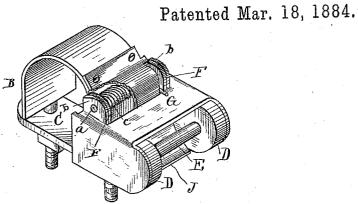
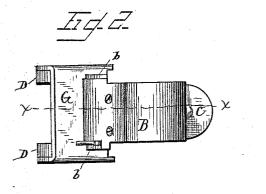
(No Model.)

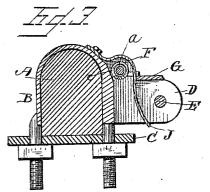
R. CAMERON. THILL COUPLING.

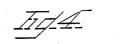
No. 295,348.

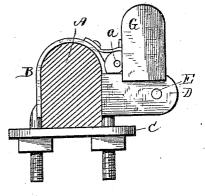












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UNITED STATES PATENT OFFICE.

ROBERT CAMERON, OF BURLINGTON, IOWA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 295,348, dated March 18, 1884.

Application filed August 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT CAMERON, a citizen of the United States, residing at Burlington, in the county of Des Moines and State Iowa, 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 to 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.
- Figure 1 is a perspective view of the improved thill-coupling. Fig. 2 is a top view. Fig. 3 is a vertical longitudinal section through the device, as shown in Fig. 2, taken in the plane indicated by dotted lines xx. Fig. 4 is 20 a side elevation, indicating the gate up.
- This invention relates to thill or draft-pole couplings wherein it is desired to prevent rattling, and also to dispense with the well-known bolt having a nut on it.
- bolt having a nut on it. The nature of my invention consists in a pivoted gate, and also in a spring-cushion for the thill-iron, which will be fully understood from the following description, when taken in connection with the annexed drawings.
- A designates the axle of a vehicle, to which the clip B is secured by means of a strap, C, and nuts, in the usual well-known manner. The front portion of the clip has two parallel ears or cheek-pieces, D D, through which is
 passed the pin E, that couples the thill-iron to the clip. The clip has also formed on its front side, on top of the cheek-pieces D D, ears F F, through which passes a pin, a, that is parallel to the coupling-pin E. This pin a
- 40 passes through ears bb, which are formed on the top and rear portions of a gate, G, and form the pivoted connection of the said gate to the clip. The pivoted gate consists of vertical cheeks and a horizontal connecting portion,
- 45 the former of which are on the outer sides of the cheek-pieces D D, and in close relation thereto. When the cheeks of the pivoted gate G are

down, as shown in Fig. 1, they cover the ends of the coupling-pin and effectually prevent displacement thereof and a casual detachment 50 of the thill from the clip. By simply raising the front of the gate G. so that its cheeks are free from the ends of the coupling-pin E, this pin can be readily removed and the thill detached from the clip. The gate is held down by means 55 of a coiled spring, c, one end of which is secured to the pin a, and the other end bears on the top of the gate.

J designates a curved spring, which is designed to bear against the round eye-piece of 60 the thill-iron and prevent rattling. The upper end of this spring is rigidly secured to the top of the clip, and between this end and the spring proper is a curved portion, which covers the spring c and pin a and makes a neat 65 finish.

It is obvious from the above description that I have a perfectly safe thill-coupling, and that the spring-plate J prevents rattling of the thill on the pin E, and also covers and protects the 70 spring which holds down the gate G.

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

1. The combination of the clip, the perfor 75 rated check-pieces formed thereon, and having ears F F, the loose coupling-pin E, and the spring-actuated gate for keeping this pin in place, substantially as described.

2. The combination, with the clip and its thill- 80 coupling, of the curved spring-plate J, covering the spring and the ends of the pivot of the gate G, substantially as described.

3. The combination of the clip, the cheekpiece and ears formed thereon, the pivoted 85 gate actuated by a spring, *c*, the spring-plate covering this spring, and the removable pin E, substantially as described.

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

ROBT. CAMERON.

Witnesses: John J. Senley, Thomas G. Kelly,