

No. 666,774.

Patented Jan. 29, 1901.

M. NIELSEN.

TUG.

(Application filed July 23, 1900.)

(No Model.)

Fig. 1

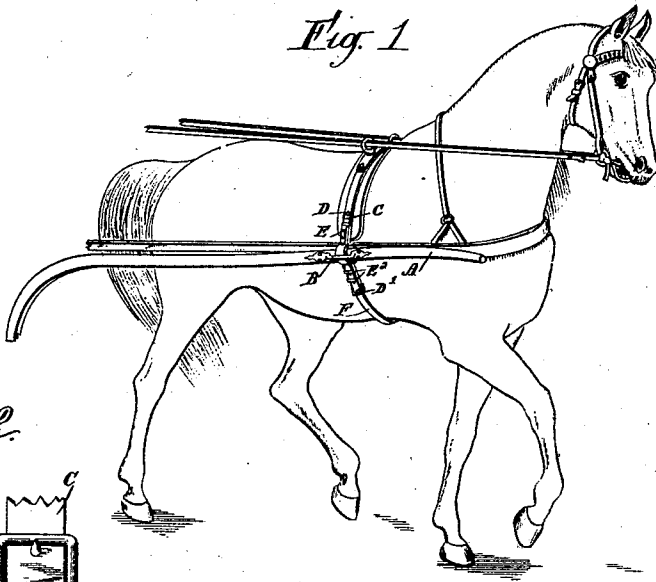


Fig. 2.

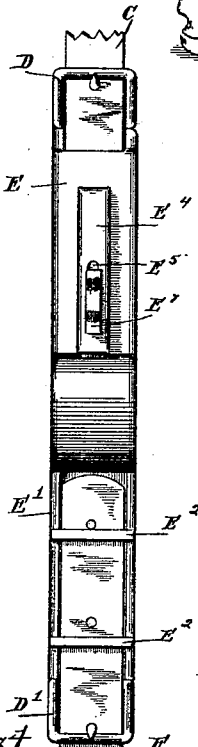


Fig. 3.

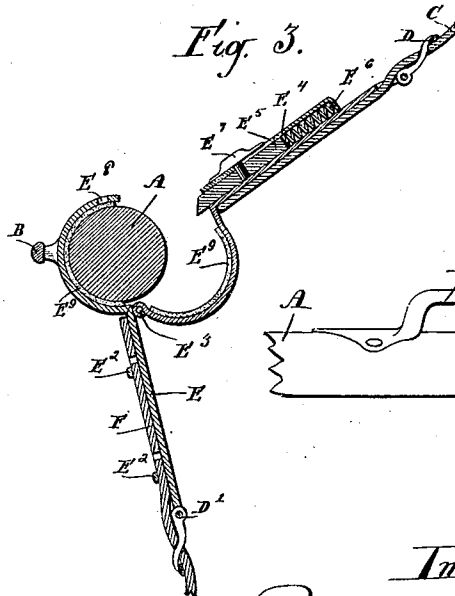
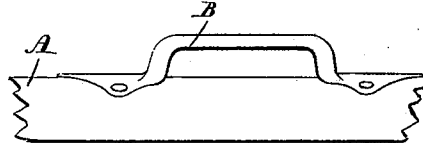


Fig. 4.



Attest.
J. P. Groat.
John C. Kead.

Inventor.
Marinus Nielsen.
By J. W. St. John.
Atty.

UNITED STATES PATENT OFFICE.

MARINUS NIELSEN, OF CEDAR RAPIDS, IOWA.

TUG.

SPECIFICATION forming part of Letters Patent No. 666,774, dated January 29, 1901.

Application filed July 23, 1900. Serial No. 24,486. (No model.)

To all whom it may concern:

Be it known that I, MARINUS NIELSEN, a citizen of Denmark, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Harness; 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.

The object of this invention is to produce a simple and efficient device whereby the thills of a vehicle may be quickly and easily connected with the back-strap of a harness and disconnected therefrom.

The invention is fully disclosed in the description and claim following, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a device embodying my invention as in use. Fig. 2 is an enlarged front view of the same. Fig. 3 is a central longitudinal section of the same. Fig. 4 is a view of a stirrup for the thill to operate in connection with my attaching device.

Similar letters refer to like parts in all the views.

In the drawings, A designates a carriage-thill, and B a metal stirrup attached thereto at the point of engagement of the harness back-strap C therewith. This stirrup might be dispensed with, but in practice it is desirable, as in the event of the traces becoming unhitched or broken the back-strap alone will hold and draw the carriage temporarily.

To the back-strap is attached, as by a buckle D, a hinged clasp E E'. The lower member of this clasp E' is provided with a buckle D' to engage the belly-band F, suitable loops E² being provided to hold the free end of said band. The hinged portion of each member forms a semicircle and the two are pivoted at E³. In a suitable housing E⁴ of one of the members is mounted a catch E⁵, adapted to slide a short distance back and forth and held outwardly by a spring E⁶. The catch is disengaged by means of a thumb-piece E⁷, the terminals of which are rounded neatly toward the housing, so as not to catch the reins or other parts of the harness. Near the end of

the other semicircle is a hole E⁸ to engage the beveled end of the catch, it being understood that this portion of the member E' passes inside the other semicircle when the parts are in locked position. To prevent chafing of the thills, the semicircles are lined with leather E⁹.

The manner of connecting with the thill is so clearly shown in Fig. 3 that little description is necessary. The operator simply opens up the parts, as therein shown, and drops the thill into position and snaps the parts together. He then passes to the other side of the horse and repeats the operation. By this means he is saved the trouble of carefully entering one thill in a loop a short distance and then going to the other side to enter the other thill, with the chance of the horse stepping forward and detaching the entered thill. The detachment of the horse from the thills is effected with equal quickness and ease.

It is to be understood that the belly-band herein represented is the usual loose or supplemental belly-band, as the tight girth would not allow for the necessary movement in opening out the joint.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination with a stirrup attached to a thill, and adapted to limit the movement of the thill-clasp, of a thill-clasp comprising a pair of semicircular parts, each with a radial extension springing from one terminus of the semicircle and projecting in opposite directions when the clasp is closed, a buckle formed at the extremity of each radial extension, a spring-catch mounted on the upper one of said extensions, and a slot near the coinciding terminus of the semicircle of the other member to engage with said catch, the clasp members being hinged together at the terminus of the inner semicircle and the angle in the outer member formed by the semicircle and the downwardly-projecting extension.

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

MARINUS NIELSEN.

Witnesses:

JOHN C. HEALD,
J. F. GROAT.