No. 728,729. PATENTED MAY 19, 1903.

A. C. LADD.

GALLEY LOCK.

APPLICATION FILED AUG. 21, 1901.

NO MODEL.

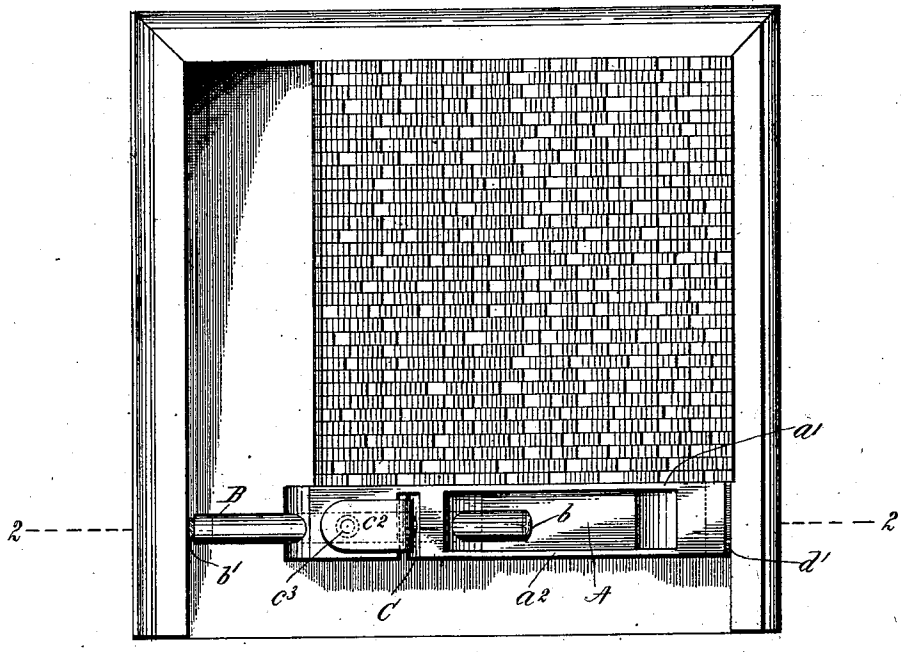


Fig. 1.

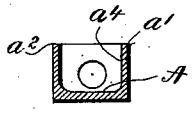


Fig. 4.

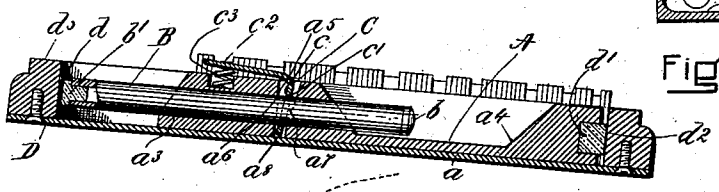


Fig. 2.

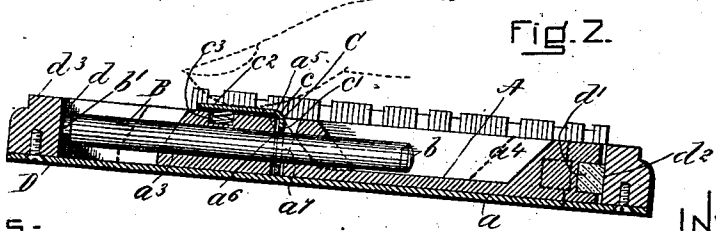


Fig. 3.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 728,729. Patented May 19, 1903.

UNITED STATES PATENT OFFICE.

ALLSTON C. LADD, OF CAMBRIDGE, MASSACHUSETTS.

GALLEY-LOCK.

SPECIFICATION forming part of Letters Patent No. 728,729, dated May 19, 1903.

Application filed August 21, 1901. Serial No. 72,756. (No model.)

To all whom it may concern:

Be it known that I, ALLSTON C. LADD, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Galley-Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

My invention relates to a device for locking type held in galleys.

It consists of a holder which serves to support the end of a column of type and also a bolt for fastening the device to the galley and means for locking the bolt to the holder.

In the drawings, Figure 1 represents a plan view of a part of a galley, a column of type thereon, and the holder in position as locked to the galley and as supporting the outer end of a column of type. Fig. 2 is a view in cross-section of the galley and in longitudinal section of the holder upon the line 2 2 of Fig. 1, these parts being shown in the inclined position which they bear on the case or in the galley-rack. Fig. 3 is a view of the same parts upon the same section, showing the holder in dotted outline in its released position. Fig. 4 is a view in cross-vertical section of the holder alone, taken through the bolt-recess.

Referring to the drawings, A represents the holder. It is made of wood or any other suitable material. It has a flat bottom a to rest upon the bottom of the galley, the straight parallel sides a' a^2, which act as supports for the ends of columns of type against which the holder may be placed, the longitudinal bolt-hole a^3 extending from a recess a^4, opening from the top of the holder, and a narrow recess a^5 extending inward from the side a^2, preferably of the full thickness of the holder and extending across the bolt-hole and which is shaped to receive and coöperate with the bolt-lock, to be described.

B is the bolt. Preferably it is of tubular metal, but not necessarily so. It is of any desired length, generally very nearly that of the holder. It is movable outward from the holder to make engagement with a galley side by pressure of the thumb or finger exerted in the recess a^4 against its inner end b. It is automatically locked in any position by the lock C, which comprises a flat metal plate c, having across it a hole c', slightly larger in diameter than the diameter of the bolt, and which plate is so combined with the recess a^5 as to be slightly movable therein sufficient to cause it to occupy two positions with respect to the bolt—viz., a position practically at right angles to the bolt when it is moved outward from the holder and a position slightly inclined to the bolt when the bolt is at rest. Its first position is automatically produced by the bolt itself upon its outward movement. Its second or locking position is preferably produced by means of a spring, which acts to move it to the inclined position and to hold it in such position. To release the bolt, the lock must be moved by hand, and for this reason it is provided with an extension c^2 beyond the recess a^5 and preferably at a right angle thereto in order that its may not project much above the top of the holder. This position of the operating extension or part permits the spring above spoken of and lettered c^3 to be applied as represented in Fig. 3—viz., to be partly contained in a hole which secures its inner end and to bear against the under surface of the extension. The operating extension may have other position and the spring may be differently applied, if desired.

The recess a^5 is constructed to assist the operation of the lock by being provided with the vertical wall a^6 and the inclined wall a^7, which very nearly come together at their lower ends and there form a fulcrum point or bearing a^8 for the lower end of the lock-plate and upon which it swings from a vertical unlocked relation to the bolt to an inclined locked relation. The vertical wall acts as a means for holding the plate while the bolt is being pushed outward from the recess. The recess gradually increases in width from its lower end upward and is sufficient in this respect to provide for the movements of the locking-plate.

The inner end b of the bolt may be closed and rounded to provide a rest for the thumb or finger used in pushing it, and its outer end is armed with rubber b' or other frictional or resilient material, which acts in two capacities—one to cause the end of the bolt to bear with friction against the side d of the galley

D and the other as a take-up for any slight backward movement of the bolt after it has been adjusted and which maintains a constant backward stress or pressure upon the bolt, which in turn is exerted by the bolt against the lock. There is thus always present a yielding relation between the lock and the side of the galley. This last-named effect may be obtained by mounting a cushion d', of rubber or other resilient material, in the end of the holder opposite that from which the bolt extends and which projects therefrom and comes into contact with the wall d^2 of the galley.

The operation of the locking device is as follows: The column of type having been arranged in the galley, the type-locking holder is placed upon the bottom of the galley, with its end d' against the lower side of the galley against the exposed end of the column of type, which then also rests on the lower edge of the galley, the last line of type or lead being in contact with the side of the holder, which is longer than the column is wide and which is high enough to provide a support for almost the entire height of the type. The holder in this position is then locked to the galley by moving the bolt outward from it, preferably by means of the thumb or finger introduced into the recess a^4 to press the bolt end b until its outer end is brought into firm contact with the inner surface of the upper wall d^3 of the galley, thereby causing a frictional relation to be established between the end of the bolt and the wall and also compressing the interposed resilient take-up sufficiently to provide a constant tension upon the bolt, bolt-holder, and lock between the sides of the galley. The galley is always held on the case or in the galley-rack in an inclined position, so that the column of type always rests against the lower of its two walls. Figs. 2 and 3 represent it as so inclined. To release the holder, the lock is moved, preferably, by pressing the finger upon the extension c^2 from the slightly-inclined position to the vertical position, and this is immediately followed by a pushing movement of the finger upon the holder acting through the said extension, by which the holder is moved toward the bolt sufficiently to release the holder from the sides of the galley. (See Fig. 3.)

The holder is adapted to be used in any part of the galley and is adjustable to galleys varying in width and for the purpose of holding type by either of its sides in any part of the galley.

The locking device is such that the outward movement of the bolt serves to automatically release it, thus insuring the easy adjustment of the holder to a locked position in the galley without requiring that the lock be moved by hand. The lock also acts to automatically lock the bolt into any position to which it may be moved and to hold it so locked and until released by a hand movement.

The holder serves to keep the type in the galley in compact and orderly position and protects it against being pied when the galley is handled.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A type-holder for galleys comprising a holder having a type-support, a bolt carried thereby and adjustable therein and means for so locking it to the holder that it makes locking engagement with the galley side.

2. A type-holder for galleys comprising a holder, a bolt carried thereby, and adjustable therefrom, and means for so locking the bolt to the holder that as the same is projected to any degree of adjustment a yielding but constant automatic locking engagement is maintained between bolt and holder substantially as described.

3. A type-holder for galleys comprising a holder, a bolt carried thereby and adjustable therein, and a bolt-lock automatically released by movement of the bolt in one direction and automatically locking the bolt when at rest so that it makes an automatic locking engagement with the galley side.

4. A type-holder for galleys comprising a holder, a bolt carried thereby and adjustable therein, a lock for automatically locking the bolt to the holder, adapted to be released by the bolt upon its outward movement, to automatically engage the bolt and hold it when at rest so that it makes an automatic locking engagement with the galley side, and adapted to be released by hand to permit of the reverse movement of the bolt.

5. A type-holder for galleys comprising a holder, a bolt carried thereby, and adjustable therefrom, and means for locking the bolt to the holder that when the end of the bolt is forced against the galley side it may be held there at the end of any degree of projection, the said bolt and holder having frictional engaging ends.

6. A type-holder for galleys comprising a holder, a bolt carried thereby and adjustable therefrom, a lock to permit the movement of the bolt to any degree of adjusted position and to then automatically engage it to lock it so that it makes an automatic locking engagement with the galley side, and a yielding take-up for maintaining a yielding pressure upon the lock while the holder is locked to the galley.

7. A type-holder for galleys comprising a block having straight parallel sides, a flat bottom, a long recess opening from the top and a longitudinal hole extending from one end of said recess, a bolt contained in said hole, to be movable therein, one end of which extends into said recess, and a lock for locking the bolt to the holder.

8. A type-holder for galleys comprising a holding-block having straight parallel sides, a flat bottom, a long recess open from the top, a longitudinal hole from one end of said recess to the end of the holder, a recess extend-

ing across a part of the holder between the first-named recess and the end of the holder, having bearing or fulcrum points for a lock, and a locking-plate contained in said recess, movable therein as specified and having a hole in line with the hole in the block and a bolt in the hole of the block extending through the hole in the locking-plate into said first-named recess.

9. A type-holder for galleys comprising a block or holder to rest on the bottom of the galley and to support the end of a column of type, having a recess for holding a locking-plate and providing a fulcrum and a stop therefor and having a hole through which the bolt extends and is movable, the said bolt carried by said holder and adjustable therefrom, and a spring to act against said locking-plate to move it and hold it in a locking engagement with said bolt.

10. A type-holder for galleys comprising a block or holder, a bolt contained therein and adjustable therefrom, a cross-recess cut from said holder for the retention of a locking-plate, the said recess being so cut that its walls will afford stops securely holding the locking-plate, but still permit of its rocking movement that the said plate may be brought into a free or cramped position with relation to the said bolt passing through the same, depending as it unlocks it from, or locks it to the holder aforesaid, said locking-plate, a spring for moving the locking-plate and holding it in a normal cramped position to engage the lock, and means for moving the lock by hand to an unlocking relation to the bolt substantially as described.

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Witnesses:
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