

No. 678,252.

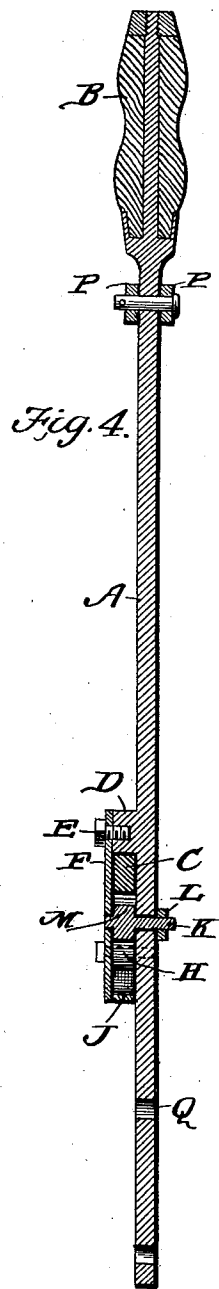
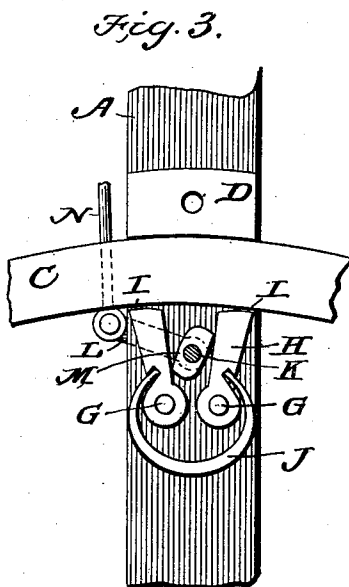
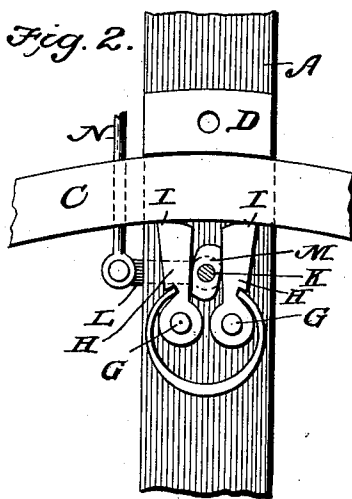
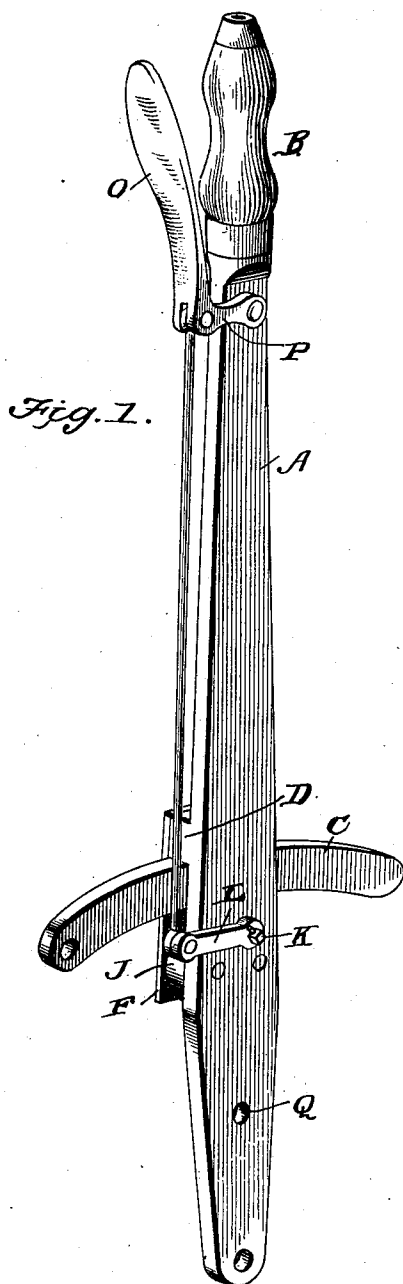
Patented July 9, 1901.

P. F. HANDLEY.

HAND LEVER.

(Application filed Feb. 18, 1901.)

(No Model.)



WITNESSES:

A. M. Magruder.
M. C. Mayhew.

INVENTOR

P. F. Handley.

BY

Attorneys

UNITED STATES PATENT OFFICE.

PETER F. HANDLEY, OF JACKSONVILLE, ILLINOIS.

HAND-LEVER.

SPECIFICATION forming part of Letters Patent No. 678,252, dated July 9, 1901.

Application filed February 16, 1901. Serial No. 47,672. (No model.)

To all whom it may concern:

Be it known that I, PETER F. HANDLEY, a citizen of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, have invented a new and useful Improvement in Hand-Levers, of which the following is a specification.

This invention relates to improvements in hand-levers; and one object is to produce an improved construction of lever having simple and improved means for locking it in its adjustment.

Another object is to provide simple and improved means for readily operating the locking means for the purpose of releasing the lever.

With the above objects in view the invention consists in the novel features of construction hereinafter fully described, particularly pointed out in the claims, and clearly illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of a lever constructed in accordance with my invention; Fig. 2, a face view with the covering-plate broken away, showing the position of the parts when the lever is locked; Fig. 3, a similar view showing the position of the parts when the locking means have been removed to release the lever, and Fig. 4 a longitudinal sectional view.

Referring now more particularly to said drawings, A designates the lever, having at its outer end a handle portion B and pivotally supported at its inner end. Said lever is guided by a segmental friction-arm C, upon which it moves and to which it is clamped at various points to hold it in its adjustment. The lever is formed upon one of its faces with a shoulder D, which has its inner face formed concave to move upon the outer side of the friction-arm. Secured to said shoulder by a screw or bolt E is a cover-plate F, which extends inwardly toward the pivotal end of the lever and serves to cover the locking mechanism.

Pivotally mounted upon studs G, extending through plate F and the lever and disposed transversely thereof, are clamping members H, which at their outer ends are formed with cam portions I to tightly contact with the inner side of the segmental arm C. Each

of the clamping members is formed adjacent to its pivotal point with a notch to receive one of the ends of a substantially U-shaped spring J, which serves to force said clamping members toward each other and cause their engaging ends to wedge against the under side of said arm, so as to hold the lever at the desired point upon the arm.

Mounted in the plate F and the lever and extending transversely thereof is a shaft K, having upon its outer end, which projects to the opposite side of the lever, a crank-arm L. Said shaft K carries in the space between plate F and the lever a double cam-block M, having a portion projecting to each side of the shaft and disposed between the two clamping members.

Pivotally secured at its inner end to the outer end of crank L is a rod N, which extends outwardly and at its outer end is pivotally connected with a thumb-lever O, supported at one side of lever A by suitable arms P.

When the thumb-lever O is moved inwardly toward the handle portion B of lever A, said rod N is moved outwardly, drawing upon crank-arm L and rocking shaft K, which causes the double cam-block to force the clamping members apart, with their cam-engaging portions out of contact with the under side of the segmental friction-arm C, thus releasing the lever. As soon as the thumb-lever O is released the spring J forces said clamping members toward each other and into contact with said arm C, locking the lever in its adjustment.

The valve or brake rod or other connection between the lever and the mechanism to be operated thereby would be pivotally attached to the lever at the point Q, which is intermediate the pivotal point of the lever and the segmental arm C.

My improved lever may be used in many connections—as, for instance, as a throttle-lever for locomotives, in which connection it is especially effective and convenient.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a segmental friction-arm, of a lever pivotally mounted at its inner end, clamping members pivoted to said

- lever and adapted to engage said friction-arm, a bow-spring holding said members normally in engagement with said arm, a rock-shaft extending between said members, a
5 cam upon said shaft, a crank-arm carried by said shaft, a thumb-lever pivoted to said lever at its outer end, and a rod pivotally connecting said thumb-lever and crank-arm, substantially as described.
- 10 2. The combination with a segmental friction-arm, of a lever pivotally mounted at its inner end, clamping-dogs pivoted to said lever at their inner ends and engaging the inner
15 side of the friction-arm at their outer ends and formed near their pivotal points with notches, a substantially U-shaped spring
- having its ends seated in said notches and holding said dogs normally in engagement with the arm, a shaft mounted between said dogs and carrying a cam-block extending 20 transversely thereof and adapted to separate the dogs and cause the same to disengage the friction-arm, a crank-arm upon said shaft, a thumb-lever pivoted at the outer end of the lever, and an operative connection between 25 said thumb-lever and said crank-arm, substantially as described.

PETER F. HANDLEY.

Witnesses:

JOHN KILORAN,
HARRIE D. TAYLOR.