

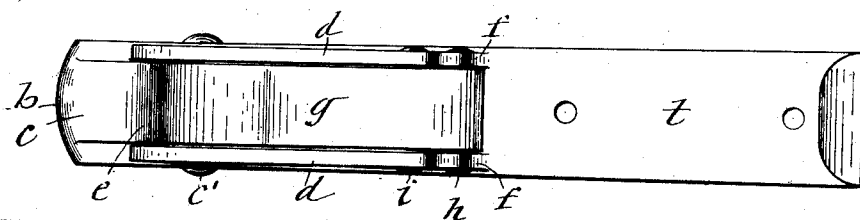
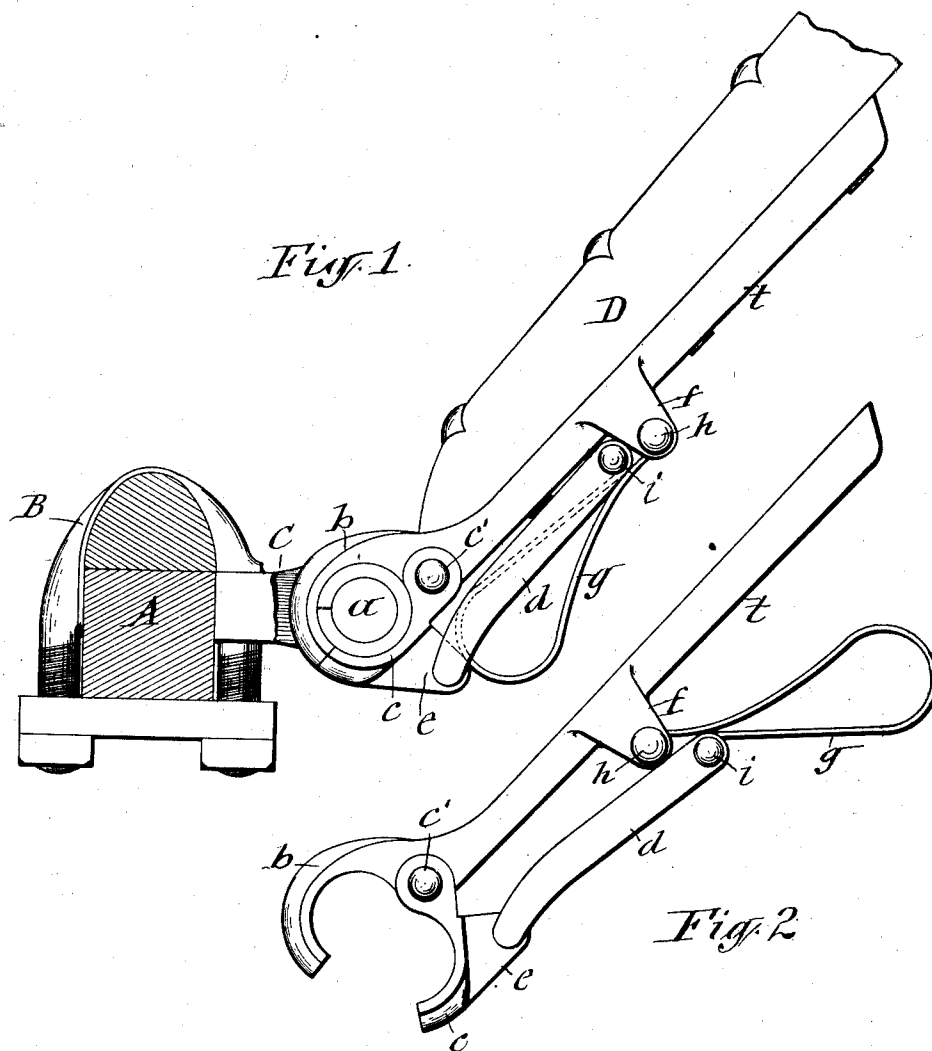
No. 738,494.

PATENTED SEPT. 8, 1903.

W. E. SHERWOOD.
THILL COUPLING.

APPLICATION FILED DEC. 26, 1902.

NO MODEL.



WITNESSES:

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Fig. 3

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WILLIAM E. SHERWOOD, OF ONEIDA, NEW YORK.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 738,494, dated September 8, 1903.

Application filed December 26, 1902. Serial No. 136,547. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. SHERWOOD, a citizen of the United States, and a resident of Oneida, in the county of Madison, in the State of New York, have invented new and useful Improvements in Thill-Couplings, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of thill-couplings usually termed "quick-shifting" couplings and in which the thill-iron is provided with jaws which are adapted to grip and release the coupling-pin and with means for operating said jaws.

The object of the present invention is to provide a thill-coupling which shall be simple and inexpensive in construction, efficient and convenient in operation, and at the same time neat and compact in appearance; and to that end the invention consists in the improved construction and combination of parts hereinafter described, and as illustrated in the annexed drawings, in which—

Figure 1 is a side view of a thill-coupling embodying my invention and showing the same in its coupled position. Fig. 2 is a side view showing the invention in its uncoupled condition, and Fig. 3 is a plan view of the under side of the thill-iron.

Similar letters of reference indicate corresponding parts.

A represents the front axle of the vehicle.

B represents one of the clips, which is fastened to the axle in the usual manner and has projecting from its front the shackle-ears C, to which the thill D is connected by the coupling-bolt a, passing either through the ears or formed integral therewith and through the shackle-eye on the thill-iron t.

My present invention has special reference to the shackle which couples the thill to the bolt a. The said shackle consists of the following construction and combination of parts, viz: The thill-iron t is formed with the stationary semicircular coupling-jaw b, which embraces the upper half of the circumference of the coupling-bolt a, the lower half of which is embraced by the companion jaw c, which is pivoted to the thill-iron at its junction with the stationary jaw b, as shown at c'. The pivoted jaw c is formed with a downwardly-

projecting lug e, to which is pivotally connected the rear end of a lever or link d, which extends forward directly under the thill-iron t when the thill is coupled to the vehicle, as shown in Fig. 1 of the drawings. The bottom of the thill-iron is provided with downwardly-projecting perforated ears f, in which is secured a transverse pin h. To this pin is connected one end of a spring g, which is curved in the form of a loop, which enables said spring to be used as a handle in the operation of coupling and uncoupling the thills. The extremities of said spring are in proximity to each other, and one of said extremities is pivotally connected to the pin h and the other extremity is connected to a transverse pin i, attached to the free end of the lever d. In swinging the spring rearward it causes the lever d to push the jaw c to its coupling position, as shown in Fig. 1 of the drawings, and by swinging the spring forward it causes the lever d to throw the jaw c into uncoupling position, as illustrated in Fig. 2 of the drawings.

To guard against accidental uncoupling of the thill from the coupling-bolt a by excessive strain on the pivoted jaw c, I arrange the ears f in proximity to the front end of the lever d, so as to cause said ears to serve as an abutment onto which said end of the lever is pressed when severe strain is exerted on said jaw.

The thill is uncoupled from the vehicle by the operator forcing down the rear portion of the spring g sufficiently to carry the lever d down away from the aforesaid abutment and relieve said lever from rearward force of the spring, and thus allow the pivoted jaw c to drop from the coupling-bolt a. The thill can then be lifted to draw the stationary jaw b out of engagement with the coupling-bolt a. The loop shape of the spring allows it to be used as a handle for the operator by inserting the fingers of one of his hands into the loop and exerting by said hand sufficient force to swing the spring back or forth to couple or uncouple the thills, as hereinbefore described.

What I claim as my invention is—

1. The combination with the thill-iron formed with the stationary coupling-jaw, a companion jaw pivoted to said thill-iron, and a lever connected to said pivoted jaw and extending forwardly therefrom, of a spring curved in the shape of a loop having its ex-

tremities in proximity to each other and pivotally connected at one end to the thill-iron and at the opposite end to the free end of the aforesaid lever as set forth.

- 5 2. A thill-coupling consisting of a stationary coupling-jaw formed on the thill-iron, a companion coupling-jaw pivoted to the thill-iron at the junction with the stationary jaw, a lever permanently pivoted at one end to
10 said pivoted jaw and extending forward di-

rectly under the thill-iron, and a looped spring connected at one end to the thill-iron in front of the free end of the aforesaid lever and extending rearward and thence forward and terminated in a connection to the front end
15 of the aforesaid lever as set forth and shown.

WILLIAM E. SHERWOOD. [L. S.]

Witnesses:

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