

E. WEERTS & J. WUEBBENHORST.

REIN AND TRACE HOLDER.

APPLICATION FILED FEB. 27, 1909.

951,163.

Patented Mar. 8, 1910.

Fig. 1.

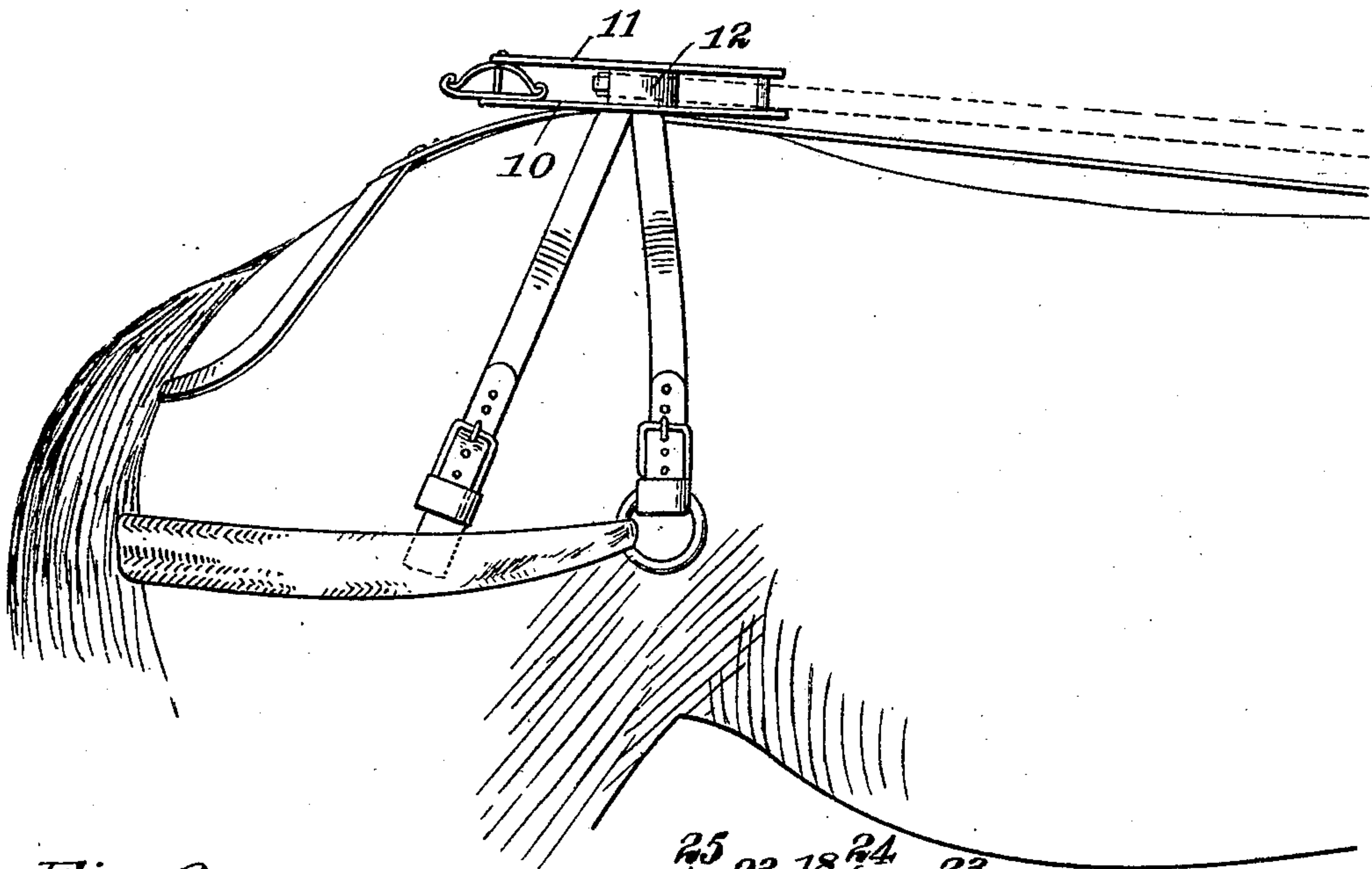


Fig. 2.

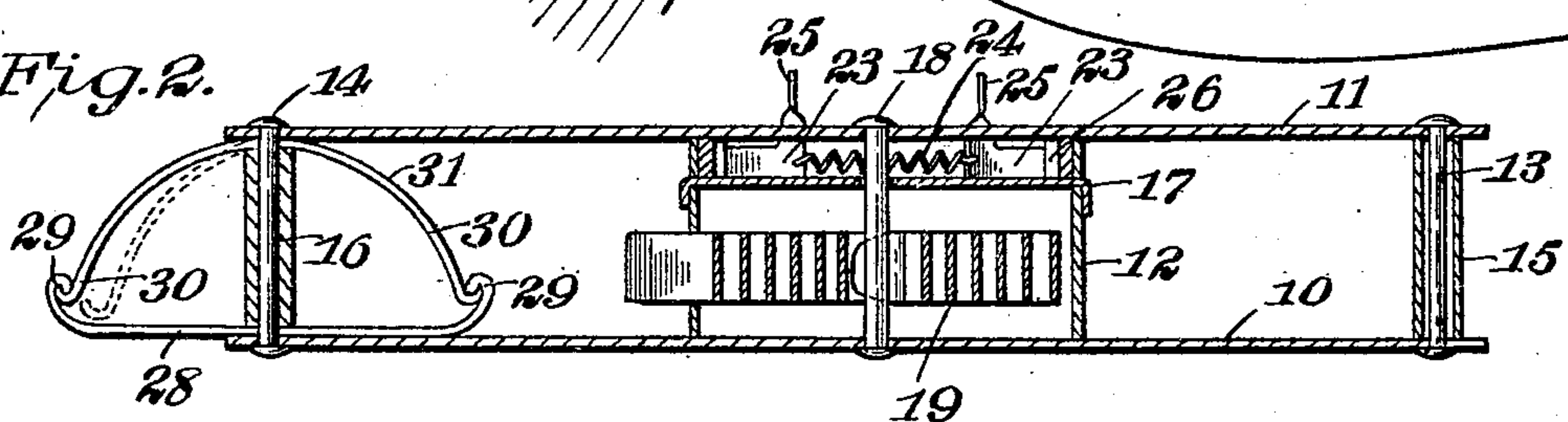


Fig. 3.

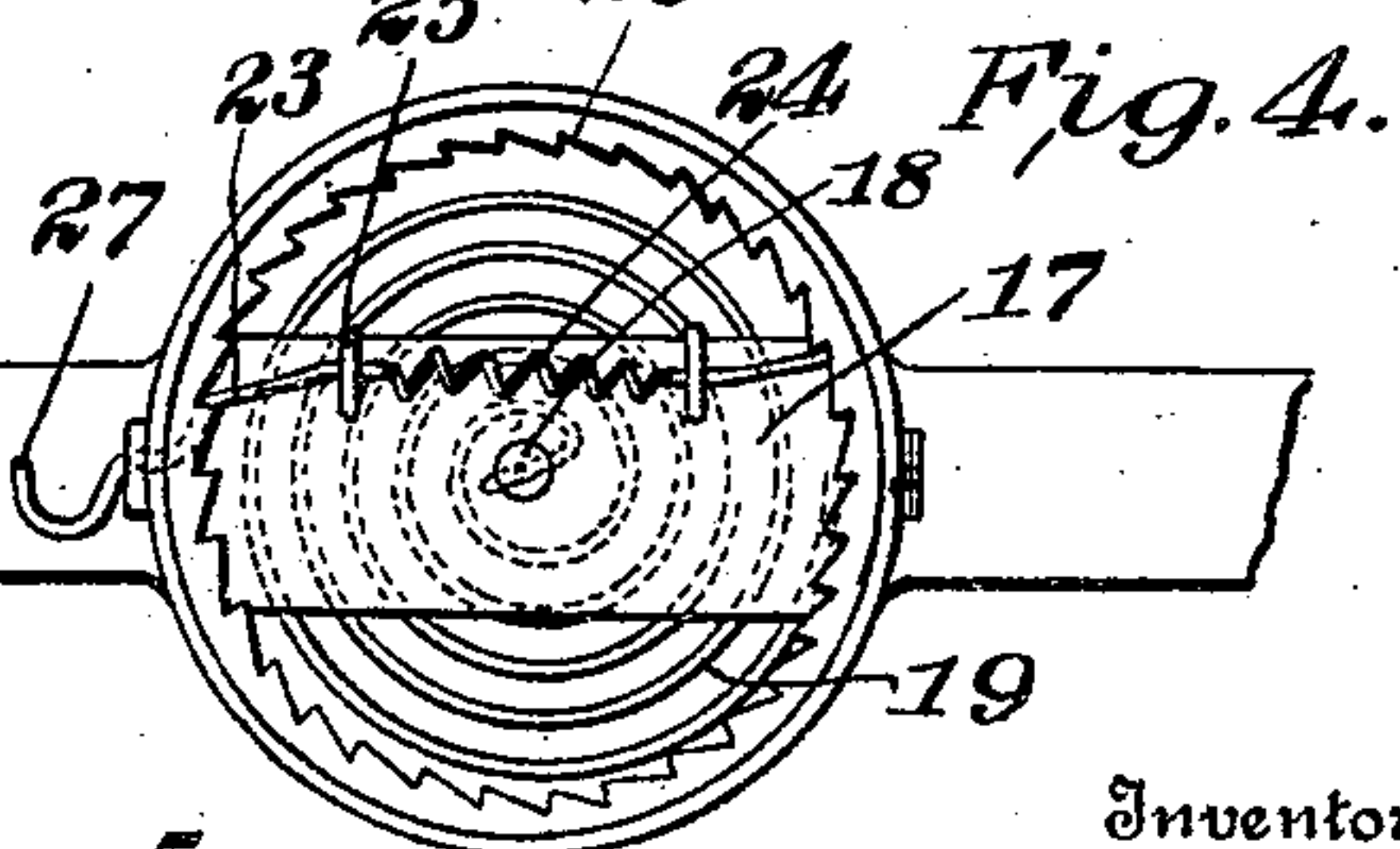
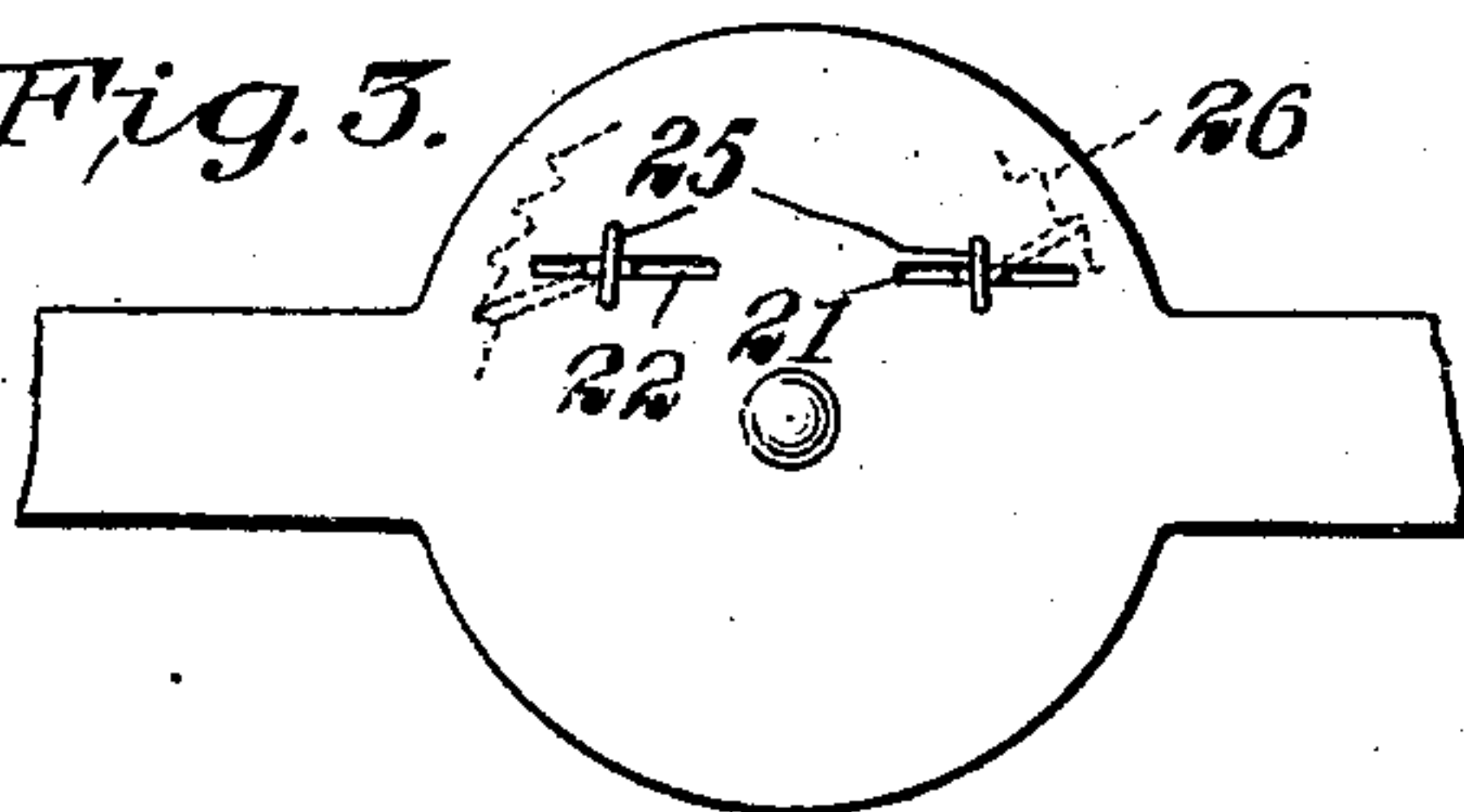
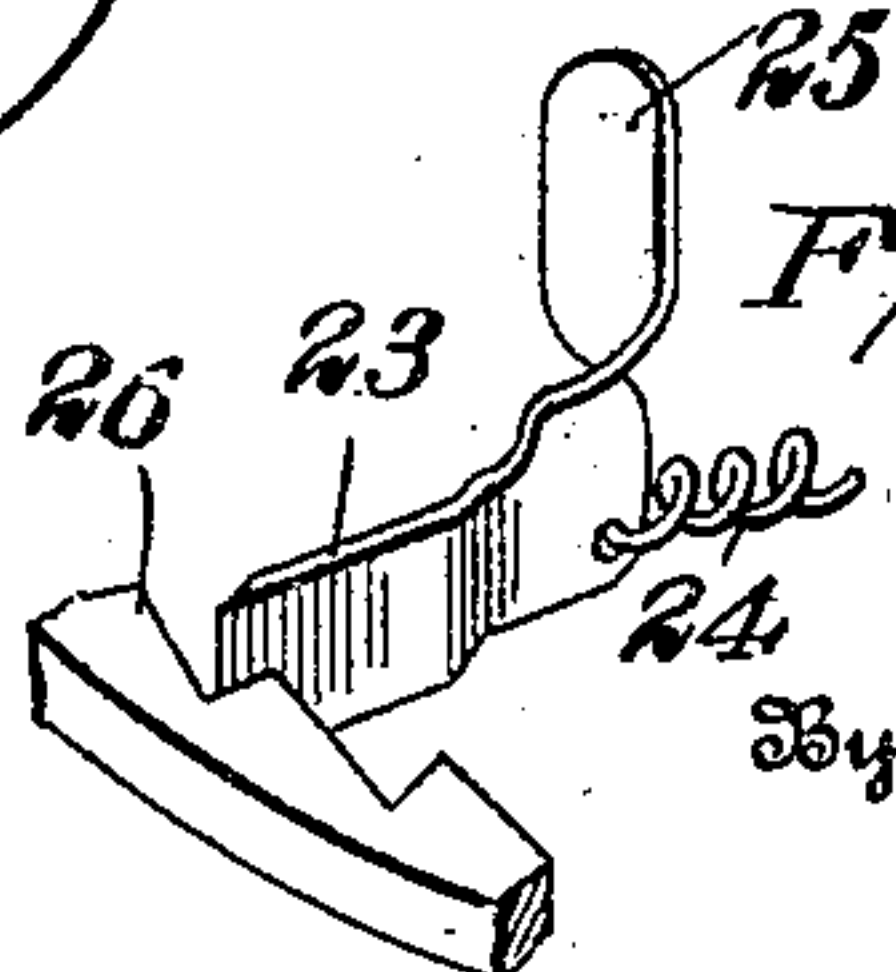


Fig. 5.



Witnesses

J. M. Fallin

W. T. Hodson.

Inventors

E. Weerts &  
J. Wuebbenhorst,

A. A. Macy, Attorneys.



# UNITED STATES PATENT OFFICE.

EILERT WEERTS AND JOHN WUEBBENHORST, OF WENTWORTH, SOUTH DAKOTA.

REIN AND TRACE HOLDER.

951,163.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed February 27, 1909. Serial No. 480,362.

*To all whom it may concern:*

Be it known that we, EILERT WEERTS and JOHN WUEBBENHORST, citizens of the United States, residing at Wentworth, in the county of Lake and State of South Dakota, have invented certain new and useful Improvements in Rein and Trace Holders, of which the following is a specification.

This invention relates to harness and refers particularly to an attachment to be applied to the same for the purpose of supporting the reins, traces or like extremities of the harness which, when freed, are permitted to drop loosely and become entangled with the legs of the animal to which the harness is applied.

The invention has for an object the provision of a device of this character which can be readily operated and which is positioned upon the harness in such a manner as to be readily reached in order to attach the extremities of the straps thereto in order to hold the same in a retained position.

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

Figure 1 is a side elevation of the device as applied to a harness. Fig. 2 is a longitudinal vertical section through the device. Fig. 3 is a fragmentary top plan view of the central portion of the device. Fig. 4 is a top plan view of the device having the top removed therefrom. Fig. 5 is a detail perspective of one of the pawls disclosed in engagement with the casing.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings the numerals 10 and 11 designate the sides of the device which comprise strips of metal which are enlarged and formed circularly intermediately of their ends to support a cylindrical drum 12 therebetween. The sides 10 and 11 are secured in parallel in rigid position by means of pins 13 and 14 which are transversely disposed between the opposite extremities of the same and upon which are mounted rollers 15 and 16 respectively. The drum 12 is provided intermediately with a plate 17 which is diametrically positioned therein and secured rigidly to the sides of the casing 12 for the purpose of pivotally supporting the casing 12 upon a post 18 which is centrally

disposed through the plate 17 and rigidly engaged at its opposite extremities in the intermediate enlarged portions of the sides 10 and 11. A coil spring 19 is positioned within the lower end of the drum 12 having its outer extremity secured to the drum 12 by extending the outer end of the same through the casing and then bending it. The inner extremity of the spring is engaged rigidly with the center post 18. The side 11 is slotted at 21 and 22 and through these slots extend pawls 23 which are slidably mounted therein and retained in a projecting position but separated from one another by means of a coil compression spring 24 secured at its opposite extremities to the inner opposite edges of the pawls 23 thereby forcing the pawls apart. The pawls 23 are each provided with projections 25 which extend upwardly through the slots 21 and 22 and are adapted for engagement by the fingers of the operator. The inner wall of the casing 12 is provided adjacent its upper edge with a plurality of inwardly extended ratchet teeth 26 which are adapted for engagement with the pawls 23. The casing 12 is provided upon its periphery with a hook 27 which projects outwardly therefrom and is adapted to engage with a strap or with the reins themselves, whereby the drum may be rotated in a direction to wind up the spring by drawing upon the strap or upon the reins, the pawls acting to hold the spring under tension with the drum wound up after the strap or reins have been withdrawn from the drum.

Mounted upon the pin 14 between the sides 10 and 11 at one extremity thereof, is a trace carrier which is formed of a strip of metal 28 which at its extremity is upwardly and inwardly curved to form opposed hooks 29 for the reception of the hooked extremities 30 of a leaf spring 31 which is disposed concentrically on the pin 14 within the strip 28 at the opposite end of the pin 14. The roller 16 is slightly reduced in length and is positioned between the strip 28 and the leaf spring 31 in order to retain the same in a diverged position.

In operation the drum is initially rotated against the force of the internal spring by hand. When it is desired to use the device the end of the pair of reins is hooked over the hook 27 and the finger-pieces 25 forced inward to release the pawls from their engagement with the internal ratchet 26. The tension of the spring 19 will then rotate



the drum, winding the reins upon the drum. When it is again desired to use the reins they are withdrawn from the drum by pulling upon them, thus causing a reverse rotation of the drum until the reins are entirely unwound. This reverse rotation of the drum causes the winding up of the spring 19, the drum being held in its final position by means of the spring-pressed pawls. It will be seen that this leaves the drum with the spring under tension and that therefore after the first initial winding up of the spring no other winding is needed. Each time the reins are drawn off the drum the spring will be wound up; each time the reins are placed upon the drum and the pawls actuated, the drum will be turned and the spring slackened in its tension until the reins are completely wrapped around the drum. When it is desired to secure the traces upon the back of the animal and to prevent the same from hanging downwardly the extremities of the traces are engaged between the hooks 29 and 30 and are retained in such position under the tension of the spring 31. The rollers 15 and 16 are employed for the purpose of reducing the frictional contact of the harness with the pins 13 and 14 and of preventing the binding of the same.

Having thus described the invention what is claimed as new is:—

1. A rein holder including a rotatable drum adapted to be supported upon a harness, a spring inside the drum acting to rotate it in one direction, a toothed ratchet on said drum and rotatable therewith, a pawl engaging with the ratchet to hold it against the tension of the spring, and a hook projecting from one side of the drum and adapted to be engaged over the end of a pair of reins.

2. A rein holder including a rotatable drum, means for supporting the drum upon a harness, a spring inside the drum to rotate it in one direction, a toothed ratchet on said drum, a pawl engaged with the ratchet to hold the drum against the tension of the spring, a hook projecting from the circumference of the drum and adapted to be engaged with the end of a pair of reins, and

a spring holding the pawl in engagement with the ratchet.

3. A rein holder including opposed side plates, a drum rotatably mounted between said side plates, a coil spring carried within the drum and acting to rotate it in one direction, an internally toothed ratchet mounted inside said drum, a pawl engaging with the ratchet to hold the drum against the tension of the spring, a hook projecting from the circumference of the drum and adapted to engage with the end of a pair of reins, and a spring holding the pawl in engagement with the ratchet.

4. A rein holder including opposed plates adapted to be attached to a harness, a drum rotatably mounted between said plates, a coil spring carried within the drum and acting to rotate it in one direction, a toothed rack carried by said drum, a spring-pressed pawl engaged with the rack to hold the drum against rotation, said pawl having a finger-piece projecting through a slot in one of said side plates, and a hook projecting from one side of the drum and adapted to engage with the end of a pair of reins.

5. A rein holder including opposed upper and lower plates, a rotatable drum mounted between the plates, a spring carried inside the drum and acting to rotate it in one direction, a toothed ratchet formed on the inside face of the drum, opposed sliding pawls projecting through one of the side plates, the ends of said pawls engaging with the ratchet to hold the drum against rotation, the outer ends of the pawls being formed with finger-pieces, a compression spring forcing said pawls into engagement with the internal ratchet, and a hook projecting from and attached to the outer circumference of the drum and adapted to engage with the end of a pair of reins.

In testimony whereof we affix our signatures in presence of two witnesses.

EILERT WEERTS. [L. S.]  
JOHN WUEBBENHORST. [L. S.]

Witnesses:

JOHN J. CASSERLY.  
C. H. PARR.