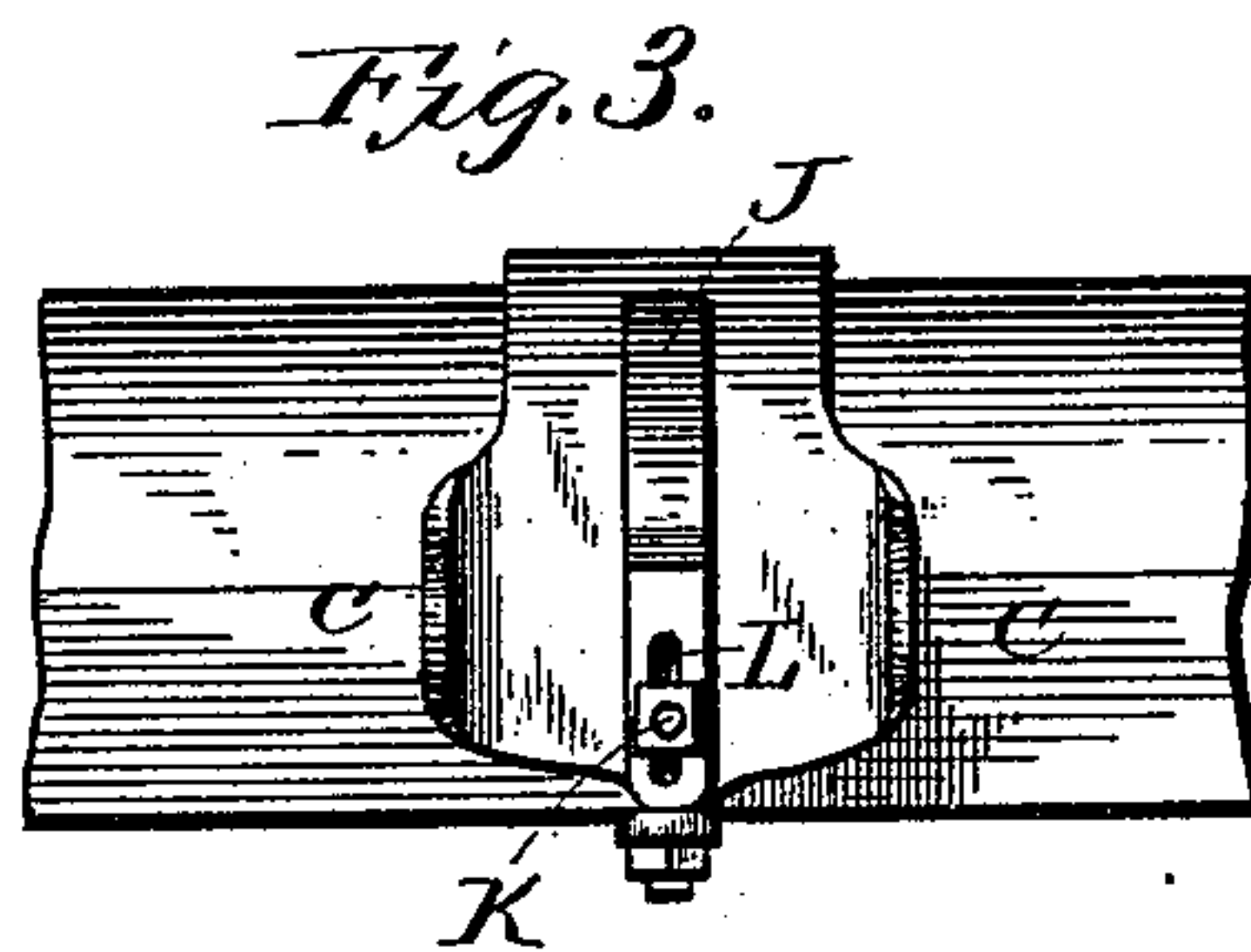
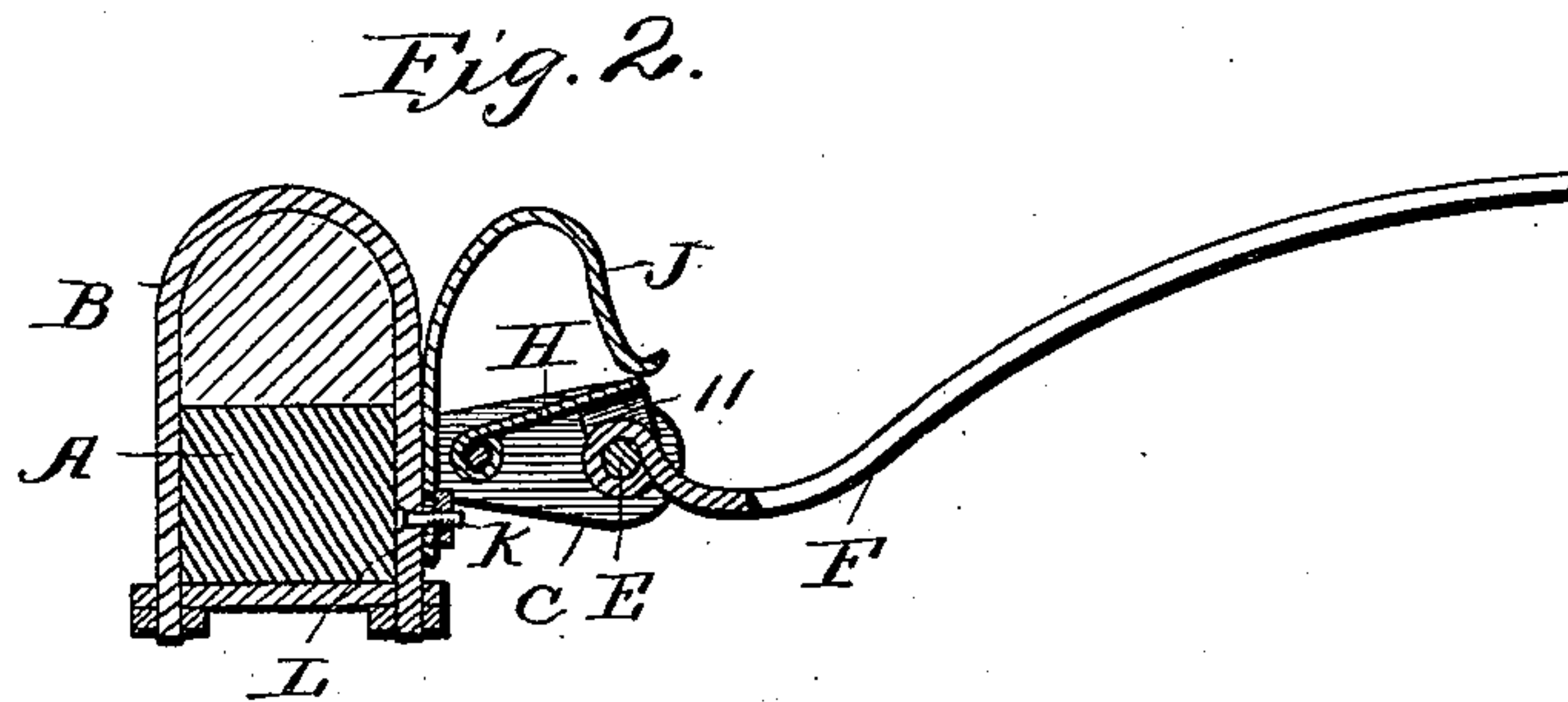
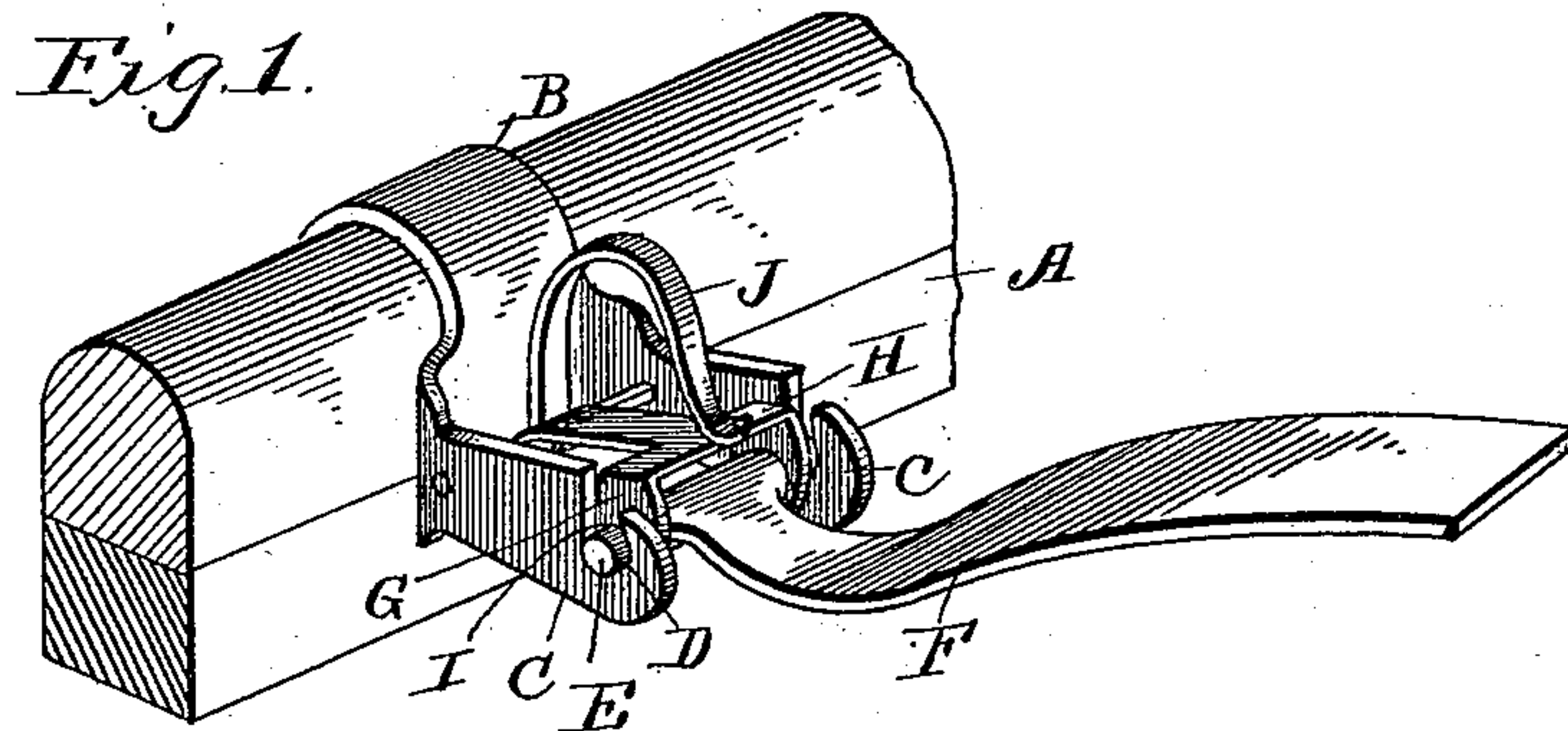


(No Model.)

E. WESTENHAVER.  
THILL COUPLING.

No. 420,846.

Patented Feb. 4, 1890.



Witnesses

Inventor

*E. C. Mordeman*

By *his* Attorneys,

*Edward Westenhaver*

*R. W. Bishop*

*C. A. Snow & Co.*

# UNITED STATES PATENT OFFICE.

EDWARD WESTENHAVER, OF SHELBYVILLE, ILLINOIS, ASSIGNOR OF ONE-HALF TO HARVEY B. SMITH, OF SAME PLACE.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 420,846, dated February 4, 1890.

Application filed June 15, 1889, Serial No. 314,361. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD WESTENHAVER, a citizen of the United States, residing at Shelbyville, in the county of Shelby and State of Illinois, have invented a new and useful Thill-Coupling, of which the following is a specification.

My invention relates to improvements in thill-couplings; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved coupling. Fig. 2 is a vertical section showing the cap raised to permit the removal of the thill, and Fig. 3 is a detail view.

The axle A is of the usual or any preferred construction, and the clip B is secured thereto in the ordinary manner. The clip is provided on its front side with the forwardly-extending supporting-arms C, which have the notches D in their upper edges, and the said notches D are engaged by the transverse coupling-pin E at the rear end of the thill-iron F, as clearly shown. The coupling-pin is held in the notches D by a cap G, which is pivoted within the supporting-arms, and is provided at its front end with the depending lugs H, having notches I in their lower ends, which engage over the coupling-pin. This cap is held normally in its lowered position by a spring J, which is secured to the front side of the clip and extends upward and then forward and downward and bears on the upper side of the cap. The spring is secured to the clip by means of a bolt K passing through a longitudinal slot L in the spring into the clip, so that it can be raised or lowered to

bear on the cap with more or less force, as may be required.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided a very simple and efficient thill-coupling, which can be manufactured at a slight expense, and in which there will be no rattling. The coupling-pin will be held firmly in the notches in the supporting-arms, and cannot be accidentally disengaged therefrom. In order to remove the thill, the cap is raised, as shown in Fig. 2, and the thill is then lifted so as to disengage the coupling-pin from the notches in the supporting-arms.

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

As an improvement in thill-couplings, the combination of the clip, the supporting-arms formed integral with the clip and projecting forward therefrom and having notches in their upper edges, the coupling-pin engaging said notches, the cap pivoted to the supporting-arms and provided at its front end with depending lugs having notches in their lower ends engaging the coupling-pin, and the spring having its front end bearing on the upper side of the cap and its rear end adjustably secured to the front side of the clip, as specified.

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

EDWARD WESTENHAVER.

Witnesses:

S. B. LAYMAN,  
W. CHEW.