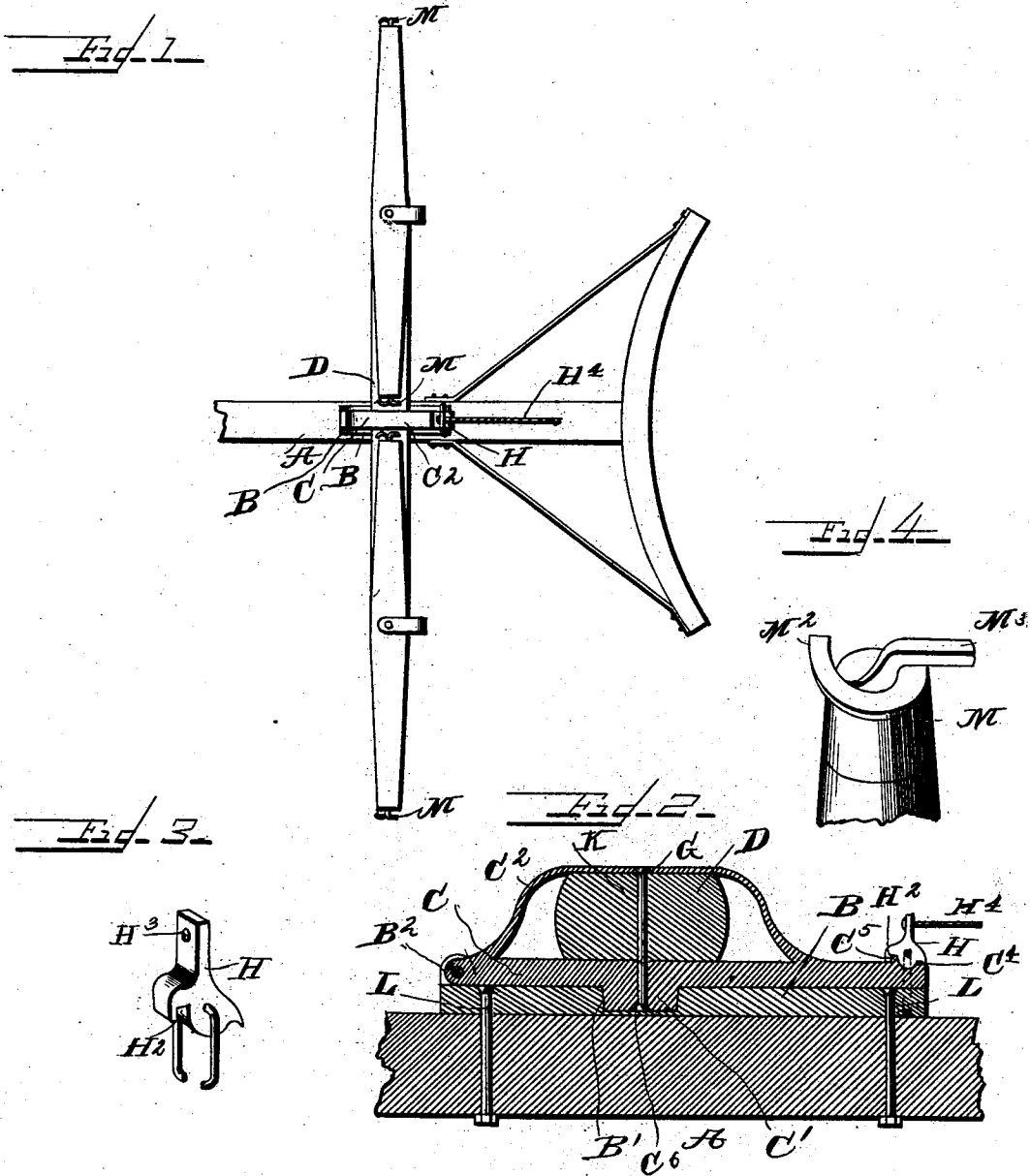


·(No Model.)

C. M. WELCH.
DEVICE FOR DETACHING HORSES.

No. 509,010.

Patented Nov. 21, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES M. WELCH, OF SPRINGFIELD, MISSOURI.

DEVICE FOR DETACHING HORSES.

SPECIFICATION forming part of Letters Patent No. 509,010, dated November 21, 1893.

Application filed August 9, 1892. Serial No. 442,625. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. WELCH, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Devices for Releasing Horses from Vehicles; 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 relates to improvements in devices for detaching horses from vehicles, the object of which is to provide a cheap, simple, durable and convenient device for freeing horses from vehicles when they become unmanageable. These objects I attain by means of the device illustrated in the accompanying drawings forming a part of the specification in which—

Figure 1, is a view in elevation of the entire device. Fig. 2, is a longitudinal vertical section of the tongue across the center of the whiffletree. Fig. 3, is a detail view of the catch that holds the plate to which the whiffletrees are secured in place. Fig. 4, is a detail view showing one of the studs for holding the tug on the end of the single-tree.

Similar letters of reference indicate corresponding parts in the several figures.

A, is the tongue of any ordinary vehicle to which is secured on its top side a plate B, by any suitable means preferably by means of bolts or screws L. Said plate is provided with an opening B' to secure the projection C' in the plate C, which is hinged to the plate B, at its front end B² or at the end farthest from the vehicle and the other end of the plate B is provided with any suitable catch H, which is secured to the plate B, so as to allow it to swing back and forth in order to allow the end of the plate C to fit down closely upon the plate B. Then the swinging catch H presses upon the top of plate C and is secured to it by any suitable means; preferably by means of a knuckle joint, and also by means of the opening H² receiving the projection C⁵ thus holding plate C firmly down upon plate B. Catch H, is provided with any suitable opening H³, to receive a cord H⁴, by which it is tripped when desired. Plate C is

made of any suitable material and is provided with a projection C', to fit down in the plate B as shown. Plate C, is also provided with a suitable clasp C², which is secured to the top of plate C, and is made to pass over the top of the double-whiffle-tree D. Said clasp is provided with an opening G, to receive a bolt K, which is made to pass down through the opening G, then through the double-whiffle-tree and into the opening C⁶, in the lower part of the plate C. Plate C, is also provided with a notch C⁴, in its top side to receive the catch H, and a projection C⁵, to enter the opening H², in the catch H.

D, is any ordinary double-whiffle-tree and is made to pass under the clasp C², and over the plate C, and is secured in place as shown. The singletree used is secured to the double-tree by means of a clasp passing over the single-tree and under the double-tree and by having a bolt pass down through the double-tree and single-tree and the inner end of the single-tree is preferably bound with a strap to pass over the inner end of the single-tree and under the double-tree thus preventing the single-tree from getting at right-angles with the double-tree.

The stud M, used on the end of the single-tree may be of any suitable material and shape, preferably of iron and is preferably made so that as the tug, is hitched, the end M³ of the stud M, will form a right angle with the single-tree and project a little above the top side of the single-tree. Said stud M is preferably provided with a part M², which is attached to the shank of the stud and projects out forming the arc of a circle resembling an auger so that the outer end of the projection M², will be even with the outer end of the part of the stud M³, and in front and above it so that as the tug is hitched, the tug passes over the stud M³, and inside of the front part projection M², in front of the single-tree and outside of the part of the projection M², which extends behind the single-tree, so that as the single-tree is thrown forward and describing one-fourth of the arc of a circle the projecting part of the stud M³, will be turned forward and the auger shaped projection M², will throw the tug off of the stud M³, by means of the back end of the tug pressing

against the outer surface of projection M², thus throwing it off of the stud M³. Then the catch H, is tripped which permits the whiffletree to turn forward in plate C.

5 I claim—

The combination with a whiffletree hook M, having projections M², M³, for holding and freeing a tug; of an ordinary tug a pivoted plate C; a catch H; and an attached tripping

cord H⁴ for throwing the catch H, all substantially as shown and described for the purpose specified.

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

CHARLES M. WELCH.

Witnesses:

S. C. HASELTINE,
LAURA SMITH.