(No Model.)

L. ROBERTS.

HEAD GATE LOCK.

No. 453,706. Patented June 9, 1891.

Fig. 1.

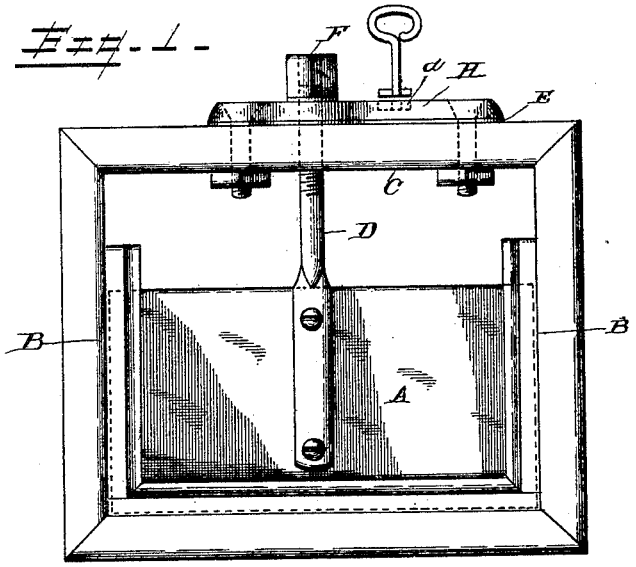


Fig. 2.

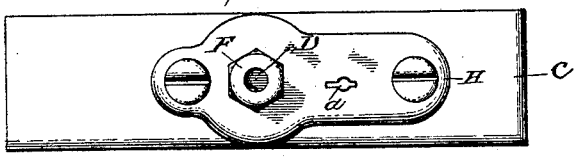


Fig. 4.

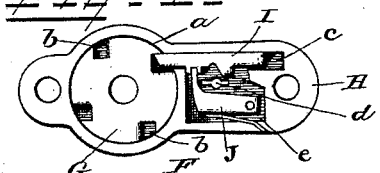
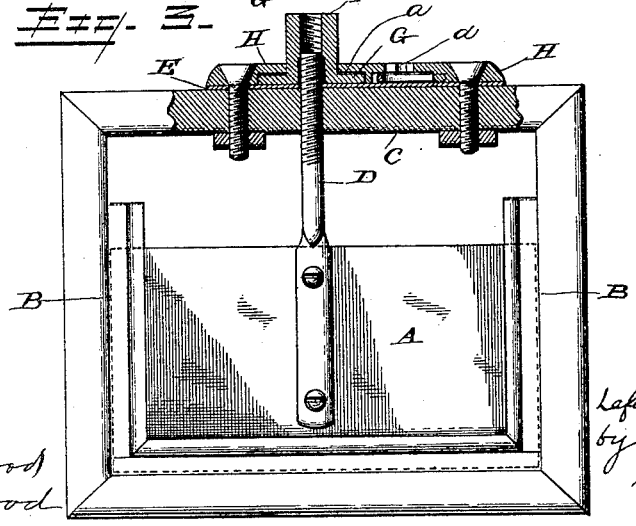


Fig. 3.



Witnesses
A. B. Blackwood
J. H. Blackwood

Inventor
Lafayette Roberts,
by Soule and Co.,
his Attorneys.

UNITED STATES PATENT OFFICE.

LAFAYETTE ROBERTS, OF LONGMONT, COLORADO.

HEAD-GATE LOCK.

SPECIFICATION forming part of Letters Patent No. 453,706, dated June 9, 1891.

Application filed December 9, 1890. Serial No. 374,056. (No model.)

To all whom it may concern:

Be it known that I, LAFAYETTE ROBERTS, of Longmont, Boulder county, Colorado, have invented certain new and useful Improvements in Head-Gates, of which the following is a specification.

This invention relates to head gates such as are employed in sluiceways and canals; and it consists in locking mechanism therefor, which prevents the movement of the gate by unauthorized persons.

The improvements are illustrated in the accompanying drawings, wherein—

Figure 1 is a front view of a head-gate; Fig. 2, a top view thereof, and Figs. 3 and 4 views of parts in detail.

A is the head-gate, which moves vertically in suitable ways in vertical beams B B, and C is a cross-bar above the vertical beams. Attached to the head-gate is a raising and lowering screw-rod D, which extends through the cross-bar and through a metal bearing-plate E thereon. Seated on this plate E is a raising and lowering nut F, internally threaded to engage the screw-rod D. This nut F has a horizontal annular flanged base-plate G, which rests and turns on the plate E. Covering this flange G is a cover H, which is securely bolted to the cross-bar D. The nut F extends through an aperture in this cover, and the cover is recessed on its under side at *a* to permit the flanged base G to turn freely. By applying a wrench to the nut F the head-gate is raised or lowered.

To lock the head-gate in position, the flanged base G is provided on its periphery with a plurality of locking-notches *b b*, with which a sliding bolt I engages. The bolt works back and forth on the plate E in a guide-recess *c* in the cover H. The bolt is operated by a key which is inserted through a key-hole *d* in the cover, and is held in its open and closed positions by a spring-tumbler J, which is held in proper position in a recess *e* in the cover H.

I claim as my invention—

1. A head-gate, its operating screw-rod, and the nut engaging said screw-rod, said nut having a flanged base having on its periphery a plurality of locking-notches, in combination with a sliding locking-bolt which engages said notches to lock said nut, substantially as set forth.

2. A head-gate, a cross-bar above the same, a bearing-plate E on the upper surface of said cross-bar, a screw-rod secured to said head-gate and extending through said cross-bar and bearing-plate, and a nut engaging said screw-rod and having a flanged base which seats and turns on said bearing-plate, said flanged base having in its periphery a plurality of locking-notches, in combination with a sliding bolt which slides on said bearing-plate and co-operates with said notches, a spring-tumbler for holding said bolt in its several positions, and a cover which fits over said flanged base, bolt, and tumbler, said cover having an aperture through which said nut and said screw-rod extend and having on its under side guide-recesses for said flanged base-bolt and tumbler and having a key-hole, and said cover being secured to said cross-bar, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

LAFAYETTE ROBERTS.

Witnesses:
LOWELL H. SMITH,
J. K. SWEENY.