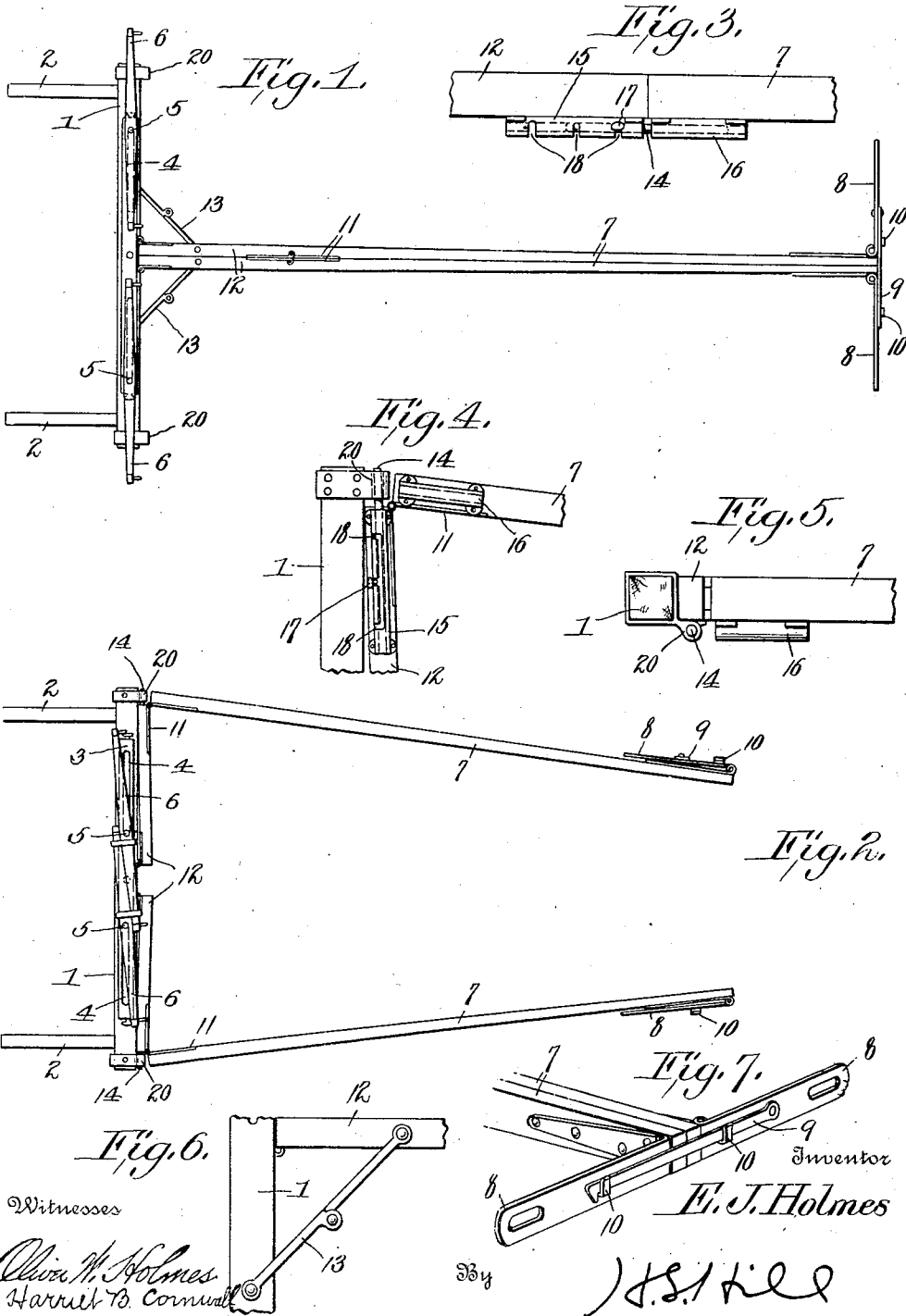


E. J. HOLMES.
COMBINED CARRIAGE POLE AND SHAFTS.
APPLICATION FILED FEB. 3, 1910.

977,093.

Patented Nov. 29, 1910



UNITED STATES PATENT OFFICE.

ETHAN J. HOLMES, OF FARMINGTON, CONNECTICUT.

COMBINED CARRIAGE POLE AND SHAFTS.

977,093.

Specification of Letters Patent.

Patented Nov. 29, 1910.

Application filed February 3, 1910. Serial No. 541,668.

To all whom it may concern:

Be it known that I, ETHAN J. HOLMES, citizen of the United States of America, residing at Farmington, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Combined Carriage Poles and Shafts, of which the following is a specification.

The present invention relates in general to vehicles, and more particularly to a novel draft applying means which embodies a novel construction whereby it may be employed either as a pole in connection with two horses or as a pair of shafts in connection with a single horse.

The object of the invention is the provision of a combined carriage pole and shaft which is simple and inexpensive in its construction, which will operate effectively in either capacity, and which can be easily and quickly adjusted as desired.

With these and other objects in view the invention consists in certain combinations and arrangements of the parts as will more fully appear as the description proceeds, the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the accompanying drawing in which:

Figure 1 is a top plan view of the device showing the parts in the position assumed when it is desired to use the device as a pole in connection with two horses. Fig. 2 is a similar view showing the parts in the position assumed when it is desired to use the device as a pair of shafts in connection with a single horse. Fig. 3 is an enlarged side elevation of the joint between the inner end of one of the shaft members and the swinging arm to which it is connected. Fig. 4 is a bottom plan view of one of the ends of the cross bar together with adjacent parts of the swinging arm and shaft section, showing the manner of connecting the parts when the device is used as a pair of shafts. Fig. 5 is an end view of the cross bar and adjacent parts. Fig. 6 is a bottom plan view of one of the hinged braces, and Fig. 7 is a detail perspective view of the neck yoke.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Specifically describing the present em-

bodiment of the invention, the numeral 1 designates the cross bar which is provided at its opposite ends with the usual members 2 by means of which connection is made to the front axle or other desired portion of the vehicle. A swingle tree 3 is pivotally mounted upon the upper face of the cross bar 2 in the usual manner, the said swingle tree being provided at the opposite ends thereof with the slots 4 within which the pivot bolts 5 of the swingle trees 6 are slidably mounted.

When the device is used in connection with two horses the pivot bolts 5 are moved to the outer ends of the respective slots 4, as indicated in Fig. 1, while when the device is used as a pair of shafts, as indicated in Fig. 2, the pivot bolts 5 are moved to the inner ends of the slots 4 and the two swingle trees 6 tied together in an out of the way position.

The two shaft members which are designated by the numerals 7 are designed to be either swung together so as to form the forward portion of the pole as indicated in Fig. 1 or to be swung apart and employed as shafts as indicated in Fig. 2. The outer end of each of these shaft members 7 has a neck yoke section 8 hinged thereto, and these neck yoke sections are preferably formed of flat metallic bars so as to swing rearwardly and fit closely against the shaft sections when the device is used as a pair of shafts. However, when the shaft members 7 are swung together to form a pole, the two neck yoke sections 8 are turned outwardly into alignment with each other and a hook member 9 upon one of the said neck yoke sections caused to engage the keepers 10. This hook member 9 then serves both to hold the neck yoke sections in alinement with each other and to lock the shaft members 7 together so that they can not swing apart. The inner ends of the shaft members 7 are loosely connected in any suitable manner as by means of the strap hinges 11 to the outer ends of the swinging arms 12 which are hinged to the central portion of the cross bar 1 so as to swing rearwardly against the same when desired. Hinged braces 13 are applied to these swinging arms 12 for the purpose of locking the same in a position at substantially right angles to the cross bar 1, the said braces being arranged under the cross bar and swinging arms so as not to interfere with the free movements of the latter. The outer or

swinging end of each of the arms 12 is provided with a bolt 14 which is slidably mounted within the tubular casing 15 and is designed to engage a keeper 16 upon the corresponding shaft member 7 for the purpose of holding the said shaft member and swinging arm in alinement with each other. Each of these bolts 14 is provided with a finger piece 17 which operates within the usual slot in the casing and is designed to be turned into engagement with any selected one of three notches 18 to lock the bolt against longitudinal movement. When the bolt is either projected or withdrawn to the full extent the finger piece 17 may be turned into one of the end notches 18 while when the bolt is at an intermediate point the finger piece can be turned into engagement with the middle notch 18.

When it is desired to transform the device from a pole into a pair of shafts, the neck yoke sections are swung rearwardly against the shaft members 7, the bolts 14 withdrawn from the keepers 16, and the hinged braces 13 broken. The swinging arms 12 are then brought rearwardly against the cross bar 1, as indicated in Fig. 2, and the bolts 14 moved outwardly into engagement with the keepers 20 located at the ends of the cross bar. It will thus be obvious that I have invented a draft device which can be readily adjusted so as to be employed either as a pole or pair of shafts, and which will operate effectively in either capacity.

While I have shown and described one embodiment of my invention, I do not wish to be understood as restricting myself thereto, since slight alterations and changes can be made without departing in any manner from the spirit of the invention.

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

1. In a device of the character described, the combination of a cross bar, keepers at the ends of the cross bar, arms hinged to the cross bar at the middle portion thereof so as to either fold against the same or project outwardly therefrom, shaft members loosely

connected to the arms, keepers upon the shaft members, and bolts upon the arms, the said bolts being designed to engage either the keepers upon the shaft members to hold the latter in alinement with the arms when the latter project outwardly from the cross bar and the shaft members are brought together to form a tongue or to engage the keepers upon the cross bar when the shafts have folded against the cross bar and the shaft members are separated to form a pair of shafts.

2. In a device of the character described, the combination of a cross bar, shaft members carried by the cross bar and mounted so as to be either brought together to form a pole or separated to form shafts, independent neck yoke sections carried by the shaft members, and means cooperating with the neck yoke sections to hold the same in operative position and also to hold the ends of the shaft members together when the device is used as a pole.

3. In a device of the character described, the combination of a cross bar, shaft members carried by the cross bar and mounted so as to be either brought together to form a pole or separated to form shafts, a neck yoke section hinged upon each shaft member, and means for holding the neck yoke sections in alinement with each other.

4. In a device of the character described, the combination of a cross bar, shaft members carried by the cross bar and mounted so as to be either brought together to form a pole or separated to form a pair of shafts, a neck yoke section hinged upon each of the shaft members, and a hook member carried by one of the neck yoke sections and adapted to engage the opposite neck yoke section to hold the shaft members together and retain the neck yoke sections in operative position.

In testimony whereof I affix my signature in presence of two witnesses.

ETHAN J. HOLMES.

Witnesses:

L. M. BARBER,
JAMES B. HENRY.