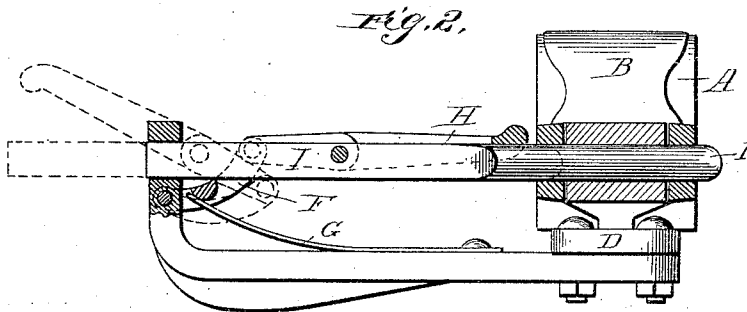
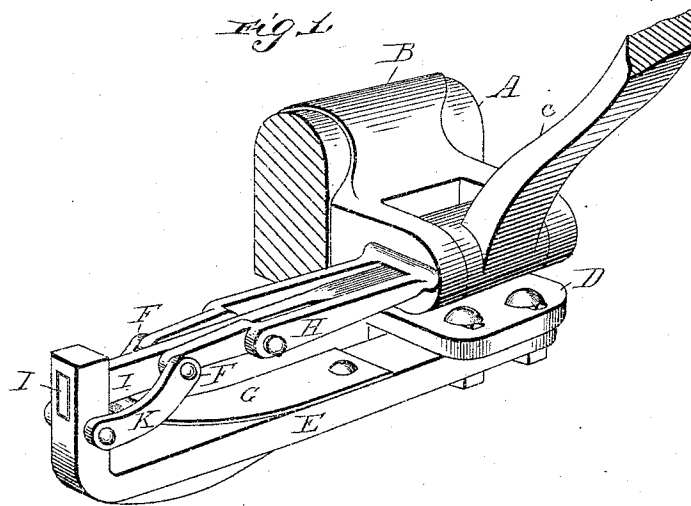


(No Model.)

G. W. CHANDLER.
THILL COUPLING.

No. 465,041.

Patented Dec. 15, 1891.



Witnesses:
S. W. Morrison
T. Scott Morrison

Inventor:
Geo. W. Chandler,
By H. W. Stackpole, Att'y.

UNITED STATES PATENT OFFICE.

GEORGE W. CHANDLER, OF AYER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO STEPHEN A. SAWYER, OF MANHATTAN, KANSAS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 465,041, dated December 15, 1891.

Application filed August 8, 1891. Serial No. 402,066. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. CHANDLER, a citizen of the United States, residing at Ayer, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Pole and Shaft Shifters; 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 the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in devices for inserting and removing thill-coupling pins; and the objects are to provide a device which, while firmly securing the pin in position, at the same time provides means whereby it may be quickly removed and replaced without the use of a wrench, as in the ordinary mode. These objects I attain by means of the mechanism hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my invention, and Fig. 2 a longitudinal sectional view of the same, showing the position of the several parts when operated.

Similar letters refer to similar parts throughout the several views.

A represents a section of a buggy-axle; B, the coupling-clip; C, the thill-iron; D, a yoke to a coupling-clip, extended forward directly under the ears to said clip and forming a rest for the thill-iron while the opposite one is being coupled; E, the base of my device, attached to the extension of the yoke, the outer end of the base being turned upward to form a bearing for other portions of the device.

F is a toggle-joint having its bearings in

the vertical portion of the base E, and is pivoted to the extension of the coupling-pin I and operated by the lever H. Coupling-pin I has its outer bearing in said vertical portion of base E and is allowed to pass freely through the same when drawn. The application of a toggle-joint to hold the pin in position whether the same be out or in, but spring G pressing against the arms K, further resists the movement of the parts, thus preventing any accidental interference from throwing the coupling-pin out of position. Any ordinary anti-rattler may be used with my device.

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

1. In a thill-coupling, the device for inserting and removing the coupling-pin by means of a toggle-joint secured thereto and operated by a lever, substantially as shown and described.

2. In a thill-coupling device, the forward extension of the coupling-clip yoke for the purpose of securing thereto the mechanism for inserting and removing the coupling-pin, substantially as shown and described.

3. In a thill-coupling device, a toggle-joint secured to the coupling-pin as a means of inserting or removing said pin or of holding the same in place, substantially as shown and described.

4. In a thill-coupling device, the combination of the base E, coupling-pin I, toggle-joint F, and lever H, substantially as shown and described.

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

GEORGE W. CHANDLER.

Witnesses:

H. C. CRUMP,
S. A. SAWYER.