(No Model.)

L. MILLER & M. L. WRIGHT.

THILL COUPLING.

No. 376,606. Patented Jan. 17, 1888.

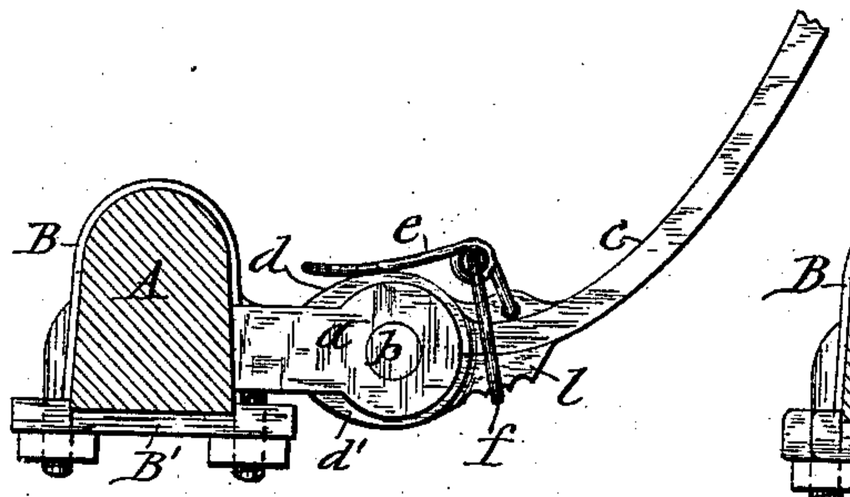

Fig. 1

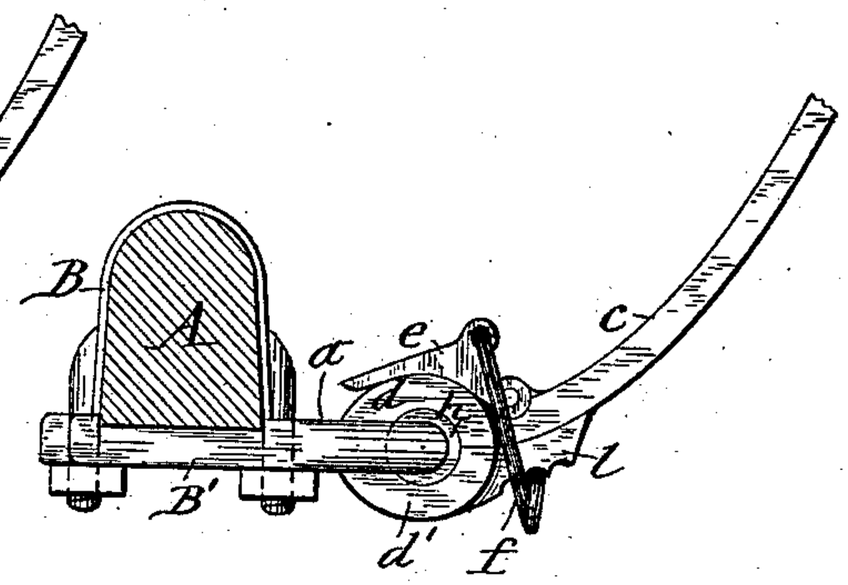

Fig. 2

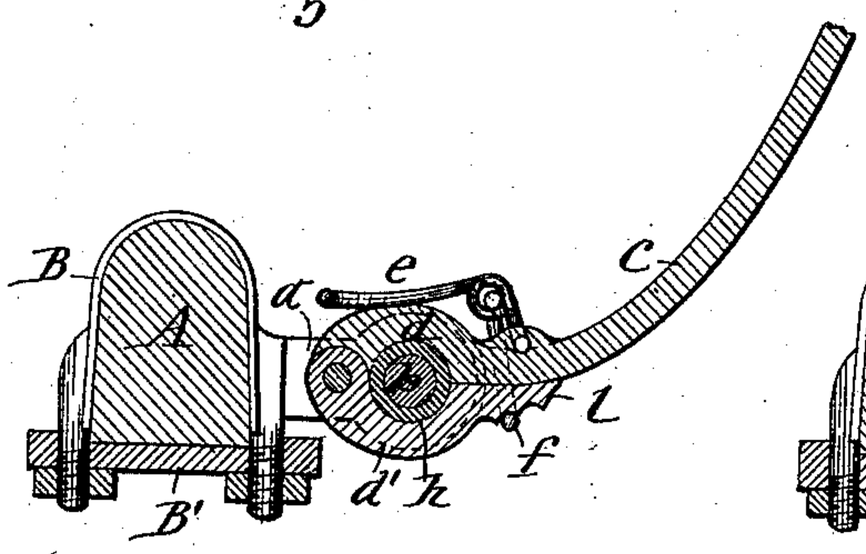

Fig. 3

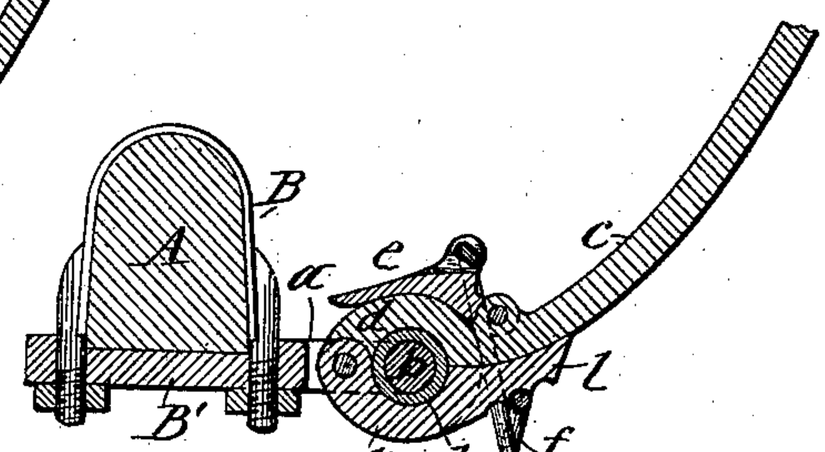

Fig. 4

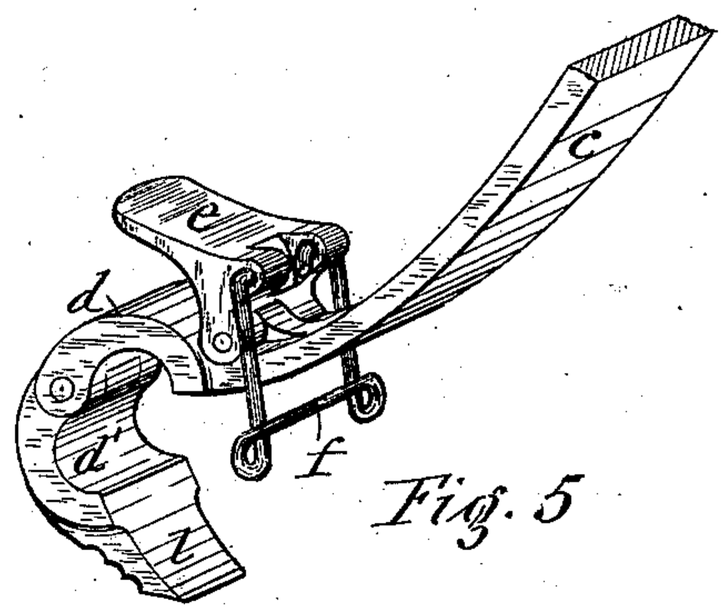

Fig. 5

WITNESSES:

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BY Church, Crosby & Church

ATTORNEYS

UNITED STATES PATENT OFFICE.

LEWIS MILLER AND MAURICE L. WRIGHT, OF MEXICO, NEW YORK.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 376,606, dated January 17, 1888.

Application filed June 13, 1887. Serial No. 241,189. (No model.)

To all whom it may concern:

Be it known that we, LEWIS MILLER and MAURICE L. WRIGHT, of Mexico, in the county of Oswego, 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 in which the eye of the thill-iron is composed of two parts hinged together and coupled to the coupling-pin by a clamp embracing the two parts of the aforesaid eye in front of the coupling-pin.

The object of this invention is to render the thill-coupling more compact and more convenient, and also more secure in its operation; and to that end our invention consists in the improved construction and combination of parts, as hereinafter described, and specifically set forth in the claim.

In the accompanying drawings, Figures 1 and 2 are side views of thill-couplings embodying our improvements. Figs. 3 and 4 are vertical longitudinal sections of the same, and Fig. 5 is a detached perspective view of the thill-iron.

Similar letters of reference indicate corresponding parts.

A represents the forward axle of the vehicle.

B denotes the usual clip, which embraces the axle and is rigidly secured thereto by the clip-tie B′, placed across the under side of the axle and receiving through it the shanks of the clip, which latter are provided with nuts on the under side of the clip-tie.

a a represent the usual shackle-eyes, which are rigidly secured or formed integral with either the aforesaid clip, as shown in Figs. 1 and 3 of the drawings, or the clip-tie, as illustrated in Figs. 2 and 4 of the drawings.

b denotes the coupling-pin, which may be either formed integral with the aforesaid shackle-eyes or formed separately and inserted in the perforations of the shackle-eyes, as represented in Figs. 1 and 3 of the drawings.

c denotes the thill-iron, which we form with the eye-section *d*, to the end of which we hinge the eye-section *d′*, which latter we form with a forward projecting lip, *l*, adapted to lie on the under side of the thill-iron when the section *d* is swung forward to complete the eye of the thill-iron. The aforesaid sections and lip are of a width to allow them to be inserted between the shackle-eyes *a a*, and by turning the eye-section *d′* on its hinge so as to carry the lip *l* away from the thill-iron, and introducing said lip between the shackle-eyes *a a* back of the coupling-pin *d*, and then swinging the eye-section *d′* forward so as to bring the lip *l* to rest against the under side of the thill-iron, the aforesaid eye-sections completely embrace the coupling-pin *b*.

For the purpose of locking the eye-sections of the thill-iron in their aforesaid position on the coupling-pin we hinge to the top of the thill-iron a lever, *e*, to which we connect a bail, *f*, which reaches down on opposite sides of the thill-iron and across the same a short distance below the under side thereof. By swinging the said bail rearward, so as to bring it to lie across the under side of the lip *l* and then swinging the lever *e* back, so as to cause it to rest on the top of the eye-section *d*, as illustrated in Figs. 1 and 2 of the drawings, the bail *f* is drawn up tightly against the under side of the lip *l* and securely clamps the same on the thill-iron.

It will be observed that when the bail *f* is under the lip *l* and the lever *e* swung back upon the top of the eye-section *d*, as aforesaid, said lever becomes securely locked in said position by the downward draft of the bail. Therefore, our improved thill-coupling is not only more conveniently manipulated than the set-screw heretofore employed in connection with analogous thill-couplings, but is also more secure, as it is a well-known fact that screws when subjected to jars are liable to work loose.

The lever *e* may be either of cast or malleable or wrought metal and of the form shown in Figs. 2, 4, and 5 of the drawings, or formed of wire, as represented in Figs. 1 and 2 of the drawings.

In order to obtain a more secure hold on the said lip we serrate the under side thereof to afford the desired hold for the bail *f*. To guard against the rattling of the described thill-coupling we introduce between the coupling-pin *b* and the embracing portions of the eye-sections *d d′* tubular bushings *h* of leather or other suitable material.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with the shackle-eyes *a* and coupling-pin *b*, the thill-iron *c*, formed with the eye-section *d*, the eye-section *d'*, hinged to the end of the section *d* and formed with the forward-projecting lip *l*, adapted to lie on the under side of the thill-iron, the lever *e*, pivoted to the top of the thill-iron, and the bail *f*, connected to the lever and embracing the lip *l*, substantially as described and shown.

In testimony whereof we have hereunto signed our names and affixed our seals, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 25th day of May, 1887.

LEWIS MILLER. [L. S.]
MAURICE L. WRIGHT. [L. S.]

Witnesses:
H. P. DENISON,
C. BENDIXON.