(Model.)

J. H. FLEMMING.

THILL COUPLING.

No. 274,751. Patented Mar. 27, 1883.

Fig. 1.

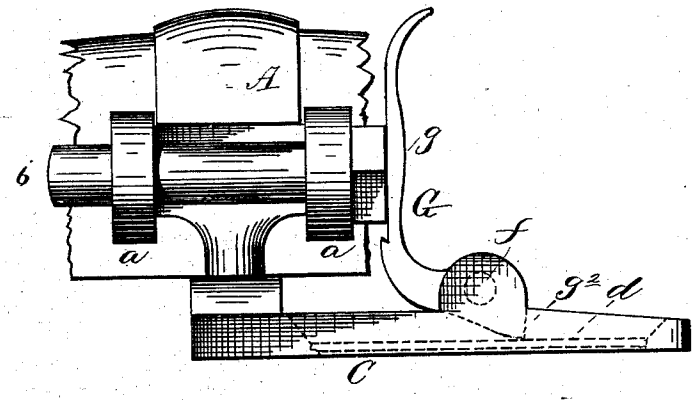


Fig. 2.

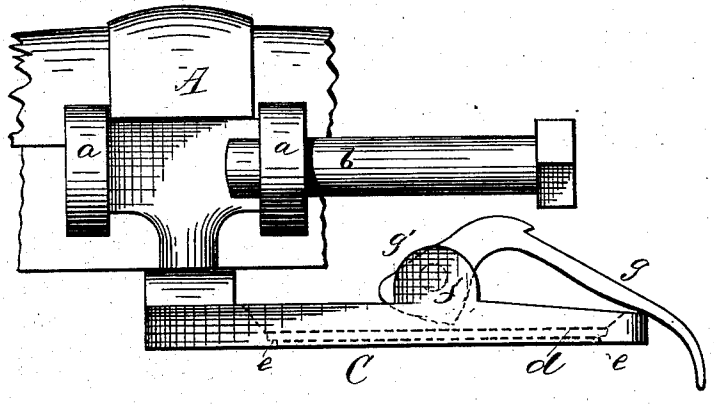
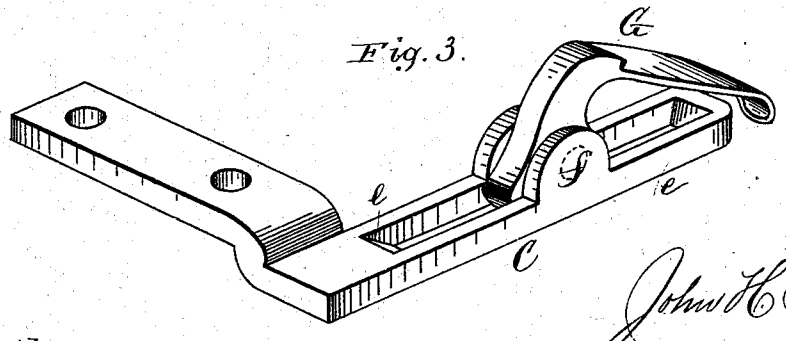


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN H. FLEMMING, OF DUNDEE, MICHIGAN.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 274,751, dated March 27, 1883.

Application filed January 13, 1883. (Model.)

To all whom it may concern:

Be it known that I, JOHN H. FLEMMING, a citizen of the United States of America, residing at Dundee, in the county of Monroe and State of Michigan, have invented certain new and useful Improvements in Thill-couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to a device for preventing plain bolts, coupling-pins, and the like from becoming displaced longitudinally in their seats, its object being to provide a lock which will hold such bolts and pins securely in place when in use, and yet permit them to be readily removed and replaced at will.

In the accompanying drawings, Figure 1 is a view in elevation of a thill-coupling having my invention applied thereto for the purpose of holding its coupling-pin in place. Fig. 2 is a similar view, showing the lock retracted and the coupling-pin partially withdrawn; and Fig. 3 is a perspective view of the lock and its supporting-plate detached.

The letter A indicates a thill-coupling, and *a a* its eyes, which receive the coupling-pin *b*. Under and to one side of the eyes *a a* is a metallic plate, C, having one end connected to the yoke of the coupling-clip. This plate C has formed in it a longitudinal slot, in which is arranged a strip-spring, *d*, the ends of which are prevented from moving downward by shoulders *e e*, formed at the end of the slot. Projecting from the plate C, on opposite sides of the slots therein, are ears *f*, between which is pivoted the lock G, which consists of the bearing-plate *g*, arranged to press against the head of the coupling-pin *b*, and a curved shank, *g'*, having a square-shouldered tail-piece, g^2, which projects beyond the pivot and receives the pressure of the strip-spring *d*, which, by bearing on the said tail-piece, will retain the lock in either its closed or open position.

When the coupling-pin is inserted and the lock in position, as shown in Fig. 1, it will be seen that the bearing-plate of said lock stands directly against the head of the bolt and effectually prevents its working out of its seat, thus dispensing with the use of nuts or other holding devices on the inner end of the pin, said devices being difficult both of application and removal, unreliable in use, and apt to be jolted off and lost. When it is desirable to remove the pin or bolt it is only necessary to press the lock back to the position as shown in Fig. 2, the strip-spring allowing this movement, and holding the lock in its retracted position by bearing against the tail-piece g^2. In this retracted position the lock may be allowed to remain until the pin is again inserted, and should then be turned up again to its locking position.

I do not of course confine myself to the application of my invention to the locking of coupling-pins in thill-couplings, as it is obviously adapted to the holding in place of all kinds of bolts or pins which are liable to become longitudinally displaced. I have shown the plate C attached to the yoke-piece of the coupling-clip simply because this would be a convenient manner of supporting said plate in the special use as illustrated; but it is obvious that the plate may be formed separately and secured in place by means of screws in the ordinary manner, and it may be arranged so that the lock will bear against the head of the bolt or pin in any position. Nor do I confine myself to the particular form of spring or lock as shown in the drawings, as they may be varied to considerable extent without departing from the essential principle of my invention.

Having now fully described my invention and the operation thereof, I claim—

1. The combination, with a thill-coupling, of the lock G, arranged to bear against the head of the pin inserted in the eyes of said coupling, and a suitable spring arranged to retain said lock against the head of the pin, or in its retracted position, as desired, substantially as described.

2. The combination, with a thill-coupling and its clip-yoke, of the slotted plate C, made in one piece with said yoke, the lock G, piv-

oted to said plate, and having the tail-piece g^2 arranged to play in the slot of said plate, and the strip-spring having its ends bearing against shoulders formed at the ends of said slot, and its intermediate portion arranged to bear against said tail-piece, the whole constructed and operating substantially as described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. FLEMMING.

Witnesses:
SIDNEY B. ROWELL,
RILEY COVELL.