J. W. WALLACE.
Thill Coupling.

No. 197,066. Patented Nov. 13, 1877.

Fig. 1.

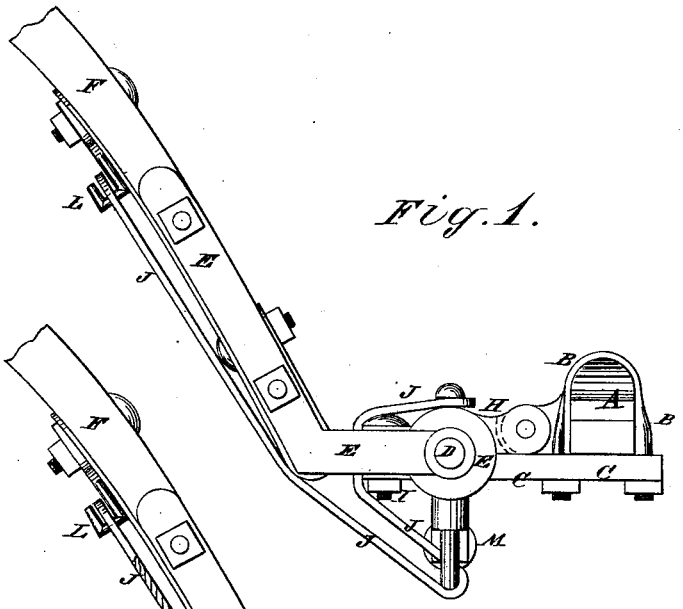


Fig. 2.

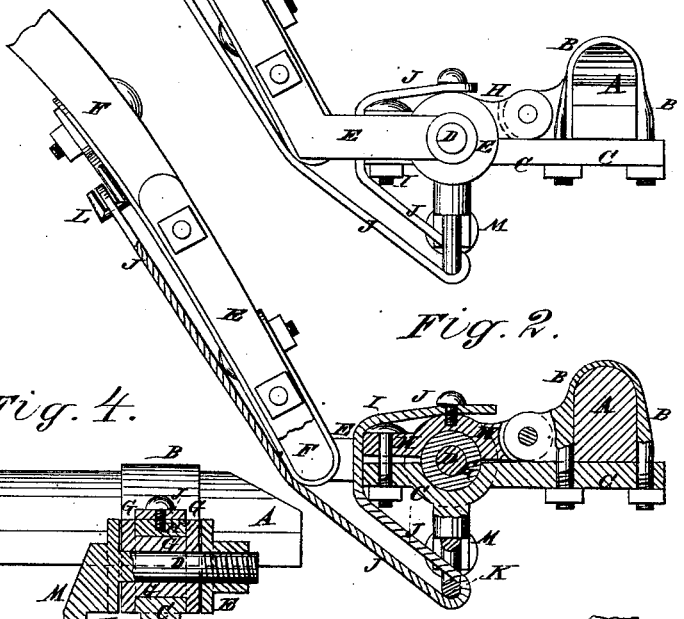


Fig. 4.

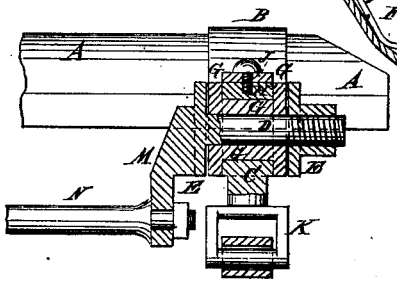
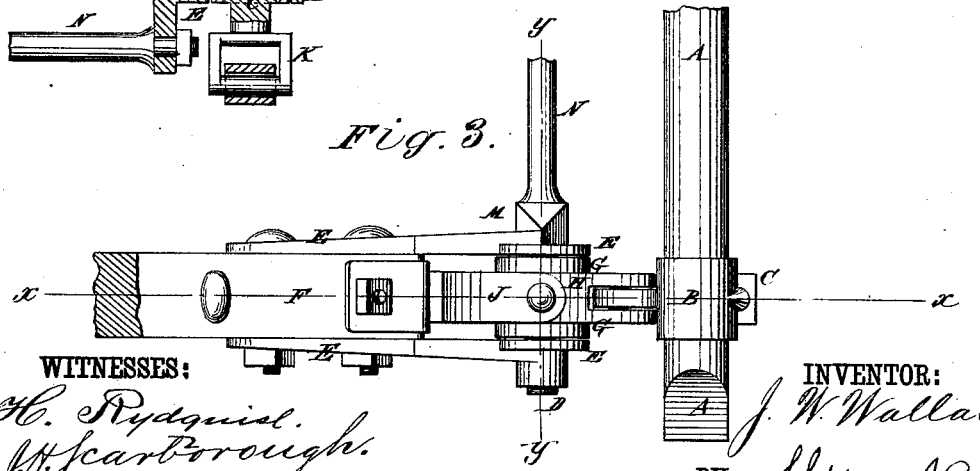


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN W. WALLACE, OF NEW YORK, N. Y.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **197,066,** dated November 13, 1877; application filed October 12, 1877.

To all whom it may concern:

Be it known that I, JOHN W. WALLACE, of the city, county, and State of New York, have invented a new and useful Improvement in Noiseless Jack-Clips, of which the following is a specification:

Figure 1 is a side view of my improved clip. Fig. 2 is a section of the same, taken through the line *x x*, Fig. 3. Fig. 3 is a top view of the same; and Fig. 4 is a cross-section of the same, taken through the line *y y*, Fig. 3.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved jack-clip or thill-coupling which shall be noiseless and safe in use and simple in construction, so that it will enable the thills or pole to be readily attached and detached.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A represents an axle. B is the bow, and C is the yoke of the axle-clip. The yoke C is extended forward, and in the upper side of said extension is formed a half-round notch or bearing for the coupling-bolt D, which is formed upon the inner side of one of the straps E of the thill-irons, and screws into a screw-hole in the other strap E. The straps E of the thill-irons are bent upward at an angle, and are bolted to the opposite sides of the rear end of a thill, F.

G is a rubber spool, the tube of which fits upon the bolt D, and its end flanges rest against the circular plates or heads formed upon the rear ends of the straps E of the thill-irons. The spool G is made of such a length that when laid in the half-bearing in the extension of the yoke C its end flanges may rest against the side edges of said extension.

Upon the forward side of the bow B of the axle-clip is formed a lug, to which is pivoted or hinged a bar, H, which is made of such a width as to fit into the space between the flanges of the rubber spool G, and has a half-round notch formed in its lower side to fit upon the tube of the said rubber spool G. The bar H is made of such a length that its forward end may be flush with the forward end of the extension of the yoke C, and the said ends are secured to each other by a bolt, I, passing through them.

The tube of the spool G is made of such a size that the forward ends of the bar H and the extension of the yoke C will not come together, so that the wear may be taken up by screwing up the nut of the bolt I.

J is a strap, one end of which is secured to the upper side of the bar H by a screw. The strap J passes down over the ends of the bar H, and the extension of the yoke C passes through a loop or eye, K, formed upon the lower side of the said extension, passes up along the under side of the thill F, and has a slot formed in it to enable it to be hooked upon a hook, L, attached to the under side of the said thill F. The strap J thus holds the bolt I securely in place, and prevents it from coming out, even should its nut work off.

The strap J is designed to be made of rubber, so that its elasticity may hold the various parts of the clip firmly in place when the thills are in working position.

Upon the head of the inner strap E of the thill-irons is formed a downwardly-projecting arm, M, in the lower end of which is formed a hole to receive the end of a rod, N, the other end of which is secured to a similar arm upon the other clip. The rod N thus binds the two clips together, and gives them a firmness and a strength to resist side strain not otherwise attainable.

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

1. In thill-couplings, the elastic strap J, secured to upper side of bar H, binding on the bolt I, passing through loop K of bar C, and fastening over a hook on shaft F, as described.

2. The two clips E E of a thill-coupling, connected by a rod, N, attached to arms of said clips, as and for the purpose specified.

JOHN W. WALLACE.

Witnesses:

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