

No. 867,413.

PATENTED OCT. 1, 1907.

H. M. REYNOLDS.
THILL COUPLING.

APPLICATION FILED FEB. 15, 1905. RENEWED MAR. 20, 1907.

Fig. 1

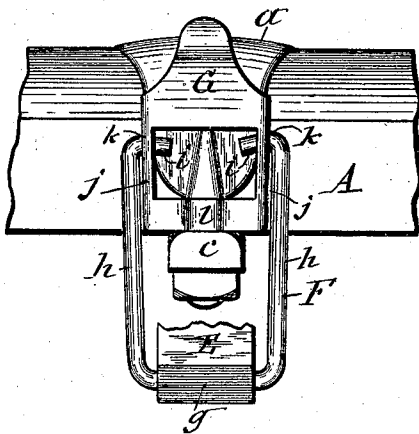
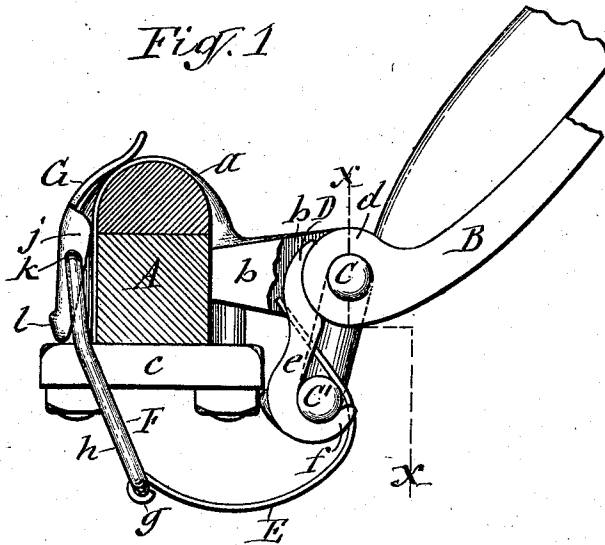


Fig. 2

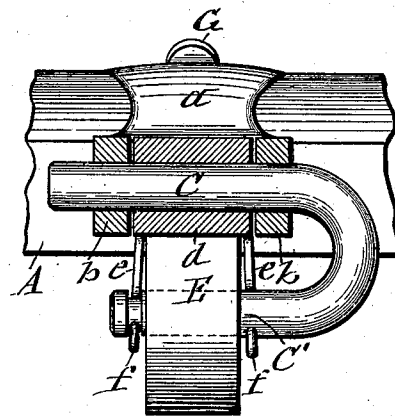


Fig. 3

WITNESSES:

C. H. Palmer.
J. J. Laass

INVENTOR

Herman M. Reynolds
By C. Laass
ATTORNEY.

UNITED STATES PATENT OFFICE.

HERMAN M. REYNOLDS, OF ONEIDA, NEW YORK.

THILL-COUPLING.

No. 867,413.

Specification of Letters Patent.

Patented Oct. 1, 1907.

Application filed February 15, 1905, Serial No. 245,694. Renewed March 20, 1907. Serial No. 363,505.

To all whom it may concern:

Be it known that I, HERMAN M. REYNOLDS, 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 which embody a jaw disposed to bear on the thill-iron for the purpose of preventing rattling of latter on the coupling pin, and actuated by a spring which is operated by means of a link and lever.

The main object of the present invention is to provide a coupling which can be easily and conveniently manipulated to permit a quick attachment of the thill to and detachment of the same from the vehicle when desired.

Another object of the invention is to produce a thill-coupling which shall be safe and reliable in its use, and simple, strong and durable in construction, and at the same time inexpensive to manufacture.

To that end the invention consists in the novel construction and arrangement of the component parts of the thill-coupling as hereinafter fully described and set forth in the claims.

In the accompanying drawings Figure 1 is a side view of my improved thill-coupling, Fig. 2 is a rear view of the same, and Fig. 3 is a vertical section taken on the dotted line —X—X— in Fig. 1.

Similar letters of reference indicate corresponding parts.

—A— denotes the front vehicle-axle which is embraced by the clip —a— formed with the shackle-ears —b—b— and provided with the usual cross-bar —c— which bears on the underside of the axle.

—B— denotes the usual thill-iron formed with a shackle-eye —d— inserted between the shackle-ears in the well known manner, through which parts passes the coupling-pin —C—. This coupling-pin may be of any suitable style, however I prefer to form the same with an arm —C¹— disposed below and parallel thereto as more clearly shown in Fig. 3 of the drawings.

—D— represents a jaw which is disposed between the shackle-ears —b—b— and bears on the back of the shackle-eye —d— to prevent rattling of the eye or the aforesaid pin —C—. This jaw is preferably formed with hangers —e—e— terminating with forwardly projecting hooks —f—f— receiving the aforesaid arm —C¹— of the coupling-pin and fulcrumed on the front of the clip-bar —c—.

—E— denotes a spring consisting of an elongated plate formed with an upwardly extending front end portion passing across the front of the arm —C¹— between the hooks —f—f— and rigidly fastened to the back of the antirattler-jaw and serving to press the latter onto the shackle-eye —d—. The spring —E— extends rearward from the arm —C¹— and is formed at its rear end with a transverse sleeve —g— which pivotally embraces the straight transverse portion at one end of the link —F—. The longitudinal portions —h—h— of said link terminate in inwardly deflected hooks —i—i—.

—G— represents the locking-lever which consists of a transverse bottom bar —l— by which said lever is seated upon the top of the rear end of the clip-bar —c— in locking the thill-coupling in its operative position as illustrated in the accompanying drawings. From the ends of the bottom bar —l— extend longitudinal bars —j—j— which are provided at their upper ends with perforations —k—k— receiving through them the hooks —i—i— of the link. The upper end of the lever —G— is formed with an upwardly extending thumb-piece which rigidly unites the upper ends of the bars —j—j— and thoroughly braces the same so as to securely retain the hooks —i—i— of the link in their connection with the lever —G—.

In locking the thill-coupling on the axle, the operator places the bottom bar —l— of the lever —G— upon the clip-bar —c— as aforesaid, and then forces the free end of said lever upward and forward and beyond its connection with the link —F— and over onto the back of the axle by which it is sustained in its locked position, and convenient of access for unlocking it when desired to uncouple the thill.

What I claim is:—

In a thill-coupling of the class herein described, the combination with the anti-rattler spring formed with a transverse sleeve on its rear end, of a link having a straight transverse end portion pivotally embraced by said sleeve and having its longitudinal portions terminating in hook-shaped deflections, and a locking-lever consisting of a transverse bar seated on the top of the rear end of the clip-bar, longitudinal bars extending from the ends of said transverse bar and perforated at their upper ends and receiving therethrough the hooks of the link, and a thumb-piece extending upward from the longitudinal bars of the lever and uniting said bars as set forth and shown.

HERMAN M. REYNOLDS. [L. S.]

Witnesses:

M. H. COLWAY,
FRED L. GREEN.