No. 753,083. PATENTED FEB. 23, 1904.

C. S. LEHMAN.

THILL COUPLING.

APPLICATION FILED JULY 6, 1903.

NO MODEL.

Fig. 1.

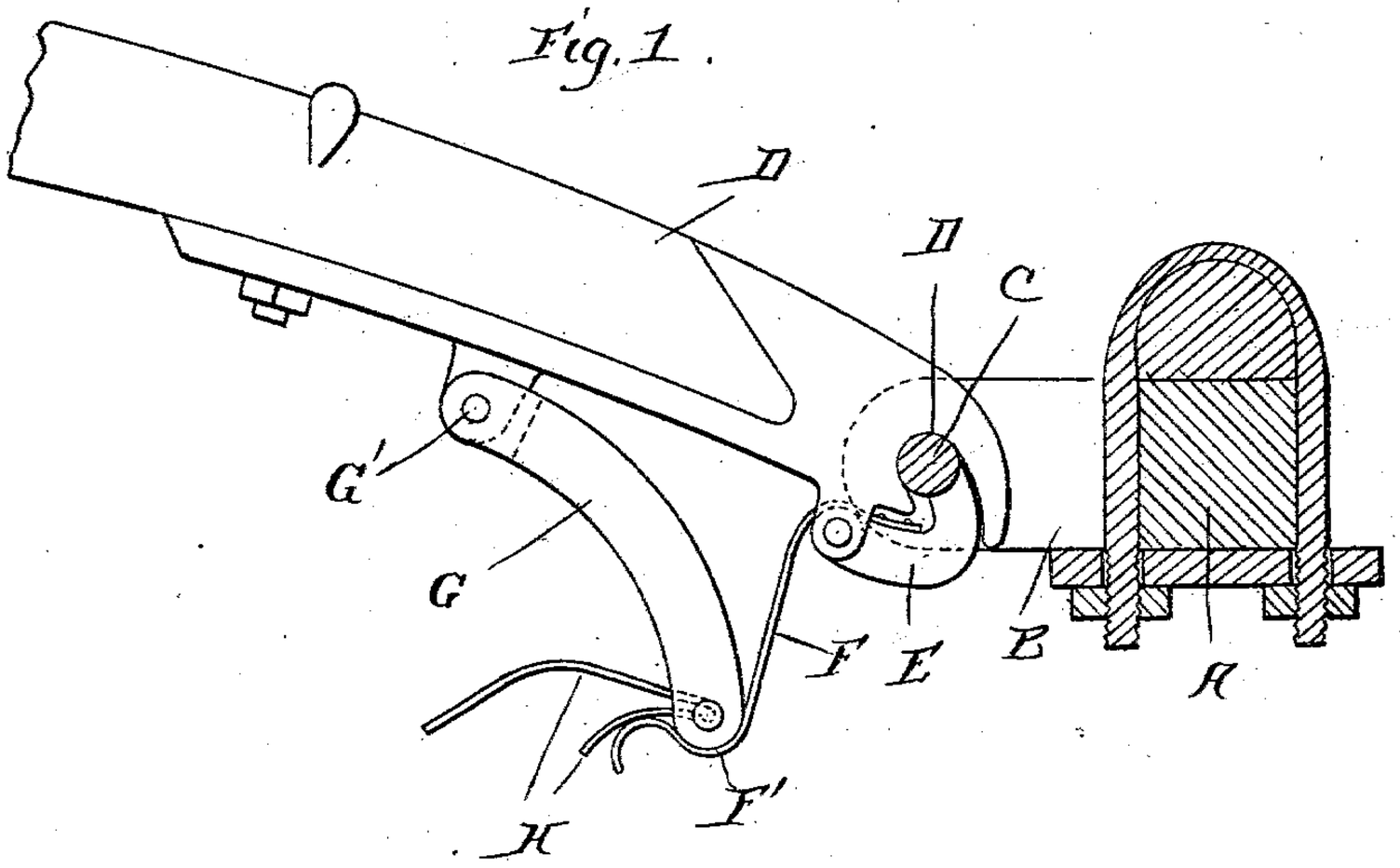
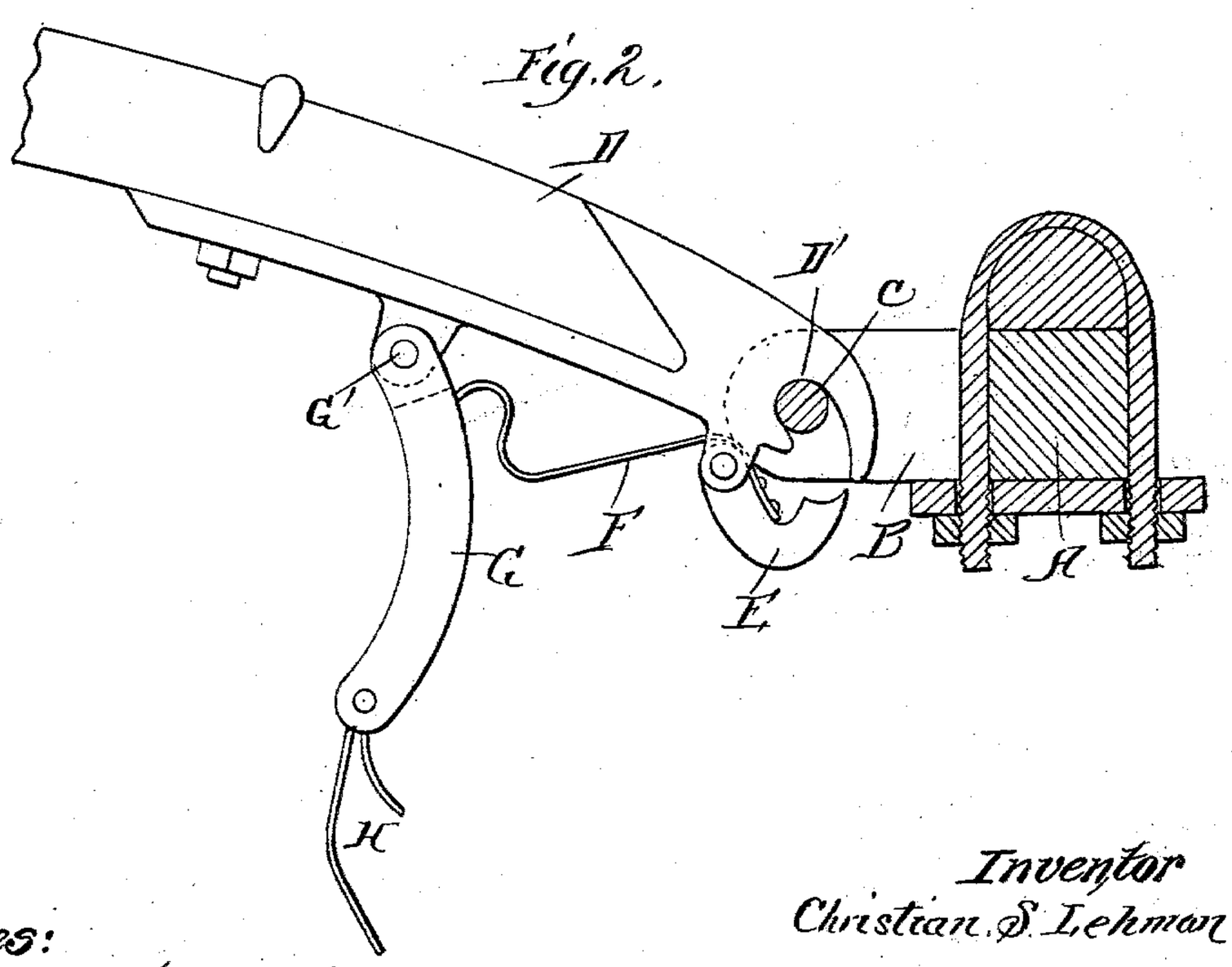


Fig. 2.



Witnesses:
Louis D. Heinrichs
L. H. Morrison

Inventor
Christian S. Lehman
By W. Tudor Williamson Atty.

No. 753,083. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

CHRISTIAN S. LEHMAN, OF LAWN, PENNSYLVANIA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 753,083, dated February 23, 1904.

Application filed July 6, 1903. Serial No. 164,368. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN S. LEHMAN, a citizen of the United States, residing at Lawn, county of Lebanon, and State of Pennsylvania, have invented a certain new and useful Improvement in Thill-Couplings, of which the following is a specification.

My invention relates to a new and useful improvement in thill-couplings, and has for its object to provide a coupling between the clips upon the shafts and the shafts which will allow for the shafts to be easily detached, and is also provided with a spring apparatus to take up wear upon the bolts as to prevent rattling of the shafts.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a sectional view through one of the clips and the axle, showing one of the thills in elevation, the coupling being in the position when in use; Fig. 2, a similar view to Fig. 1, showing the coupling in position to detach the shafts.

A represents the axle.

B is the ordinary clip, secured to the axle.

C is the bolt carried by the clips, to which the thills D of the shafts are attached. Each of the thills D at the rear end is formed hook-shaped by means of the notch D′. This notch D′ is adapted to embrace the bolt C of the clips. Pivoted underneath the rear end of each of the thills is a curved contact-retaining piece E, the free end being concaved, so as to conform to the shape of the bolt C, with which it comes in contact when the device is in operation. This retainer E is held in contact with the bolt C by means of the spring F, which is secured to the retainer at one end, the other end of the spring being curved, as indicated at F′, in which is adapted to fit the free end of a lever G, which is pivoted to the under side of the thill at G′. By pressing the lever G forward into the curved portion of the spring F′ tension is applied to the spring F, so as to throw the retainer E into spring contact with the bolt C, and thus help to retain the shaft in connection with the bolts, and at the same time the spring will take up any lost motion caused by wear upon the bolts and prevent any rattling of the shafts. Pivoted to the free end of the lever G is a light lever H, which normally rests upon the free end of the spring F. By pressing the lever H downward the spring F will be pressed away from the free end of the lever G, and in this manner the shafts may be uncoupled from the clips upon the axle. Thus it will be seen that by simply pressing the lever G forward after the thills have been placed upon the bolts the shafts will be coupled to the clips and remain so until it is desired to disconnect the shafts therefrom, which can be easily and quickly done by simply pressing downward upon the lever H, which will throw the parts in the position shown in Fig. 2, when the shafts can be easily detached.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

In a thill-coupling, a pair of shafts, an axle, clips secured to the axle, bolts carried by the clips, the rear end of the thills composing the shafts being hook shape and notched, the notches adapted to embrace the bolts of the clips, curved retaining-pieces pivoted at one end to the under side of the thills, the free end of the retainers being concaved and adapted to come in contact with the bolts within the notches, springs, one end of each being curved so as to form a socket, levers pivoted at one end to the under side of the thills, the free

end of the levers adapted to be forced into the sockets of the springs so as to hold said springs under tension, and levers pivoted to the free ends of the other levers adapted to disengage the spring from the levers when the releasing-levers are pressed downward, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

CHRISTIAN S. LEHMAN.

Witnesses:

JOHN H. GORMAN,

ELIAS E. RISSER.