

No. 619,405.

Patented Feb. 14, 1899.

U. GRIGNON.
HARNESS HANGER.

(Application filed Apr. 8, 1898.)

(No Model.)

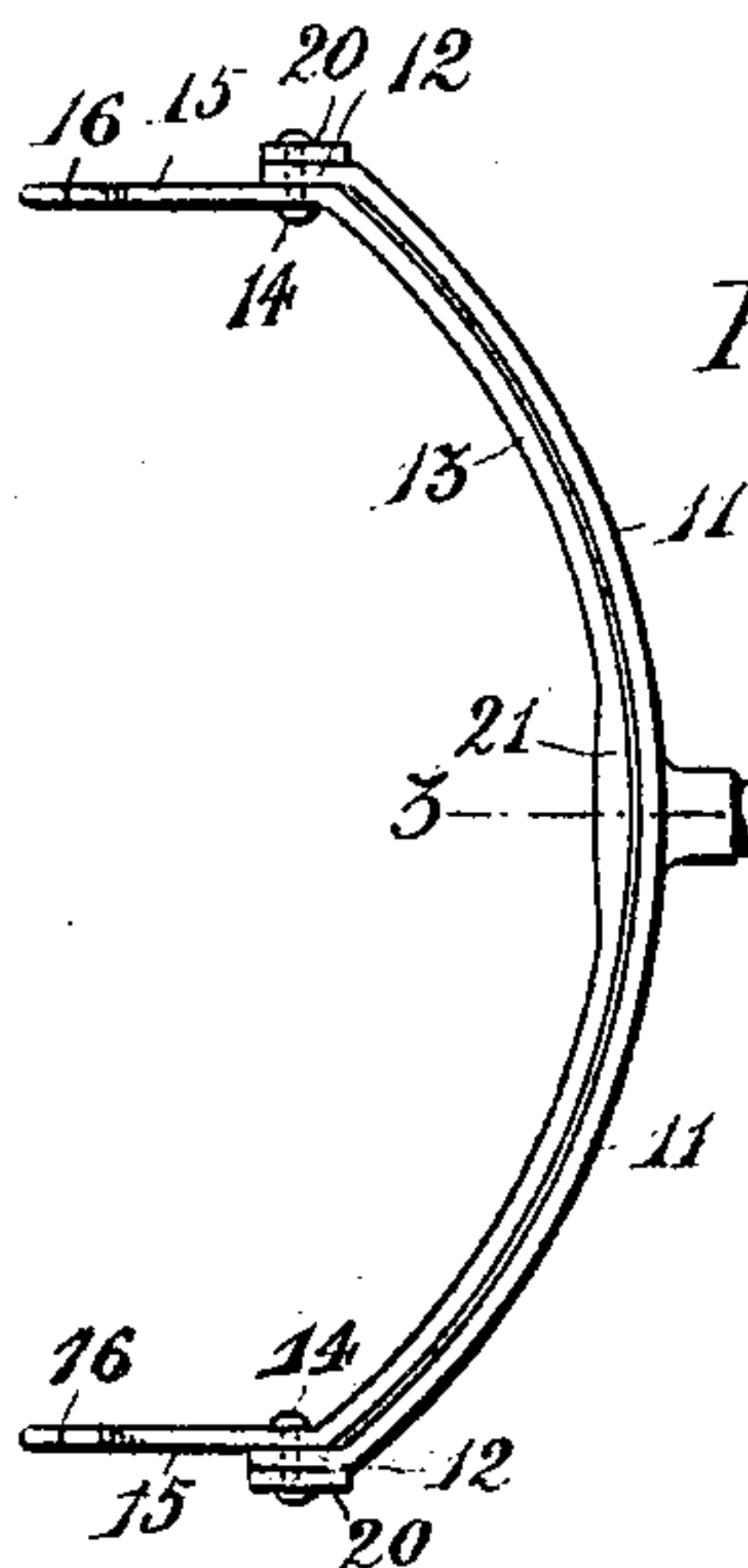
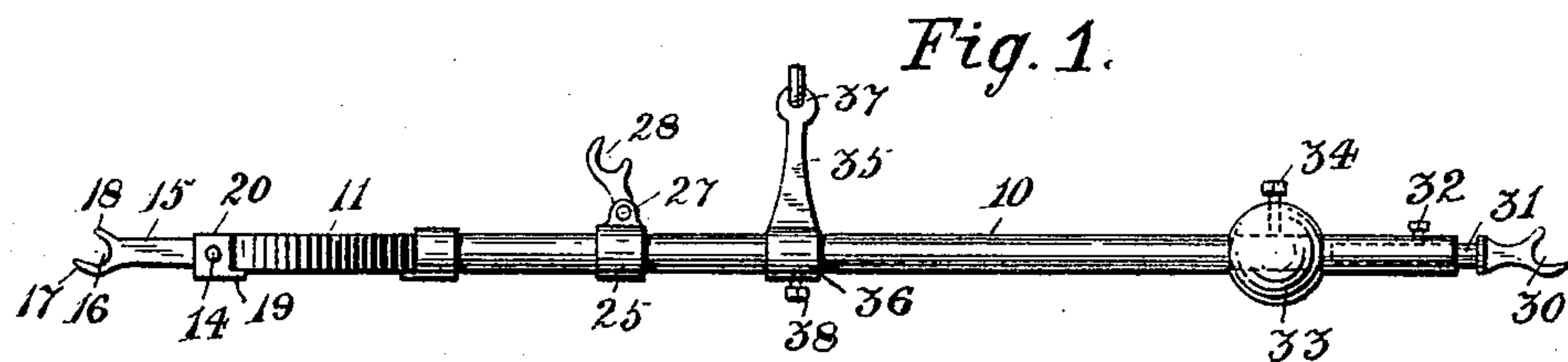


Fig. 2.

Fig. 3.

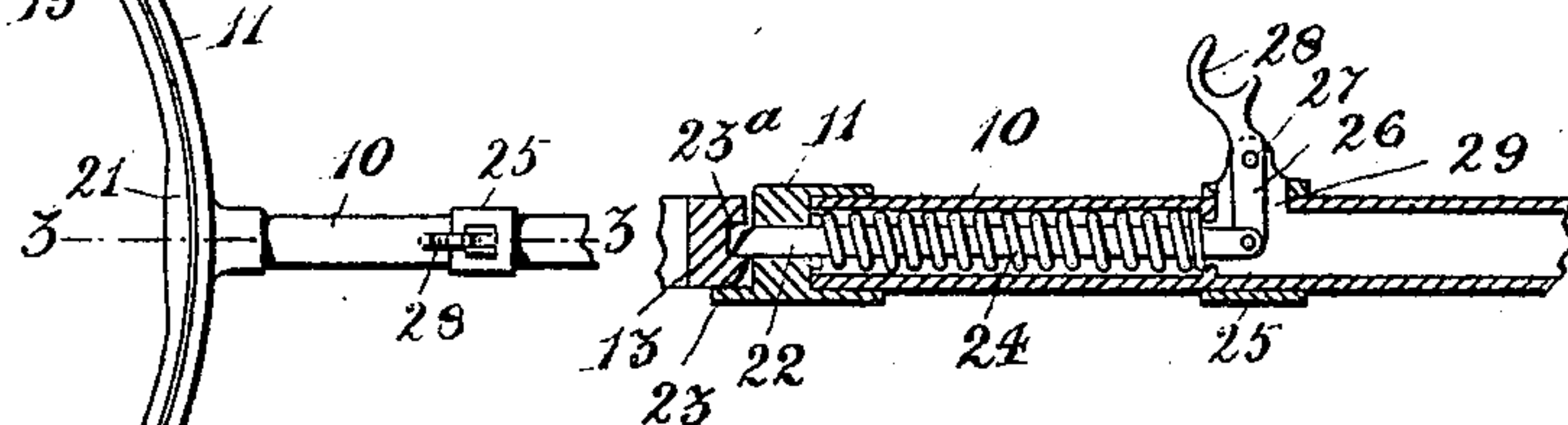
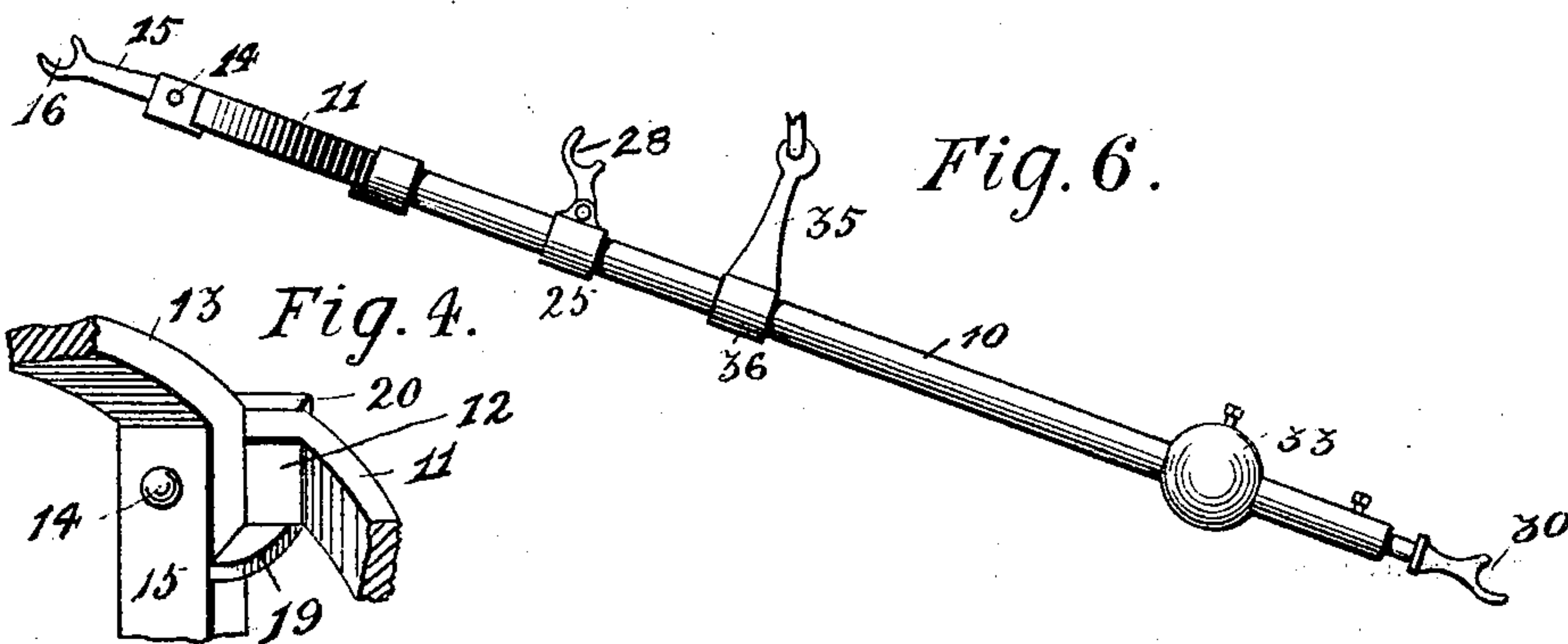
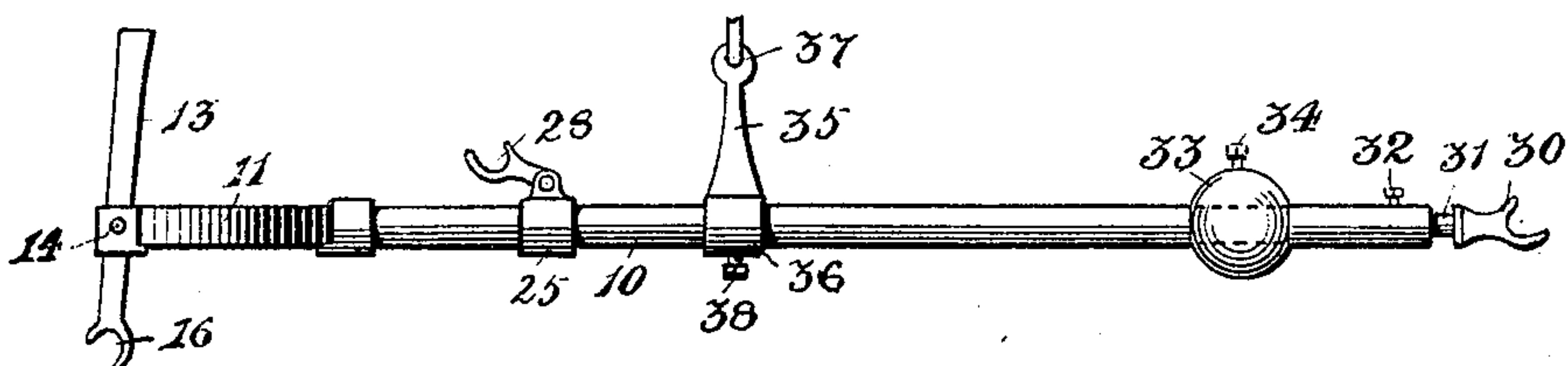


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

URGEL GRIGNON, OF OTTAWA, CANADA.

HARNESS-HANGER.

SPECIFICATION forming part of Letters Patent No. 619,405, dated February 14, 1899.

Application filed April 8, 1898. Serial No. 676,897. (No model.)

To all whom it may concern:

Be it known that I, URGEL GRIGNON, fireman, a subject of the Queen of Great Britain, residing at Ottawa, in the county of Carleton, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Harness-Hangers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to hangers on which the harness is suspended ready to be dropped when the horse is underneath, and is especially designed for use in fire-stations and like places where sudden calls are liable to occur, thus requiring quick harnessing.

The object of my invention is to provide a hanger that will when released remain hanging and will automatically resume a horizontal position and be clear of and above the driver's head, so as to be ready when the horses return to the station to replace the harness on the hanger without any trouble, and also to simplify the parts.

In the accompanying drawings, illustrating my said invention and in which similar characters indicate like and similar parts throughout the different views, Figure 1 is a side view of the hanger in its normal position. Fig. 2 is a top view of the rear portion of the hanger, which holds the "breeching." Fig. 3 is a section on line 3 3 of Fig. 2, enlarged, showing the trip mechanism. Fig. 4 is a detail of the hinge-joint of the breeching-holder. Fig. 5 is a side view showing the position the hanger assumes just after the trip has been operated. Fig. 6 is the position it assumes a moment later.

Referring to the drawings, 10 is a tube of a suitable length—say three feet—and is provided at one end with two arms 11 11. These arms form a U-shaped frame, the short ends 12 of which are bent parallel with the tube 10. These two arms are made in one piece and are rigidly connected to the end of the tube or bar 10. A bail 13 of the same shape, but fitting inside the U-shaped frame 11 11, is pivoted at 14 to the short arms 12. The arms 15, through which the pivots pass, are longer

than the arms 12 and terminate in hooks 16. These hooks are composed of two fingers, the lower one, 17, in its normal position being curved slightly upward at the end and a short upper finger 18. Stops 19 are provided to prevent the bail turning too far, and consist of plates 20, reinforcing the portions 12 and secured thereto, the stops 19 being portions of the said plates bent under the arms. The bail 13 is made heavier in its central portion at 21, the object of which will be hereinafter pointed out. A latch 22 engages the bail 13 by entering a recess 23^a formed therein, a stop 23 being formed at the lower edge of the frame 11 11, and on this the bail rests, held by the latch. The latch consists of a spring-bolt 22, having its upper projecting end beveled off, a spring 24 being coiled around the shank of the bolt, which spring tends to press out the beveled end. The shank of the bolt 22 extends some distance into the bar or tube 10, where it is connected to the lower end of a trip. This trip is pivoted in a collar 25, secured on the bar 10, and consists of an arm 26, to which the shank of the bolt 22 is pivoted inside the hollow bar and extends upwardly above the pivotal point 27, where it terminates in a hook 28, this hook being similar to the hooks 16, except that it is nearly vertical in its normal position. An aperture 29 is made in the upper part of the tube 10 for the passage of the arm 26. Another hook 30 is secured in the other end of the tube 10. This hook is similar to the hooks 16 in shape and is provided with a shank 31, which slides into the end of the tube 10 and is held in any desired position by a set-screw 32. An adjustable balance-weight 33 slides on the tube near the end carrying the hook 30, a set-screw 34 holding it in any position required to balance the device and maintain it at all times in a perfectly horizontal position. An arm 35, having at its lower end an eye 36, through which passes the tube 10, and an eye 37 at its upper end, by means of which it is secured to the rope or chain by which it is suspended from the ceiling, and a set-screw 38 holds this arm in position on the tube.

The operation of the device is as follows: The harness is suspended on the hooks of the hanger, the breeching on hooks 16 16, the collar on hook 30, and the lines or reins con-

nected to the vertical hook 28. When an
 alarm is given, the driver on taking his seat
 pulls toward himself the reins held by hook
 28, pulling back with them the said hook,
 5 thereby releasing the latch, and thus allow-
 ing the bail to raise and the hooks 16 16 to
 tip down, thus lowering the arms carrying
 the breeching and allowing it to slip off the
 hooks onto the horse, this position being shown
 10 in Fig. 5. These hooks being thus released
 of the weight of the breeching, the bar will
 then be tipped forward by the weight of the
 collar on the hook 30, aided in this action by
 the weight 33, and the collar will fall onto the
 15 horse's neck and the heavy central portion
 of the bail 13 will also immediately cause it
 to fall back in its place, where it will be locked
 by the latch and made to resume its normal
 position, as shown in Fig. 6. It will thus be
 20 seen that immediately after the collar is off
 its hook the whole device when raised will
 assume a horizontal position, the heavy rear
 portion thereof being counterbalanced by the
 weight 33, as shown in Fig. 1.

25 It is obvious that the hanger in automatic-
 ally assuming a horizontal position imme-
 diately after being released of the harness is
 of considerable advantage, inasmuch as it
 will present no obstacle whatever to the driver
 30 as he drives past under it, and, moreover, also
 renders the hanger to be always ready for
 immediate use in rehanging the harness when
 the horse is to be unharnessed, which is also
 of a great advantage, more especially so in
 35 winter-time, when the hands of the driver
 have been rendered numb by cold and it is
 almost impossible to manipulate any compli-
 cated gearing.

Having thus described my invention, I
 40 claim as new and desire to secure by Letters
 Patent—

1. In a harness-hanger consisting of a sus-
 pended bar or tube, an adjustable collar-hook
 at one end of the said bar, a U-shaped frame
 45 secured to the other end of the said bar, a
 bail pivoted in the said frame, the ends of
 said bail projecting past the pivoted point,
 and carrying on said ends hooks for the

breeching, a spring-latch engaging the said
 bail in the center, a trip pivoted to the said 50
 bar, a hook formed on the upper end of the
 said trip, the lower arm of the said trip be-
 ing pivoted to the inner end of the said latch,
 stops on the ends of the said U-shaped frame
 to limit the upward movement of the said 55
 bail, a stop in the center of the said frame,
 to limit the downward movement of the said
 bail, an adjustable balance-weight, near the
 collar-hook, and an adjustable arm by which
 the said hanger is suspended, substantially 60
 as set forth and described.

2. In a harness-hanger, the combination
 with a tube or bar having a collar-hook at one
 end and a U-shaped frame secured to the
 other end, of a bail pivoted in the said frame, 65
 the ends of said bail projecting past the pivotal
 point, and carrying hooks on said ends, the
 central portion of the said bail being made
 heavy to counterbalance the said hooks, a
 latch engaging the said bail, the said latch 70
 operated by a trip, substantially as set forth
 and described.

3. In a harness-hanger, the combination
 with the bail 13 pivoted in the U-shaped frame
 11, 11, secured to the tube 10, of the stops 19 75
 secured to the said frame, and the stop 23,
 limiting the movement of the said bail, a
 spring-latch 22 engaging the said bail, a trip
 pivoted to the said tube 10, the lower arm 26
 of said trip to which the shank of the said 80
 latch is pivoted, and a hook 28 formed on the
 upper portion of the said trip, substantially
 as set forth.

4. In a harness-hanger, the combination 85
 with a U-shaped frame secured to a horizon-
 tal tube, of a bail pivoted in the arms of the
 said frame, the central portion of said bail
 being made heavier than the rest, and having
 the ends of said bail provided with hooks,
 substantially as set forth. 90

In testimony whereof I have affixed my sig-
 nature in the presence of two witnesses.

URGEL GRIGNON.

In presence of—

JAMES O'CONNOR,
 WILLIAM MCKAY.