

No. 721,034.

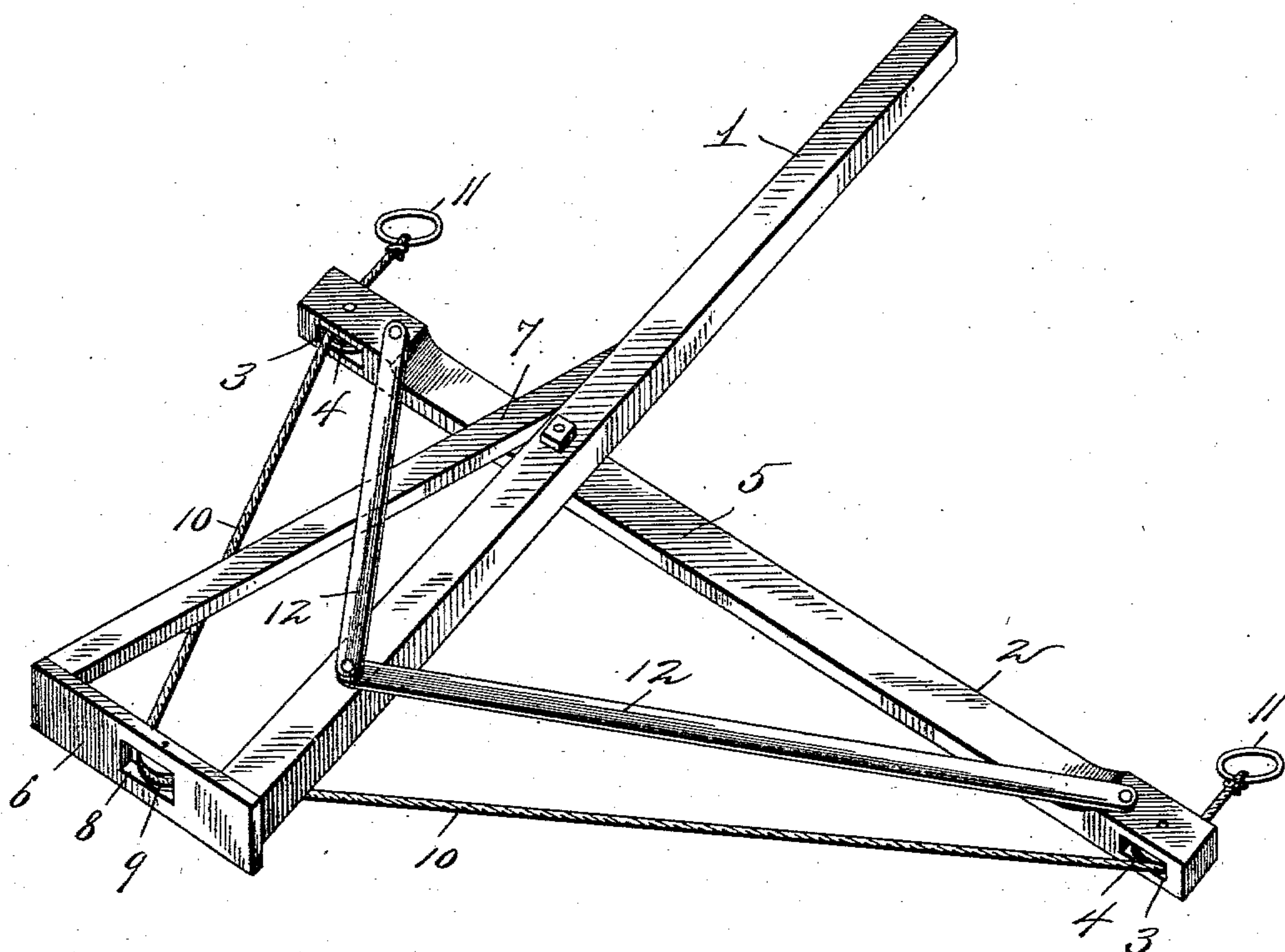
PATENTED FEB. 17, 1903.

P. J. GRADY.

DRAFT EQUALIZER.

APPLICATION FILED NOV. 21, 1902.

NO MODEL.



Inventor

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Witnesses

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PATRICK J. GRADY, OF TURTLE RIVER, MINNESOTA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 721,034, dated February 17, 1903.

Application filed November 21, 1902. Serial No. 132,288. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. GRADY, a citizen of the United States, residing at Turtle River, in the county of Beltrami and State of Minnesota, have invented new and useful Improvements in Draft-Equalizers, of which the following is a specification.

This invention relates to a draft-equalizer; and the primary object of the same is to provide a simple and effective construction whereby side draft will be prevented and pulling strain more uniformly distributed on opposite sides of the pole.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

The accompanying drawing represents a perspective view of a draft-equalizer embodying the features of the invention.

The numeral 1 designates a draft beam or pole having a cross-bar 2 secured thereto at a point in advance of the rear end of the same, said cross-bar being projected a greater distance at one side of the pole than at the other side thereof and having the outer ends formed with horizontal slots 3, in which are movably mounted horizontally-disposed sheaves or pulleys 4. The upper side of the bar between its opposite extremities has a recess 5 formed therein, so that the pole or beam 1 will be slightly countersunk in relation to the bar for convenience in applying the draft devices and in attaching the draft-animals to the forward extremity of the pole.

Secured to and extending at right angles from the rear end of the beam or pole 1 and having its edges disposed in a vertical direction is a right-angular support 6, which extends exclusively beyond the side of the beam or pole 1 from which the shortest part of the bar 2 projects, and extending from the outer end of the support 6 to the side edge of the beam or pole 1 in advance of the point of attachment of the latter to the bar 2 is a diagonal brace 7. The support 6 has a slot 8 therein at a distance from the rear end of the beam or pole 1, and in said slot a sheave or pulley 9 is horizontally disposed. The support 6 is of greater vertical extent than the corre-

sponding vertical thickness of the draft beam or pole 1, and a part of said support depends below the under surface of the said beam or pole. The slot 8 is formed at about a central point in the support, vertically considered, and the sheave or pulley 9 is in approximately the same horizontal plane as the sheaves or pulleys 4. Carried by the ends of the bar 2 and engaging the sheaves or pulleys 4 and 9 is a draft-equalizing rope or cable 10, having the extremities thereof passed through the ends of the bar 2 and provided with attaching-rings 11 to receive the hooks or other devices of double and single trees of such a nature as to provide a four-horse eveners to arrange a greater number of animals on one side of the beam or pole 1 than on the other side of the latter, as will be readily understood by those skilled in the art. It will be seen that the pulling strain imposed upon the equalizer or eveners by the draft-animals will be largely removed from the ends of the bar 2 and imposed upon the rear end of the beam or pole 1 through the support 6 and also on a part of the said beam or pole in advance of the point of attachment of the latter to the bar 2 through the medium of the brace 7. It will also be observed that the draft rope or cable 10 is free to slide through the parts it engages, and to prevent the bar 2 from bending and fracturing angularly-disposed braces 12 are connected to the beam 1 in rear of the point of attachment of the same to the bar 2 and to the outer ends of the said bar.

The advantages of the improved device are numerous, and one of the most essential is the arrangement of the draft rope or cable 10 so that it will move through the ends of the bar 2. A further advantage is that the single or double tree devices that are used in connection with the equalizer or eveners will not be attached to the bar 2 direct; but the draft force applied to such single or double trees will be directly imposed upon the draft rope or cable. By the use of the improved draft-equalizer side draft will be prevented, with well-known advantages in drawing machines or other devices in performing certain classes of work.

To suit various applications, changes in the

proportions, dimensions, and minor details may be resorted to without in the least departing from the spirit of the invention.

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

In a draft-equalizer, the combination of a pole, a bar rigidly secured thereto in advance of the rear end thereof, the said bar being projected a greater distance at one side of the
10 tongue than the other, and having the ends thereof horizontally slotted and provided with horizontally-disposed pulleys in the said slots, a rear support connected to the pole and having a horizontally-disposed pulley therein lo-
15 cated at one side of the rear end of the pole,

a brace secured to the outer end of the support and to the pole in advance of the point of attachment of the latter to the bar, braces extending from the pole in rear of the bar to the outer ends of the latter, and a draft rope 20 or cable engaging the pulleys in the ends of the bar and in the support and projected in advance of the ends of the bar for attachment of draft devices.

In testimony whereof I affix my signature 25 in presence of two witnesses.

PATRICK J. GRADY.

Witnesses:

RAY BURT,
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