(No Model.)

W. J. RIDEOUT & J. W. MERRITT.

THILL COUPLING.

No. 493,387. Patented Mar. 14, 1893.

Fig. 1.

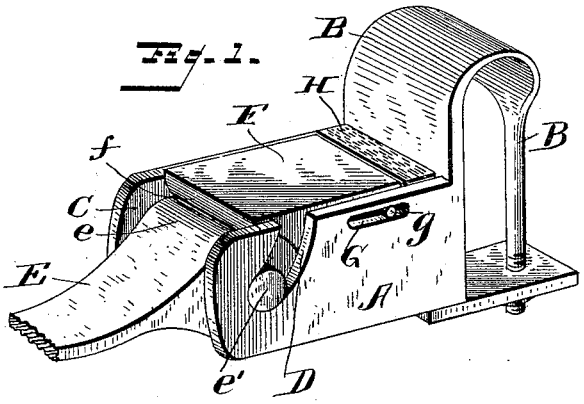


Fig. 2.

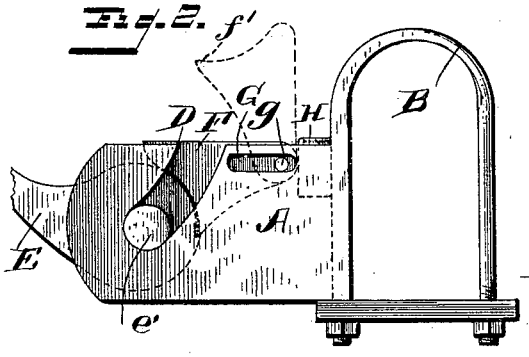


Fig. 3.

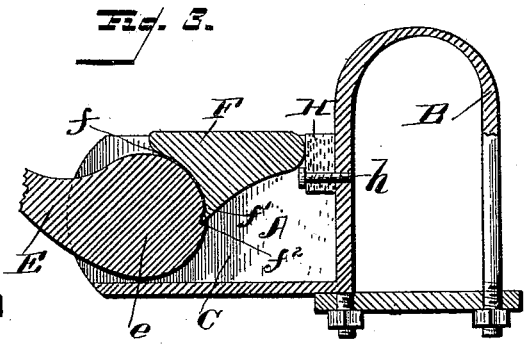
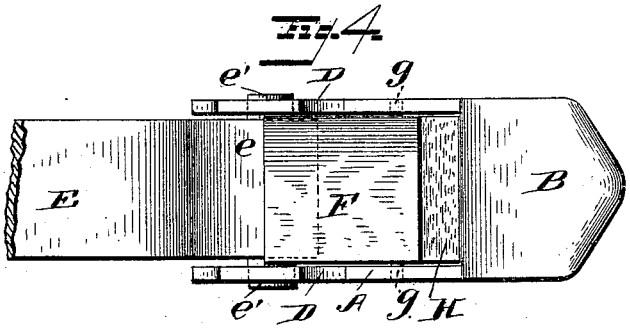


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM J. RIDEOUT AND JOHN W. MERRITT, OF ATWOOD, ILLINOIS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 493,387, dated March 14, 1893.

Application filed October 25, 1892. Serial No. 449,965. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM J. RIDEOUT and JOHN W. MERRITT, citizens of the United States, residing at Atwood, in the county of Piatt and State of Illinois, have invented certain new and useful Improvements in Thill-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to thill couplings, and it has for its object to provide a simple and improved device of this character which will possess advantages in point of inexpensiveness and durability in construction and general efficiency.

To this end, the invention consists, substantially, in the construction, combination and arrangement of parts, as will be hereinafter more fully described and particularly pointed out in the claims.

In the drawings—Figure 1 is a perspective view of a thill coupling, embodying our invention. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical longitudinal sectional view thereof. Fig. 4 is a top or plan view.

Corresponding parts in all the figures are denoted by the same letters of reference.

Referring to the drawings, A designates a casing, which is provided at its rear end with a clip, B, for attaching the same to the vehicle axle. The casing A is formed with a vertical longitudinal chamber, C, open at the top and front end of the casing, and the side walls of said chamber are provided with coincident downwardly and forwardly curved slots, D D.

E designates the thill-iron, which is provided with a segmentally-curved head, *e*, the latter having at each side an outwardly-projecting bearing stud, *e'*. In practice, the thill-iron head is seated between the forward ends of the side walls of the casing, with the bearing studs *e'* bearing in the lower, closed ends of the slots D.

To retain the thill iron head and the bearing studs in their proper positions, a block, F, is provided. The latter has at its rear end and at opposite sides outwardly-projecting bearing studs, *g g*, which are seated in longitudinally-elongated slots, G G, provided in the side walls of the casing. The block is approximately triangular in side elevation, and has its front side curved as at *f*, to conform to the contour of the thill-iron head. This block is also provided with a lug, *f'*, which is adapted to engage a recess, f^2, in the periphery of the thill-iron head. By this construction, when the thill is lowered the recess f^2 is engaged by the lug *f'*, and the block is elevated, but when the thill is raised, the block is in like manner lowered. For exerting a forward pressure upon the block F, and consequently prevent "rattling" of the thill-iron, a rubber block, H, is inserted in the chamber C between the rear wall thereof and the block F. The latter is thus urged forwardly, the elongated bearing slots G permitting such movement. The block H is held in place by means of a screw, *h*, passing therethrough and secured in the rear wall of the chamber C.

It will be noted that while the bearings of the thill-iron and the block F are described as lugs at the sides thereof, we may employ a pin passed through an aperture in the thill-iron and the block to serve the same purpose, and without departing from the spirit and scope of our invention, or the lugs on thill iron may have at ends of same a head to prevent any spreading of casing (A) when in use.

We claim as our invention—

1. In a thill coupling, the combination, with a casing provided with a vertical longitudinal chamber, downwardly and forwardly extending slots, and with longitudinally-elongated slots, of a thill iron provided with bearings seated in the first-mentioned slots, and a forwardly-yielding block provided with bearings disposed in said elongated slots, said block being adapted to bear against the thill iron; substantially as and for the purpose set forth.

2. In a thill coupling, the combination, with a casing provided with a vertical longitudinal chamber and with downwardly and forwardly curved slots, of a thill iron comprising a head seated in said chamber, said head

being provided with bearings seated in said slots, and with a recess at its periphery, of a forwardly-yielding, pivoted block adapted to bear against said head, and provided with a lug for engaging said recess; substantially as and for the purpose set forth.

3. In a thill coupling, the combination, with a casing forming a vertical longitudinal chamber, the side walls of which being provided with downwardly and forwardly curved slots, D D, and with longitudinally-elongated slots, G, of a thill-iron provided with bearings seated in the slots D, a block, F, provided with bearings seated in the slots G, and an elastic block, H, interposed between the rear wall of the chamber and the block F, and adapted to urge the latter forwardly against the thill iron; substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM J. RIDEOUT.
JOHN W. MERRITT.

Witnesses:
CHARLEY C. DAY,
JAMES D. RASS.