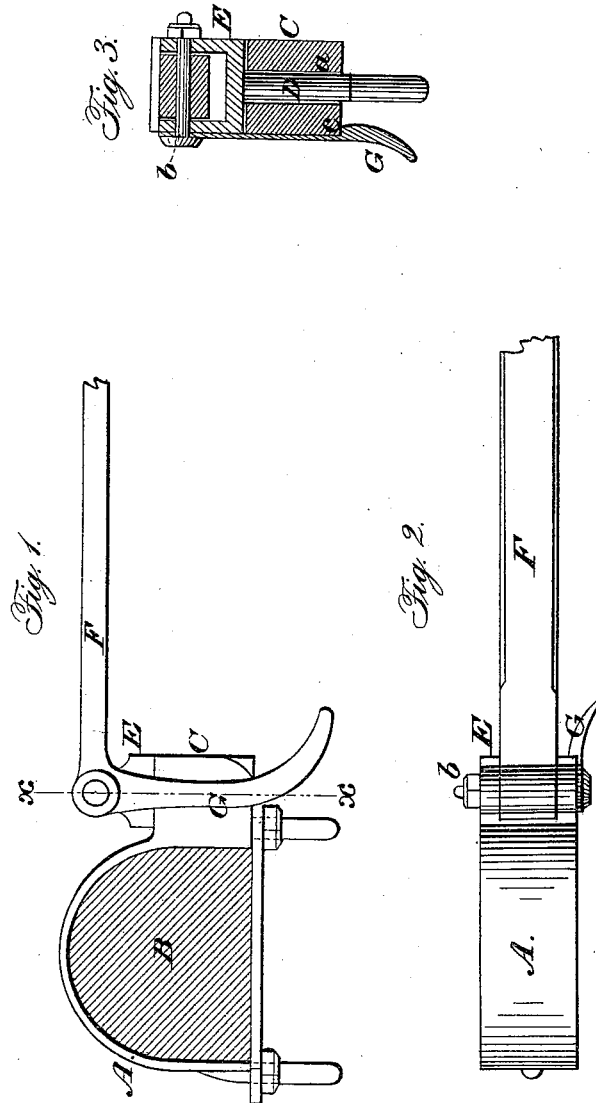


J. W. INNIS.

Thill-Coupling.

No. 51,457.

Patented Dec. 12, 1855.



Witnesses:

Wm. Brown
Geo. Tusch

Inventor:

J. W. Innis
By Munroe & Co.
Atty.

UNITED STATES PATENT OFFICE.

JAMES W. INNIS, OF MILROY, INDIANA.

IMPROVED THILL-COUPLING.

Specification forming part of Letters Patent No. 51,457, dated December 12, 1865.

To all whom it may concern:

Be it known that I, JAMES W. INNIS, of Milroy, in the county of Rush and State of Indiana, have invented a new and Improved Thill-Coupling for Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same; Fig. 3, a vertical section of the same, taken in the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention consists in attaching the thills to the axle in such a manner as to obtain a firm and secure coupling; and one which will admit of the thills being very readily attached to and detached from the axle.

A represents a clip, which may be constructed and applied to the axle B in the usual or any proper manner. (See Fig. 1.) This clip has a protuberance, C, at its front side, through which a hole, *a*, is made vertically to receive a pin, D, which is at the under side of an eye, E, in which the thill-iron F is secured by a pin,

G, forming a joint, to admit of the thill rising and falling freely.

G represents a spring-catch, which is fitted on the pin *b* and extends down at one side of the protuberance C, and has a shoulder, *c*, upon it, which catches under the bottom of C and holds the pin D in the hole *a*, as will be fully understood by referring to Fig. 3. This spring-catch effectually prevents the thills from being casually detached from the axle, and at the same time admits of the thill being readily connected to and detached from the axle, the whole forming a very simple and efficient device for the purpose specified, and which will not be liable to work loose and cause a disagreeable rattling when the vehicle is drawn along.

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

A thill-coupling for wheel-vehicles, composed of an eye, E, in which the thill-iron F is secured by a pin, *b*, the eye being provided with a pendent rod, D, which is fitted in a protuberance, C, on a clip, A, and secured therein by a spring-catch, G, substantially as and for the purpose set forth.

Witnesses:

W. H. FISK,
JESSE C. BOYD.

JAMES W. INNIS.