

(No Model.)

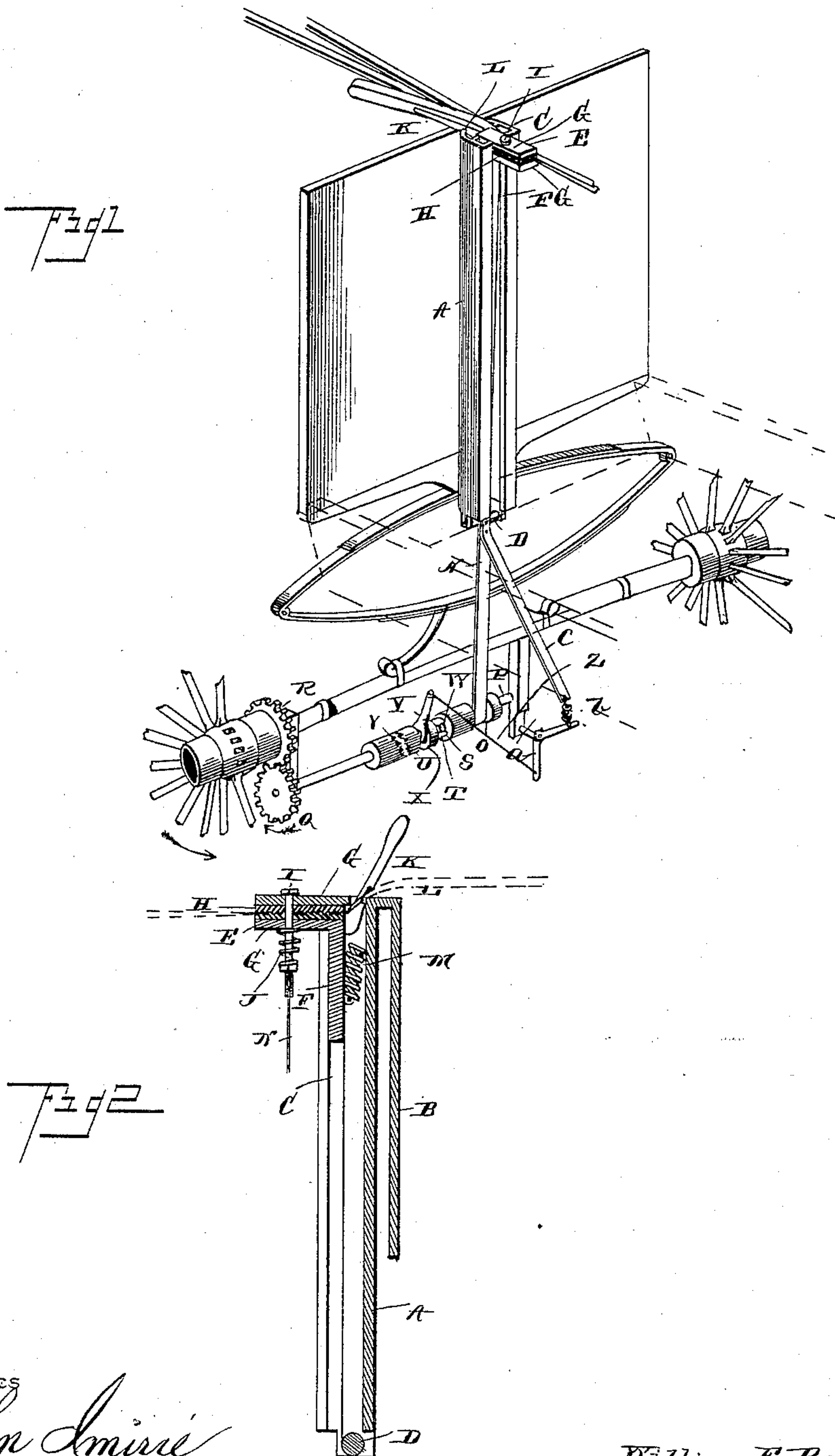
2 Sheets—Sheet 1.

W. E. ROSS.

REIN HOLDER FOR PREVENTING RUNAWAYS.

No. 427,616.

Patented May 13, 1890.



Witnesses

*John Amire*  
*R. H. Bishop.*

By his Attorneys,

*William E. Ross*

*CA Snow & Co.*

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Fig 3

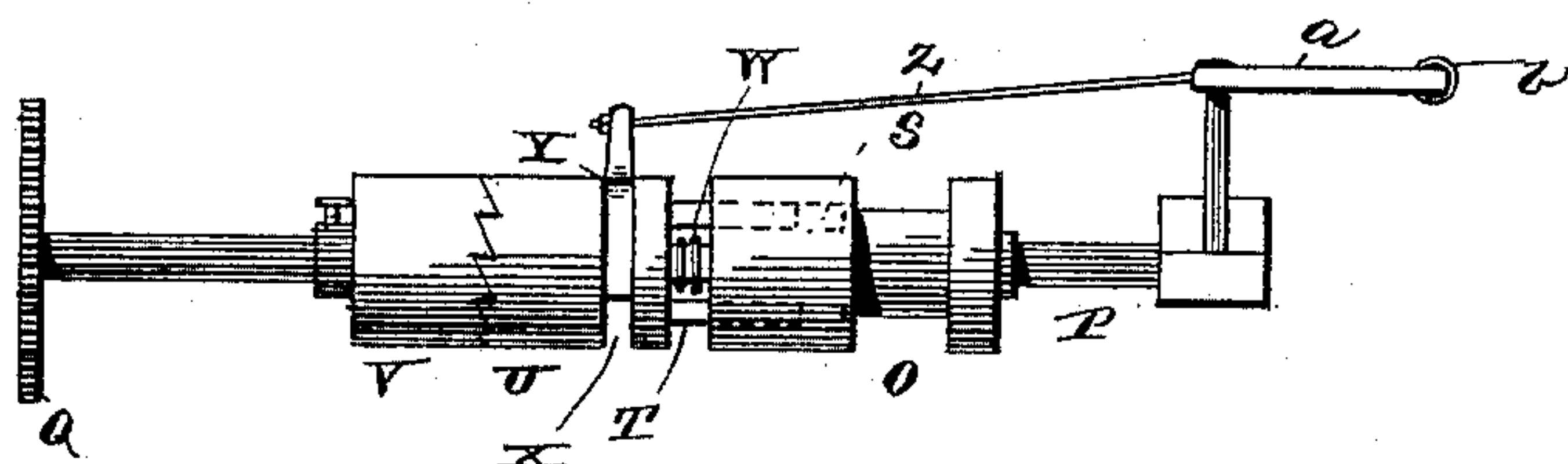


Fig 4

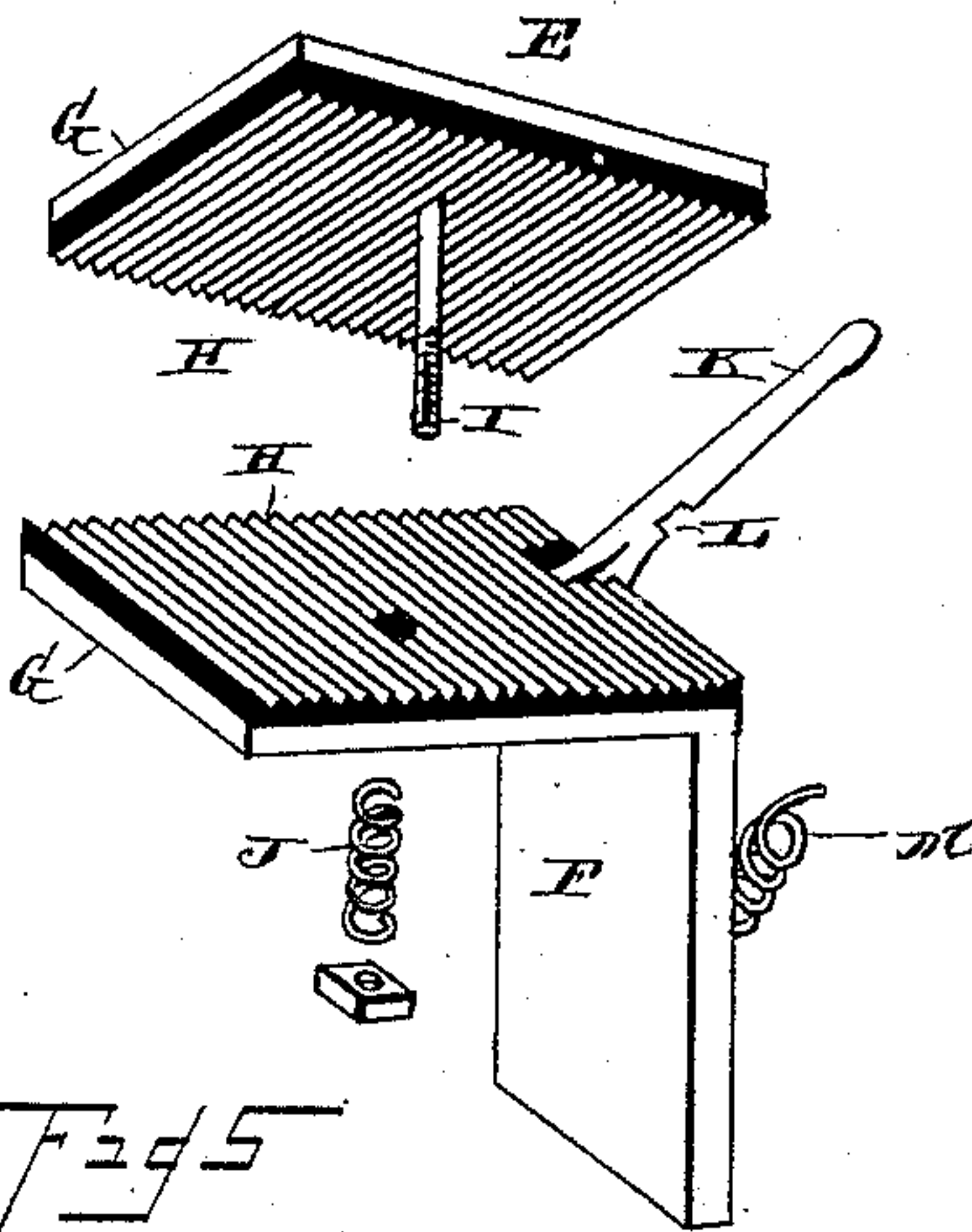
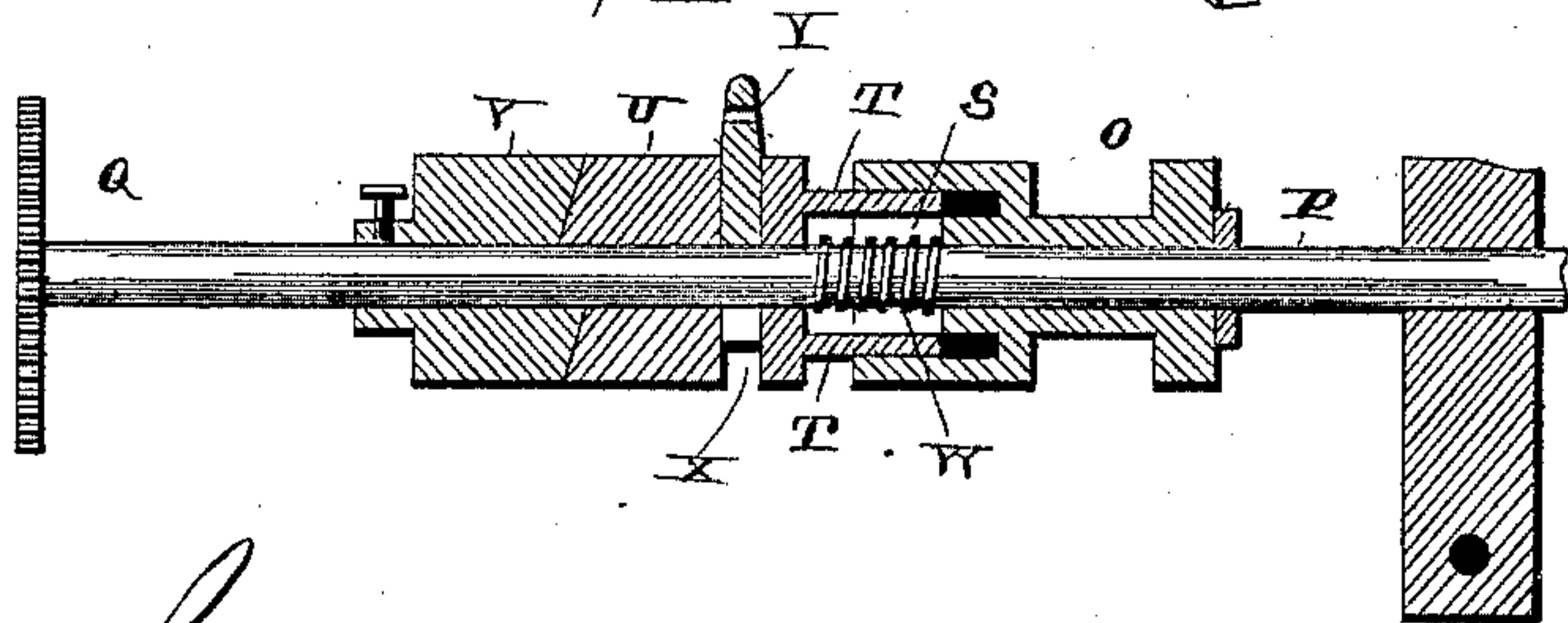


Fig 5



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# UNITED STATES PATENT OFFICE.

WILLIAM EZRA ROSS, OF ROCHESTER, NEW YORK.

## REIN-HOLDER FOR PREVENTING RUNAWAYS.

SPECIFICATION forming part of Letters Patent No. 427,616, dated May 13, 1890.

Application filed July 22, 1889. Serial No. 318,285. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM EZRA ROSS, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Rein-Holder for Preventing Runaways, of which the following is a specification.

My invention relates to horse-holders; and it consists in certain novel features, herein-after described and claimed.

In the drawings, Figure 1 is a perspective view showing my improved device in its normal position on the dash-board of a buggy. Fig. 2 is a central vertical sectional view. Fig. 3 is a front elevation of the windlass, its shaft, and connections. Fig. 4 is an enlarged perspective detail of the rein-clamp, and Fig. 5 is a central vertical longitudinal section of Fig. 3.

In carrying out my invention I employ a semi-cylindrical tube A, which has open ends and an open front side and is provided with a hook B, which is adapted to engage over the dash-board of a wagon or buggy, and thereby secure the tube in position. This tube or barrel is secured upon the inner side of a dash-board and provided on its inner side with the vertical longitudinal grooves C and at its lower end is provided with a transverse roller D. The rein-holding clamp E is provided with a depending guide F, the edges of which engage the grooves C, and thereby give the same a true vertical motion when in operation. The said rein-holding clamp consists of the plates or jaws G G, which are provided on their inner faces with the corrugated rubber pads H, and the said jaws are held together by means of a bolt I, passing through the jaws, and a spring J, coiled around said bolt between the head of the same and the under side of the lower jaw. A lever or hook K is pivoted to one of the jaws of the clamp and is adapted to engage over the upper edge of the tube or barrel A, and it is provided with a notch L, so that when engaged over the said edge the clamp will be firmly held in its elevated position. The clamp is normally raised by a spring M, having its upper end secured to the tube or barrel and its lower end secured to the guide F, as clearly shown.

A strap N is secured to the bolt I and ex-

tends downward therefrom through the bottom of the buggy and beneath the roller or pulley D, and thence rearward to a windlass O, which is arranged beneath the body of the vehicle. This windlass is loosely mounted on a shaft P, which is journaled in suitable supports on the under side of the vehicle-body and is provided at one end with a gear-wheel Q, meshing with a similar gear-wheel R, secured to the hub of the front carrying-wheel of the vehicle. The windlass is provided in one end with the recesses S, which are engaged by the pins T, projecting from a half-clutch U, which is loosely mounted on the said shaft P and is adapted to be engaged by a half-clutch V, rigidly secured to said shaft. The said half-clutches are normally held in engagement by a spring W, arranged around the shaft between the windlass and the sliding half-clutch, as clearly shown. The sliding half-clutch is provided with an annular groove X, which is engaged by a fork Y, and the said fork is connected by a rod Z with one arm of an angle-lever a, which is suitably fulcrumed beneath the body of the vehicle, and the other arm of said lever is connected with the bolt I by means of a spring b, strap c, and strap N, as clearly shown. The construction and arrangement of the several parts of my device being thus made known, the operation of the same will, it is thought, be readily understood. When the vehicle is being drawn along the road, the clamp will be raised and will be held in its raised position by a hook K being engaged over the supporting tube or barrel A, as shown in Fig. 1 and as will be readily understood. When the rider has reached his destination, the reins are inserted between the jaws of the clamp, and the hook K is then disengaged from the tube or barrel A. The clamp will then fall sufficiently to allow the spring W to throw the sliding half-clutch into engagement with the rigid half-clutch, so that any motion of the shaft P will be communicated to the windlass, and the strap N thereby drawn downward. When the parts are arranged in this position, if the animal should start off the motion of the carriage-wheels will be communicated through the gear-wheels and the shaft P and its connections to the windlass, so that the strap N will be wound thereon,



and the clamp consequently drawn downward, thereby tightening the reins over the upper edge of the dash-board and checking the horse. When the rider again enters the vehicle, the clamp is drawn upward a trifle by hand and the lever or hook K engaged over the upper edge of the supporting tube or barrel, thereby drawing on the strap *c* and spring *b*, so as to vibrate the angle-lever *a*, and thereby draw on the fork Y, so as to disengage the half-clutches. If, however, the horse has started and the clamp has been drawn downwardly in the tube by the winding of the strap N upon the drum, it will be obvious that the strap *c* will be loose, and the clutches must therefore be disengaged by reaching beneath the wagon-body. Ordinarily this will not be necessary, as the horse will not have started, and the clutches can therefore be disengaged from the wagon-body by raising the clamp, as above described. In case the parts stick and do not separate with ease the horse can be backed a step or two, thereby relieving tension on the strap N and turning the clutches so that they can be more easily disengaged, as will be understood.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided an extremely simple device by the use of which the horse will be securely held against prematurely moving off, and which is simple in its construction, so that it may be easily repaired, and its advantages are thought to be obvious.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a vehicle, a windlass connected to a wheel thereof, and a strap connected to said windlass, of the supporting tube or barrel and the clamp mounted therein and movable vertically along the same, said strap being connected with said clasp, as set forth.

2. The combination, with a vehicle, a windlass connected to a wheel thereof, and a strap connected to said windlass, of the supporting tube or barrel, the clamp mounted therein, and the hook pivoted to the clamp and adapted to engage over the upper edge of the supporting tube or barrel, said strap being connected with said clasp, as set forth.

3. The combination, with a vehicle, a windlass connected to a wheel thereof, and a strap connected to said windlass, of the supporting tube or barrel provided with vertical longitudinal grooves in its inner side, the clamp provided with a depending guide engaging said grooves, and the hook pivoted to the clamp and adapted to engage over the upper edge of the supporting-tube, said strap being connected with said clasp, as set forth.

4. The combination of the supporting-tube adapted to be attached to the dash-board of a vehicle, the windlass arranged below the vehicle and adapted to be rotated by the wheel of the same, the clamp mounted in the supporting-tube, and the strap extending between the clamp and the windlass, as set forth.

5. The combination of the clamp, the vertical guide within which said clamp moves, the transverse shaft, the windlass loosely mounted on said shaft, the strap connecting the clamp with the said windlass, the sliding half-clutch engaging the windlass and adapted to engage a half-clutch rigidly secured to the transverse shaft, the angle-lever, connections between the angle-lever and the clamp, the fork engaging the sliding half-clutch, and the rod connecting the fork with the angle-lever, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM EZRA ROSS.

Witnesses:

E. C. GLAZIER,  
F. J. SCHLICK.