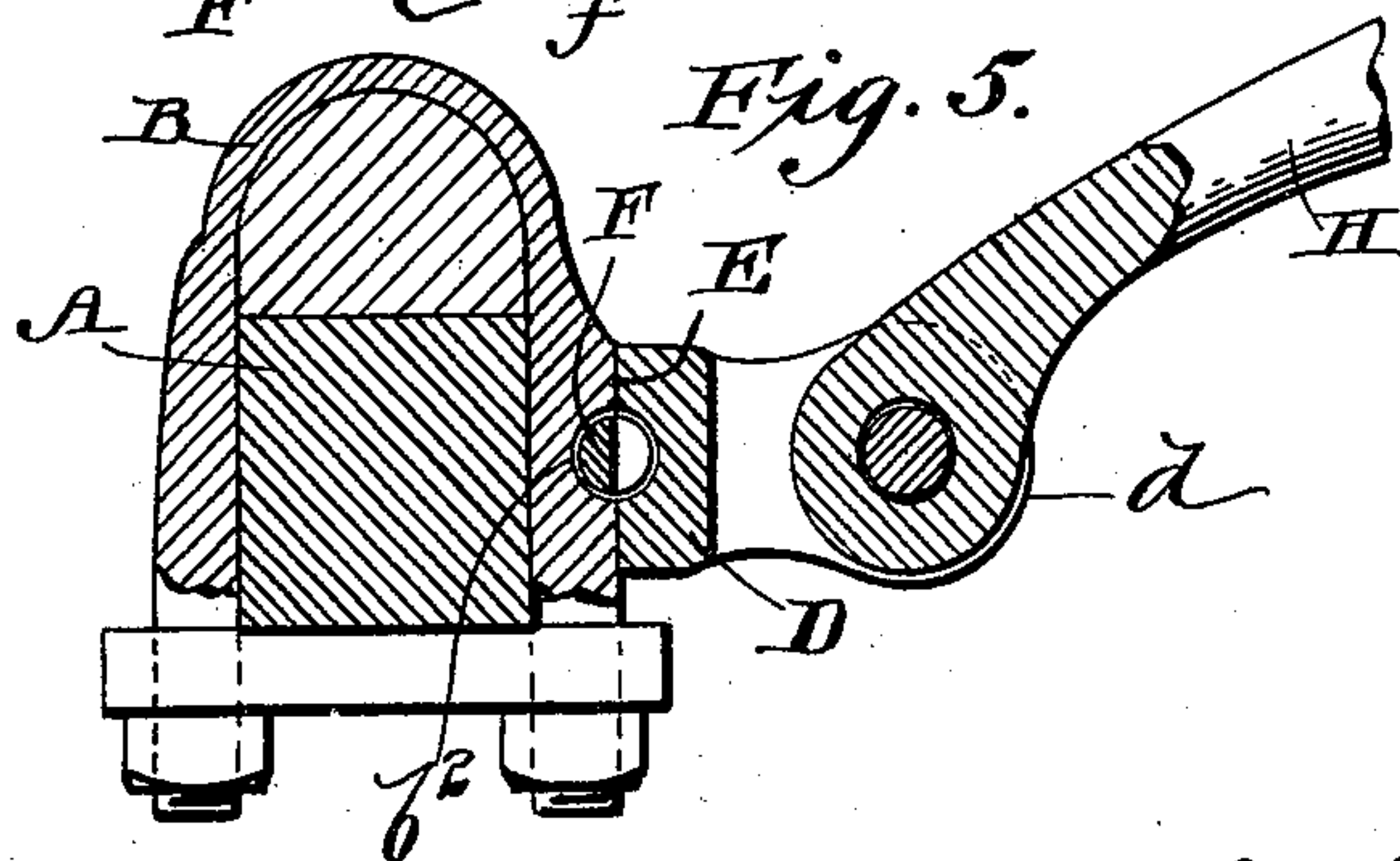
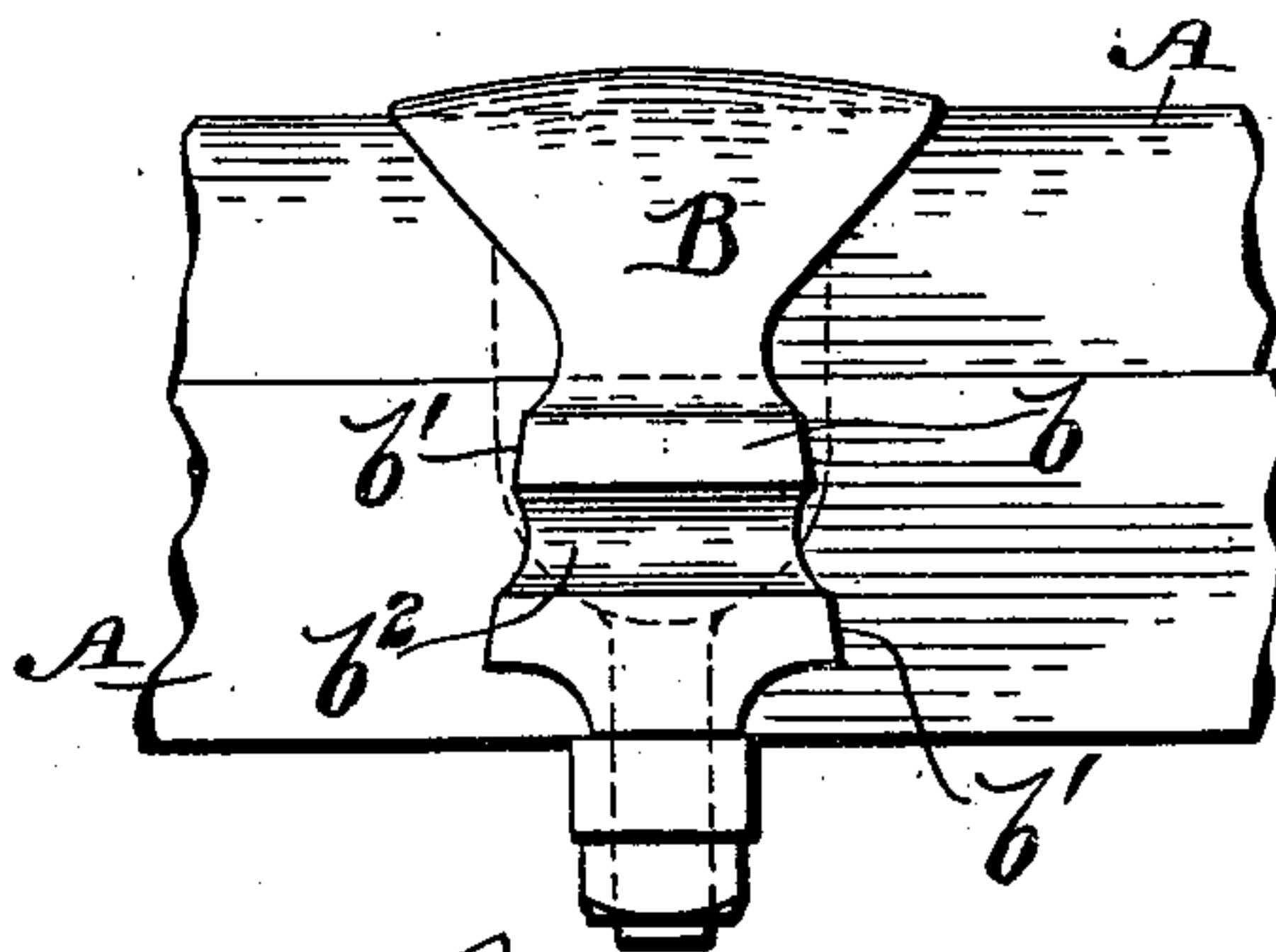
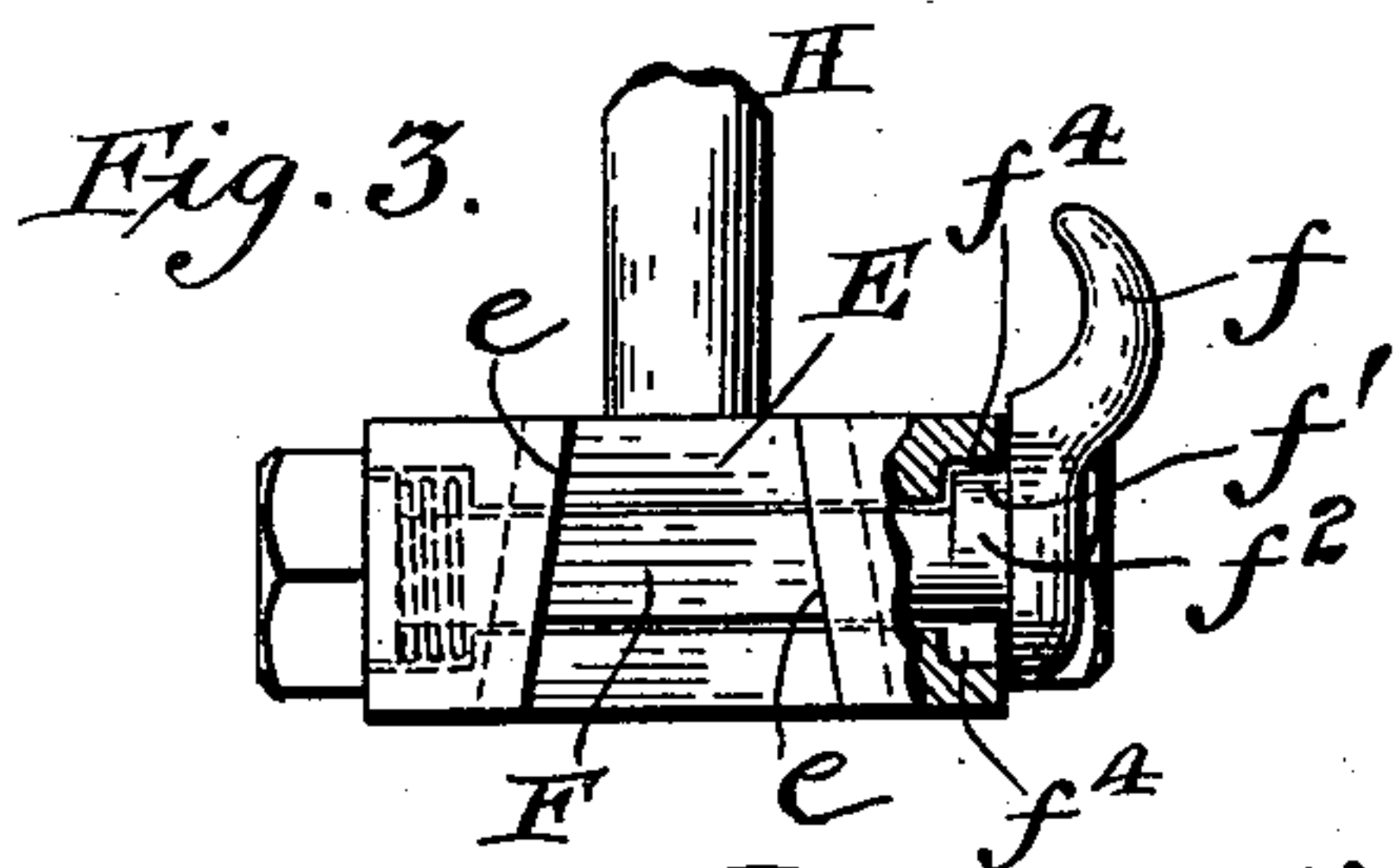
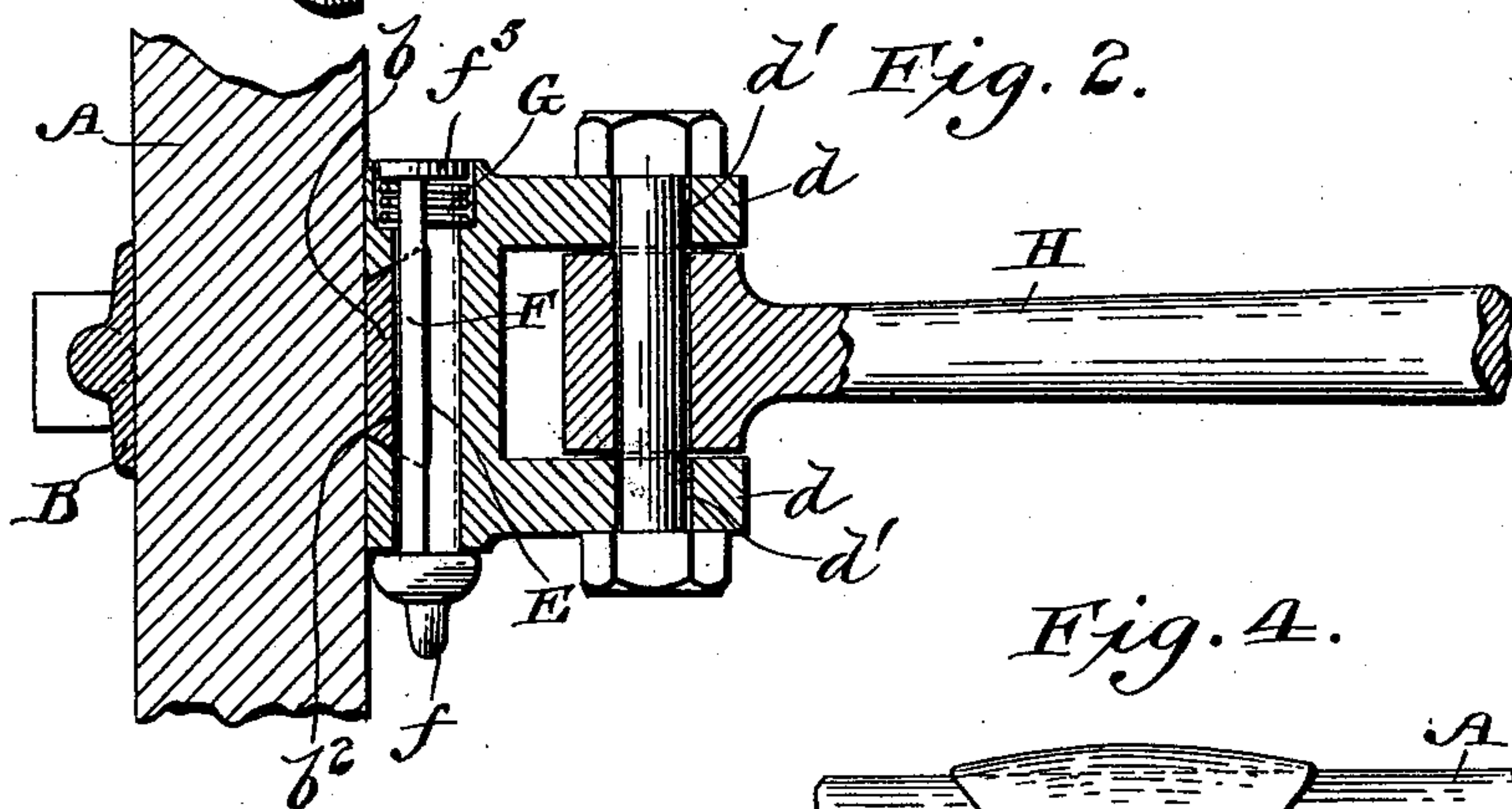
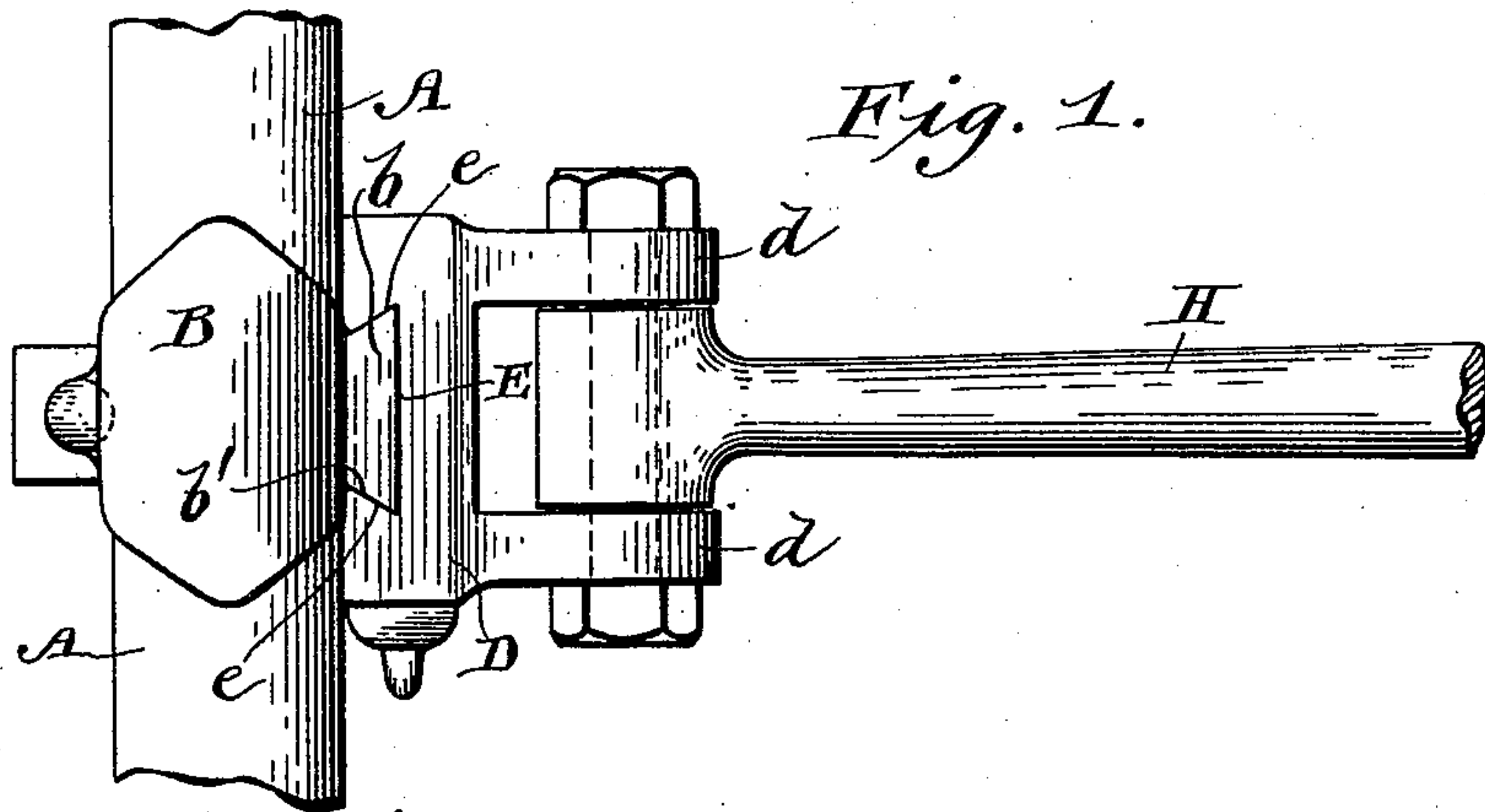


(No Model.)

W. K. SCRIBNER.  
THILL COUPLING.

No. 562,250.

Patented June 16, 1896.



WITNESSES

Cleverance.  
N. S. Hockman.

INVENTOR

Walter K. Scribner  
by his Attorneys  
Mason, Fenwick & Lawrence



# UNITED STATES PATENT OFFICE.

WALTER K. SCRIBNER, OF OSHKOSH, WISCONSIN.

## THILL-COUPPING.

SPECIFICATION forming part of Letters Patent No. 562,250, dated June 16, 1896.

Application filed January 29, 1896. Serial No. 577,255. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER K. SCRIBNER, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Thill-Couplings; and I do 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 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to thill-couplings; and it consists in the main of a coupling-block provided on its rear face with an open-top, wedge-shaped, vertical recess having downwardly-flaring sides, the recess being wider at its base than at its top, and a transversely - arranged, spring - actuated, half-round, rotatable pin; and a clip provided on its front face with a projection or lug corresponding in shape to the recess on the coupling-block and provided with a transverse recess or passage, the construction being such that the wedge-shaped recess on the coupling-block is adapted to be dropped down onto the wedge-shaped projection on the clip, so that a tight dovetail connection is effected and the parts securely held together by bringing the curved portion of the half-round pin into the recess on the clip projection.

It also consists of certain other novel constructions, combinations and arrangements of parts, all of which will be hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a top plan view of my improved thill-coupling without the shaft. Fig. 2 is a transverse longitudinal section of the same. Fig. 3 is a rear end view of the coupling. Fig. 4 is a front view of the clip. Fig. 5 is a transverse section through the coupling-block.

A in the drawings represents the front axle of the vehicle, to which is attached the clip B, which is provided on its front face with a wedge-shaped projection  $b$ , having downwardly and outwardly flaring sides  $b'$   $b'$  and provided with a transverse groove  $b^2$ .

D is the coupling-block provided with a wedge-shaped vertical recess E on its rear

face and having downwardly-flaring sides  $e$   $e$  corresponding to the projection  $b$  on the clip.

F is a half-round pin extending laterally through the coupling-block D. The pin F is provided at one end with an operating-handle  $f$  and a shoulder or head  $f'$ , provided with a lug  $f^2$ , which is adapted to be sprung into either one of the recesses  $f^4$   $f^4$ , formed in the coupling-block. The other end of the half-round pin is provided on its other end with a head  $f^5$ , between which and the casing of the coupling-block a spring G is interposed. The office of this spring is to hold the projection  $f^3$ , formed on the under side of the operating-handle, in either one of the recesses  $f^4$   $f^4$  in the body of the coupling-block.

When it is desired to rotate the half-round pin, it is necessary to first pull the pin laterally, by means of the operating-handle  $f$ , sufficiently so that the lug  $f^3$  will be disengaged from one of the recesses  $f^4$   $f^4$ , thereby compressing the spring G, before the pin can be revolved. When the operating-handle  $f$  is in the position shown in Fig. 3, the straight face of the half-round pin is in the same vertical plane with the rear wall of the recess E, so that the coupling-block D may be dropped down upon or raised from the projection  $b$  on the clip. The half-round pin F is turned to the position shown in Fig. 2 to lock the coupling in the half-round recess  $b^3$  in the projection on the clip B, thus effectually preventing the block D from being raised from the projection C.

The coupling-block D is formed with forwardly-extending spaced ears  $d$ , which are provided with lateral passages  $d'$ . The rear end of the shaft H is inserted in between the ears  $d$   $d$  and is secured in this position by a bolt passed through the shaft and ears and held in place by a nut.

By giving the projection on the clip a downwardly-flaring form and the passage E a similar shape, the coupling-block will find a perfect and secure seat on the clip and the weight of the coupling-block and shaft will tend to hold the parts securely together and prevent rattling at this point.

It will be observed that with my construction the shaft can be attached to and detached from an axle without changing the construction of the attaching end of the shaft or ne-



cessitating the use of auxiliary means in addition to those described for holding the parts in place.

It will also be observed that with my invention the construction of the forward part of the coupling-block is not changed in any way and that rubber or any other antirattling device can be applied in the usual manner. I regard this as a very important feature of my invention.

By my invention a very simple and effective and absolutely safe thill-coupling is produced which can be readily attached and detached without removing the clip from the axle and without the use of nuts and bolts and without removing any auxiliary antirattling devices.

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

1. A thill-coupling comprising in its construction a clip formed on its front face with a wedge-shaped projection having downwardly-extending sides, a transverse passage in the face of said projection, a coupling-block formed on its rear face with a similarly-shaped recess which is adapted to receive the projection on the clip, and a transversely-arranged rotatable half-round pin located in the coupling-block and adapted to be operated to lock the coupling-block to the clip, substantially as described.

2. In a thill-coupling, the combination with a clip formed on its front face with a wedge-

shaped projection having downwardly-flaring sides a transverse passage in the face of said projection, of a coupling-block formed on its rear face with a similarly-shaped recess, a transversely-arranged, rotatable half-round pin located in the coupling-block and capable also of longitudinal movement, means for drawing the pin laterally and rotating the same into and out of the groove in the projection and the clip, and means for holding the pin in an adjusted position, substantially as described.

3. In a thill-coupling, the combination with a clip formed on its front face with a wedge-shaped projection having downwardly-flaring sides, a transverse passage in the face of said projection, of a coupling-block formed on its rear face with a similarly-shaped recess adapted to receive the projection on the clip, a transversely-arranged, rotatable, half-round pin located in the coupling-block and provided with a handle for drawing the pin laterally and giving it a rotary movement and also provided with a holding-lug, notches for receiving said lug, and a spring for holding the lug in either one of the notches, substantially as described.

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

WALTER K. SCRIBNER.

Witnesses:

FRANK J. MCKENNEY,  
CHAS. J. SCHMITT.