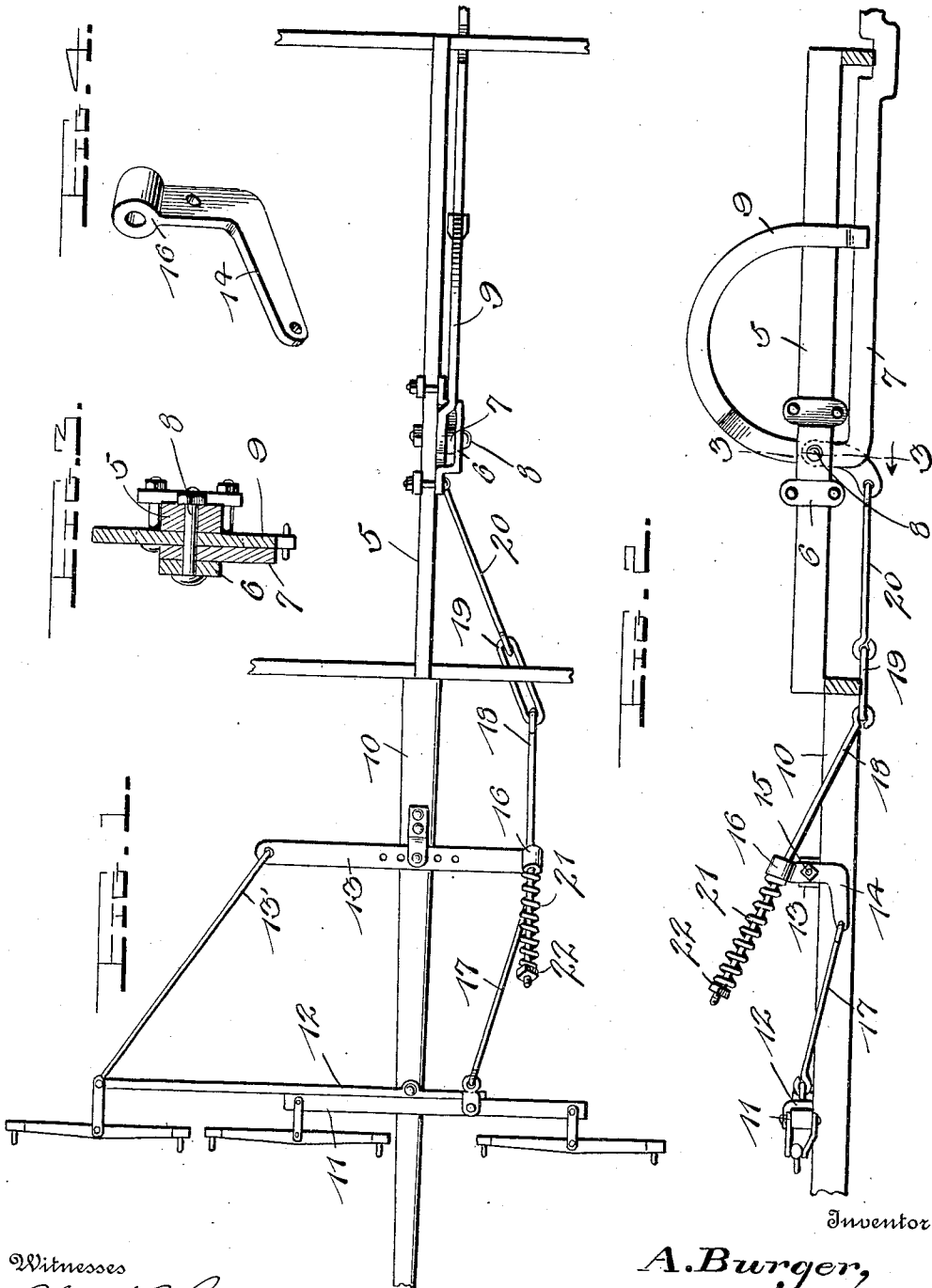


A. BURGER.
BINDER TRUCK ATTACHMENT.
APPLICATION FILED JUNE 29, 1912.

1,050,424.

Patented Jan. 14, 1913.



Witnesses

Chas. L. Grinstauer.
A. B. Norton.

By

A. Burger,

Watson E. Coleman,
Attorney

UNITED STATES PATENT OFFICE.

ALBERT BURGER, OF WATKINS, MINNESOTA, ASSIGNOR OF ONE-HALF TO LOUIS
ATLAS, OF FREDERIC, WISCONSIN.

BINDER-TRUCK ATTACHMENT.

1,050,424.

Specification of Letters Patent.

Patented Jan. 14, 1913.

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To all whom it may concern:

Be it known that I, ALBERT BURGER, a citizen of the United States, residing at Watkins, in the county of Meeker and State of Minnesota, have invented certain new and useful Improvements in Binder-Truck Attachments, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to binder trucks of that character shown and described in my prior application for patent Serial No. 642,599, filed August 7, 1911, and has for its primary object the provision of improved means for yieldably holding the truck wheel in engagement with the ground when the machine is moving over a hillside or uneven grade surface, said means also serving to eliminate excessive draft upon the horses or other animals in the tilting movement of the binder frame.

15 Another object of the invention is to provide a device for the above purpose which consists of very few parts of simple form, and which may be readily assembled in operative relation upon the machine without requiring any alteration in its construction.

20 With the above and other objects in view as will become apparent as the description proceeds, the invention consists in certain constructions, combination and arrangements of the parts that I shall hereinafter fully describe and claim.

25 For a full understanding of the invention; reference is to be had to the following description and accompanying drawings in which—

30 Figure 1 is a plan view showing a portion of the frame of a binder and my improved truck attachment applied thereto; Fig. 2 is a side elevation; Fig. 3 is a detail section taken on the line 3—3 of Fig. 2; and Fig. 4 is a detail perspective view of the angular arm mounted upon the end of the everer bar.

35 Corresponding and like parts are referred to in the following description and designated in the accompanying drawings by like reference characters.

40 Referring in detail to the drawings, 5 designates a portion of a binder frame, the front and rear transverse bars and central longitudinal bar being illustrated. Upon the longitudinal bar a plate 6 is secured

and between this plate and the frame bar, the forward end of the truck beam 7 is pivotally mounted upon the transverse bolt 8 which extends through the plate 6 and the longitudinal frame bar. The rear end of this beam carries the truck wheel, (not shown). A vertically disposed U-shaped bar 9 has one of its ends disposed between the plate 6 and the frame bar of the binder and is also pivotally mounted upon the bolt 8. The other end of this U-shaped bar is forked or bifurcated to receive the truck beam 7, and bears upon said beam to normally hold the truck wheel in close engagement with the ground surface.

45 To the front transverse bar of the binder frame the rear end of the tongue 10 is pivotally connected. Upon this tongue the draft attachments generally indicated by the numeral 11 are mounted, said attachment including an equalizing bar 12. Between these draft attachments and the binder frame a transversely disposed everer bar 13 is pivotally mounted upon the tongue 10. Upon one end of this everer bar an angular arm 14 is pivotally mounted upon a stud bolt 15 secured in the end of said bar. One end of this arm extends vertically above the everer bar and is provided with a sleeve 16. The other end of said arm is disposed in a horizontal plane and extends forwardly as clearly shown in Fig. 2. To this latter end of the arm a rod 17 is connected at one of its ends, the other end of said rod being connected to the draft attachment 11.

50 An obliquely disposed rod 18 is loosely movable through the sleeve 16 upon the upper end of the arm 14. The rear end of this rod is connected to one end of a link 19 and a rod 20 connects the other end of said link to the forward end of the U-shaped bar 9, below the pivot bolt 8. The link 19 extends beneath the forward transverse bar of the binder frame. Upon the forward end of the rod 18 a coil spring 21 is arranged and bears at one of its ends against the sleeve 16. A nut 22 is threaded upon the outer end of said rod whereby the tension of the spring 21 may be adjusted as circumstances may require.

55 From the foregoing the operation of the device will be readily understood. When operating under normal conditions, and the machine is moving over a comparatively level grade surface, the forward pull of

the draft animals oscillates the arm 14 and forces downwardly upon the rod 18, thereby tending to rock the bar 9 upon its pivot 8 and forcing the rear end of said bar 5 downwardly upon the truck beam. If the truck wheel strikes an obstruction, said wheel may be readily moved over the same without placing any additional draft upon the animals, as the rod 18 will be pulled 10 rearwardly and the spring 21 compressed. Upon ascending a hill or when the machine is operating upon the side of a hill, the binder frame is tilted with relation to the truck beam, and in the forward pull of the 15 draft animals, the spring is placed under compression and supports the weight of the forward portion of the frame, thereby relieving the animals of additional draft and of the weight of the tongue.

20 As the various parts of the device are simple in form, it will be obvious that the same may be produced at small cost. The present invention also materially increases the efficiency and ease of operation of the 25 truck disclosed in my prior application hereinbefore referred to. The device may be easily and quickly applied to the ordinary binder frame without necessitating the employment of skilled labor or requiring any 30 alteration in the construction thereof.

While I have shown and described the preferred form and arrangement of the various elements, it will be obvious that the 35 invention is susceptible of considerable modification without departing from the essential features or sacrificing any of the advantages thereof.

Having thus described the invention, what is claimed is:

40 1. The combination with the binder including a frame, tongue and draft attachments thereon, an evener bar mounted upon the tongue, of a truck beam fulcrumed at one end upon said frame, a bar fulcrumed 45 upon the frame and bearing upon the truck beam at one of its ends, connections between the ends of the evener bar and the draft attachments, and a yieldable connection between the other end of said fulcrumed bar 50 which is mounted upon the frame and said evener bar.

2. The combination with a frame, a forwardly extending tongue connected thereto, draft attachments mounted upon the tongue 55 and an evener bar connected at one end to said draft attachments, a truck beam pivotally mounted at one end upon said frame, a

substantially U-shaped bar fulcrumed adjacent one of its ends upon the frame and bearing at its other end upon the truck 60 beam, an angular arm pivotally mounted upon one end of the evener bar, a rod connecting one end of said arm to the draft attachments, and means yieldably connecting the U-shaped bar at its fulcrumed end 65 to the other end of said pivoted bar.

3. The combination with a frame, a tongue connected thereto, draft attachments mounted upon the tongue, an evener bar 70 connected at one end to said draft attachments, of a truck beam pivotally mounted at one of its ends upon the frame, an inverted U-shaped bar pivotally mounted adjacent one end upon said frame and extending below the pivot of the truck beam, the other 75 end of said bar bearing upon the beam, an angular arm pivotally mounted upon one end of the evener bar, a rod connecting one end of said arm to the draft attachment, the other end of said arm being provided with 80 a sleeve, a rod movable through said sleeve, connecting means between the rear ends of said rod and the pivoted end of the U-shaped bar, and a spring arranged upon the forward end of said rod. 85

4. The combination with a frame, a tongue connected thereto, draft attachments mounted upon the tongue, an evener bar on the tongue connected at one of its ends to the draft attachments, of a truck beam piv- 90 otally mounted at one end upon the frame, an inverted U-shaped bar fulcrumed upon the pivot of said beam and extending at one of its ends below the same, the other end of said bar bearing upon the beam, an 95 angular arm pivotally mounted upon one end of the evener bar, a rod connecting one end of said arm to the draft attachments, a sleeve formed on the other end of said arm, an obliquely disposed rod loosely movable 100 through said sleeve, a rod connected to the U-shaped bar at its fulcrumed end, a link connecting the latter rod with the obliquely disposed rod, a spring arranged upon the forward end of the oblique rod and bearing 105 against said sleeve, and a nut threaded upon said rod to adjust the tension of said spring.

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

ALBERT BURGER.

Witnesses:

THEODORE GORMINSKY,
E. ENDERLE.