(No Model.)

W. W. HAMILTON.

HORSE DETACHER.

No. 265,316. Patented Oct. 3, 1882.

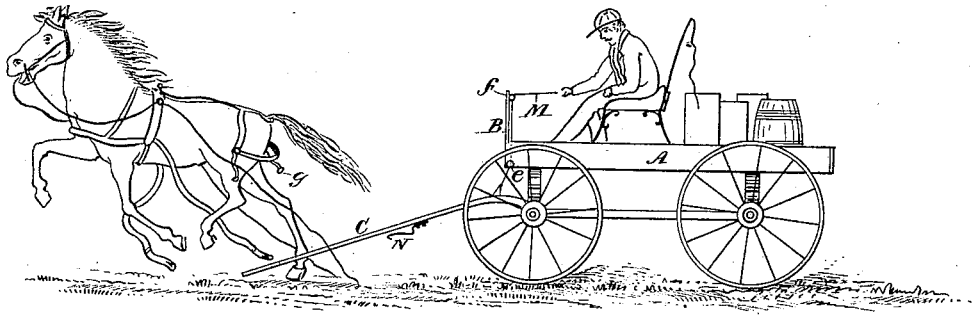

Fig. 1.

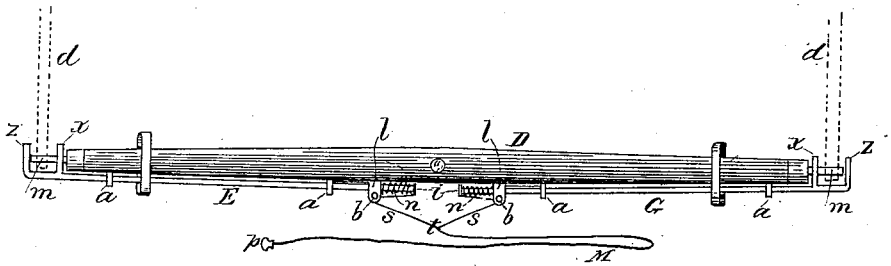

Fig. 2.

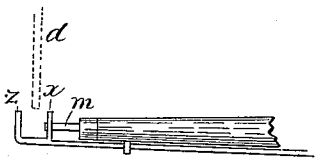

Fig. 3

Fig. 4.

Witnesses.
H. E. Kennick.
William H. Diehl

Inventor
Walter W. Hamilton,
Per C. C. Shaw.
Atty.

UNITED STATES PATENT OFFICE.

WALTER W. HAMILTON, OF BOSTON, MASSACHUSETTS.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 265,316, dated October 3, 1882.

Application filed April 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, WALTER W. HAMILTON, of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Wagons and other Vehicles, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation, showing a wagon provided with my improvement; Fig. 2, a top view of the whiffletree; Fig. 3, a view of the end of the whiffletree; and Fig. 4, a view of the shaft, showing the breech-hook and a part of the breeching-strap.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to means for detaching the horse from the wagon or other vehicle to which it is applied; and it consists in a novel construction and arrangement of parts, as hereinafter more fully set forth and claimed, by which a more effective device of this character is produced than is now in ordinary use.

In the drawings, A represents the body of the wagon; B, the dash-board; C, the shafts, and D the whiffletree. The whiffletree is provided at its rear side with two rods, E G, arranged to slide longitudinally in the supports or eyes *a a*, the outer ends of the rods having laterally-projecting lips or flanges *x z*, as shown in Figs. 2 and 3. Projecting from the respective ends of the whiffletree are studs or rods *m m*, which pass through corresponding holes in the flanges *x* and come into contact with the flanges *z*, when the rods E G are pushed or drawn inwardly to their fullest extent. The inner ends of the rods E G are respectively provided with an annular flange or button, *i*, and coiled spring *n*, one end of the spring abutting against the stop *l* and the other against the inner face of the button *i*, the spring acting expansively to force or draw the rod toward the center of the whiffletree and bring the flange *z* against the outer end of the stud *m*, thus securing the trace or tug *d* on the stud, as shown in Fig. 2.

Disposed in the outer ends of each of the stops *l* there is a friction-wheel, *b*, and there is also a friction-wheel, *e*, in the forward end of the body of the wagon, and another at *f* in the top of the dash-board.

Two cords, *s s*, are respectively attached to the buttons *i i*, and pass around the wheels *b b*. These cords are joined at *t* to form the main cord M, which passes under the wheel *e* and vertically up the inner side of the dash-board over the wheel *f*, where it is attached to the knob *p*.

In harnessing or attaching the horse to a wagon or other vehicle provided with my improvement the rods E G are drawn outwardly, as shown in Fig. 3, and the traces *d* slipped over the studs *m*, the rods, when released, being forced inwardly by the springs, assuming the position shown in Fig. 2, thus securing the traces on the studs *m* by means of the flanges *z*. The breeching-straps are then secured in the ordinary manner to the hooks N, and the other parts of the harness adjusted as usual.

In case the horse becomes frightened or runs away, it may be instantly detached from the carriage by pulling on the cord M, which, by acting through the cords *s s*, compresses the springs *n n*, forces the rods E G outwardly, and slips the traces *d* from the studs *m* in a manner which will be readily understood by all conversant with such matters without a more explicit description.

The outer or free end of the holdback or breeching-hook N is elastic, and so arranged in reference to the shaft as to permit the breeching-strap *g* to be readily withdrawn therefrom as the horse leaves the shafts.

I am aware that a slotted sliding plate operated by a cord for detaching the traces is not new; but said device requires a special form of whiffletree having one side made flat, while my device may be readily applied to whiffletrees already in use. Moreover, the plate in that device is liable to release the traces accidentally, as there are no springs for holding it in its normal position.

I am also aware that hinged plates operated by a cord are not new for this purpose; but these are less positive in their action than mine, and are more cumbersome upon the whiffletree.

Having thus explained my invention, what I claim is—

The combination of a whiffletree provided

with studs at the ends, longitudinally-sliding rods, each provided with a flange at its inner end and with two lugs at its outer end, loops on the whiffletree in which the rods slide, the inner loops being provided with pulleys or eyes for the cords, springs encircling the rods between the inner flanges thereof and the inner loops of the whiffletree, and cords attached to the inner ends of the rods and passing over the pulleys of the inner loops, substantially as described.

WALTER W. HAMILTON.

Witnesses:
C. A. SHAW,
W. H. DIEHL.