G. H. COLLINS.
Thill-Coupling.

No. 208,372. Patented Sept. 24, 1878.

Fig. 1

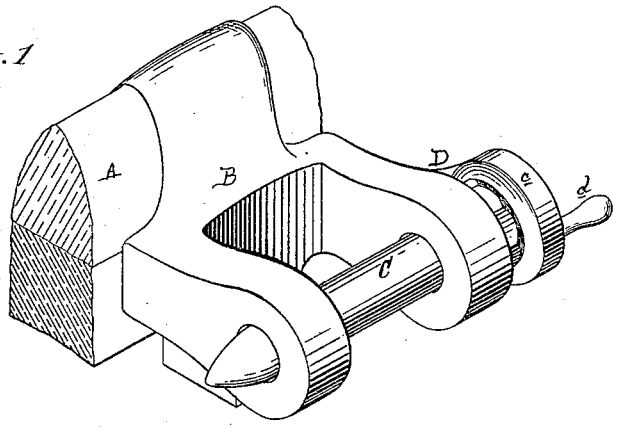


Fig. 2

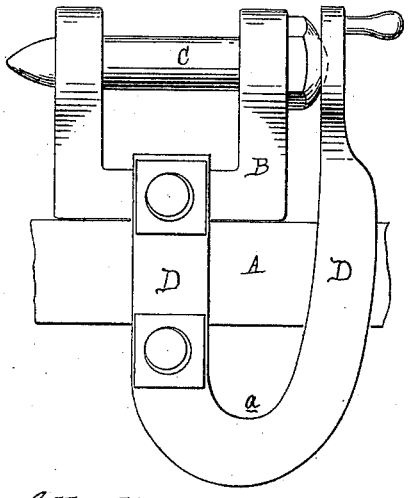
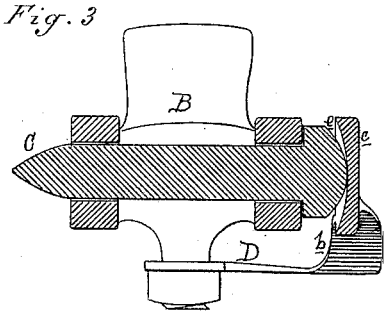


Fig. 3



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UNITED STATES PATENT OFFICE.

GILES H. COLLINS, OF WAYNE, MICHIGAN.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **208,372**, dated September 24, 1878; application filed July 22, 1878.

To all whom it may concern:

Be it known that I, GILES H. COLLINS, of the town and county of Wayne, and State of Michigan, have invented an Improvement in Thill-Coupling Fastenings, of which the following is a specification:

The nature of my invention relates to certain new and useful improvements in devices for securing in place and against accidental displacement the bolts which couple the thill-iron to the axle-clip; and the invention consists in combining a spring of peculiar construction with the coupling-bolt and clip, as more fully hereinafter described.

Figure 1 is a perspective view, showing a section of an axle-clip and coupling with my improved fastening. Fig. 2 is a plan of the same, looking from the bottom. Fig. 3 is a vertical section through the vertical longitudinal center of the bolt.

Like letters indicate like parts in each figure.

In the accompanying drawings, which form a part of this specification, A represents a section of a front axle of a wagon to which is attached, in the usual manner, the shaft-clip B, of the ordinary construction, and provided with the coupling-bolt C. D is a spring secured to the clip by means of the same bolts which secure the clip to the axle. This spring projects to the rear of the axle, and by a return-bend, *a*, is projected in front of the axle, and by an upward bend, *b*, its free end, terminating in a flat head, *c*, is carried up opposite the bolt-holes through the ears of the clip. The outer face of the head is provided with a thumb-piece or handle, *d*, and the inner face is concave, as shown at *e*, to embrace partially the head of the bolt.

By this construction and arrangement of parts the head of the spring pressing against the head of the bolt will hold the same in place, and the inner concave surface of the head, partially embracing the head of the bolt, will prevent any sudden jar from displacing the spring. When it is desired to withdraw the bolt, the head of the spring is forced sidewise and then downward, until the bolt-head is free.

I am aware that it is not new to use a leaf-spring which presses against the head of the coupling-bolt and holds it in place; and I do not pretend to claim the same broadly.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a thill-coupling, the spring D, secured to the under side of the axle, extending to the rear, and then curved forward and bent upwardly, terminating in a head, *c*, with concave inner face, which presses against the head of the coupling-bolt, constructed and arranged substantially as described and shown.

2. The combination, with the axle A and clip B, of the spring D, forming the clip-plate and bent forward to hold the coupling-bolt, substantially as described and shown.

GILES H. COLLINS.

Witnesses:
H. S. SPRAGUE,
C. H. S. HART.