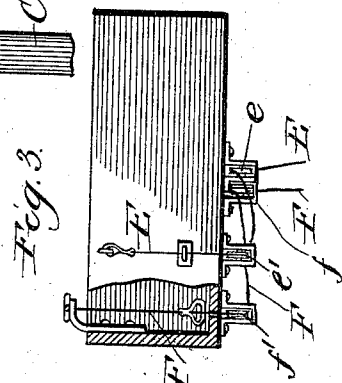
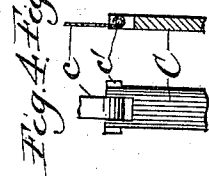
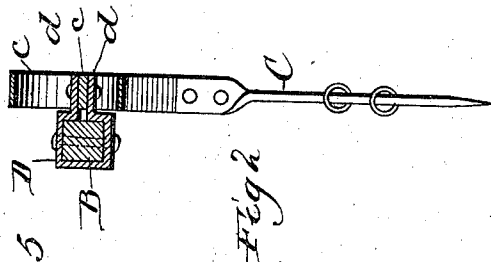
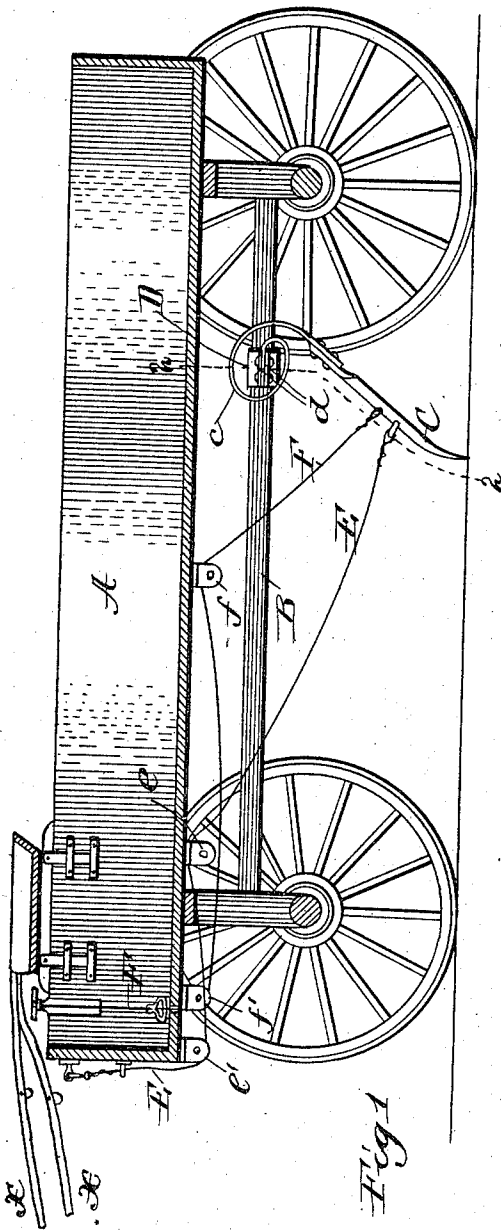


(No Model.)

T. AGNEW.
HORSE HITCHING DEVICE.

No. 577,675.

Patented Feb. 23, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS AGNEW, OF EVANSTON, ILLINOIS.

HORSE-HITCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 577,675, dated February 23, 1897.

Application filed January 14, 1896. Serial No. 575,494. (No model.)

To all whom it may concern:

Be it known that I, THOMAS AGNEW, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Horse-Hitching Devices; and I 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to that class of horse-hitching devices which consist of a lever or arm swinging from the frame of the vehicle and adapted to engage the road-bed, a cord leading from the arm to the horse's head.

The invention consists in so attaching the lever or arm to the vehicle, by means of a spring, that it is capable of longitudinal as well as angular movement, so that the vehicle is free to move through a limited range without disturbing the point of the arm.

I show in the drawings, in Figure 1, a longitudinal vertical section of a vehicle provided with my improved hitching device; Fig. 2, a sectional detail on the line 2 2 of Fig. 1; Fig. 3, a detail of the vehicle-body, showing the cords for controlling the lever and for connecting it with the animal. Figs. 4 and 5 are details.

The body of the vehicle is designated by the character A and its reach by the character B. The lever C has at its lower end a claw for engaging the road-bed and is attached to the vehicle-reach B by means of a coil-spring *c*, having one of its ends secured to the upper end of the lever and its other end bolted between projecting lips *d d* of a clip D, encircling the reach B. This spring is so disposed that it tends to throw the lever or arm down, so as to bear its lower end forcibly against the road-bed. The length of the lever C is such that it normally strikes the road-bed somewhat in advance of the clip D, and is consequently inclined forwardly and downwardly when brought into service.

A cord E is attached to the lever C near its free end and leads upward over a sheave *e*, se-

cured to the body of the box A, and turns upwardly about a sheave *e'* at the forward end of the box and may be permanently secured to the lines X X, by which the horse is driven, or when not in use may be secured to a ring attached to the front end of the box A. A second cord F leads from the lever C over a sheave *f'*, secured to the bottom of the box A, and turns about a sheave *f'* and terminates within the box A, where the driver has it under control, so that he can at pleasure draw up the lever or allow it to fall.

The length of the cord E is such that it is somewhat slack when the lever C is first lowered. Should the horse advance, the forward movement of the vehicle will cause the lever C to approach a vertical position, the spring *c* yielding or uncoiling by reason of the pressure. When the cord E becomes taut, it of course draws upon the bridle-bit, and the animal is stopped. Should he back, the lever assumes its original position.

The attachment between the spring *c* and the lever C may be and preferably is rigid, as shown in Figs. 1 and 2, or it may be pivotal, as shown in Figs. 4 and 5.

I have not attempted to show the many forms which the device may assume and do not wish to be limited to those shown, as any form in which the lever is attached to the vehicle by a spring and is free to assume a vertical position without raising the vehicle will come within the scope of the invention. While I have shown the lever as secured to the reach of the vehicle, it is not essential that it be attached to this particular part.

I claim as my invention—

1. The combination with a vehicle, of an arm pendent therefrom and having a swinging movement, such arm being adapted to engage the road-bed when inclined forwardly, a coil-spring forming the means of attachment of the arm to the vehicle, whereby the arm may yield longitudinally, and a cord leading from the lower end of the arm.

2. The combination with a vehicle, of a swinging arm projecting forwardly from the under side or frame of the vehicle, a leaf-spring forming the means of attachment between the arm and the vehicle and normally tending to bear the arm downwardly and

backwardly, and a cord, or the like, leading from the outer or free end of the arm.

3. The combination with a vehicle, of a rigid arm C pendent from the vehicle, a coil-
5 spring forming the means of attachment of the arm to the vehicle, having one of its ends secured to the vehicle and its other end pivotally attached to the lever, and a cord leading from the arm near its free end, substan-

tially as described and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS AGNEW.

Witnesses:

LOUIS K. GILLSON,
SPENCER WARD.