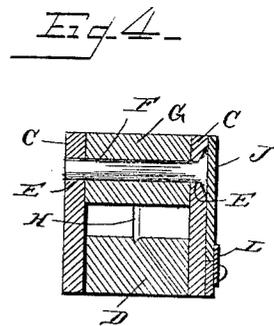
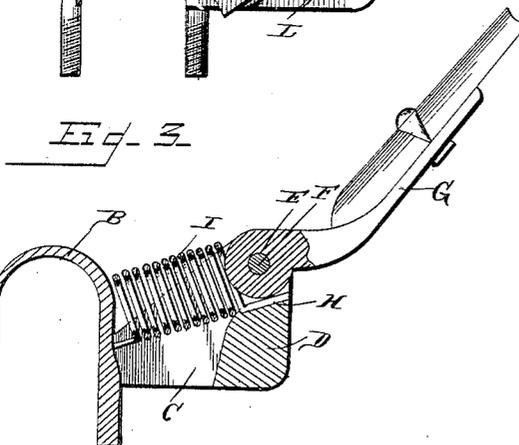
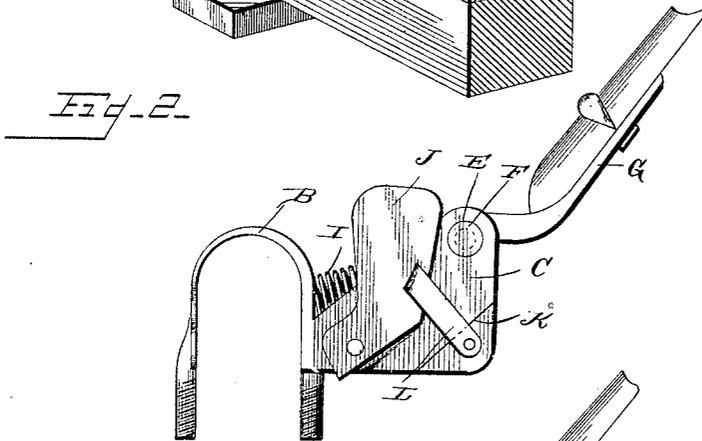
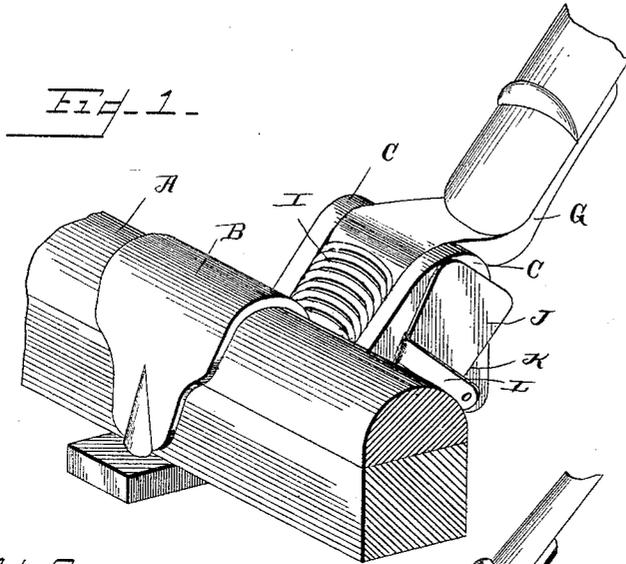


(No Model.)

J. W. ALFORD.
THILL COUPLING.

No. 419,171.

Patented Jan. 14, 1890.



Witnesses
Geo. E. Fresh.

Inventor
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By his Attorneys

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UNITED STATES PATENT OFFICE.

JOHN WESLEY ALFORD, OF COLLIERVILLE, TENNESSEE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 419,171, dated January 14, 1890.

Application filed April 23, 1889. Serial No. 308,276. (No model.)

To all whom it may concern:

Be it known that I, JOHN WESLEY ALFORD, a citizen of the United States, residing at Collierville, in the county of Shelby and State of Tennessee, have invented a new and useful Thill-Coupling, of which the following is a specification.

My invention relates to improvements in thill-couplings; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a thill-coupling constructed in accordance with my invention. Fig. 2 is a side view of the same, showing the parts arranged to permit the removal of the pivot-pin. Fig. 3 is a longitudinal vertical section, and Fig. 4 is a transverse vertical section.

My improved thill-coupling is secured on the front axle A, by means of a clip B, in the usual manner. On the front side of the clip I form the integral forwardly-projecting arms C C, which are connected at their front ends by a cross-bar D. These supporting-arms C C are provided in their upper ends with the perforations E, through which the pivot-pin F is inserted to engage the eye of the thill-iron G. The cross-bar D is provided in its upper side with a longitudinal groove H, which receives the end of the spring I, arranged between the thill-iron and the clip so as to hold the thill-iron in proper position and prevent rattling of the same.

To the side of one of the arms C C, I pivot a keeper-plate J, which is adapted to extend over the end of the pivot-pin to prevent the accidental removal of the same, and the said keeper-plate is supported in position over the end of the pivot-pin by the inclined shoulder K on the side of the arm C. The keeper-plate is prevented from moving laterally from the arm C by a spring-latch L, which is secured at its lower end to the side of the arm C and has its free end adapted to engage the upper edge of the keeper-plate, as shown.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided a very

efficient thill-coupling. The longitudinal groove H, which receives the end of the anti-rattling spring, effectually prevents the said spring slipping from its place, and so maintains it in its proper position bearing on the thill-iron. The keeper-plate holds the pivot-pin securely in the arms C C and the eye of the thill-iron, and is itself held in place by the spring-latch. When it is desired to uncouple the thills, the spring-latch is disengaged from the keeper-plate, the said keeper-plate is then swung upward on its pivot, and the pivot-pin then removed. The thill-iron is then lifted from between the supporting-arms C C, as will be readily understood. It will thus be seen that in my device the thills will be securely held against accidental uncoupling, and can be quickly removed when so desired. My device is very simple, and its advantages are thought to be obvious.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the arms C C, the cross-bar D, connecting the same and provided with a longitudinal groove in its upper side, the thill-iron pivoted between the arms C C, and the spring bearing on the thill-iron and having its end engaging the longitudinal groove of the cross-bar D, as set forth.

2. The combination of the arms C C, one of said arms having the inclined shoulder K, the thill-iron inserted between the arms C, the pivot-pin passed through the said arms and the thill-iron, the keeper-plate pivoted to the side of one of the arms C, and adapted to rest on the shoulder K and extend over the end of the pivot-pin, and the spring-latch secured at one end to the arm C and having its other end engaging the upper edge of the keeper-plate, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN WESLEY ALFORD.

Witnesses:

T. W. ALLEN,
W. J. NORTHCROSS.