

(No Model.)

P. S. GRIFFITH & E. MANES.
HORSE DETACHER.

No. 581,714.

Patented May 4, 1897.

Fig. 1

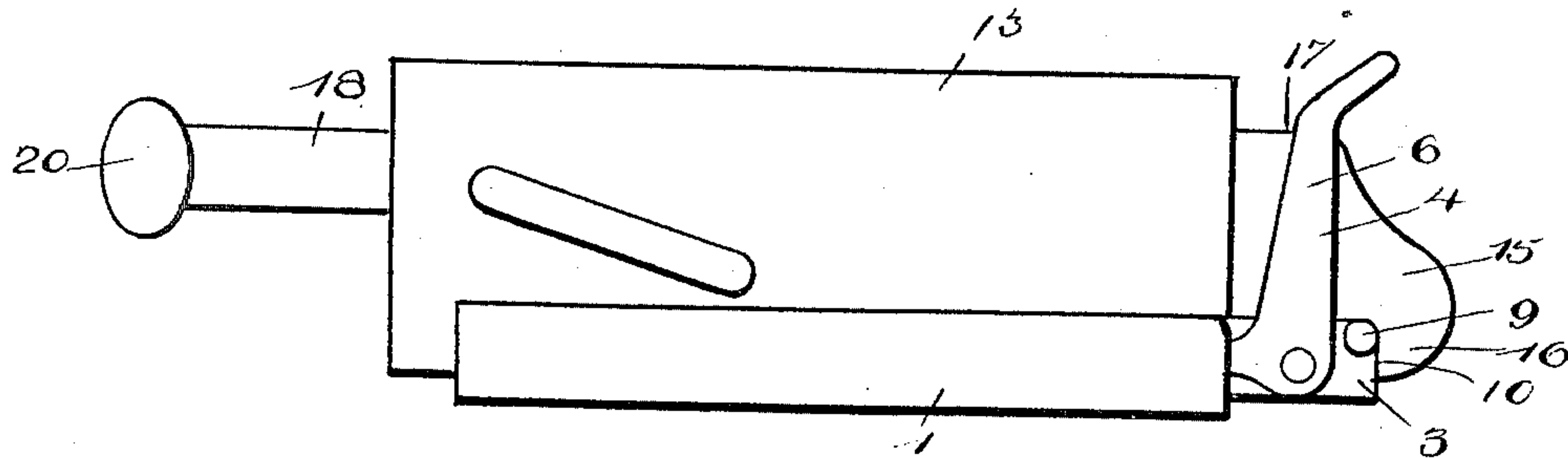


Fig. 2

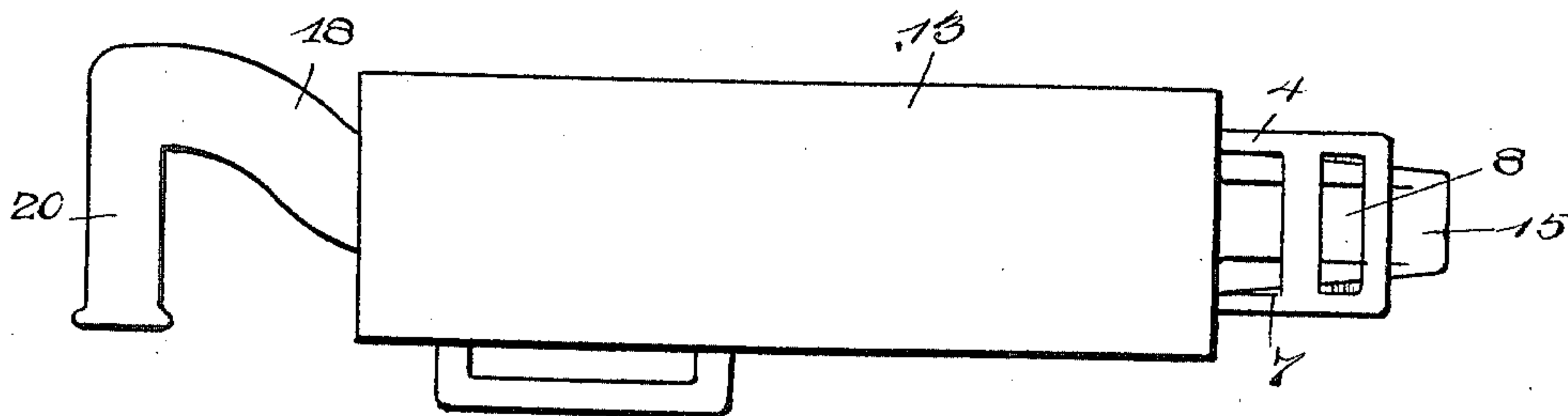
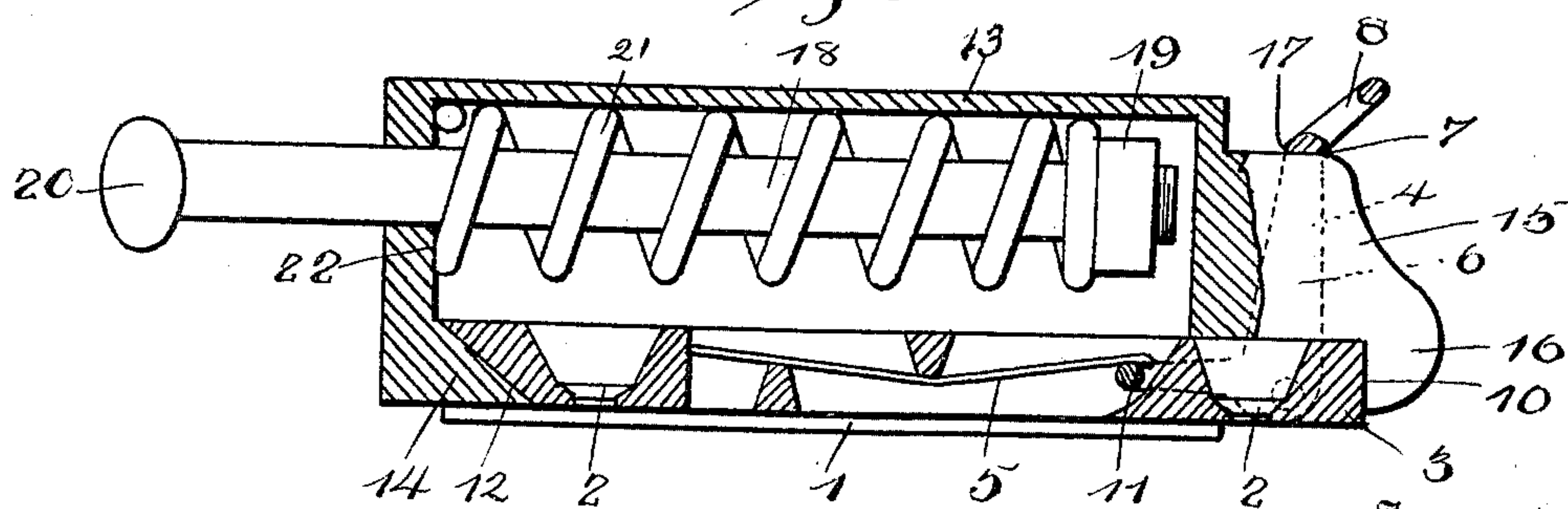


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

PEYTON S. GRIFFITH AND EPHRAIM MANES, OF CHATTANOOGA,
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HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 581,714, dated May 4, 1897.

Application filed December 19, 1896. Serial No. 616,262. (No model.)

To all whom it may concern:

Be it known that we, PEYTON S. GRIFFITH and EPHRAIM MANES, citizens of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Horse-Detachers; and we do 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.

Our invention has relation to improvements in horse-detachers; and the object is to provide a simple, durable, and reliable device of this kind.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-numerals indicate the same parts of the invention.

Figure 1 is a side elevation of our improved horse-detacher. Fig. 2 is a top plan view, and Fig. 3 is a longitudinal section of the same.

1 represents the base-plate, which is permanently secured to the thills at a point about where the breeching passes around the thills, and in some instances it may be fixed to the thills where shaft-tugs usually work. In either case, of course, the usual singletree or shaft-tug is dispensed with.

The bottom of this base-plate 1 is concaved transversely to correspond to the convexity of the thills, and it is provided with countersunk screw-holes 2 2 for affixing it permanently and substantially to the thill.

3 represents a longitudinal integral arm extending horizontally from the rear end of said base-plate, and on it is pivoted an angular lever 4, the forward horizontal end 11 of which engages the free end of a horizontal leaf-spring 5, anchored in the base-plate to normally retain the upright arm 6 of said lever in a vertical position. Near the upper end of said arm 6 is located a transverse yoke 7, and the immediate end of the arm terminates in a loop or eye 8, to which is secured

a hand-strap (not shown) extending back to within reach of the occupant of the vehicle.

A transverse pin 9, secured in the outer end of the arm 3, serves to limit the rearward movement of the arm 6, and the immediate end of the arm 3 terminates in a vertical face 10. The forward end of said base-plate 1 is undercut to form a beveled dog 12, as shown.

13 represents the detachable shoe, its forward end being provided with a rearwardly-projecting jaw 14, which engages the dog 12 on the base to hold that end in position on said plate, while its rear end terminates in a longitudinal integral arm 15, having a right-angular jaw 16, which engages the correspondingly-shaped vertical face 10 of the arm 3, these parts being effectually protected against accidental displacement by the yoke 7, engaging the longitudinal shoulder 17 on the arm 15, the leaf-spring 5 serving to secure the lever 4 and its yoke 7 in place. It will thus be seen that when the parts are in this position the shoe is effectually secured to the base-plate, but, should occasion require, the strap attached to the eye 8 of the lever 4 may be drawn backward, which releases the yoke 7 from the shoulder 17, and at the same time the forward end 11 of said lever raises the shoe, so that its arm 15 is also raised, carrying the jaw 16 with it, and thus clearing the face 10 of the arm 3. This operation completely releases or detaches the shoe from the base-plate.

18 represents a longitudinal rod mounted in the shoe 13, its housed end being threaded to receive the adjusting-nut 19, and its projecting end being formed with a transverse arm 20, which receives the trace or tug, and the end of said arm is formed with the usual flange for retaining the tug in place.

21 represents a stout spiral spring encompassing said rod 18, one end resting on the shoulder 22 of the shoe and the other end resting on the nut 19. The object of this spring is to ease the draft on the animal, the sudden starts and jerks being taken up by the spring instead of being transmitted to the vehicle.

Although we have specifically described the construction and relative arrangement of the

several elements of our invention, we do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of our invention without departing from the spirit thereof.

Having thus fully described our invention, what we claim as new and useful, and desire to secure by Letters Patent of the United States, is—

- 10 A horse-detacher, comprising the base-plate 1, provided with the integral beveled dog 12, the integral arm 3 formed with the vertical face 10 and limit-pin 9, the right-angular lever 4 pivoted on said arm and having its
15 vertical arm 6 formed with a transverse yoke 7 and strap-eye 8, a leaf-spring 5 secured in said base-plate, and having its free end in

contact with the horizontal end 11 of lever 4, in combination with the detachable shoe 13, having an integral jaw 14, an integral arm 15 20 formed with an angular jaw 16, and longitudinal shoulder 17, the longitudinal rod 18 mounted in said shoe and provided with the adjusting-nut 19 and the integral transverse tug-arm 20, and the spiral spring 21 located 25 in said shoe and encompassing said rod 18, substantially as and for the purpose set forth.

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

PEYTON S. GRIFFITH.
EPHRAIM MANES.

Witnesses:

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W. G. M. THOMAS.