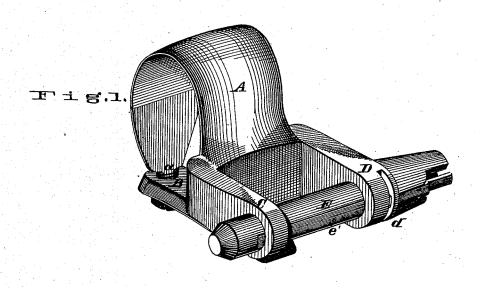
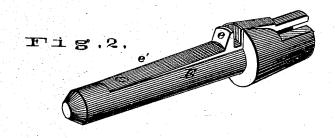
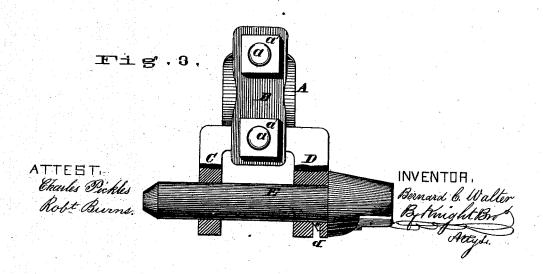
B. C. WALTER.
Thill-Coupling.

No. 168,303.

Patented Sept. 28, 1875.







## UNITED STATES PATENT OFFICE.

BERNHARD C. WALTER, OF KIRKWOOD, MISSOURI.

## IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. 168,303, dated September 28, 1875; application filed August 23, 1875.

To all whom it may concern:

Be it known that I, BERNHARD CHRISTOPH WALTER, of Kirkwood, county of St. Louis and State of Missouri, have invented a new and useful Improvement in Thill-Couplings, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

My improvement consists in forming the coupling pin with a spring upon its front side, which has a projection at the handle end entering a slot in one of the ears to hold the pin in the ears, and also to prevent its turning.

In the drawings, Figure 1 is a perspective view of my apparatus. Fig. 2 is a perspective view of the pin. Fig. 3 is a bottom view, showing part in horizontal section axial to the pin.

A is the clip, which passes around the axle, and whose ends a are screw-threaded in the ordinary manner and pass through the clipplate B, to which they are secured by nuts a'. C D are the ears of the clip. The ears are of the ordinary construction, except that the ear D has a slot, d, in the front side, to receive a spring-lug on the coupling-pin. The coupling-pin E passes through eyes in the ears in the ordinary manner; but instead of having a nut or key to hold it in position in the ears, it is held in by a lug, e, projecting from the spring

 $e^1$ . This lug is inclined upon the inner side, so that as the pin is thrust into position the lug is forced backward until the pin reaches its position, when the lug springs outward into the slot d and holds the pin in the position shown, as the pin is prevented from moving out endwise by the pressure of the lug against the side of the slot, and is prevented from turning by the lug coming in contact with the ends of the slot.

It will be seen that the wear of the thilliron upon the pin is always on the side opposite to the spring  $e^1$ , for the backward strain of the thills comes upon a rubber block placed behind the thill-iron, so that there is no wear upon the front side of the pin, where the spring is located. The outer end of the spring constitutes a thumb-piece,  $e^2$ , by pressure against which the spring  $e^1$  is depressed and the lug e forced backward so as to allow the pin E to be drawn out.

I claim—

The combination of ear D, having a slot, d, and pin E, provided with spring  $e^{l}$  and lug e, substantially as and for the purposes set forth.

BERNHARD CHRISTOPH WALTER.

Witnesses:

SAML. KNIGHT, ROBT. BURNS.