

(No Model.)

D. E. RUSSELL.
THILL COUPLING.

No. 454,118.

Patented June 16, 1891.

FIG. 1.

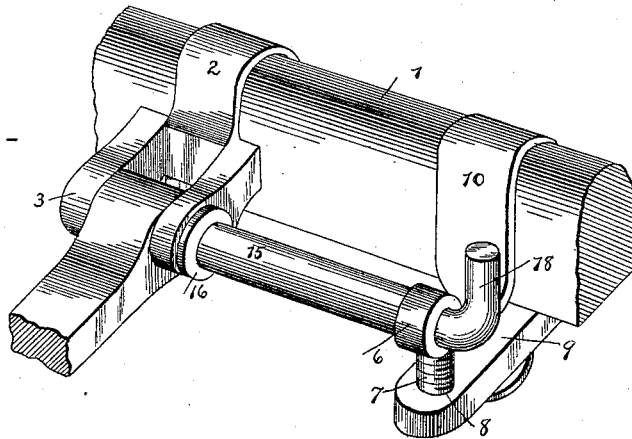


FIG. 2.

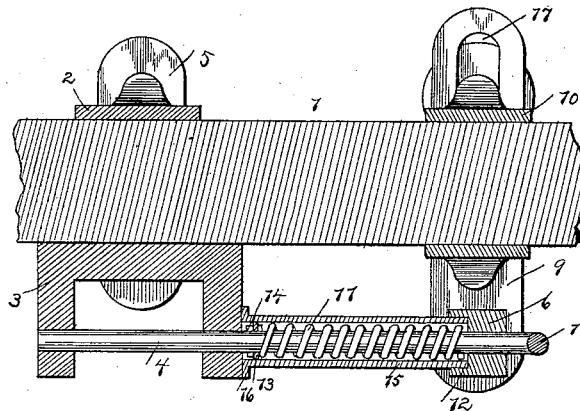
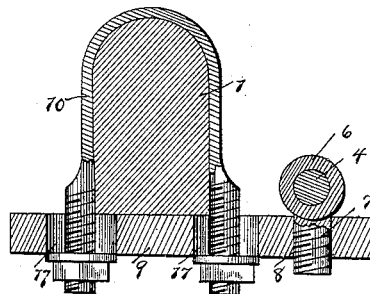


FIG. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

DANIEL EDWARD RUSSELL, OF DUNBARTON, WISCONSIN.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 454,118, dated June 16, 1891.

Application filed April 4, 1891. Serial No. 387,640. (No model.)

To all whom it may concern:

Be it known that I, DANIEL EDWARD RUSSELL, a citizen of the United States, residing at Dunbarton, in the county of La Fayette and State of Wisconsin, have invented a new and useful Thill-Coupling, of which the following is a specification.

The invention relates to improvements in thill-couplings.

10 The object of the present invention is to provide a simple and inexpensive thill-coupling capable of enabling the coupling-bolt to be readily withdrawn for releasing a tongue or thill, and adapted to be readily adjusted to the ordinary construction of thill-couplings and to any vehicle-axle.

15 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.

20 In the drawings, Figure 1 is a perspective view of a thill-coupling embodying the invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view.

25 Referring to the accompanying drawings, 1 designates an axle, and 2 an ordinary clip provided with forwardly-extending perforated ears 3, adapted to receive a coupling-bolt 4, which secures a shaft-iron between the perforated ears 3. The clip 2 is secured to the axle by a tie-plate 5 and nuts in the usual manner, and the coupling-bolt 4 has its inner end arranged in the perforations of the ears 3 and its outer end supported by a vertically-adjustable eye 6, consisting of a head and a threaded stem 7, which engages a threaded opening 8 of a tie-plate 9 of a clip 10. The bolt is normally held in the perforated ears and in engagement with a shaft-iron by a spiral spring 11, which is coiled around the bolt, and has one end arranged in a recess 12 of the adjustable eye 6 and its other end engaging a washer 13, which is secured in place by a pin 14. The spiral spring is protected from dust and dirt by a sleeve 15, which has its outer end arranged in the recess 12 of the eye 6 and its inner end provided with an annular flange 16, which is arranged against the adjacent ear 3 of the clip 2. The eye 6 may

be adjusted by means of a threaded stem, and it is also adjusted by means of the nuts on the threaded ends of the clip 10. The tie-plate 9 is provided with slots 17, in which are arranged the threaded ends of the clip 10, and which permit the sides of the clip to be spread or contracted to adjust the clip to different-sized axles.

It will be seen that the thill-coupling is simple and inexpensive in construction, and is adapted to be readily adjusted to any vehicle. The spring-actuated bolt is provided at its outer end with a handle 18, which engages the adjustable eye and limits the inward movement of the bolt.

What I claim is—

1. In a thill-coupling, the combination of the clip 2, provided with perforated ears, the spring-actuated bolt having its inner end arranged in the perforation of the ears, the clip 10, the tie-plate 9, provided with slots to receive the threaded ends of the clip, and the adjustable eye 6, supporting the outer end of the bolt and provided with a threaded stem engaging the tie-plate 9, substantially as described.

2. The combination of the clip 2, provided with forwardly-extending ears, the clip 10, the tie-plate 9, provided with slots to receive the threaded ends of the clip 10 and extending forward and provided with a threaded opening, the adjustable eye 6, having a threaded stem engaging said opening and provided in its head with a recess 12, the bolt arranged in the adjustable eye and the perforations of said ears, the coiled spring arranged on the bolt and having its inner end engaging the same and its outer end arranged in the recess of the eye, and the sleeve arranged on the bolt and covering the spring and having one end provided with a flange and arranged adjacent the clip 2 and its other end arranged in the recess 12, substantially as described.

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

DANIEL EDWARD RUSSELL.

Witnesses:

GEO. E. WEATHERBY,
JOHN H. FARAY.