

No. 649,597.

Patented May 15, 1900.

C. H. CHITTUM.

COMBINED ANTIRATTLER AND NUT LOCK FOR THILL COUPLINGS.

(Application filed Mar. 9, 1900.)

(No Model.)

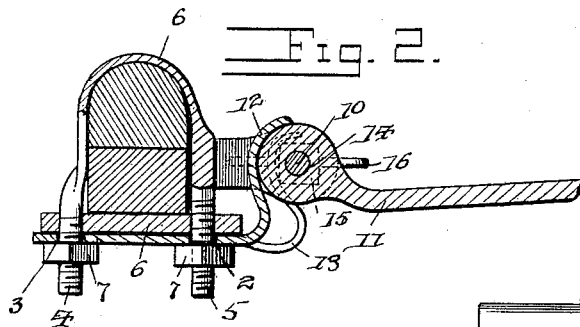
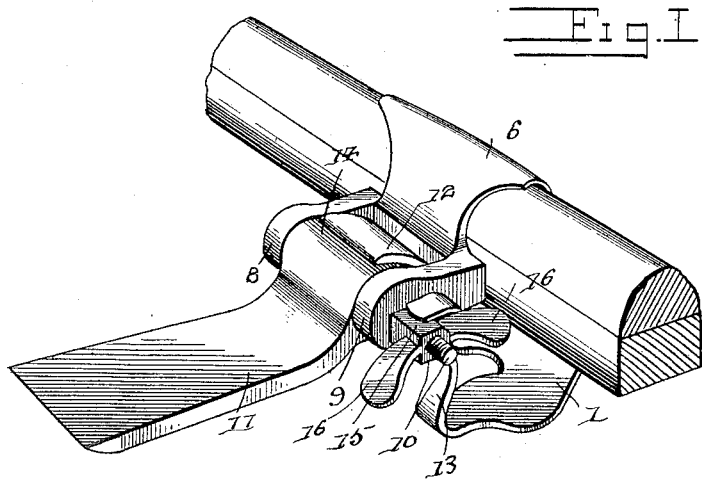


Fig. 3.

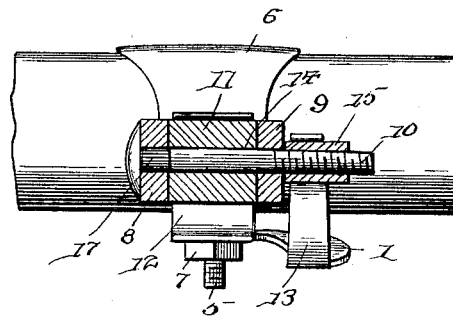
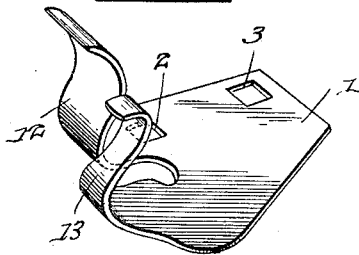


Fig. 4.



Witnesses

F. E. Alden.

J. H. Riley

C. H. Chittum

Inventor

By F. C. S. Attorneys,

C. H. Chittum

UNITED STATES PATENT OFFICE.

CHARLES H. CHITTUM, OF LEXINGTON, VIRGINIA.

COMBINED ANTIRATTLER AND NUT-LOCK FOR THILL-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 649,597, dated May 15, 1900.

Application filed March 9, 1900. Serial No. 8,047. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. CHITTUM, a citizen of the United States, residing at Lexington, in the county of Rockbridge and State of Virginia, have invented a new and useful Combined Antirattler and Nut-Lock for Thill-Couplings, of which the following is a specification.

The invention relates to improvements in combined antirattlers and nut-locks for thill-couplings.

The object of the present invention is to provide a simple, inexpensive, and efficient device adapted to be readily applied to any ordinary thill-coupling and capable of effectually preventing the parts from rattling and of locking the nut of the coupling-bolt against accidental rotation.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a thill-coupling provided with a combined antirattler and nut-lock constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the device.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a plate constructed of sheet-steel or other resilient material and provided adjacent to one side with front and rear apertures 2 and 3 for the reception of the depending threaded portions 4 and 5 of an axle-clip 6, and the said plate is secured against the lower face of the clip-plate 6 by the nuts 7 of the axle-clip, as clearly illustrated in Fig. 2 of the accompanying drawings. The axle-clip is provided with the ordinary forwardly-extending perforated ears 8 and 9 for the reception of the pivot-bolt 10, which couples a thill-iron 11 to the axle-clip, the eye of the thill or coupling iron 11 being arranged between the perforated ears of the axle-clip in the ordinary manner, as clearly shown in Fig. 1.

The plate 1 is provided at its front with a pair of upwardly-extending resilient arms 12

and 13, which are offset from each other to provide an intervening space for the adjacent perforated ear 9, the arm 12 being located between the perforated ears for engaging the eye 14 of the thill or coupling iron, and the arm 13 being arranged at the exterior of the perforated ear 9 and slightly in advance of the arm 12 to engage the nut 15 of the coupling-bolt. The arm 12, which is arranged in alinement with the openings 2 and 3, is disposed centrally of the thill-coupling and is much heavier and wider than the arm 13, its width being substantially the distance between the perforated ears to secure the maximum strength, whereby an effective antirattler is provided. The resilient arm 12 is curved to conform to the configuration of the eye 14 and it extends upward over the same, holding it firmly against the coupling-bolt and effectually preventing the parts from rattling.

The outer arm 13, which is lighter than the arm 12, engages the upper and rear face of the nut, which is provided with a squared extension for this purpose. The upper end of the arm 13 is extended forward over the upper face of the nut, which is preferably provided with wings 16 to enable it to be readily rotated against the action of the arm 13 when it is desired to uncouple a pair of thills or a pole.

The bolt is provided adjacent to its head with a squared portion 17, which fits in a corresponding square aperture of the perforated ear 8, whereby the bolt is held against rotation, and as the nut is effectually locked against rotation it will be apparent that the thill or coupling iron cannot become accidentally disconnected from the axle-clip. The resiliency of the arm 13 is sufficient to permit the nut to be rotated in either direction when the proper force is applied; but the said arm is capable of exerting sufficient pressure upon the squared portion of the nut to prevent the latter from accidentally rotating. The plate is tapered toward its back and is enlarged at its front adjacent to the inner end of the outer arm 13.

It will be seen that the device is simple and comparatively inexpensive in construction, that it possesses strength and durability, and that it provides an efficient antirattler and

nut-lock. Furthermore, it will be clear that the device is adapted to be readily applied to an ordinary thill-coupling without necessitating any alteration in the construction thereof, the outer arm 13 being adapted to engage and effectually lock an ordinary nut, the wings being provided only for the purpose of facilitating coupling and uncoupling.

What is claimed is—

- 10 1. A combined antirattler and nut-lock consisting of a horizontal plate designed to be arranged beneath an axle and provided with inner and outer arms located respectively between the ears of the axle-clip and at one
15 side of the same and extending upward from the front of the plate and arranged to engage the eye of a coupling-iron and the bolt of a nut, substantially as and for the purpose described.
- 20 2. In a device of the class described, the combination with a thill-coupling, of a horizontal plate located beneath the axle and provided with openings to receive the sides of an axle-clip, the inner arm extending upward
25 from the front portion of the plate and located between the perforated ears and engag-

ing the eye of the coupling-iron, and the outer arm extending upwardly from the front of the plate and offset from the inner arm and engaging the nut of the coupling-bolt, substantially as described. 30

3. In a device of the class described, the combination with an axle-clip, of a coupling-iron, a bolt connecting the coupling-iron to the axle-clip and provided with a nut having wings, said nut being also provided with an extension, and a horizontal plate arranged beneath the axle and secured to the axle-clip and provided at its front with upwardly-extending inner and outer arms, the inner
40 arm engaging the eye of the coupling-iron and the outer arm engaging the nut at the extension thereof and extending over the top of the same, substantially as described.

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

CHARLES H. CHITTUM.

Witnesses:

J. M. SENSENEY,
J. A. JACKSON.