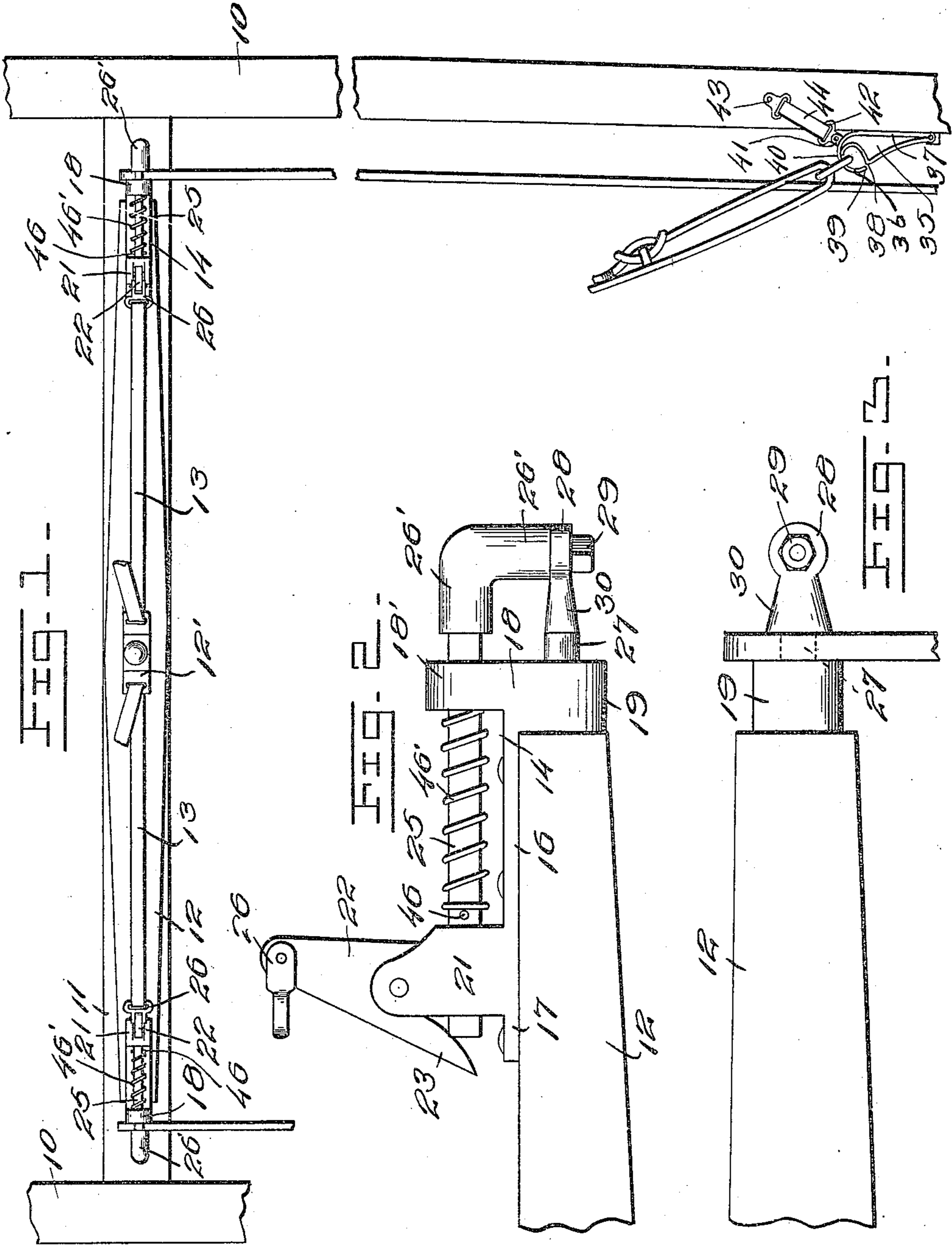


J. E. DREW.  
HORSE DETACHER.  
APPLICATION FILED APR. 21, 1909.

961,941.

Patented June 21, 1910.

2 SHEETS—SHEET 1.



Inventor

J. E. Drew

Witnesses  
L. L. Cunningham  
E. L. Chandler

By Woodward & Chandler

Attorneys

J. E. DREW.  
HORSE DETACHER.  
APPLICATION FILED APR. 21, 1909.

961,941.

Patented June 21, 1910.  
2 SHEETS—SHEET 2.

FIG. 4.

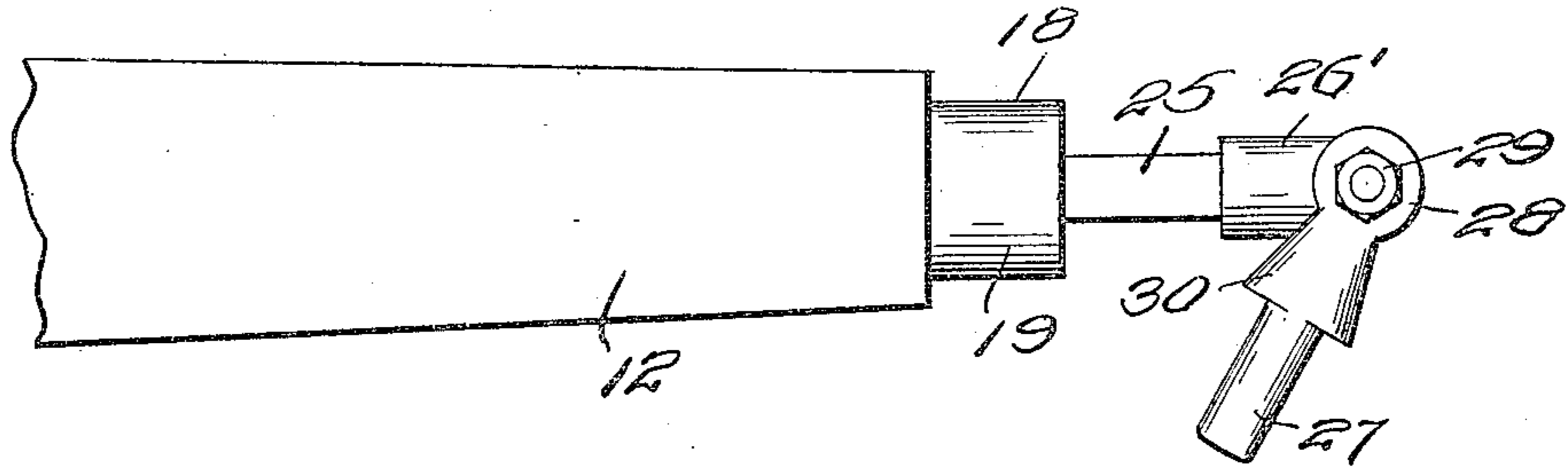
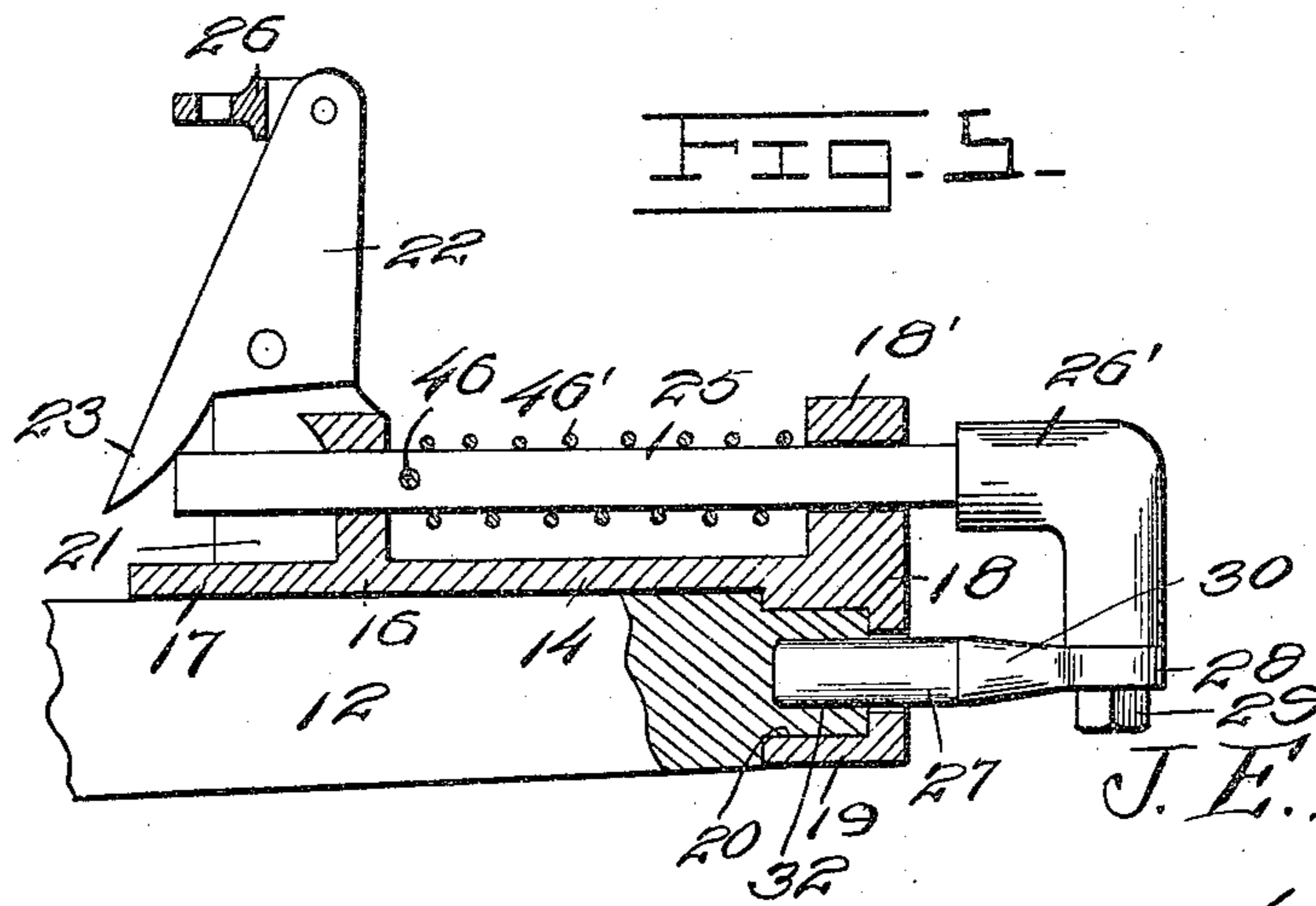


FIG. 5.



Witnesses  
*L. A. Woodward*  
*C. L. Chandler*

Inventor  
*J. E. Drew,*  
By *Woodward & Chandler*  
Attorneys

# UNITED STATES PATENT OFFICE.

JOSEPH E. DREW, OF BRADENTOWN, FLORIDA.

HORSE-DETACHER.

961,941.

Specification of Letters Patent. Patented June 21, 1910.

Application filed April 21, 1909. Serial No. 491,282.

*To all whom it may concern:*

Be it known that I, JOSEPH E. DREW, a citizen of the United States, residing at Bradentown, in the county of Manatee and State of Florida, have invented certain new and useful Improvements in Horse-De-  
tachers, of which the following is a specifica-  
tion.

This invention relates to means for de-  
taching animals from vehicles while in mo-  
tion, and has for an object to provide such  
a device adapted for engagement with vehi-  
cles of various types.

A particular object of the invention is to  
provide coöperating means adapted to dis-  
engage both the traces and other connections  
between horses and a vehicle.

Another object is to provide a novel form  
of snap hook especially adapted for use with  
this device.

Another object is to provide a novel form  
of trace-engaging and releasing means of an  
effective type.

Other objects and advantages will be ap-  
parent from the following description and  
it will be understood that changes in the  
specific structure shown and described may  
be made within the scope of the claim with-  
out departing from the spirit of the inven-  
tion.

In the drawings forming a portion of this  
specification, and in which like numerals of  
reference indicate similar parts in the sev-  
eral views, Figure 1 is a top plan view of  
the device engaged upon a set of shafts,  
Fig. 2 is a rear view of a swingletree hav-  
ing such a device thereon, Fig. 3 is a bot-  
tom view of one end of the device in detail,  
showing a trace engaged therewith, Fig. 4 is  
a similar view showing the device in releas-  
ing position, Fig. 5 is a longitudinal vertical  
sectional view through one of the trace-re-  
leasing members.

Referring to the drawings, there is shown  
a pair of shafts 10 having a cross piece 11  
supporting a swingletree 12 of the usual  
type. Centrally of the swingletree there is  
a double guide member 12' receiving flexi-  
ble operating members 13, extending for-  
wardly through the guide and divergently  
therefrom to the release members 14 at oppo-  
site ends of the swingletree. Each of the  
release members includes a base member 16  
comprising a swingletree engaging plate 17  
suitably perforated for the reception of fas-  
tening means, and carrying at its outer end a

head 18 vertically projected above and below  
the plate and being horizontally perforated  
at its opposite ends, as shown. Its lower  
portion 19 is provided on its inner side with  
an enlarged socket 20 adapted to engage over  
the end of the swingletree to reinforce the  
engagement of the releasing member with the  
swingletree, as will be understood. At the  
opposite end of the plate 17 there is a hori-  
zontally perforated lug 21, the upper end of  
which is bifurcated and laterally perforated  
as shown, to carry a releasing dog 22 pivoted  
therein and having an inward extension 23  
adapted to engage against the inner end of a  
slidable member 25 disposed in the horizon-  
tal opening through the lug and upper end  
of the head 18, the function of which is sub-  
sequently to be described. The upper end  
of the dog carries a pivoted member 26 suit-  
able for engagement with the flexible operat-  
ing member 13.

Disposed slidably in the lug 21 and the  
upper portion 18' of the cross head 18,  
there is a latch member 25 having an en-  
larged shoulder at its outer end and being  
turned downwardly to carry a horizontally  
revolvable trace-engaging pin 27 projected  
into the apertured portion 19 of the head 18  
and recess 32 in the swingletree. The ex-  
tension 26' of the member 25 is reduced at  
its lower end, and receives pivotally there-  
over an enlarged head 28 of the member 27,  
a suitable retaining member 29 being en-  
gaged outwardly of the member 27 to re-  
tain it thereon. The head 28 is provided  
with a lateral extension 30 on its rearward  
side, the inner edge of which is disposed at  
right angles to the axis of the portion 27.

Spaced forwardly of the swingletree upon  
the shafts 10, there are back strap engaging  
members 35 each comprising a hook 36 hav-  
ing a shank 37 engaged pivotally at its ex-  
tremity against the inner face of the shaft.  
Secured to the shank 37, there is a resilient  
tongue 38 disposed yieldably against the  
bill 39, turned laterally inward therefrom  
and curved outwardly to lie snugly within  
the bight 40 of the hook 36 as shown. The  
hook 36 is secured to the shaft at the end  
of the shank 37 pivotally, and adjacent the  
bight 40 there is a perforated lug 41 carry-  
ing pivotally a strap-engaging member 42.  
Spaced rearwardly of the hook, there is a  
strap anchor 43 secured pivotally to the  
shaft as shown, and receiving a strap 44  
commonly connected with the member 42 as

shown to allow oscillation of the hook 36 within a restricted limit.

In use, an animal is hitched in the usual manner to a vehicle equipped with my invention, the back strap being snapped into the hooks 36 as will be understood. It will be seen that the inwardly turned portion of the tongue 38 extends rearwardly inward at an acute angle with respect to the bill 39, so that a forward pressure of the back strap therein will depress the tongue and effect the release of the strap. The releasing members 13 are extended rearwardly from the swingletree to the adjacent vehicle body, and when it is desired to release an animal a pull thereon will release the traces, and the continued forward movement of the released animal will disengage the back strap from the members 35, as will be understood. The member 25 carries projections 46 adjacent to the lug 21, and engaged concentrically around the member 25 there is a spring 46' bearing oppositely against the projections 46 and the portion 18' of the head 18. It will be seen that upon releasing the device, the inner ends of the pins will be disengaged from the portion 19 of the head 18, and allowed to swing forward under the pull of the trace. In this action, the portion 30 upon the rear part of the member 27 will engage against the trace at its rearmost portion, and in the pivotal movement of the pin will tend to force the trace outwardly of the pins, facilitating its ready disengagement therefrom and preventing its acci-

dental binding upon the pin and failure of the device to properly operate.

What is claimed is:—

In a device of the class described, a trace releasing member comprising a body portion adapted to be engaged with the extremity of a swingletree, and having spaced guide projections thereon, a member longitudinally reciprocable therein and projecting inwardly of the inner projection, resilient means coengaged with the reciprocating member to hold it at the inner limit of its movement, said reciprocating member having its outer extremity turned downwardly, a retaining pin pivoted upon the downward extension of said reciprocating member for movement longitudinally with respect to the direction of draft upon the swingletree, said inner projection of the body member being bifurcated and having pivoted therein a dog having a portion projecting over the path of the reciprocating member and adapted to engage against the inner extremity to propel it outwardly, said retaining pin being adapted to be seated in a suitable socket at the extremity of a swingletree for the support of a trace against disengagement, and means for operating said dog.

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

JOSEPH E. DREW.

Witnesses:

E. KRETSCHMOR,  
JAS. A. HERRIN.