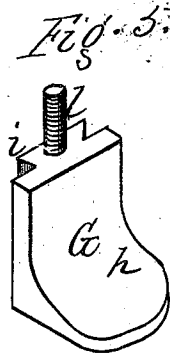
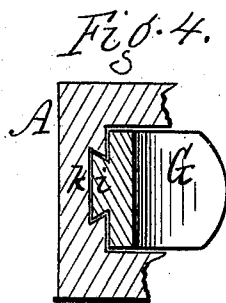
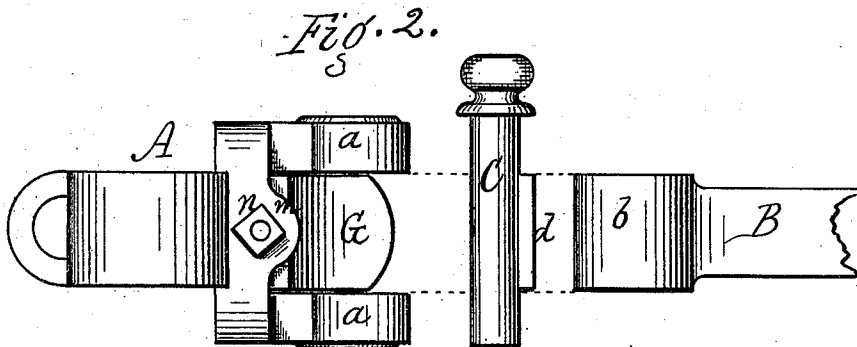
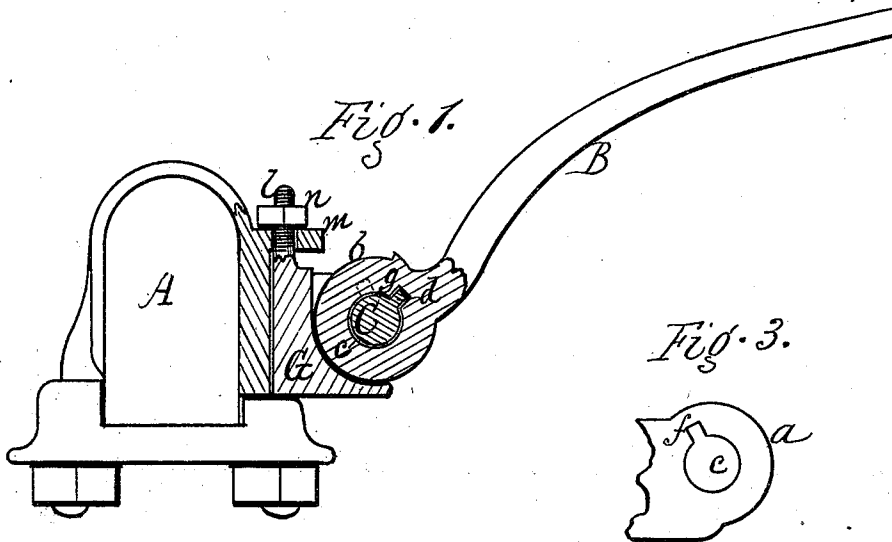


G. W. COGSWELL.

THILL-COUPLING.

No. 176,773.

Patented May 2, 1876.



Witnesses.
 C. B. Scott.
 J. C. S. S. S.

Inventor.
 Geo. W. Cogswell.
 per R. F. Cogood, Atty.

UNITED STATES PATENT OFFICE.

GEORGE W. COGSWELL, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 176,773, dated May 2, 1876; application filed March 10, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. COGSWELL, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same—reference being had to the accompanying drawings, in which—

Figure 1 is a sectional elevation. Fig. 2 is a plan, showing the parts separated. Figs. 3, 4, and 5 are detail views.

This improvement relates to thill-couplings, in which the pin which secures the thill-eye to the clip is connected with the eye, so as to ride or turn with it, thereby avoiding rattling and unnecessary wear.

The invention consists in the construction and arrangement of parts hereinafter more fully described.

A represents an ordinary jack or clip, having jaws *a a*, between which rests the eye *b* of the thill-iron B. These parts are connected by a pin, C, which passes through holes *c c* of the jaws. The pin C is provided on one side with a spline or feather, *d*, of just such length as will fit and ride between the jaws *a a*; and the said jaws are provided with corresponding offset slots *f f*, for allowing the insertion of the pin endwise. The slots *f f* are located either above or below (preferably above) the range of motion of the thill-eye, so that, in ordinary use, the parts cannot become detached, yet when the thills are fully raised or lowered the disconnection can be made. The thill-eye is also formed with a corresponding slot, *g*, in which the spline *d* rests, as shown in Fig. 1.

It will be seen that the spline *d* serves a double purpose: First, being connected with the thill-eye, the pin rides or turns with the eye, so that the friction comes within the jaws of the clip, and not between the thill-eye and pin; and, second, being made of just such length as to fit between the jaws and turn easily, it serves to retain the pin in place within the jaws, thereby dispensing with nuts or any other attachments upon the pin.

G is a clamp or tightening-block, which is fitted in the rear and below the thill-eye, and rests between it and the body of the clip. Its face *h* is made concave to fit the thill-eye, and on its back is a dovetailed rib, *i*, which fits and slides in a corresponding dovetailed groove, *k*, of the clip. On its upper end is a screw-stem, *l*, which passes up through a projecting bearing, *m*, and has upon its upper end a nut, *n*, by which it is raised or lowered.

By drawing up the follower at any time the thill-eye and pin can be packed, thereby preventing rattling and compensating for wear.

The nut may have a flange at the bottom, and the bearing *m* may have a corresponding flange, embracing the flange of the nut, whereby the nut is prevented from working off the screw.

I am aware that wedges, springs, and other devices are employed for packing the eye and bolt in thill-couplings. My device differs from such, in constructing the follower with the dovetailed rib *i*, and in attaching to the same the screw-stem *l*, by which the adjustment can be produced by turning the nut at the top.

The dovetail serves to keep the clamp centered and in proper position, and also to retain it in place when the thills are removed. This clamp is much more effective than common wedges.

I do not claim, broadly, a coupling-pin which rides or turns with the eye of the thill. Neither do I claim, broadly, a wedge for tightening the thill-eye upon the pin; but

I claim—

The combination, with the clip A and thill-iron B, provided with the feathered pin C, of the clamp G, constructed with the dovetailed rib *i* and the screw-stem *l*, extending through the bearing *m*, and secured by a nut, *n*, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

G. W. COGSWELL.

Witnesses:

R. F. OSGOOD,
E. B. SCOTT.