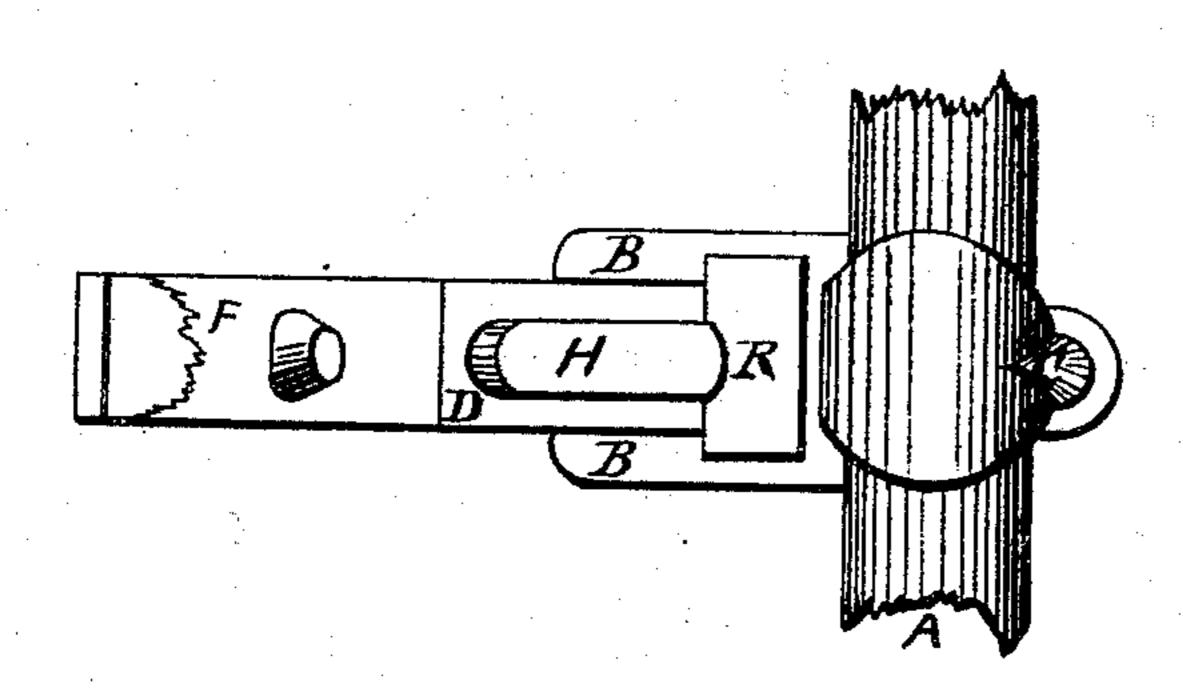
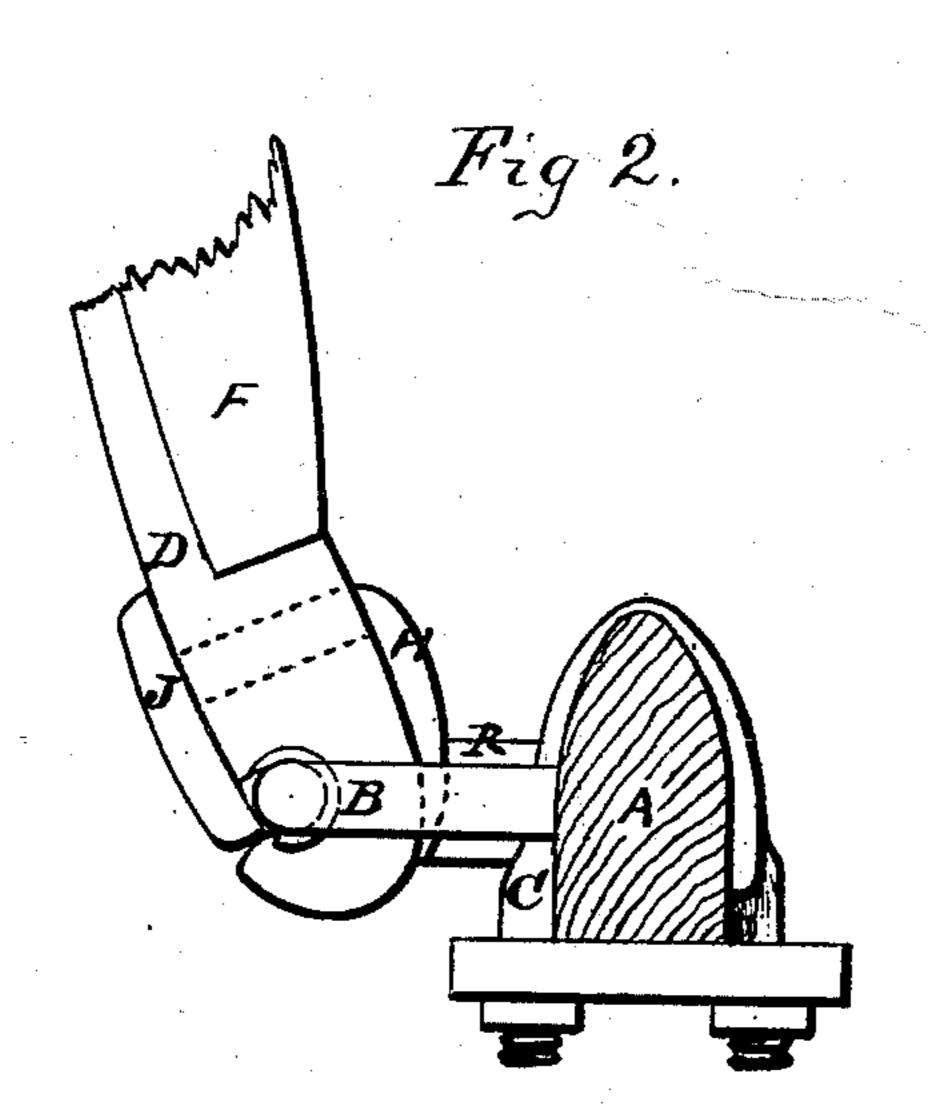
## W. L. RAYMENT. THILL-COUPLING

No. 170,113.

Patented Nov. 16, 1875.

Fig 1





Witnesses: Will A. Coleso Hill A. Coleso Hinson Inventor; William L. Rayment Per Otto L. Johnson Atty

## UNITED STATES PATENT OFFICE.

WILLIAM L. RAYMENT, OF TEKONSHA, MICHIGAN.

## IMPROVEMENT IN THILL-COUPLINGS.

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 jointhead, 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. Dis 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 jointhead 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.