt, H, passed through both, as shown in Fig. 1. This bolt secures the evener to the holder, and also affords the ends of the latter opportunity to oscillate a convenient distance to accommodate the uneven draft of the team.

The rod  $r$ , one end of which is attached, as aforesaid, to end  $e$ , slides in the direction of the tongue in a transverse support or upright, D, preferably provided with braces F, all attached to a bottom plate,  $b$ . A spring,  $s$ , of the proper strength to greatly resist a sudden start of the team—in other words, of the proper elasticity to accomplish the object of its employment, as stated in the nature of invention—encircles the rod  $r$ , the latter being of sufficient size to prevent the spring from buckling or catching in its own coils.

An arch,  $k$ , is attached to the rear side of the support D, and to secure additional strength for itself, and the support D is also attached to the bottom  $b$ . This arch  $k$  overarches the spring  $s$  and rod  $r$ , and projects far enough rearward to prevent the end  $e$  of the holder from crushing the spring if, by any means, the holder should be drawn thus far forward before the load is started.

The bottom plate is secured to the tongue by any suitable means. Here the plate is provided with bolt-holes  $h h'$ . Bolts passed through these holes and screwed into the tongue secure the bottom  $b$  and its accompaniments firmly in position.

The rod  $r'$ , fixed, as aforesaid, in the other end,  $e'$ , of the holder, projects rearward, and slides through a support, D', braced by rearwardly-projecting flanges F', both the latter and the support D being firmly attached to a bottom,  $b^1$ , which latter is secured to the tongue in substantially the same manner as bottom  $b$ . The bottoms  $b$  and  $b^1$  are preferably long enough to touch, and each overlaps the other by a half-lap, as shown at  $t$ , thereby presenting a smooth and continuous surface to the tongue, and to the bottom, which is preferably so placed as to rest on and slide on the bottoms, although the holder would be operative if supported and guided by the rods only.

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the holder B, rods  $r$   $r'$ , supports D D', and spring  $s$ , substantially as and for the purposes set forth.

2. The combination of holder B, provided with rods  $r$   $r'$ , spring  $s$ , supports D, provided

with arch  $k$  and bottom  $b$ , and support D', provided with bottom  $b^1$ , all substantially as and for the purposes set forth.

MICHAEL D. NELON.

Attest:

C. WALTON, Jr.,

WM. HUBBELL FISHER.