(No Model.)

M. D. STOCKING.

THILL COUPLING.

No. 426,149. Patented Apr. 22, 1890.

Fig. 1.

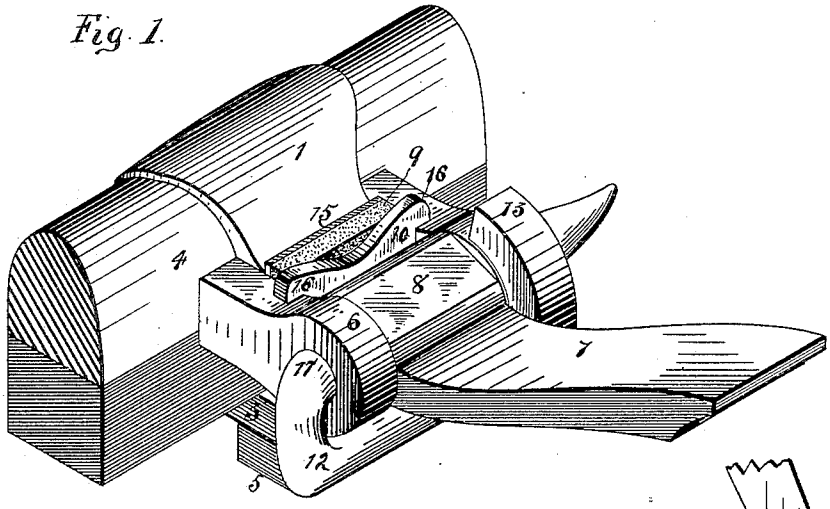


Fig. 2.

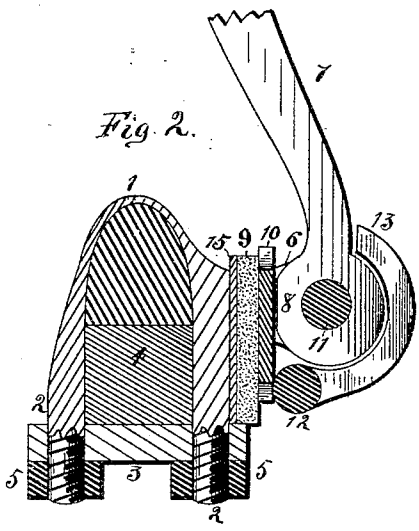


Fig. 3.

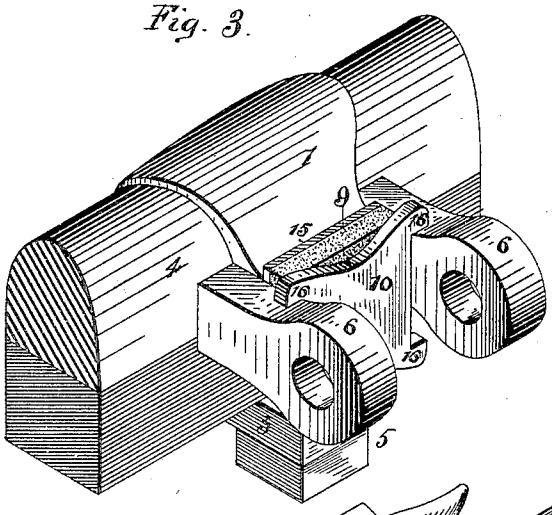


Fig. 4.

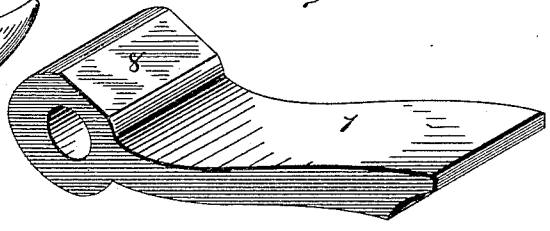
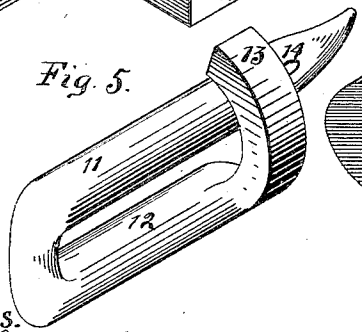


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

MILTON D. STOCKING, OF LINDENWOOD, ILLINOIS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 426,149, dated April 22, 1890.

Application filed January 21, 1890. Serial No. 337,576. (No model.)

To all whom it may concern:

Be it known that I, MILTON D. STOCKING, a citizen of the United States, residing at Lindenwood, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Thill-Couplings, of which the following is a specification.

The object of this invention is to produce a thill-coupling simple in construction and easy of application.

In the accompanying drawings, Figure 1 is an isometrical representation of a thill-coupling embodying my invention. Fig. 2 is a transverse central section of the same. Fig. 3 is a representation of my coupling with the thill-iron removed. Fig. 4 is an isometrical representation of the thill-iron. Fig. 5 is an isometrical representation of the pin for holding the thill-iron in position.

The clip portion of the coupling is of the usual construction, consisting of the clip proper 1, having its lower ends in screw-threaded shanks 2, upon which is placed a cross-bar 3, held in position on the axle 4 by screw-nuts 5. From the forward face of the clip project two perforated ears 6, to which is coupled the thill-iron portion of the thills.

The thill-iron 7 is of the usual construction, except that a portion of the perforated shank is flattened, as at 8, and the shank itself is of eccentric form, its rear face being farthest from its central opening, as shown at Figs. 2 and 4. A block of rubber 9 or other elastic material, rectangular in form, is placed between the ears, and a metallic plate 10, placed against the rubber, forms the wearing-surface for the thill-iron.

The pin for holding the thill-iron in position is of staple form, the portion 11 passing through the opening in the ears and thill-iron, and the portion 12 passing under the ears and resting against the plate 10, and having its free end 13 bent in semicircular form, the inside diameter of which is somewhat larger than the outside diameter of the ears 6.

In placing the coupling together the rubber is first placed in position, then the wearing-plate. The thill-iron is placed between the ears, so that the holes in the thill-iron and ears will coincide, the flat portion of the thill-iron lying parallel with the face of the wearing-plate, thereby relieving the thill-iron of the influence of the rubber. The coupling-pin is then inserted through the opening in the ears and thill-iron. The semicircular portion of the pin will pass beyond the thill-iron, and, if necessary, a leather strip or cotter may be placed in the transverse opening 14 in the pin as an additional safeguard against its displacement. When the thill-iron has been placed between the ears and turned down, the semicircular portion of the pin will come in contact with the edge of the thill-iron and prevent its displacement, and by raising the thill, as shown in Fig. 2, the pin can be removed. The enlargement of the shank portion of the thill-iron will compress the rubber and prevent rattling of the coupling. If necessary, I employ strips of metal 15, to take up any lost elasticity of the rubber. The wearing-plate 10 has projections 16 on its upper and lower ends, which hold it in position between the ears. The end of the pin 11 is pointed, as shown at Fig. 5, which will permit its easy insertion through the openings in the ears and thill-iron.

I claim as my invention—

1. The combination, with a clip provided with ears, a thill-iron the eye portion of which is flattened and eccentric in form, and a pin inserted through said ears and the eye of the thill and provided with an upright portion to engage the edge of the thill-iron when in operative position, thereby preventing the displacement of said pin, of a cushion located between said ears adjacent to the thill-eye, and a wearing-plate interposed between said eye and cushion, substantially as set forth.

2. The combination, with a clip, of a thill-iron and a staple-shaped pin having one of its branches passed through the clip and thill-iron, the said pin provided with an upright portion engaging the thill-iron when the thill is in running position, substantially as set forth.

MILTON D. STOCKING.

Witnesses:
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