

W. L. RAYMENT.
THILL-COUPLING.

No. 170,113.

Patented Nov. 16, 1875.

Fig 1.

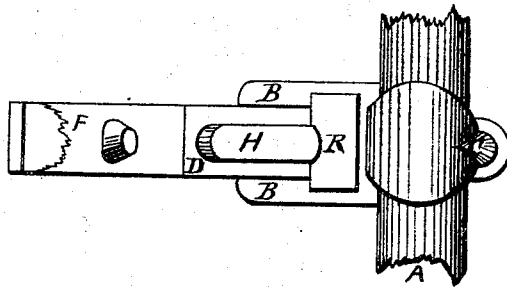
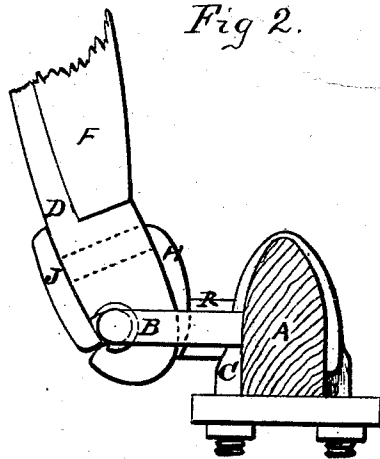


Fig 2.



Witnesses:
Will A. Coles
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UNITED STATES PATENT OFFICE.

WILLIAM L. RAYMENT, OF TEKONSHA, MICHIGAN.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **170,113**, dated November 16, 1875; application filed August 24, 1875.

To all whom it may concern:

Be it known that I, WILLIAM L. RAYMENT, of Tekonsha, Calhoun county, State of Michigan, have invented a Thill-Coupling, of which the following is a specification:

My improvements relate to the employment of a rectangular-shaped joint-head forged on the axle-clip, in combination with a socket-joint head formed on the thill-iron; also an upper and lower cap firmly connected to the head of the thill-iron by a bolt passing up through the same.

In the accompanying drawings illustrating my invention, Figure 1 is a plan view; and Fig. 2 is a side elevation, representing the thill-iron in working position.

In the drawing, the letter A represents the vehicle-axle; B, the rectangular-shaped joint-head, preferably forged on the side, and near the center, of the clip C, which embraces, and is secured to, the axle in the usual way. D is the thill or pole-arm iron, bolted to the wood F, and forged with a joint socket-head to fit over and play on the joint-head B, and within a rectangular opening formed therein. The caps H and J are usually made out of one solid piece of metal, connected together by a bolt, as shown by dotted lines, Fig. 2. The lower cap J extends across the socket in the head of the thill-iron. The upper cap H is a prolongation of the bolt, turned down in line with the lower cap, and flattened to conform to the curved end of the thill-iron, and of such a length as just to clear the sides of the joint-

head when the points of the thills are on the ground to couple or uncouple.

The socket-joint of the thill-iron is lined with leather to prevent noise and undue wear of the parts.

The operation of coupling is as follows: The caps being turned at right angles with the shaft, the points resting on the ground, the socket of the thill-iron is placed on the clip joint-head B. The caps are then turned back in line with the shaft, when the coupling is effected as soon as the points of the thills are lifted a short distance from the ground, and the upper cap has entered between the sides of the clip joint-head.

Though it is not essential, yet I usually employ a block of rubber, when the thills are coupled, to fill the opening left in the joint-head B, to keep the parts in close working order, and prevent the lower cap from sustaining undue strain, which is liable to occur in backing. The joint-head B can be forged on the end of the clip-yoke, and a common sale clip be used, which will materially cheapen the construction.

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

The combination of the thill-iron D and caps H and J with the joint-head B, substantially as and for the purpose set forth.

WILLIAM L. RAYMENT.

Witnesses:

STEPHEN M. HASKELL,
OTTO L. JOHNSON.