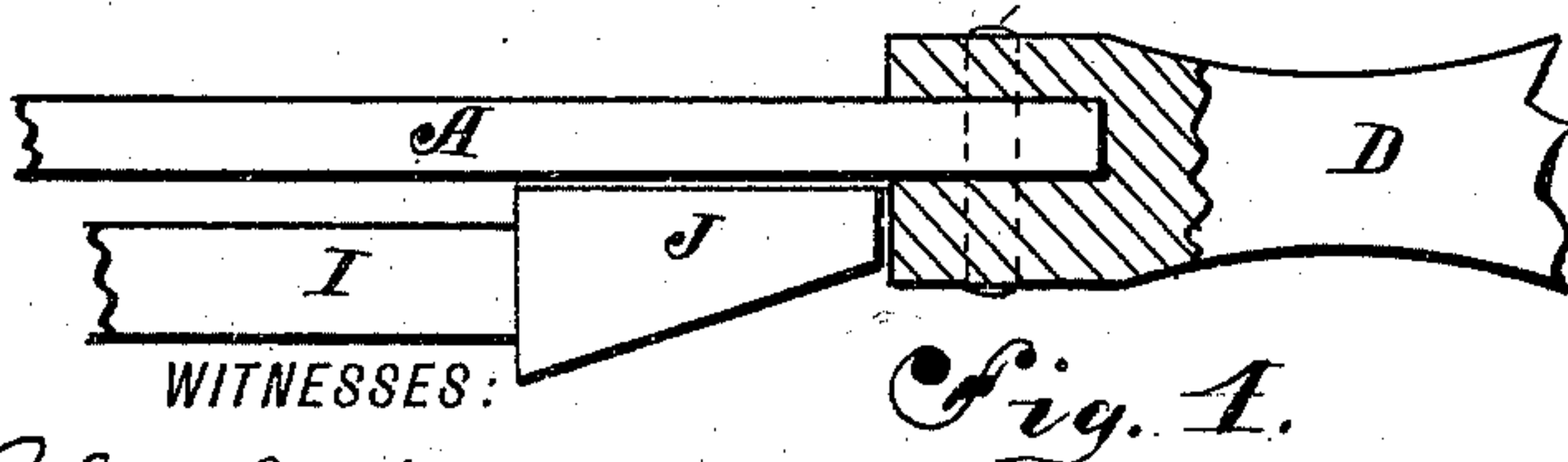
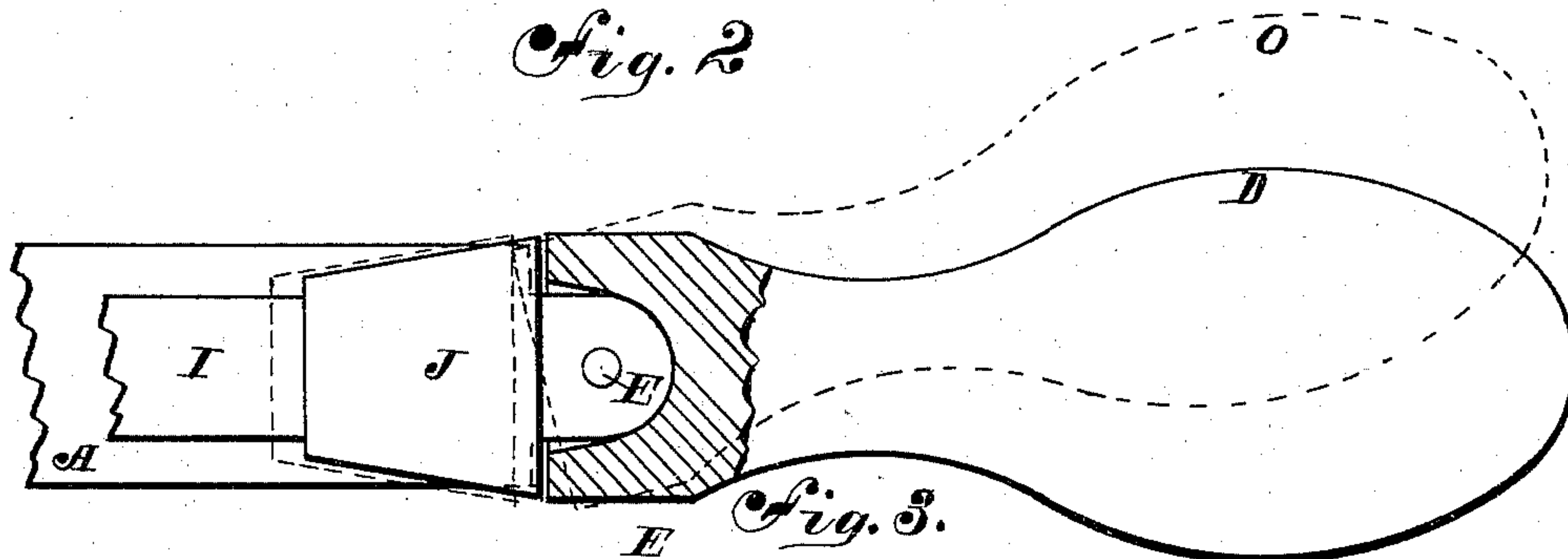
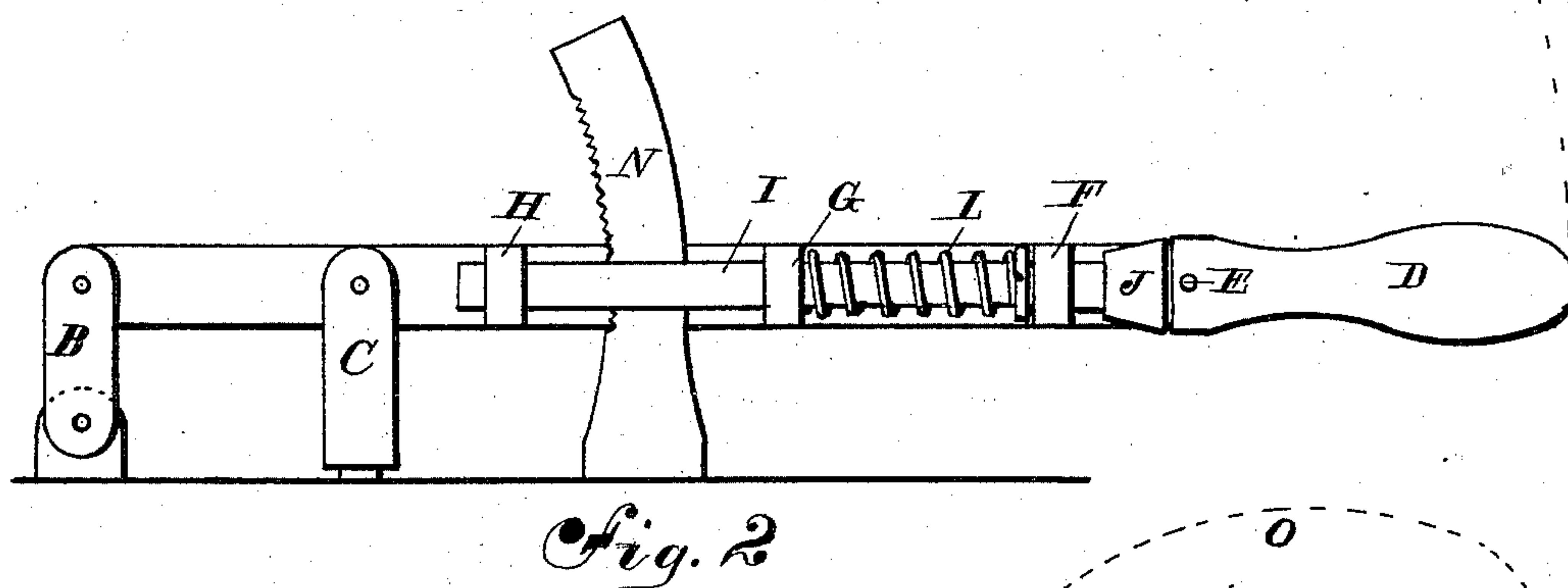
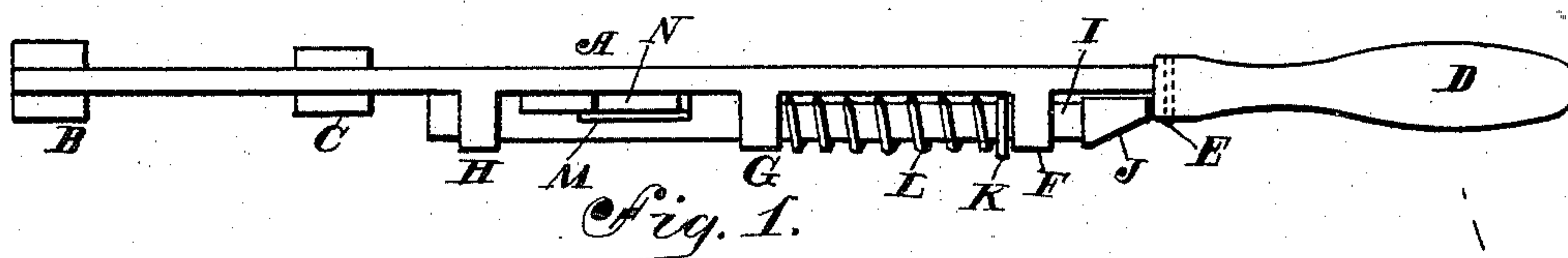


(No Model.)

F. W. KLINE.
THROTTLE VALVE LEVER.

No. 470,494.

Patented Mar. 8, 1892.



WITNESSES:

Chas J Gray
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INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

FRANK W. KLINE, OF NORTH GERMANTOWN, NEW YORK.

THROTTLE-VALVE LEVER.

SPECIFICATION forming part of Letters Patent No. 470,494, dated March 8, 1892.

Application filed July 8, 1891. Serial No. 398,791. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. KLINE, a citizen of the United States, and a resident of North Germantown, in the county of Columbia and State of New York, have invented certain new and useful Improvements in Throttle-Valve Levers, of which the following is a specification.

The object of my present invention is to provide a simple and efficient throttle-valve lever; and it consists of a lever having a handle jointed thereto, and on one side of the lever a sliding bar provided with teeth which engage with a curved serrated arm, and this sliding bar has on its outer end a head which engages with the inner end of the hinged handle, whereby the sliding bar or latch at the initial movement of the handle in either direction will move the latch inwardly and cause its inner toothed end to disengage from the curved serrated bar, and the moment the hand is removed from the handle the spring will throw back the handle and cause the teeth to engage and hold the lever in the position to which it was moved, as will now be set forth in detail.

In the accompanying drawings, Figure 1 is a front view of my improved throttle-valve lever; Fig. 2, a view of the under side; Fig. 3, a view of a portion of the under side enlarged and partially cut away in the handle to show construction, and Fig. 4 a front or edge view of same with portion of the handle cut away.

In constructing my invention I hinge the inner end of the lever A to the usual links B, attached to a stationary object, and make the ordinary connection to the valve by means of the connecting-rod C.

To the outer end of the lever A, I hinge a handle D, so that it is capable of a slight swinging motion back and forth on the pivot-pin E. On the under side of this lever I place three keepers F G H to receive a sliding bar or latch I. The outer end of this latch has a diverging head J, which rests against the inner end of the handle D, and on the sliding latch I, inside of the first keeper F, is a collar J, between which collar and the middle keeper G is a coiled spring L to hold the latch-head J in contact with the hinged handle D.

Between the keepers G H the latch I has

a cut-away or gained portion M on the side facing the lever A, through which the serrated segment N passes. The lever thus constructed is capable of various modifications, such as making the lever A tubular and enclosing the latch and spring inside; but in such a case the handle D would be hinged thereto in the manner here shown substantially and the other parts would be constructed the same as shown herein in principle, although differing somewhat in details.

In operation the engineer grasps the handle D and moves it forward or backward. In doing so the initial movement turns the handle to the position indicated in dotted lines O, Fig. 3. As a result, the contact edge of the inner end of the handle throws in the latch I, causing the teeth of the latch to be disengaged from the serrated edge of the segment N. The next movement of the handle moves the lever A itself, and when the proper throw of the lever is obtained the initial motion of releasing the handle causes the spring L to act and thus return the handle to its normal position, as shown in Figs. 2 and 3.

What I claim as new is—

1. A throttle-valve lever composed of a lever with a handle hinged thereto at its outer end, a longitudinally-movable latch on one side with a flaring head engaging with the inner end of the hinged handle, a spring for holding the latch in contact with the hinged handle, and a serrated segment engaging with the toothed end of the latch, substantially as set forth.

2. A throttle-valve lever composed of a lever with a handle hinged thereto at its other end, in combination with a longitudinally-movable latch sliding in keepers on one side, with the flaring head engaging the handle, a spring for holding said latch in contact with the handle, a serrated segment engaging with the toothed end of the latch, and a rod for connecting said lever with the operating-valve, substantially as set forth.

Signed at North Germantown, in the county of Columbia and State of New York, this 2d day of July, A. D. 1891.

FRANK W. KLINE.

Witnesses:

JOHN B. SOWN,
JOSIAH COONS.