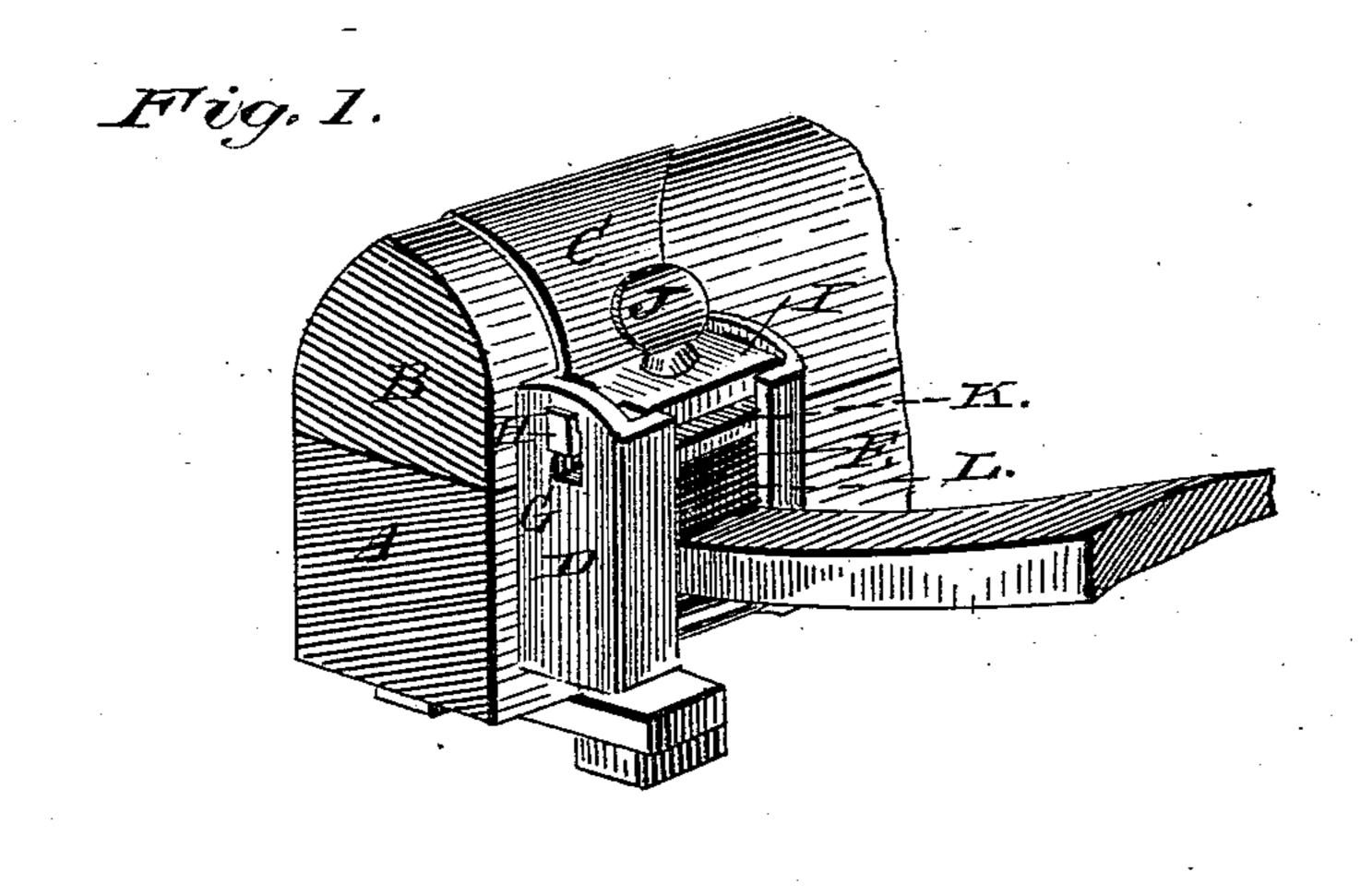
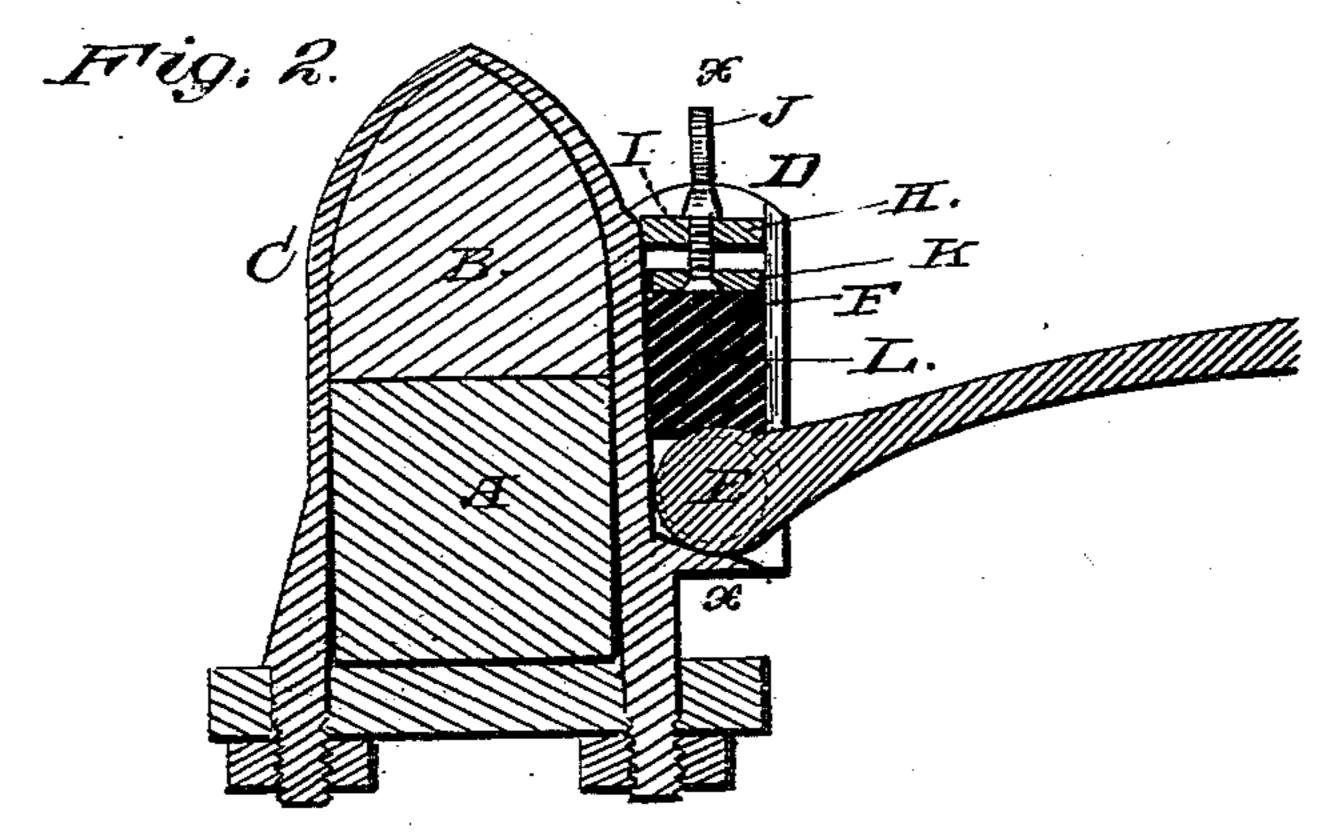
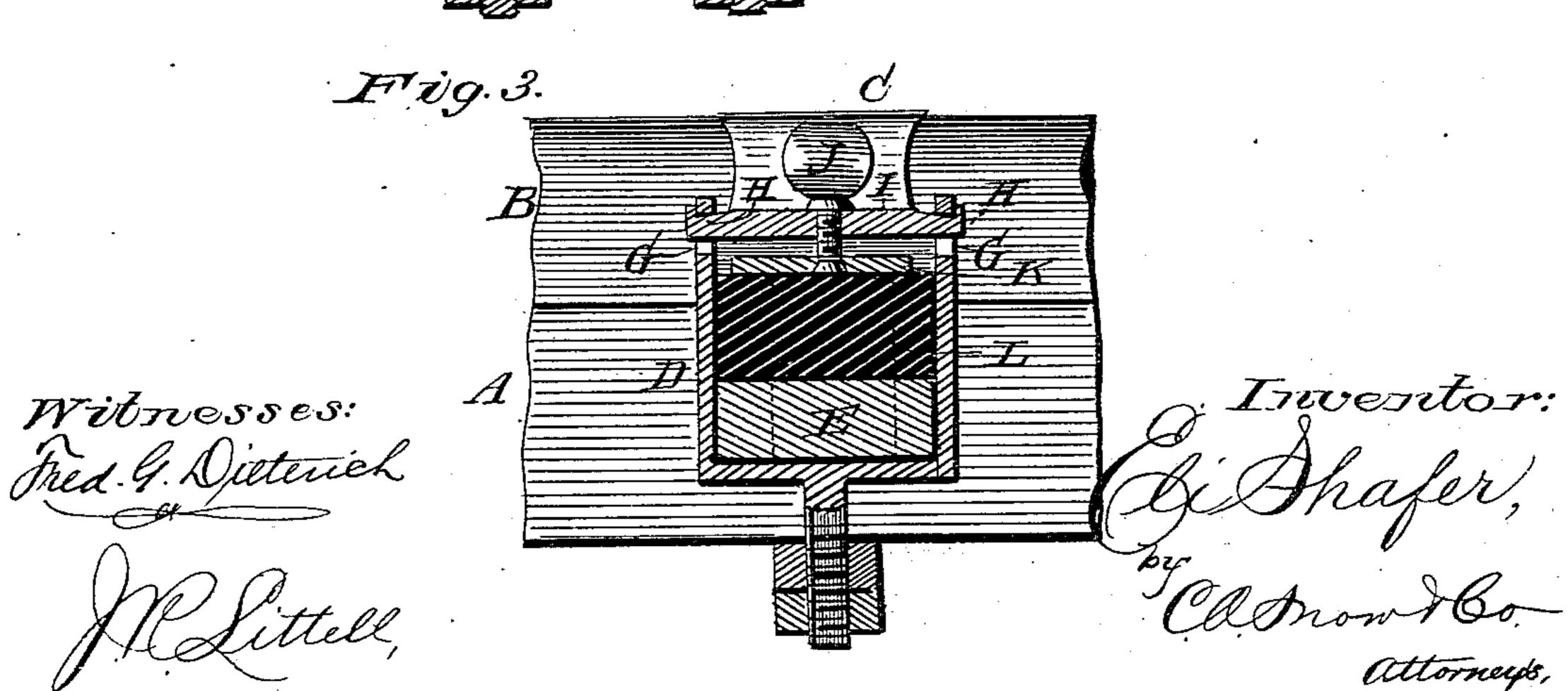
E. SHAFER. Thill-Coupling.

No. 226,251.

Patented April 6. 1880.







United States Patent Office.

ELI SHAFER, OF SIGOURNEY, IOWA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 226,251, dated April 6, 1880.

Application filed March 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, ELI SHAFER, of Sigourney, in the county of Keokuk and State of Iowa, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view; and Fig. 3 is a vertical cross-section on the line x x, Fig. 2.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to thill-couplings; and it consists in certain improvements in the construction of the same, which will be hereinafter ter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represets the axle, B the axle-tree, and C the clip or coupling, which is provided upon its front side with a box, D, to receive the T-iron E of the thill, for the accommodation of the shank of which it is provided, in front, with a slot, F, as shown. The sides of box D are provided, near their upper ends, with slots G G, to receive the hooked irons H H of a detachable head, I. Saidhead is provided with a threaded opening to receive a thumb-screw, J, carrying

at its lower end a follower, K, which, by working the thumb-screw, may be adjusted vertically in the box D

cally in the box D.

In operation, the T-iron of the thill is first adjusted in box D. A block, L, of rubber or other suitable packing material, is placed on top thereof, and the head I, with its thumbscrew and follower, is finally placed in position. The thumb-screw J is now screwed down, thus forcing the packing down against the thill-head, rattling of which is thereby prevented.

When it is desired to remove or to change the 45 thills, this may be done in a moment's time by removing the heads I of the respective boxes.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

As an improvement in thill-couplings, the combination, of the clip C, having box D, provided with slots F G G, of the removable head I, having hooked arms H H, thumb-screw J, and follower K, and the thill-iron E, all arranged and operating substantially as and for the purpose herein shown and specified.

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

ELI SHAFER.

Witnesses:

C. E. FREY, D. E. MOORE.