

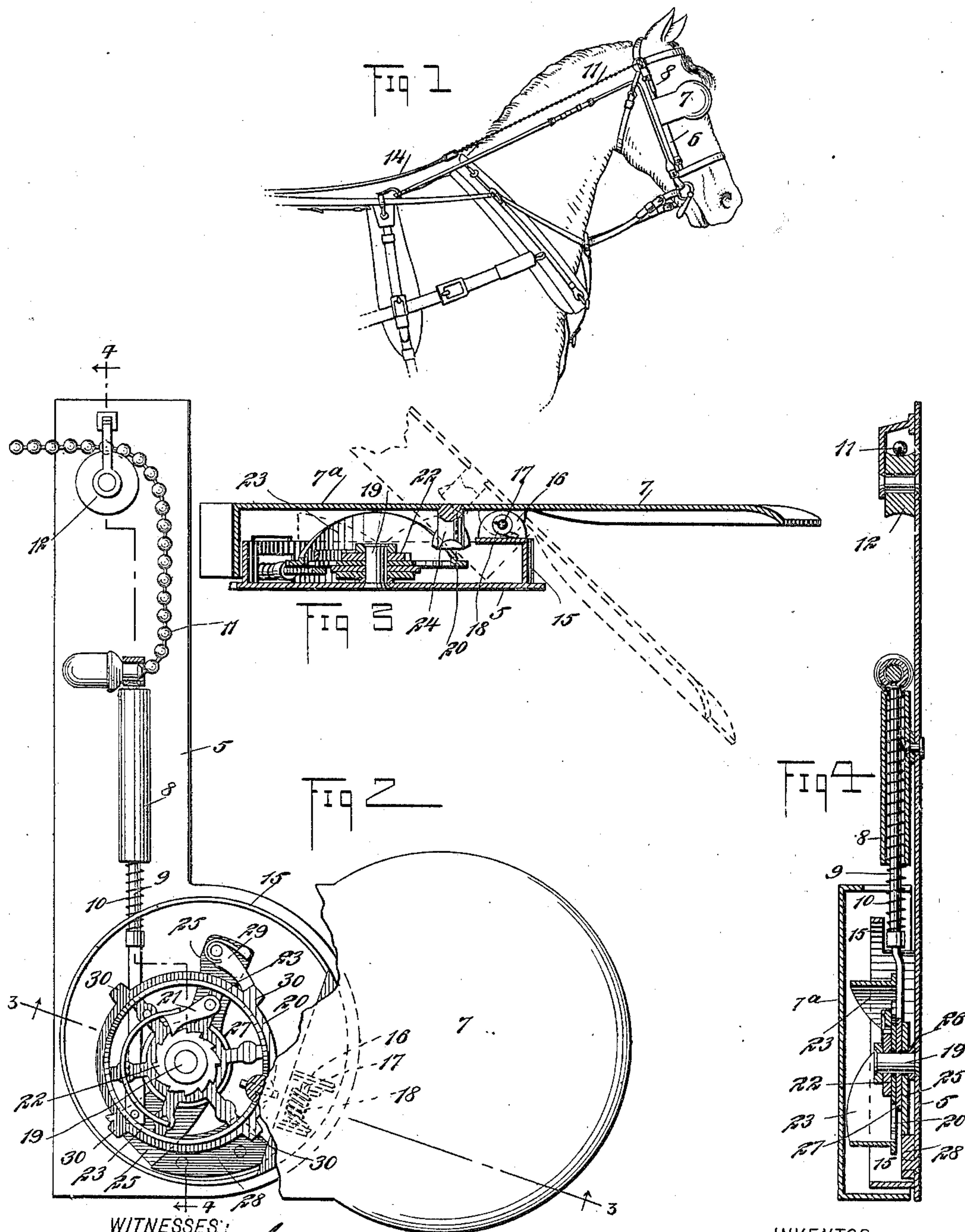
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Patented Nov. 6, 1900.

F. MACK.
BRIDLE BLIND.

(Application filed Apr. 25, 1900.)

(No Model.)



WITNESSES:

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FRANK MACK, OF NEW YORK, N. Y.

BRIDLE-BLIND.

SPECIFICATION forming part of Letters Patent No. 661,375, dated November 6, 1900.

Application filed April 25, 1900. Serial No. 14,268. (No model.)

To all whom it may concern:

Be it known that I, FRANK MACK, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented new and useful Improvements in Horse-Blinkers, of which the following is a full, clear, and exact description.

This invention has for its purpose to provide horse blinkers or blinders which may be employed to completely blind a horse, and thereby to stop it.

This specification is the disclosure of one form of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a view showing my invention in use. Fig. 2 is an enlarged side elevation with parts broken away. Fig. 3 is a section on the line 3 3 of Fig. 2, and Fig. 4 is a section on the line 4 4 of Fig. 2.

The device has a body-plate 5, adapted to be fastened to the bridle by straps or like devices 6, so as to hold the shade 7 in juxtaposition with the eye, as shown in Fig. 1. A tube 8 is fastened to the body-plate 5 and contains a reciprocally-mounted rod 9. An expansive spiral spring 10 encircles this rod and enters the tube 8, the spring serving to normally throw the rod 9 into the position shown in Figs. 2 and 4. The upper end of the rod 9 is connected with a cord, chain, or other flexible structure 11, which passes upward over an idler-pulley 12, mounted at the top of the body-plate 5, and thence rearward, where it may be joined to a rein 14, which extends to the vehicle, so as to be operated by the person therein. It will be understood that one of these devices is provided for each eye of the horse, and, if desired, the two cords or chains 11 may be joined to a single rein 14, so as to operate the two blinkers simultaneously.

The shade 7 has a shank-like portion 7^a, which is arranged to cover the lower portion of the body-plate 5 and which is formed with flanges extending around a flange 15, fastened rigidly on the body-plate 5. The shade is mounted on the flanges 15 of the body-plate

5 by means of lugs 16, (see Figs. 2 and 3,) which carry a pivot-pin 17, and a spring 18 encircles the pivot-pin and bears against a part of the flange 15 and against the shade 7, so as to normally throw the shade into the position shown by full lines in Fig. 3, in which position it will act simply as the usual blind or shade for horses, and therefore will not completely cover the eye. A stub shaft or pin 19 is mounted rigidly on the body-plate 5, within the flange 15, and carries loosely a wheel 20, which has a spring-pressed pawl 21, working with a ratchet-wheel 22, fast on the shaft 19. The wheel 20 has two cams 23, each of which covers approximately one-half of the circle of the wheel, the cams being arranged concentrically to the axis thereof. On the cams 23 a projection 24 of the shade 7 rides, so that as the wheel 20 turns to move the cams 23 under this projection 24 the shade is thrown from its normal position (see full lines in Fig. 3) to its abnormal or active position. (See dotted lines in Fig. 3.)

Mounted to rock on the shaft 19 is an arm 25, beneath which bears a collar 26 and between which and the wheel 20 bears a second collar 27. By this arrangement the arm 25 is properly spaced from the body-plate 5 and from the wheel 20, so that its free movement is permitted. A stop 28 is fixed on the body-plate 5, within the flange 15, and is engaged by the arm 25 to limit its movement in one direction. (See Fig. 2.) A spring-pressed pawl 29 is carried by the end of the arm 25 opposite the stop 28, and this pawl engages with teeth 30, formed on the periphery of the wheel 20. These teeth 30 are according to the construction here shown four in number, so that each movement of the arm 25 throws the wheel 20 for one-quarter of a revolution. The rod 9 is pivotally connected with the arm 25, so that the movement of the rod will be imparted to the arm, it being understood that the rod is mounted in the tube 8 with sufficient freedom of movement to compensate for the movement of the arm 25, which is around a constant axis, as will be understood.

The spring 10 on the rod 9 holds the arm 25 normally in the position shown in Fig. 2. Now by pulling on the rein 14 and cord 11 the rod 9 will be moved up, and a quarter of a revolution will be imparted to the wheel

20, so that one of the cams 23 will act on the shade 7 to throw it from one position to another. The wheel 20 turns continuously, and the projection 24 first rides on and then rides
5 off of one of the cams. Therefore to throw the shades in against the head of a horse to completely cover its eyes but one movement of the rod 9 is necessary, and then to uncover the eyes of a horse a second movement is nec-
10 essary. By these means the shades may be kept completely under the control of the driver, and by placing them over the horse's eyes to cover the same the horse will be instantly stopped, as is well known to horsemen.
15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A horse-blinker, comprising a body, a shade movably mounted thereon to cover or
20 uncover the eye of a horse, a cam mounted on the body to actuate the shade, and means for operating the cam.

2. A horse-blinker, comprising a body, a shade movably mounted thereon, a cam ac-
25 tuating the shade to cover or uncover the eye

of a horse, a moving arm having a pawl for driving the cam, and means for driving the arm.

3. A horse-blinker having a body, a shade movably mounted thereon, a rotating cam 30 for actuating the shade to cover or uncover the eye of a horse, an arm mounted to turn upon the axis of the cam, a pawl carried by the arm and acting upon the cam to drive the same, and means for driving the arm. 35

4. A horse-blinker, comprising a body, a pivotally-mounted shade movable on its pivot to cover or uncover the eye of a horse, and a wheel with two cams thereon, such cams being each of a length equal approximately to 40 one-half the circumference of the wheel, the cams acting upon the shade to actuate the same in the manner described.

In testimony whereof I have signed my name to this specification in the presence of 45 two subscribing witnesses.

FRANK MACK.

Witnesses:

F. W. KUHTZ,
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