H. KAISER.

DRAFT APPLIANCE TO PREVENT SHOCK.

APPLICATION FILED JULY 2, 1917.

1,305,651. Patented June 3, 1919.

Fig. 1.

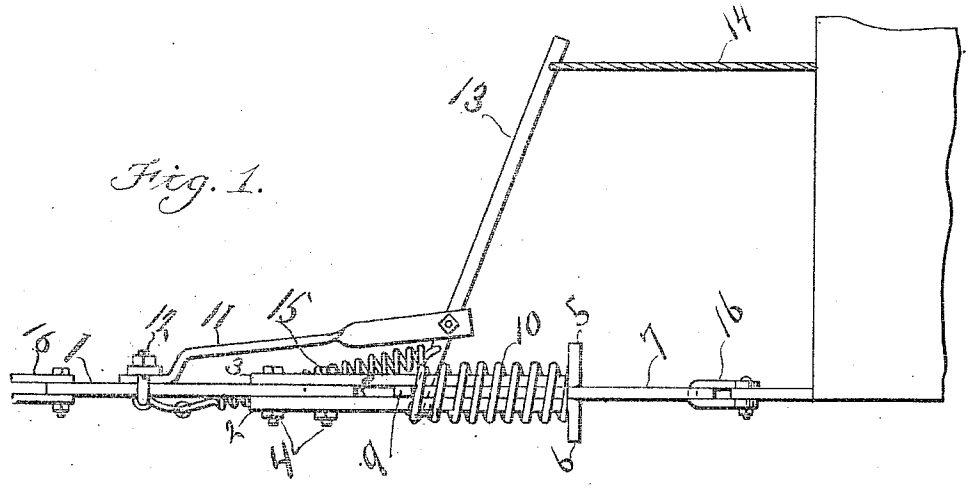
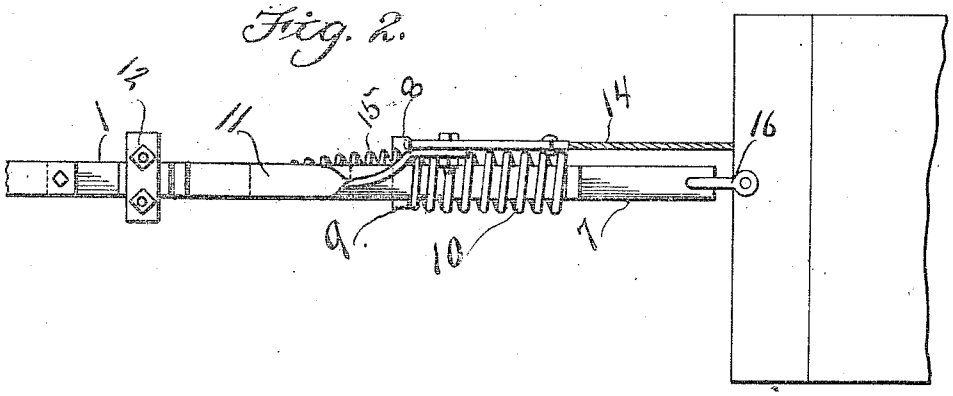


Fig. 2.



INVENTOR

Henry Kaiser

WITNESSES

Chas. C. Hempel.

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UNITED STATES PATENT OFFICE.

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DRAFT APPLIANCE TO PREVENT SHOCK.

1,305,651. Specification of Letters Patent. Patented June 3, 1919.

Application filed July 2, 1917. Serial No. 178,110.

To all whom it may concern:

Be it known that I, HENRY KAISER, a citizen of the United States, residing at New Holstein, in the county of Calumet and State of Wisconsin, have invented certain new and useful Improvements in Draft Appliances to Prevent Shock, of which the following is a specification.

My invention relates to draft appliances, and it relates more particularly to a resilient draft medium designed to connect a traction engine or the like with a plow, harvester or like object to be drawn thereby.

The object of my invention is to provide a draft medium between the source of power and the object moved thereby, so that when the object being moved comes in contact with an obstacle the motive power is disconnected and the engine or motor stopped, thereby preventing any damage or injury to the plow or object being drawn.

Furthermore, the object of my invention is to provide a resilient draft medium comprising a member having a groove or pathway longitudinally its center, and a tongue member adapted to reciprocate within the groove, all of said parts being surrounded by a spiral spring, and a lever having connection with the throttle or operative valve of the engine or motor.

Furthermore, the object of my invention is to provide a cross head upon the tongue member, whereby it will trip the lever having connection with the source of power, and thus prevent the further moving of the traction engine or the like to which the object being drawn is attached.

Finally, the object of my invention is to provide an improved resilient draft medium between a traction engine and gang-plow or harvesting machinery, which is to be moved thereby, for preventing a shock received by said object from being transmitted to the traction engine or motor, and thereby doing injury to the object being drawn.

With the above and other objects in view, my invention consists in the details of construction and in the arrangement and combination of parts which will be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawing, forming a part of the specification, wherein similar characters denote like parts in the several views, and in which:

Figure 1 is a side elevation, and

Fig. 2 is a top view.

In the drawings, 1 indicates a metal bar having secured at one end extensions 2 and 3, by means of bolts 4. The opposite end of the extensions, 2 and 3, are provided with shoulders, 5 and 6, bent at right angles to the main body portion of said extensions. A draw-bar, 7, provided with extension arms, 8 and 9, at one end, reciprocates between the extensions 2 and 3. A spiral spring, 10, having one end seated against the shoulders, 5 and 6, and its opposite end seated against the extensions 8 and 9 of the draw-bar 7, provides a cushion for the draw-bar when the object drawn comes in contact with an obstacle. A brace, 11, is secured at one end by a bolt, 12, to the metal bar, 1. The brace, 11, extends above the extensions 2 and 3, and to which I pivot a lever, 13; one end of said lever contacting with the extension, 8, on the bar 7, and the upper end of the lever being connected by a cable, 14, or other suitable means to the clutch, throttle or operative valve of a traction engine or motor. A spiral spring, 15, I secure at one end to the bolt, 12, and at its opposite end to the end of the lever, 13, below the support, 11 which normally holds the lower end of the lever, 13, in contact with the arm, 8. Clevises, 16, are connected to each end of the draft appliance, whereby the same may be suitably connected between the traction engine or motor and the object being drawn thereby.

In the operation of my device, the draft appliance will be connected to the traction engine or motor at one end by means of the clevis, and at the other end to a gang-plow, harvesting implement, or object to be drawn, and the cable, 14, connected at one end to the lever, 13, and connected to the clutch or throttle-valve lever or a traction engine at its opposite end. The engine being started moves therewith the object to be drawn. When said object comes in contact with any obstacle in its path, the spring, 10, will be compressed and by the forward movement of the bar 7, drawing with it the lower end

of the lever, 13, said movement will release the clutch and shut off the motive power of the traction engine or motor, and thus bring it to a stop, preventing any shock or injury which would otherwise be caused by the object being drawn coming in contact with an obstacle and not provided with means for absorbing the shock of the contact.

What I claim as new and desire to secure by Letters Patent is:—

In a device of the character described, a bar having extensions secured thereto, said extensions being provided with shoulders extending at right angles to said bar, a draw bar having arms extending at right angles thereto, a spiral spring seated between said shoulders of the extension and draw bar, a lever suitably supported by a supporting bracket, means for holding the free end of said lever normally against one of the extensions on said draw bar and means for connecting said lever to the throttle valve or clutch.

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

HENRY KAISER.

Witnesses:
FREDERICK BULLWINKEL,
ALMA ARPS.