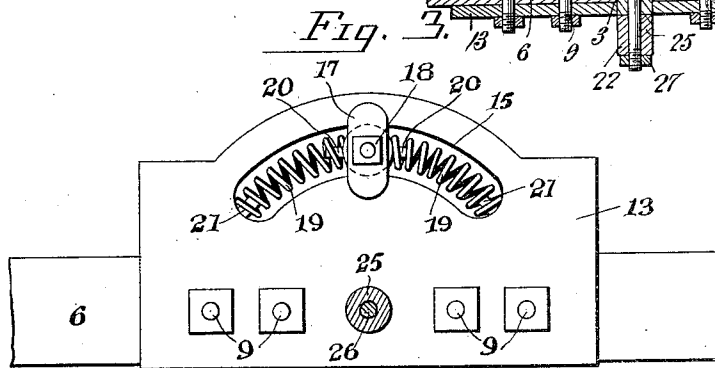
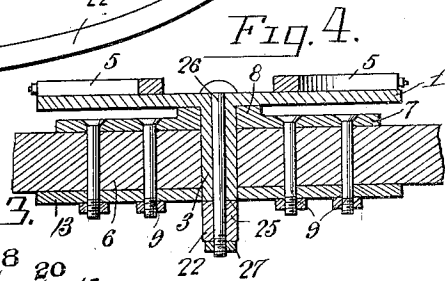
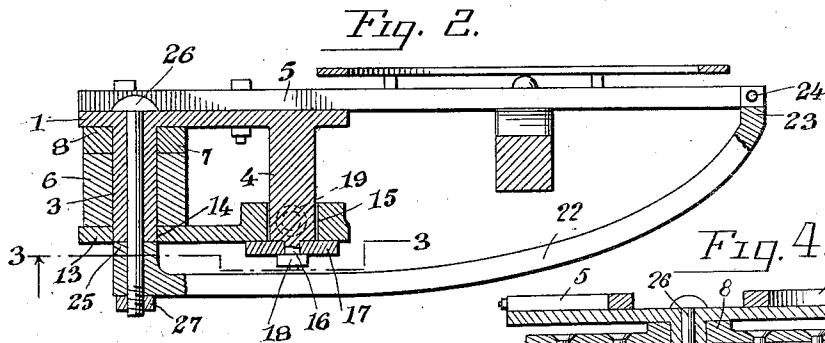
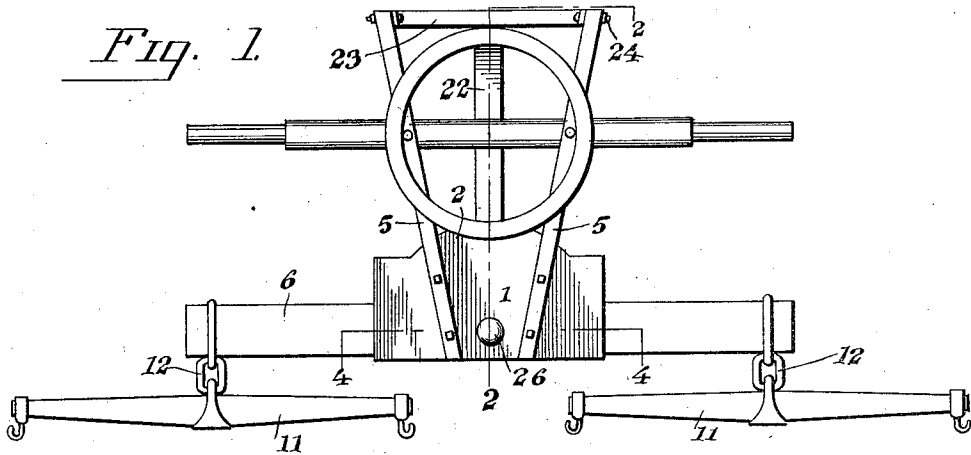


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DRAFT EVENER.
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1,046,890.

Patented Dec. 10, 1912.



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DRAFT-EVENER.

1,046,890.

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Patented Dec. 10, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM P. STEGMEYER, a citizen of the United States, residing at East St. Louis, in the county of St. Clair and State of Illinois, have invented new and useful Improvements in Draft-Eveners, of which the following is a specification.

This invention is an improved draft equalizer, especially adapted for use in connection with the double-tree to normally keep the double-tree in position at right angles to the pole and yet permit the double-tree to swing to some extent and to cushion the swinging motion of the double-tree so as to prevent jerking motions being communicated to the collars of the horses' harness and also to cause the double-tree to equalize the draft stress between the horses of the team, the invention consisting in the construction, combination and arrangement of devices, hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a plan of a draft equalizer constructed in accordance with my invention, showing the same arranged in operative relation to a double-tree and a pair of swingle-trees. Fig. 2 is a vertical longitudinal central sectional view of the same on the plane indicated by the line 2—2 of Fig. 1. Fig. 3 is a detail horizontal sectional view on the plane indicated by the line 3—3 of Fig. 2. Fig. 4 is a detail vertical transverse sectional view on the plane indicated by the line 4—4 of Fig. 1.

In accordance with my invention, I provide an upper plate 1 which has a rounded rear edge 2 and is also provided on its under side, with a depending tubular sleeve 3 which is concentric with the rounded edge 2 and a depending cylindrical stud 4. In practice, hounds 5 are secured on the upper side of the said plate and extend rearwardly therefrom.

The double-tree 6 is pivotally mounted on the sleeve 3 and has an iron or wear plate 7 on its upper side, the central portion of which has a boss 8 that bears against the under side of the upper plate. This iron or wear plate 7 is secured to the double-tree by means of bolts 9. The usual swingle-trees 11 are connected to the double-tree, as at 12. I also provide a lower plate 13 which

corresponds in size and shape with the upper plate 1 and is secured to the under side of the double-tree by the bolts 9. This lower plate has an opening 14 through which the lower end of the sleeve 3 projects and has a curved slot 15 in which the lower end of the stud 4 operates, the said slot being concentric with the opening 14. The stud 4 is provided with a shank 16 at its lower end which receives a washer plate 17 that bears against the lower side of the lower plate 13 and is held in place by a nut 18 which is screwed to the threaded portion of the stud stem. In those portions of the slot 15 which are at opposite sides of the stud 4 are coiled extensile springs 19, which are counteracting and the ends of which are engaged with spurs 20—21, which are respectively formed on opposite sides of the stud 4 and in the ends of the slots 19. These springs normally keep the double-tree at right angles to the pole as will be understood, since the double-tree is free to swing with the lower plate and the latter is normally held in such position by the action of the springs.

It will be understood that the strain or pull on the double-tree is equalized by the springs, that all jerking motions on the double-tree, caused by the exertions of the horses in pulling are absorbed by the springs, and that my improved equalizing devices enable me to dispense with all stops, straps or chains, such as are usually connected to the double-tree.

A link bar 22, which is longitudinally and vertically curved, as shown in Fig. 2, has a cross arm 23 at its rear end, the ends of which are secured between the rear ends of the hounds 5, as at 24. The front portion of the link bar extends under the lower plate 13, is formed with a boss 25 which bears against the lower end of the sleeve 3 and the front end of the said link bar is secured in place by a bolt 26 the head of which bears on the upper side of the upper plate and the shank of which extends down through the bore of the sleeve and also through an opening in the front end of the link bar. A nut 27 is secured to the lower end of the said bolt.

While I have herein shown and described what I now consider a preferred form of my invention, I would have it understood

that changes may be made in the form, construction and proportion of the several parts, without departing from the spirit of my invention and within the scope of the
5 appended claims.

I claim:—

1. A draft equalizing device comprising
an upper plate having a depending sleeve
near its front side and a depending stud
10 near its rear side; a lower plate having an
opening engaged by the sleeve and a curved
slot in which the stud operates, a draft element
pivotally mounted on the sleeve between
the said plates and secured to the
15 lower plate, hounds secured to and extending
rearwardly from the upper plate, a link
bar having its front end pivotally connected
under the lower plate at a point concentric
to the sleeve and its rear end connected to
20 the hounds, and counteracting springs in
the slot of the lower plate bearing between

the ends of said slot and the opposite sides
of the stud.

2. A draft equalizing device of the class
described comprising an upper member and
a lower member pivotally connected to-
25 gether, said upper member having a depend-
ing stud spaced from the pivot and said
lower member having a slot in which said
stud operates, hounds secured to the upper
30 member, a draft element secured to the
lower member for pivotal movement there-
with, and counteracting springs connected
to the lower member and to the stud of the
upper member. 35

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

WILLIAM P. STEGMAYER.

Witnesses:

GEORGE GRONDENBERG,
SIDNEY H. HORN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."