J. O. PRICE.

DRAFT EQUALIZER.

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916,194. **Patented Mar. 23, 1909.**

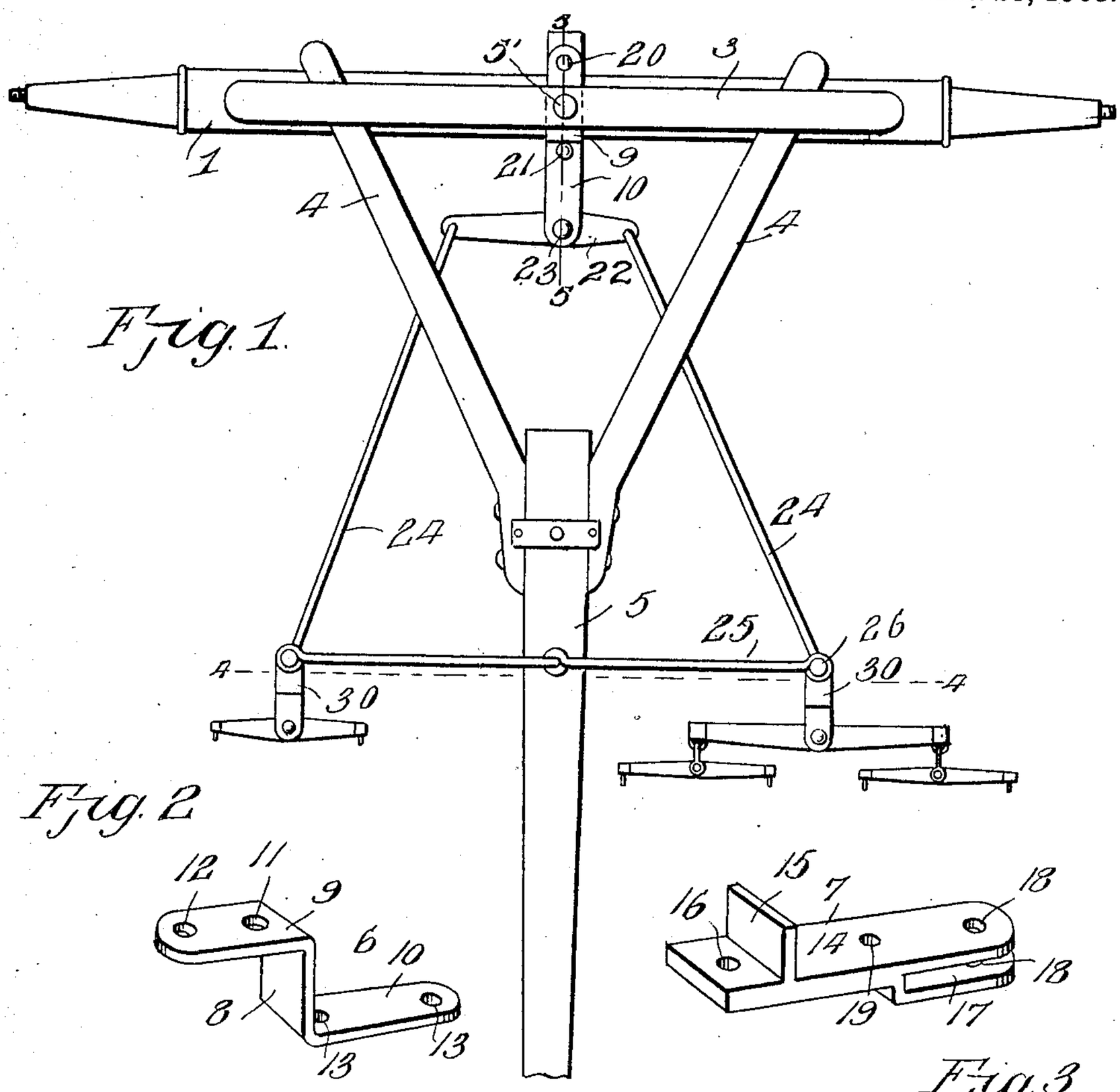
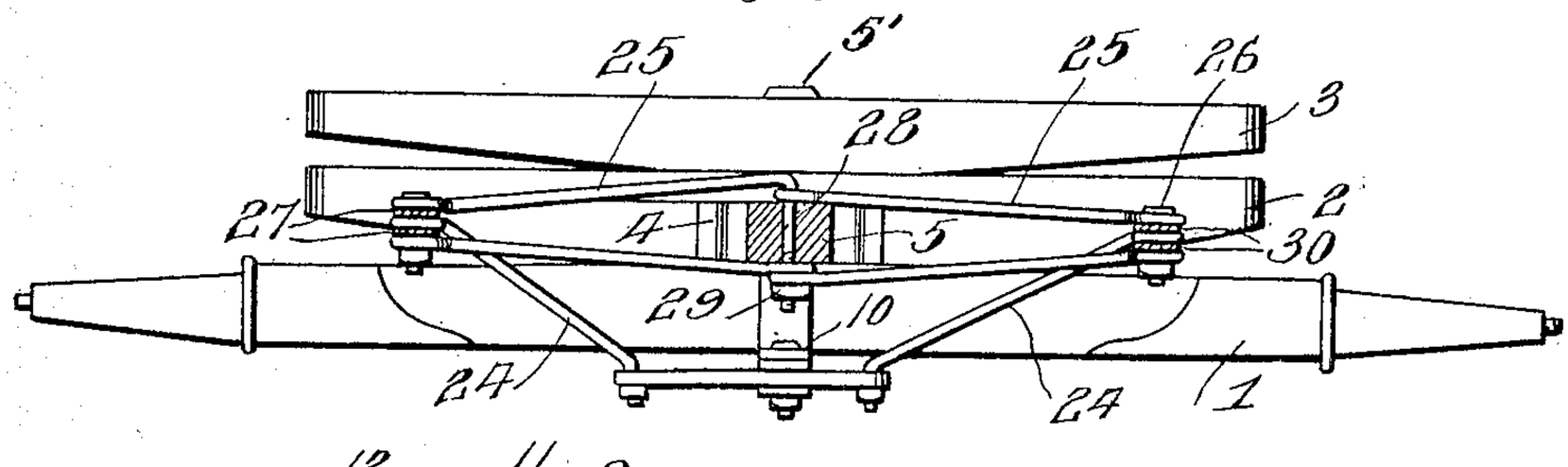


Fig. 1.

Fig. 2

Fig. 3

Fig. 4



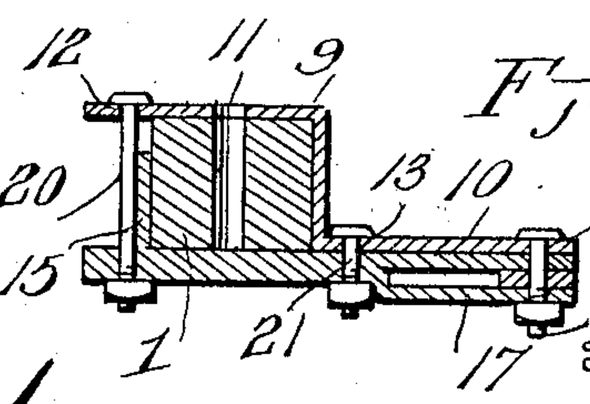


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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DRAFT-EQUALIZER.

No. 916,194. Specification of Letters Patent. Patented March 23, 1909.

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To all whom it may concern:

Be it known that I, JOHN O. PRICE, a citizen of the United States, residing at Mark Center, in the county of Defiance and State of Ohio, have invented new and useful Improvements in Draft-Equalizers, of which the following is a specification.

The invention relates to an improvement in draft equalizers, being particularly directed to a three horse evener connected directly, to and the draft on which is sustained by, the front axle of the vehicle.

The main object of the present invention is the production of an evener of the type noted in which the connection is made directly with the forward axle through the medium of the king bolt, the latter being utilized for resisting the draft on the evener.

The invention in the preferred embodiment of details will be described in the following specification, reference being had particularly to the accompanying drawing, in which:—

Figure 1 is a plan illustrating a draft equalizer constructed in accordance with my invention. Fig. 2 is a perspective view of the upper member of the coupler. Fig. 3 is a perspective view of the lower member of the coupler. Fig. 4 is a transverse section on line 4—4 of Fig. 1. Fig. 5 is a section on line 5—5 of Fig. 1.

Referring particularly to the drawings, it will be noted that my draft equalizer is adapted for use with a wagon body of ordinary construction, including the forward axle 1, the sand board 2 connected to and supported above the axle, the bolster 3 connected to the wagon body, the hounds 4 leading forward from the axle and the tongue 5 connected to the forward ends of the hounds, it being understood that the bolster is mounted for movement relative to the axle and through the medium of the usual king bolt 5′.

The draft equalizer of the present invention comprehends a coupler for removably connecting the evener bar to the axle, said coupler including an upper member 6 and a lower member 7. The upper member comprises an approximately Z-shaped bar having a vertically disposed plate from the respective ends of which project in opposite directions an upper or clamp plate 9 and a lower or supporting plate 10. The clamp plate 9 is of greater length than the width of the forward axle 1, being formed with an opening 11 to permit the passage of the king bolt therethrough, and in that portion of the plate extending rearwardly beyond the axle with a bolt opening 12, for a purpose which will presently appear. The supporting plate 10 is formed with two bolt openings 13 to permit the connection of the lower end of the coupler thereto.

The lower member of the coupler comprises an elongated plate 14 formed near its rear end with a vertically extending flange 15 designed when the coupler is assembled to bear against the rear surface of the axle, said plate, in rear of the flange being formed with a bolt opening 16. The forward end of the plate 14 is provided with an underlying plate 17 preferably formed integral with the plate 14 by offsetting, so that said plates project in spaced parallel relation, as seen in Fig. 3. The plates 14 and 17 are formed near their forward or free edges with vertically alined bolt openings 18, and said plate 14, in rear of the connection of the plate 17 therewith is formed with a bolt opening 19.

In connecting the coupler to the axle the upper member thereof is arranged upon the upper surface of the axle with the plate 8 abutting squarely against the forward edge of the axle and the opening 11 alined with the king bolt opening in the axle, the lower member arranged beneath the axle, with the flange 15 abutting against the rear edge thereof. In this position of the members the openings 12 and 16 are alined in rear of the axle for the reception of a hang bolt 20, while the openings 13 and 19 are alined forward of the axle for the reception of a stay bolt 21, thus securing the coupler against accidental disconnection from the axle.

The evener bar 22 is pivotally supported between the plates 14 and 17 by means of a pivot bolt 23 passed through the openings 18. Said bar is to be specifically arranged with regard to the purpose of the evener, in the present instance, the use of the device as a three horse evener the extent of the bar on one side of the pivot connection will be double the length of the bar on the opposite side, thus providing a leverage in favor of the single horse. From the respective ends of the evener bar extend rods 24 which at their forward ends are connected to tongue levers 25. The respective levers 25 are each made up of spaced bars terminally formed with eyes to receive pins 26 which are passed

through similarly formed eyes in the forward ends of the rods 24, said rods being arranged intermediate the rods forming the levers and spacing collars 27 being arranged on the pins 26 to prevent frictional interference of the parts in operation. The relatively inner end of one of the bars of a lever 25 is bent to form a depending pivot pin 28 which passes through the tongue 5 and receives the eyes of the inner ends of the remaining rods, the lower terminal of the pin being threaded for the reception of a nut 29. Pull bars 30 are secured upon the respective pins 26, one of said bars carrying at its forward end a single horse connection, and the other a double horse connection.

The operation of the improved equalizer will be fully apparent from the above description taken in connection with the drawing, it being particularly noted that the evener is supported by the forward axle and that the strain thereon is mainly directed against that axle and the king bolt. By this construction I am enabled to utilize the evener with any of the usual wagon gears, and quickly and readily apply the evener without requiring special tools for the purpose. Furthermore, by the disconnection of the evener bar from the coupler the entire device may be readily removed when not desired for use.

Having thus described the invention, what is claimed as new, is:—

1. A draft equalizer including a coupler comprising a plurality of independent members formed to together embrace the forward axle, one of said members being formed with an opening to receive the king bolt of the vehicle, one of the members being provided at its forward end with spaced parallel plates, an evener bar pivotally supported between said plates, draft animal attaching means, and connections between said means and the evener bar.

2. A draft equalizer including a coupler comprising a plurality of independent members formed to together embrace the forward axle, one of said members being formed with an opening to receive the king bolt of the vehicle, one of the members being provided at its forward end with spaced parallel plates, an evener bar pivotally supported between said plates, draft animal attaching means, connections between said means and the evener bar, and levers between said connections and the draft tongue.

3. A draft equalizer including a coupler comprising a plurality of independent members arranged to embrace the forward axle, the upper of said members being formed with an opening to receive the king bolt and including a rearwardly extending plate to rest upon the upper portion of the axle, a vertical plate to rest against the forward portion of the axle, and a lower plate extending forwardly from the lower edge of the vertical plate, the lower member being designed to underlie the axle and provided adjacent its rear edge with a vertically extending flange to bear against the rear edge of the axle, and an additional plate underlying and spaced from the lower member adjacent the forward edge of the latter, and means for securing the members together.

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

JOHN O. PRICE.

Witnesses:

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CHRISTIAN M. OVERHOLT.