

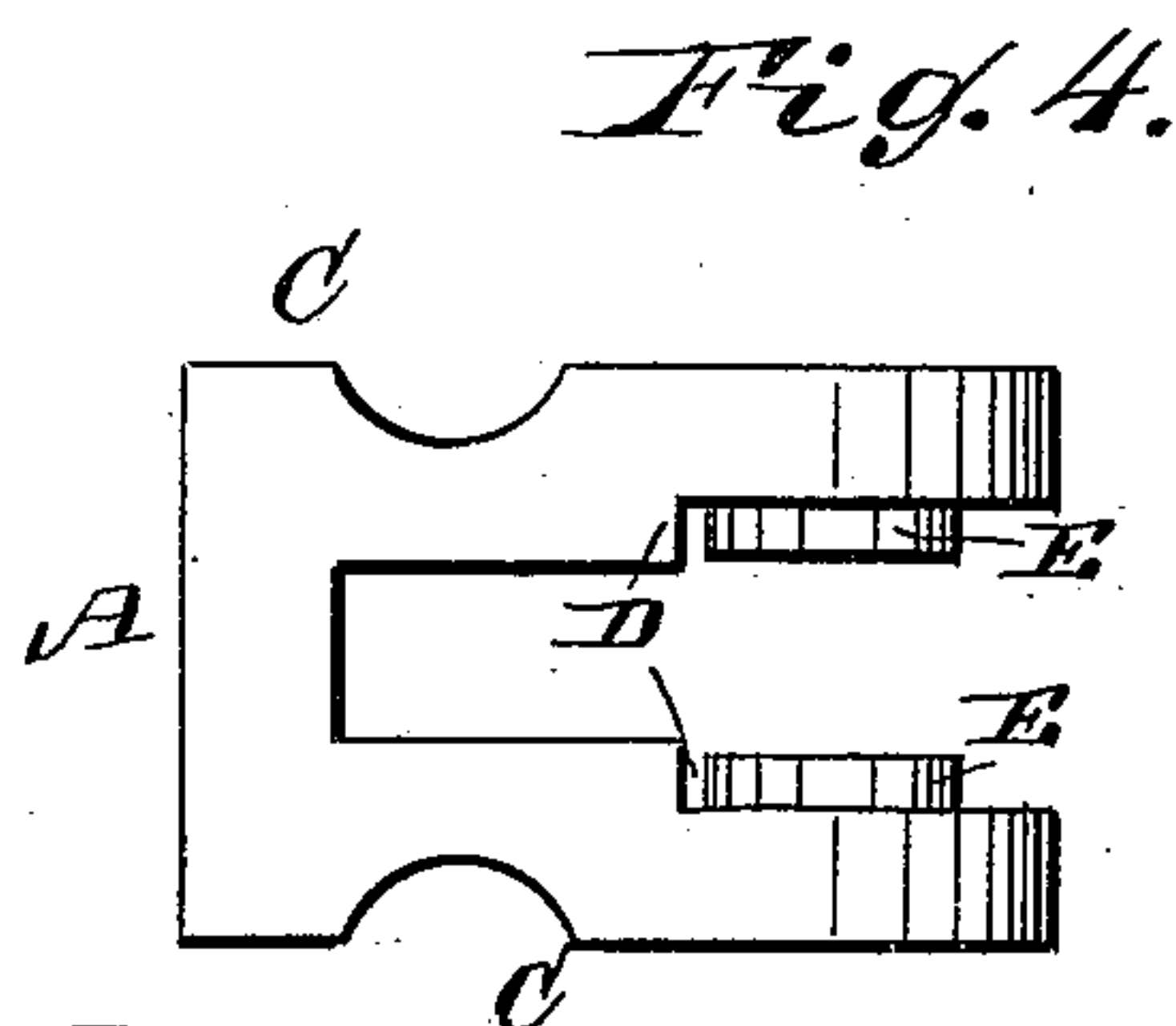
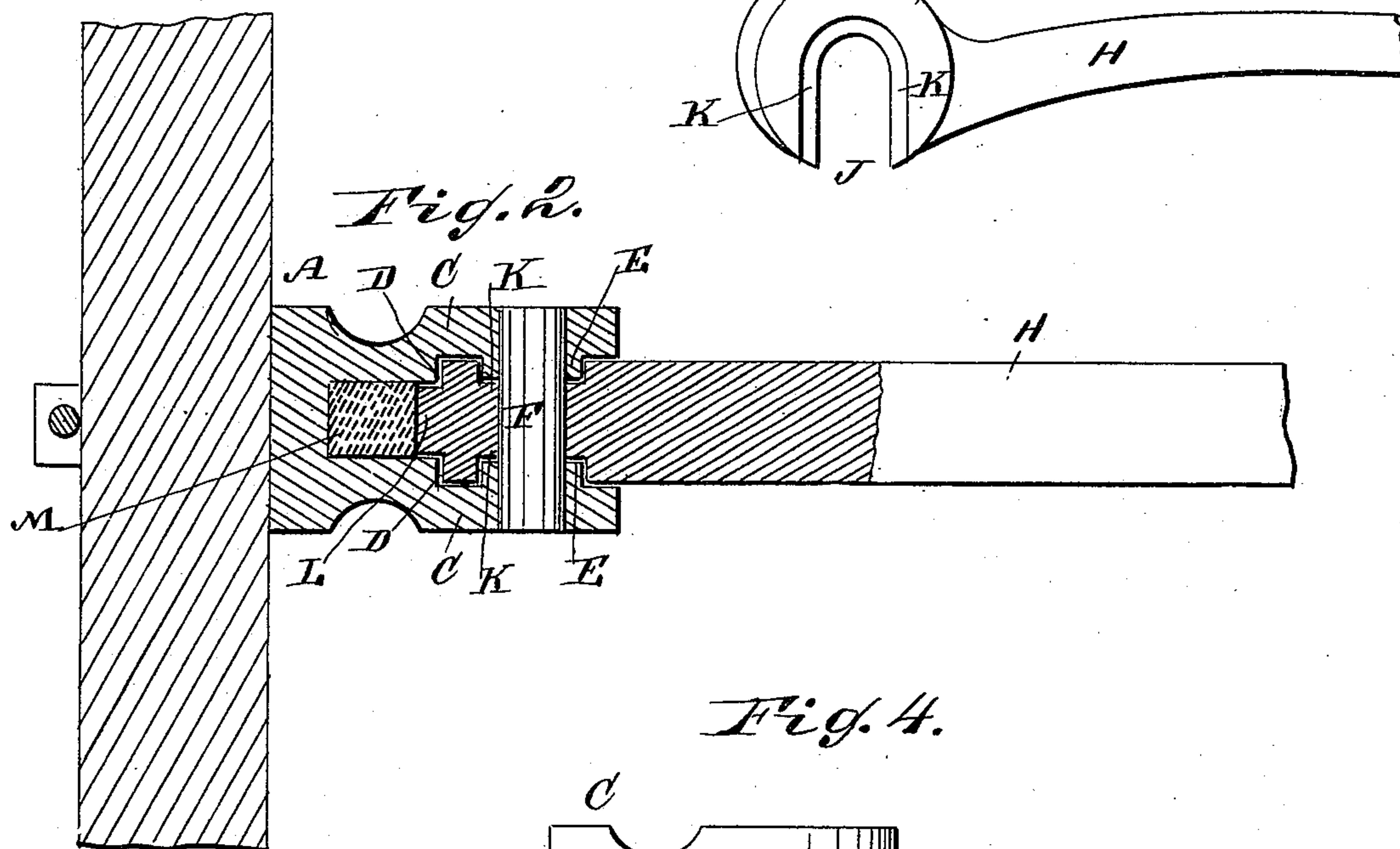
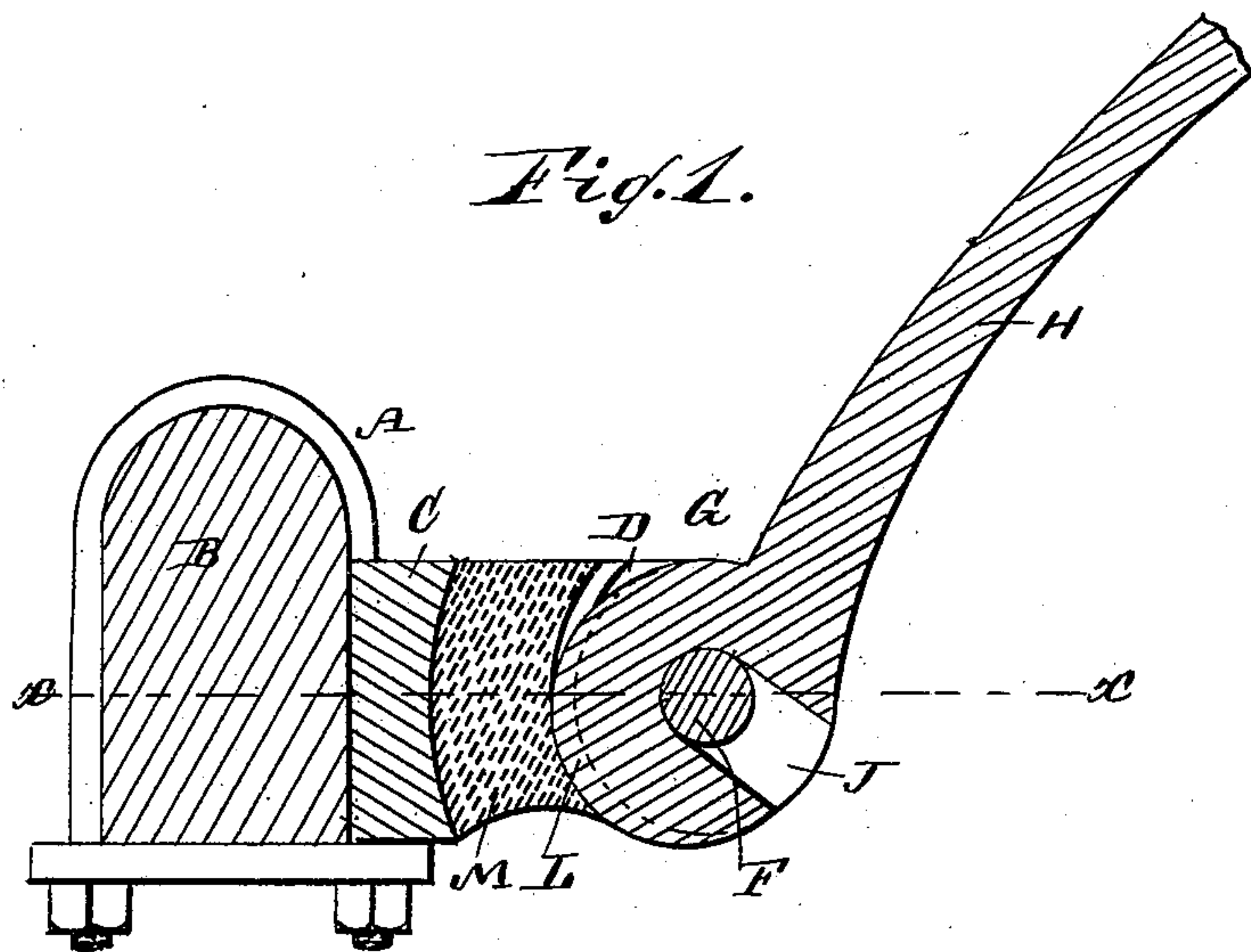
(No Model.)

E. A. GALATIAN & J. B. TAETS.

THILL COUPLING.

No. 312,112.

Patented Feb. 10, 1885.



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UNITED STATES PATENT OFFICE.

ERWIN A. GALATIAN AND JOHN B. TAETS, OF SOUTH WESTERLO, N. Y.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 312,112, dated February 10, 1885.

Application filed May 29, 1884. (No model.)

To all whom it may concern:

Be it known that we, ERWIN A. GALATIAN and JOHN B. TAETS, both of South Westerlo, in the county of Albany and State of New York, have invented a new and Improved Shaft-Coupling, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved shaft-coupling, by means of which the shafts can be coupled and uncoupled very rapidly, and which prevents the shafts from rattling.

The invention consists, principally, of jaws having upon their inner sides circular or annular projections, combined with a hook-eye having a groove or recess in each end, and of certain other parts in combination therewith, substantially as hereinafter more fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional view of my improved shaft-coupling. Fig. 2 is a sectional plan view of the same on the line $x x$, Fig. 1. Fig. 3 is a side view of the hook-eye. Fig. 4 is a plan view of the clip.

From the front of the clip A, held on the axle B, two jaws or prongs, C, project, each of which has a slightly-curved upright shoulder, D, formed on the inner surface at or near the middle.

In front of the shoulder D a circular projection, E, is formed on the inner surface of each jaw or prong C, in the centers of which projections E the holes are formed, through which the pin or bolt F is passed, which is also passed through the hook-eye G, inserted between the jaws C and formed on the end of a bar, H, secured on the inner or rear end of the thill or shaft. The eye G is provided with a transverse U-shaped groove or recess, J, in its bottom, the top of which recess is rounded to fit on the bolt F. A recess, K, is formed along the edges of the groove J on each end surface of the eye, which recesses K are of sufficient width and depth to receive the circular pro-

jections E on the inner surfaces of the jaws C. On the back edge of the eye G an eccentric or cam ridge, L, is formed, which is not as wide as the eye, and is adapted to fit in between the shoulders D of the jaws C. A block, M, of rubber is held between the back parts of the jaws, and has its front or outer surface rounded or concaved, as shown.

The operation is as follows: When the front or free end of the shaft rests upon the ground, the slot J is in a vertical position, and if the hook-eye G is pressed down between the jaws C the bolt F passes into the groove or recess J and the projections E pass into the recesses K on the ends of the hook-eye. If the shaft is swung up into position to be held in the harness, the hook-eye G is turned on the bolt F and the lower part of the groove J swings to the front into the position shown in Fig.

1. At the same time the cam or eccentric ridge or projection L is pressed against the rubber block M, thus preventing rattling of the hook-eye between the jaws. The hook-eye cannot be removed from between the jaws C as long as it is in this position, and if it is to be removed the front end of the shaft must first be swung down so as to bring the groove or recess J into a vertical position. The bolt need not be removed to couple or uncouple the shaft, and the eye G cannot rock between the jaws, and thus is not apt to wear off the bolt. The hook-eye will remain attached to the clip when the bolt is lost out or withdrawn.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a shaft-coupling, the combination, with the jaws C, having circular projections on the inner sides, of the hook-eye G, having a groove or recess, J, in the bottom, and a recess, K, in each end, substantially as herein shown and described.

2. In a shaft-coupling, the combination, with the jaws C, having circular or annular projections E upon their sides, of the bolt F, the hook-eye G, having a groove or recess, J, in the bottom and a recess, K, in each end, and

a cam or eccentric ridge, L, on its back, and of the rubber block M, substantially as herein shown and described.

3. In a shaft-coupling, the combination, with
5 the jaws C, having circular or annular projections E upon their sides, and curved shoulders D, of the rubber block M between the jaws, the bolt F, and the hook-eye G, having a groove or recess, J, in the bottom and a re-

cess, K, in each end, and a cam or eccentric ridge, L, on its back, substantially as herein shown and described.

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