

No. 661,467.

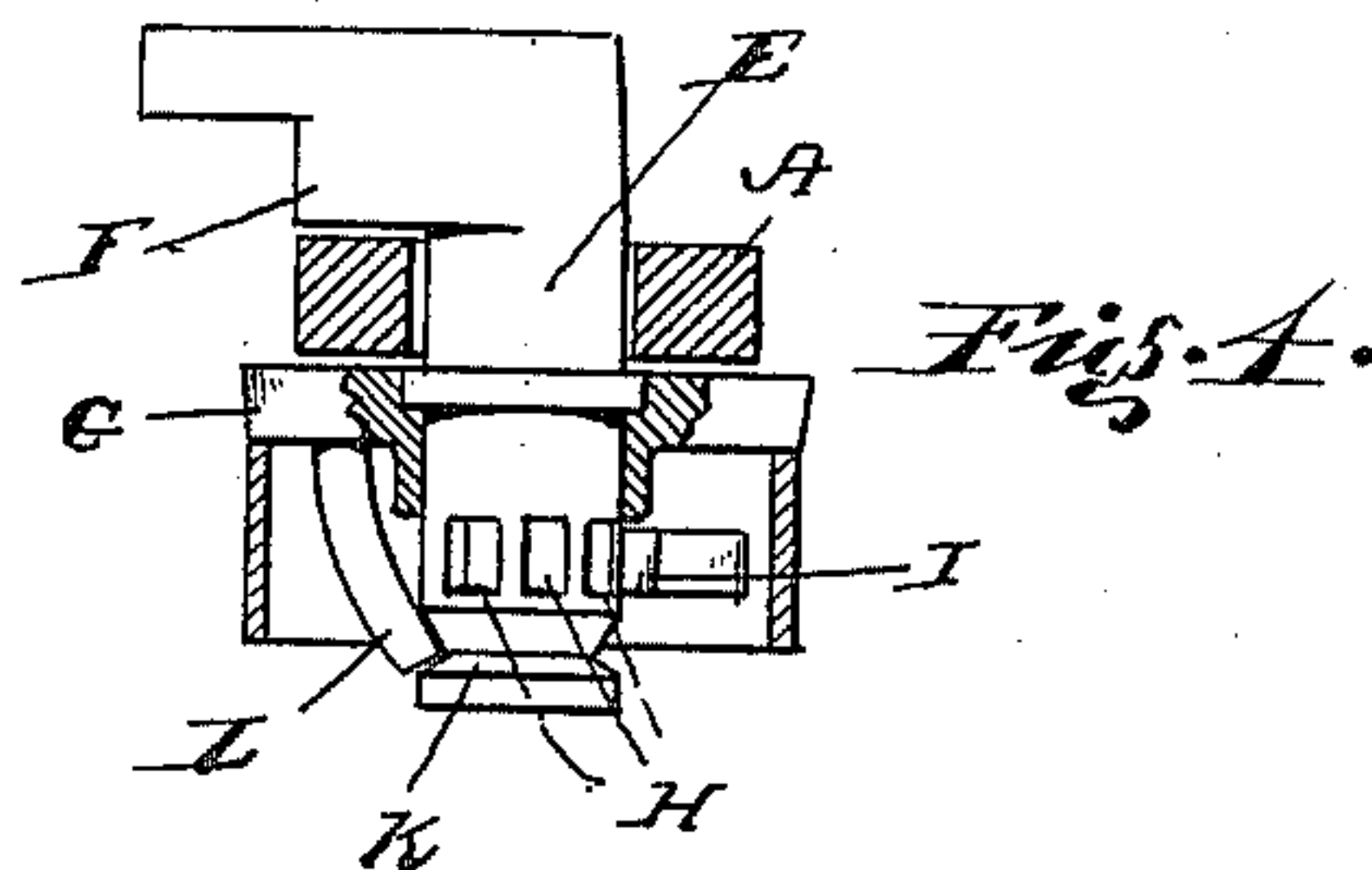
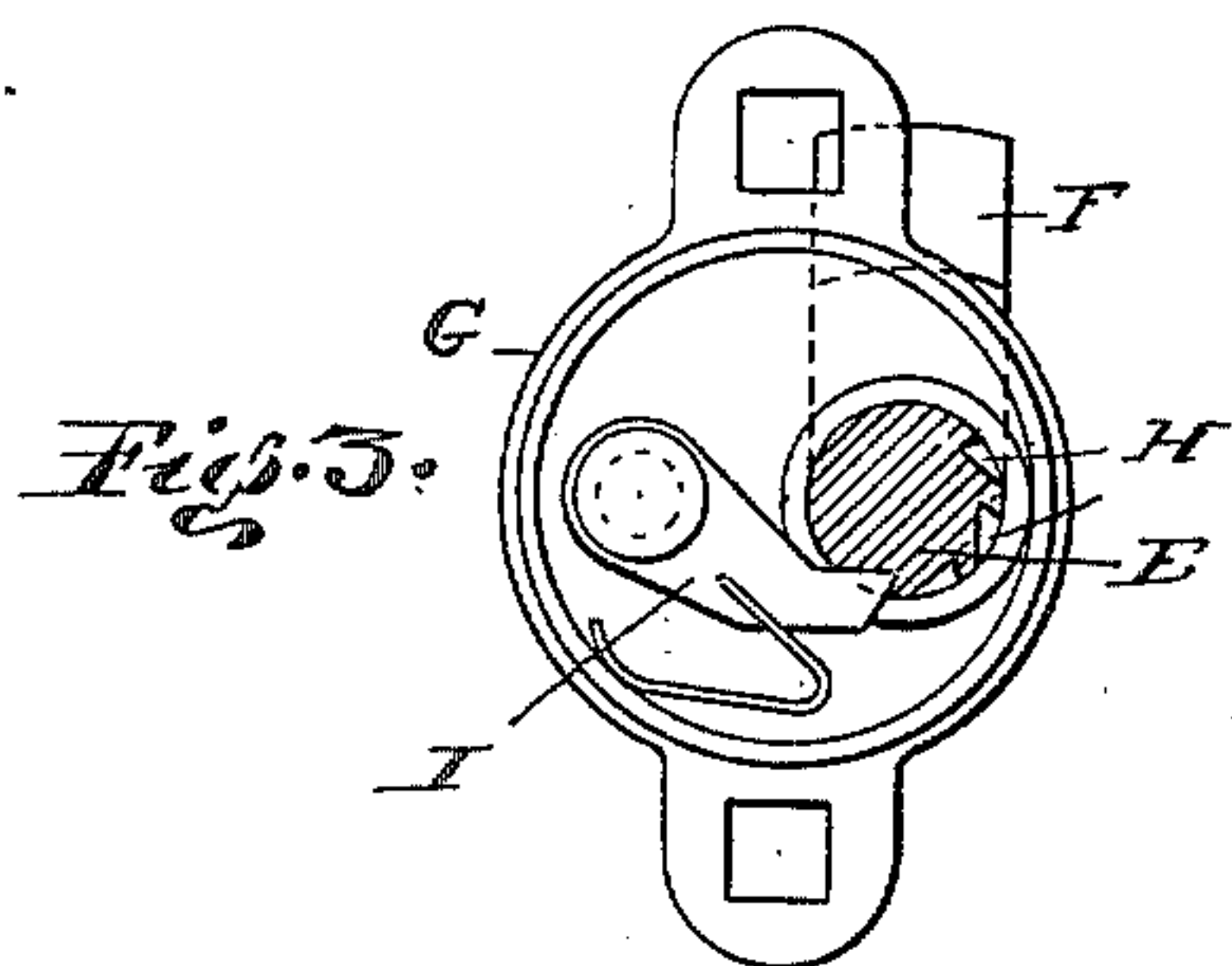
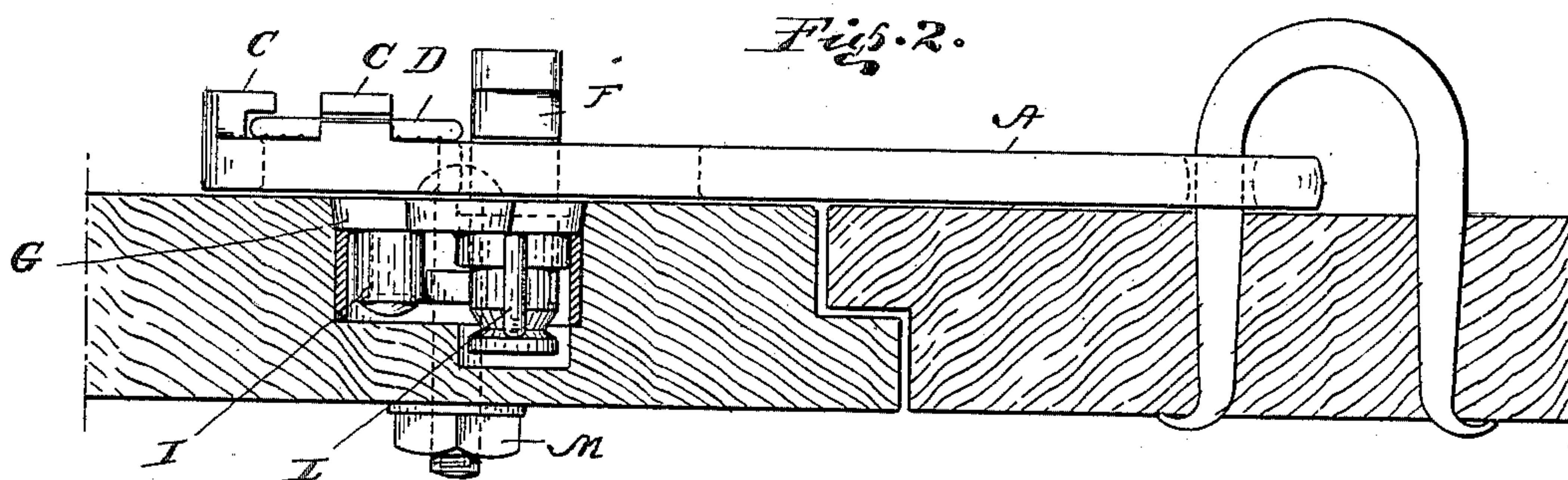
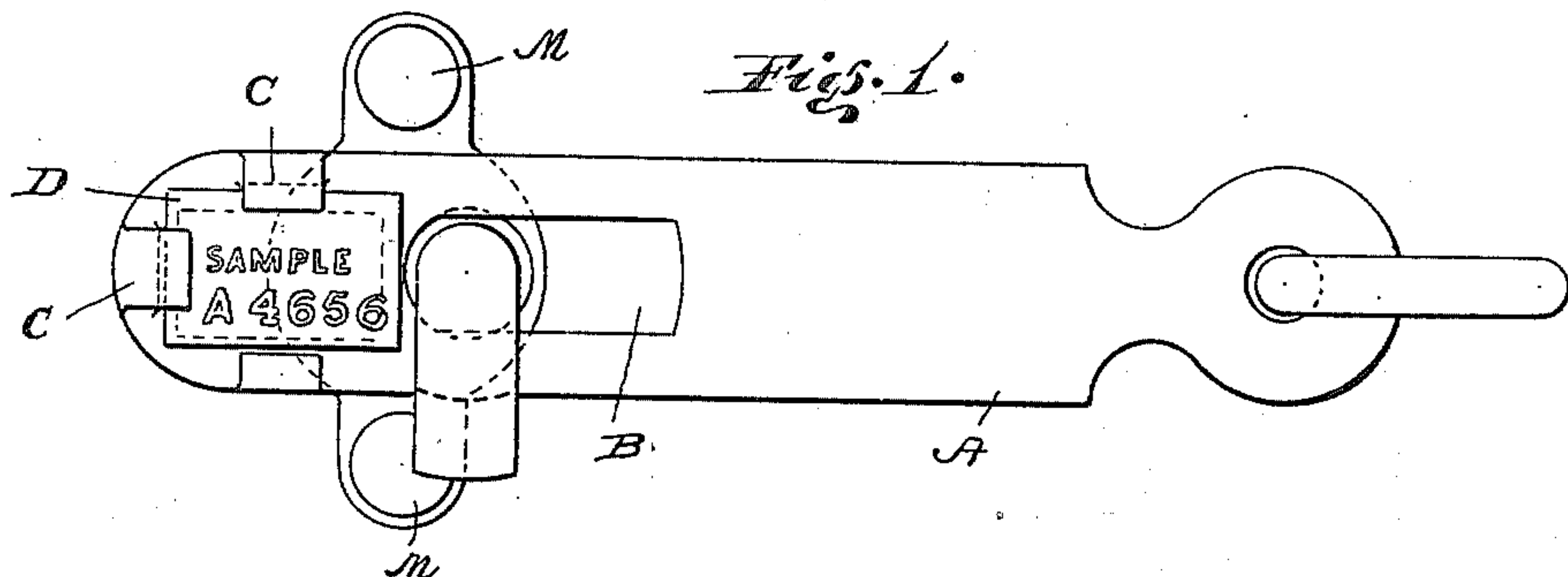
A. W. COFFIN.

Patented Nov. 6, 1900.

SEAL LOCK.

(Application filed June 12, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARTHUR W. COFFIN, OF SAN FRANCISCO, CALIFORNIA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 661,467, dated November 6, 1900.

Application filed June 12, 1900. Serial No. 20,072. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR W. COFFIN, a citizen of the United States, residing at Fourth and Townsend streets, in the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Seal-Locks; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

This invention has relation to seal-locks, and more particularly to that class of locks in which are employed a staple and hasp.

In the drawings, Figure 1 is a side elevation of a lock constructed in accordance with this invention. Fig. 2 is an edge view of the same, showing its application to a door and the jamb of the same, the door and the jamb being shown in section, as is also the containing-box of the staple-lock. Fig. 3 is a plan view of the containing-box, showing from the lower side the arrangement of the pawl and the ratchet-teeth in the barrel or pin of the staple, the said pin being shown in section. Fig. 4 is an elevation of the staple, showing in cross-sections the hasp and portions of the containing-casing for the staple-barrel.

Heretofore locks of this character have been complicated in construction and subject to damage by the formation of ice in the metal parts, and, further, from danger to the operators in opening the lock and in breaking the seal. It is to overcome these objections that is the object of this invention.

To facilitate the description of the construction embodying the invention, the various parts are designated by distinguishing-letters.

The hasp A is secured to the door or the door-jamb in the usual manner. In the forward end it is provided with an elongated staple-slot B. Forward of this slot B it is provided with lugs having overhanging portions C, which form a recess to receive the seal D and adapted to hold the same firmly in position. The seal D is constructed of any suitable material; but that which is preferred by me is a form of clay which after receiving the characters necessary to the des-

ignation of the station at which it is applied and of the serial number may be burned solid, and thereby rendered brittle. The seal D, when resting under the lugs C C, extends to the outer end of the elongated slot B and against the pin or barrel of the staple E. The staple E is constructed of a form substantially as shown in the drawings, having a rounded rotatably-mounted pin or barrel and an elongated head F, which is adapted to pass through the slot B. The lower portion of the pin of the staple E is extended through the perforation in the plate G and is suitably provided with a collar to hold it in position on the said perforation. Below the perforation in the plate G the pin of the staple E is provided with a series of recesses or teeth H, which in the rotation of the staple move in the path of the end of the pawl I, which is so set, as shown in Fig. 3 of the drawings, that the staple may be rotated in one direction only. For convenience of construction the lower end of the staple-pin is provided with an annular recess K, into which the end of the pin L is protruded after the barrel or pin of the staple has been extended through the perforation in the plate G, as shown in Fig. 4 of the drawings. The plate G is maintained rigidly in position on the door or the jamb, as the case may be, by means of the bolts M M, which are extended through the woodwork and secured by nuts on the inner side of the structure.

In the operation of the invention when it is designed to lock a door and seal the same the staple-pin E is rotated so that the head F will coincide with the slot B when the same is lowered into position against the plate G. In this position the head F extends entirely through the slot B and above the surface of the hasp A, so as to pass over the same. Before the hasp is placed in this position the seal D is slid into position under the lugs C C in such manner that as the hasp is lowered the inner end of the seal clears the staple E and when lowered in position rests in close proximity to or against the said pin of the staple, as shown in Figs. 1 and 2. In this position of the staple the hasp may be raised; but when the staple is rotated in the direction opposite from the pawl I the pawl I falls into one of the recesses H, preventing the re-

turn of the staple in the opposite direction. The first recess H is so located that when the head F is extended partly over the hasp the pawl I falls in the said recess and prevents the head F being returned over the slot B. In this manner is guarded against the partial locking of the door and the return of the head of the staple to such position as would permit the hasp to be raised. In the locked position the middle one of the recesses H is engaged by the pawl I. When thus engaged, the head of the staple is in the position shown in Figs. 1 and 2 of the drawings. When the third recess is engaged, the position of the head F would be such as would destroy the seal D. The head F, it will now be observed, when brought in the position shown in Figs. 1 and 2 is in the path of the seal D and cannot be rotated in the same direction to the position coinciding with the slot B unless and without the seal D being destroyed. Therefore the hasp cannot be raised off the staple E without first breaking the seal D; which is the object desired to be accomplished.

When in the operation of this invention it has become necessary to open the door and the seal has been broken by the party authorized, a new seal is replaced in position, the hasp lowered over the staple, and the staple rotated to its locked position. This operation immediately shows by the fact that the proper seal of the station at which the car was opened bears the designating-mark of that station.

If by accident or through malice the car be opened at a station or between stations, the destruction of the seal will be discovered at the next station. The handling of the business of railroading where this seal is employed is simple to that heretofore employed.

Having thus described this invention, it is claimed—

In a seal-lock, a hasp having an elongated slot therein, supports for a seal upon said hasp and between the outer end thereof and the outer end of said slot, a rotatably-mounted pin having recesses or teeth formed about its circumference and provided about its circumference with an annular recess, a head upon the outer end of said pin and adapted when turned in one position to pass through the slot in the hasp, but when turned in another position to partly extend across the hasp and thus lock said hasp in position, a pawl engaging the teeth in said pin, and a pin secured to a relatively-fixed member and entering the said annular recess, the said teeth and pawl being so arranged that rotation of the pin is permitted in one direction only; substantially as described.

In testimony whereof I have hereunto set my hand this 26th day of May, 1900.

ARTHUR W. COFFIN.

Witnesses:

E. F. MURDOCK,
G. W. MARSH.