

J. DUFOUR.  
Thill-Coupling.

No. 204,547.

Patented June 4, 1878.

Fig. 1.

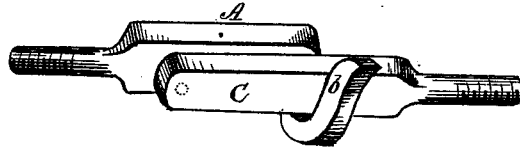


Fig. 2.

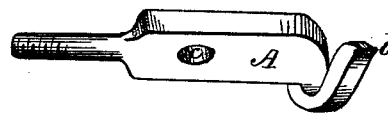


Fig. 3.

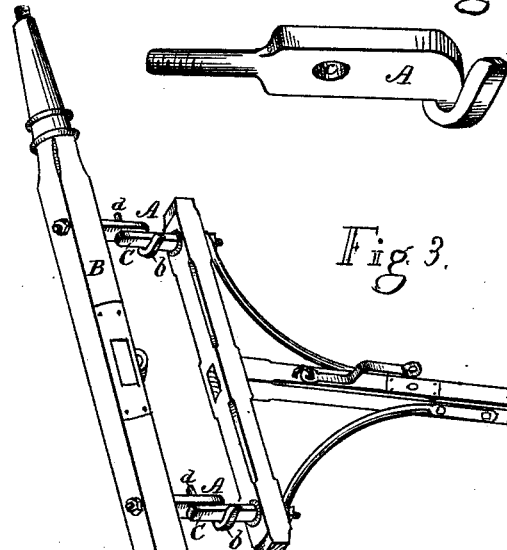
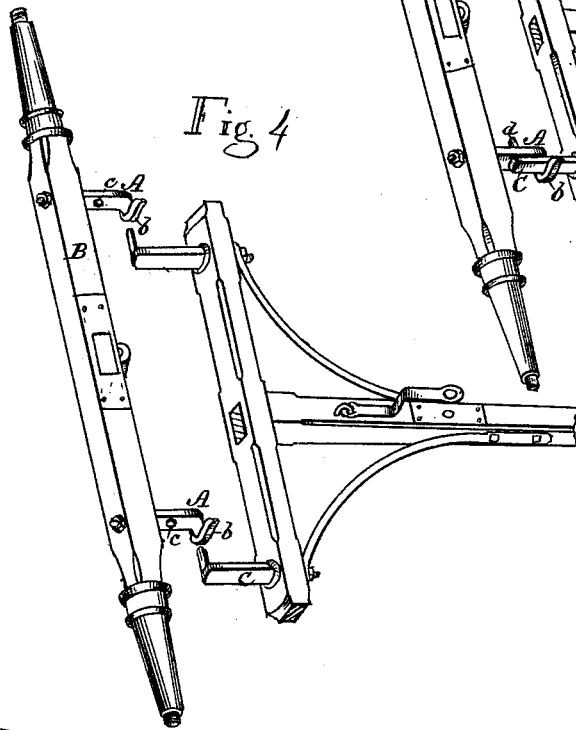


Fig. 4.



Witnesses -  
Charles H. Lee.  
Thos. St. George

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# UNITED STATES PATENT OFFICE.

JOSEPH DUFOUR, OF RACINE, WISCONSIN.

## IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **204,547**, dated June 4, 1878; application filed March 15, 1878.

*To all whom it may concern:*

Be it known that I, JOSEPH DUFOUR, of the city and county of Racine, and State of Wisconsin, have invented a new and useful Improvement in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in the class of thill-couplings which are so constructed that the thills may be detached from the wagon or carriage by raising them into vertical position and then shifting them laterally.

The object of my invention is to provide a cheap coupling which can be easily constructed of wrought-iron.

The improvement consists in constructing the axle-clips or axle-irons, to which the thill-irons are attached, with lateral curved arms, which serve to prevent detachment of the thills when in their normal position, but not when elevated vertically.

In accompanying drawing, Figure 1 is a perspective view of the coupling-irons as connected when in the normal position. Fig. 2 is a perspective view of the axle clip or iron. Fig. 3 is a perspective view of a wagon-pole attached to an axle by means of my improved coupling. Fig. 4 is a perspective view, showing such pole detached.

A A indicate the irons, which are attached to the axle B. Each consists of a straight bar, having its front end extended to form an arm, *b*, which is bent downward and laterally, and then upward, so as to form a hook. Each iron, A, has also a transverse perforation, *c*, about the middle of its length. The thill-irons C

have pintles *d* formed on their rear ends, and both project laterally in the same direction. Both hooks *b* are likewise formed on the same side of the irons A A, but project oppositely to said pintles *d*.

It is apparent from this construction and arrangement of parts that, when the pole or thills, as the case may be, to which the irons C are attached, are raised to a vertical position, both pintles *d d* may be simultaneously inserted in holes *c c* of irons A A, and then, upon lowering the outer end of the pole or thills, the pairs of irons A C will assume the parallel or approximately parallel position shown in Figs. 1 and 3, and be held or locked together by arms *b b*, so that they cannot be disengaged until the pole or thills have been again raised to a vertical position.

I do not claim the combination of thill-irons having laterally-projecting pintles and clips or axle-irons having holes or sockets to receive such pintles, and the latter having also lugs or projections which serve to prevent separation or disconnection of the parts, except when the pole or thills are first elevated into vertical position; but

What I do claim is—

The combination, substantially as described, of the irons A, having the hook-shaped lateral arms *b* and perforations *c*, and the thill or pole irons C, having pintles *d*, for the purpose specified.

JOSEPH DUFOUR.

In presence of—

CHARLES H. LEE,  
THOS. ST. GEORGE.