

No. 685,598.

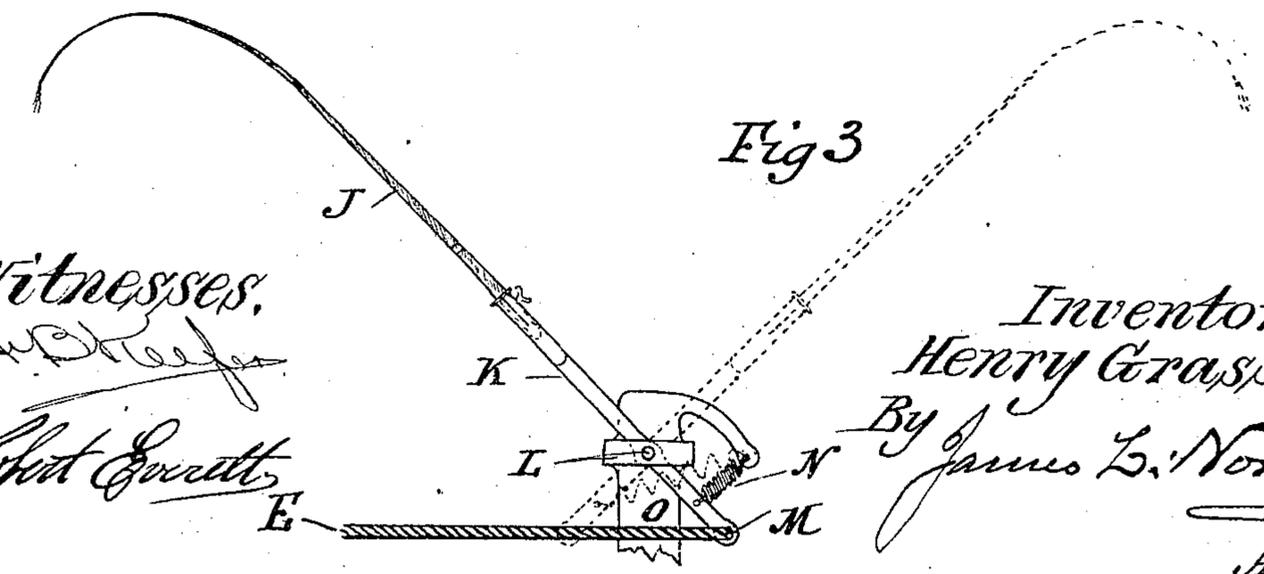
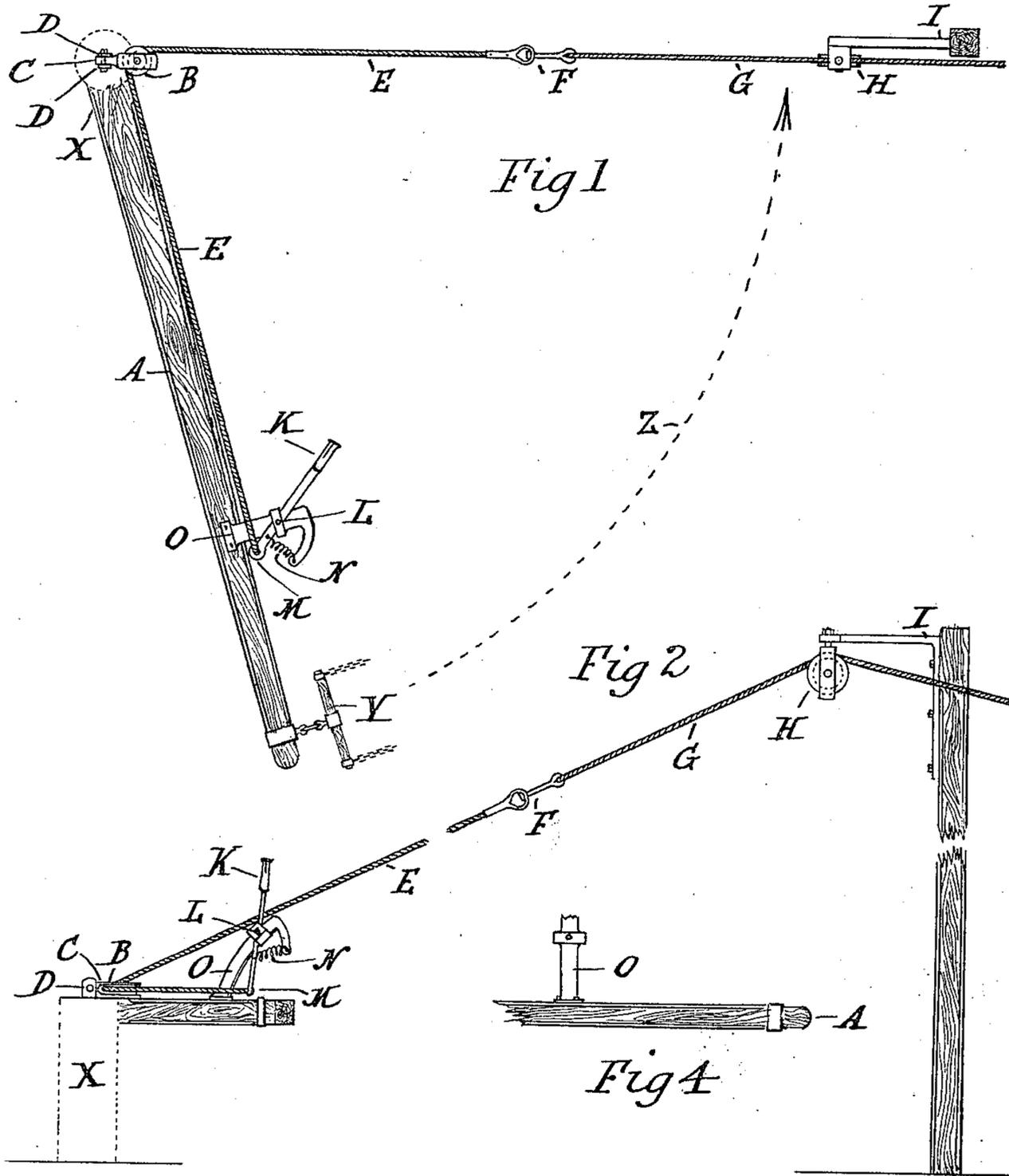
Patented Oct. 29, 1901.

H. GRASS.

DEVICE FOR HORSE DRIVING FROM A DISTANCE.

(Application filed Apr. 18, 1901.)

(No Model.)



Witnesses,
W. D. [Signature]
Robert Everett

Inventor,
 Henry Grass,
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 Att'y.

UNITED STATES PATENT OFFICE.

HENRY GRASS, OF FLOWERDALE, VICTORIA.

DEVICE FOR HORSE-DRIVING FROM A DISTANCE.

SPECIFICATION forming part of Letters Patent No. 685,598, dated October 29, 1901.

Application filed April 18, 1901. Serial No. 56,506. (No model.)

To all whom it may concern:

Be it known that I, HENRY GRASS, a subject of King Edward VII, King of the United Kingdom of Great Britain and Ireland, residing at Flowerdale, near Broadford, in the State of Victoria, Australia, have invented certain new and useful Improvements in Devices for Horse-Driving from a Distance; 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.

My invention has been devised with the object of saving labor by rendering it unnecessary for the driver of a "horse" (which word herein includes other beasts of draft, such as mules) in certain cases to remain near the horse or to give so much attention to the driving as to have no time for other duties. If my invention be applied to horse-works, the driver may be fifty or one hundred yards away and give his attention almost wholly to some other occupation, and yet he can easily keep the horse from lagging by applying the whip from the aforesaid distance. This is rendered possible by suitably affixing in contiguity to the horse a whip and by making this movable by means of a cord or like connection extended to the place where the driver is.

As the details used in carrying out my invention may be easily varied to suit different circumstances, I illustrate a simple construction in Figure 1, which is a plan view, and in Fig. 2, which is an elevation of Fig. 1, while Fig. 3 is an elevation on a larger scale, showing devices for holding, applying, and retracting the whip, the said devices not being restricted to horse-works. The position of the said devices in Fig. 3 relatively to the center of the horse-works in Fig. 2 is shown by Fig. 4.

In the drawings, A is the pole of a horse-works connected in any known manner to a central support, (indicated by the letter X,) the gearing of which is not shown.

Y is the singletree or part at which the horse is attached. The distant driver by pulling or jerking a rope G will actuate the

whip J, causing its application by reason of the construction next described.

The whip is inserted in a socket in, or is otherwise secured to, a rod K, which is pivoted or the like, as at L, to some suitable support. Connected to rod K is also the actuating-cord, (this part of which is marked E,) and a spring N, acting on or connected to rod K, keeps whip J normally clear of the horse, as in Fig. 1. When the driver's end of the cord is pulled, the whip is by that action applied, as seen in dotted lines in Fig. 3, the spring thereby being expanded and the whip being thereafter automatically retracted by the return of the spring N to normal. The whip will of course be of such length and pliability and be fixed at such an angle and location that when applied it will strike the horse.

O is any pedestal serving to support the pivot L and one end of spring N, and it may have stops to limit the movements of the rod K when the latter responds to the action of either the cord or spring N.

The connection between the cord and the driver may vary, but is usually carried high up, so as to enable the horse to pass under it. Thus I show cord E carried over a pulley B to a swivel F, and cord G extends from that swivel over pulley H, fixed to a support L of such height that the horse and whip may pass below the cord. To prevent twisting of the cording, a swivel or the like F is provided, while pulley B is also made movable, so as to keep it at all times in suitable relative position to the cord. This is accomplished by passing loosely through the shank C of the pulley B a pin, which is fixed between cheeks D, located over the center of X.

The dotted line Z in Fig. 1 shows the path of the horse around the center X.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In a device of the class specified, a central support, a pole connected to said support, provided with a standard having an arm, a whip-carrying rod pivoted to said standard, a spring connected, respectively to said rod

and arm, an upright supported independently
of and located at a distance from said pole, a
guide-pulley carried by said upright, a second
pulley, a pin passing loosely through the shank
5 of the pulley, cheeks located over the center
of the central support, between which said
pin is fixed, and a cord passing over said
guide-pulleys said cord being connected with

said rod and consisting of a plurality of sec-
tions connected by a swivel-joint. 13

In witness whereof I have hereunto set my
hand in the presence of two witnesses.

HENRY GRASS:

Witnesses:

G. G. TURRI,
JOHN P. BRAY.