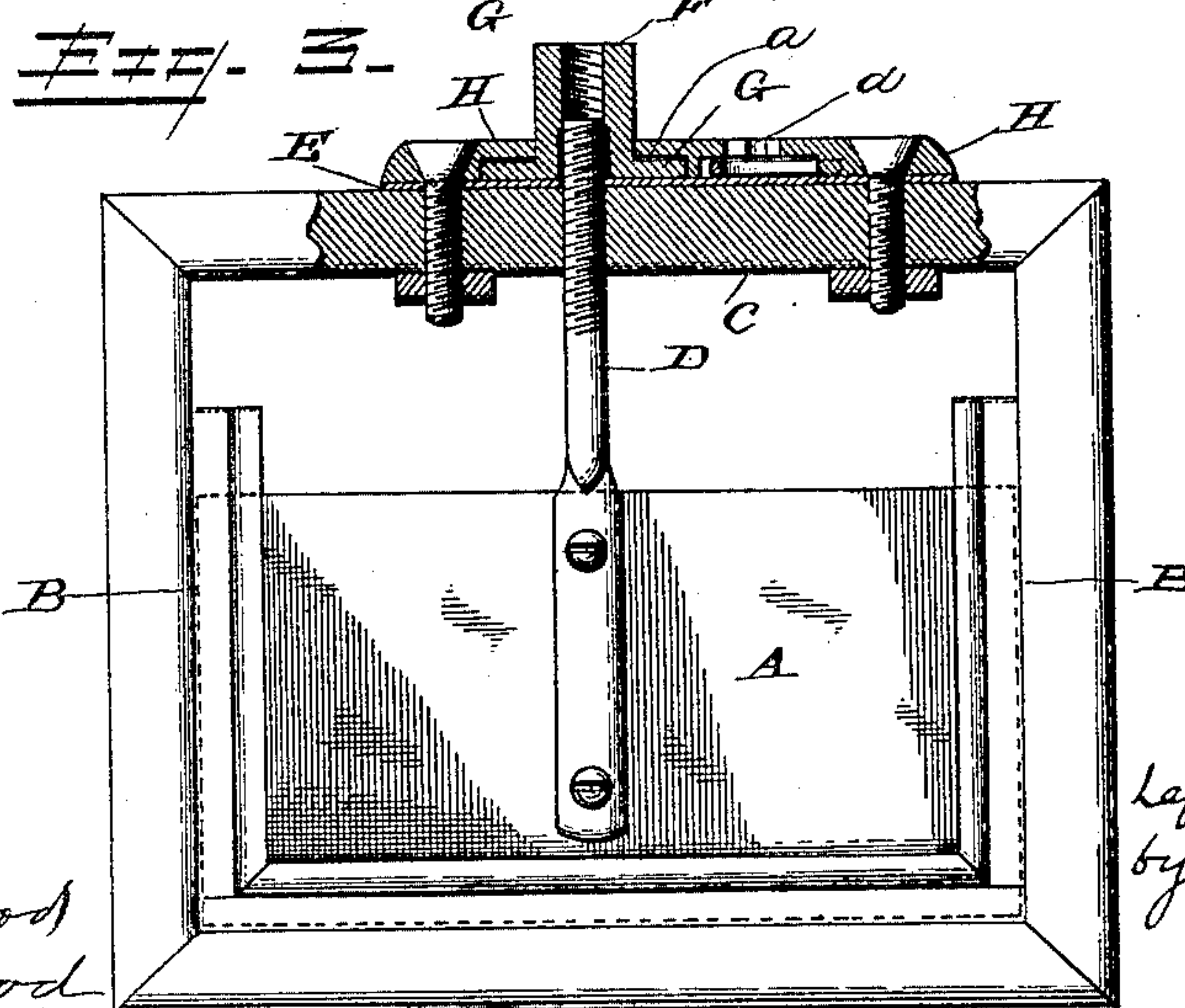
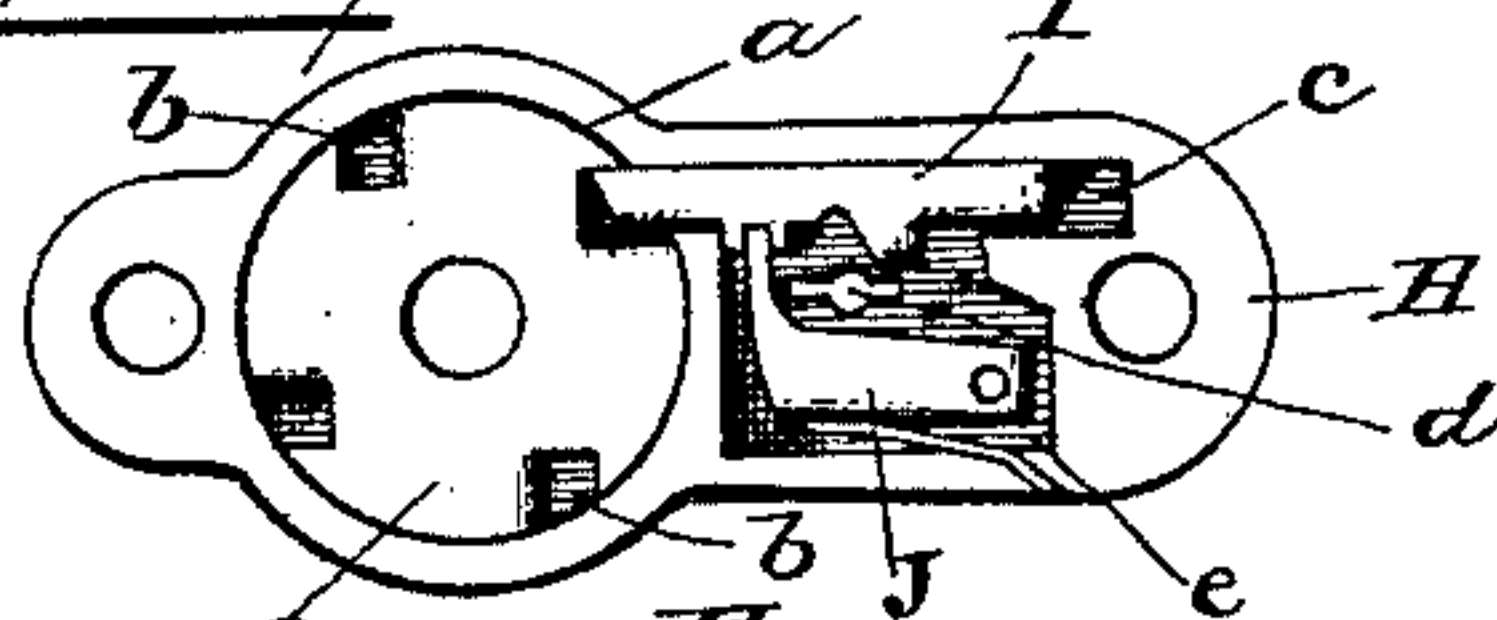
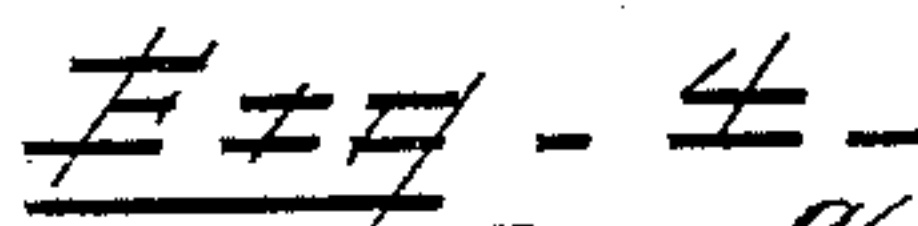
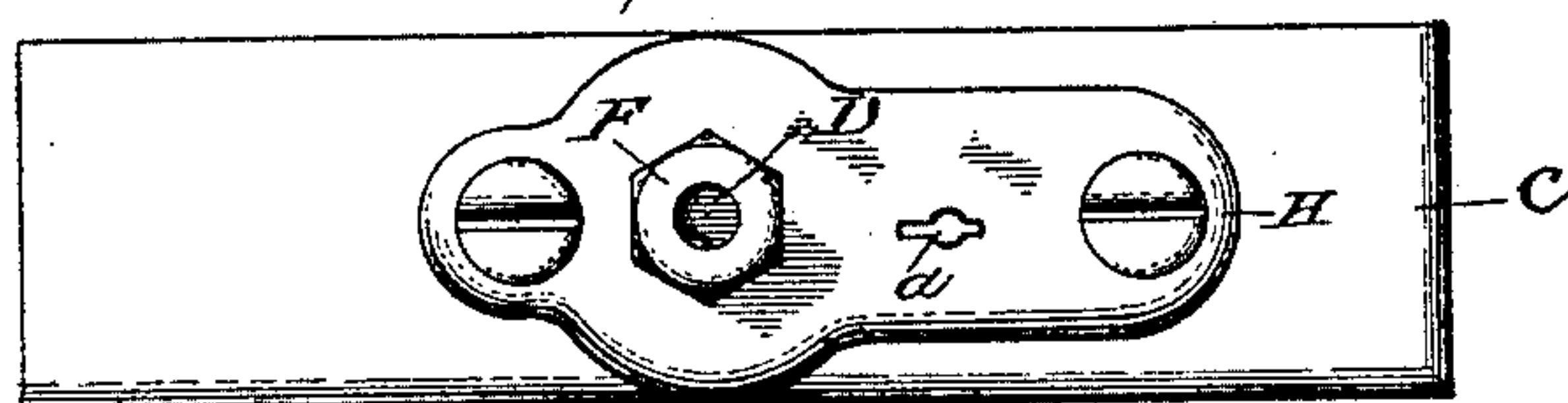
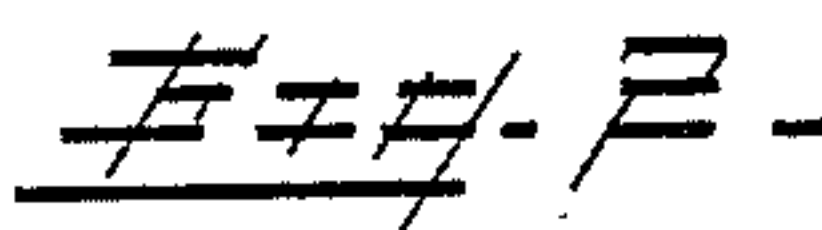


L. ROBERTS.
HEAD GATE LOCK.

Patented June 9, 1891.



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. SWEENEY.