

(No Model.)

A. STEWART.
PADLOCK.

No. 345,187.

Patented July 6, 1886.

FIG. 1.

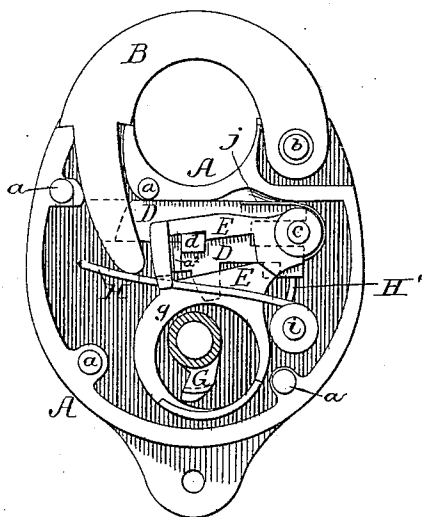


FIG. 2.

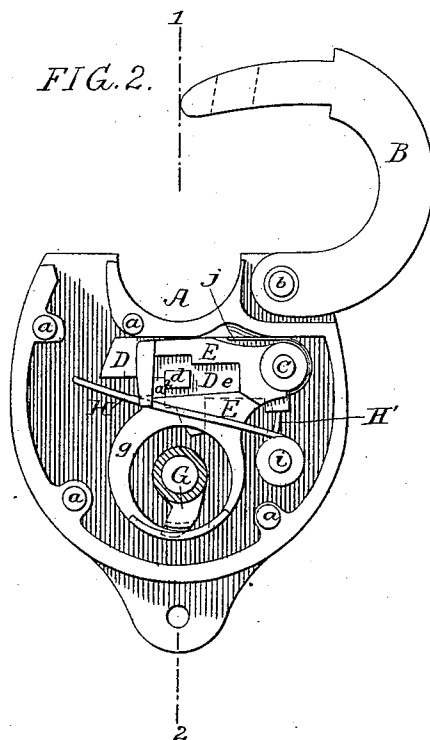


FIG. 3.

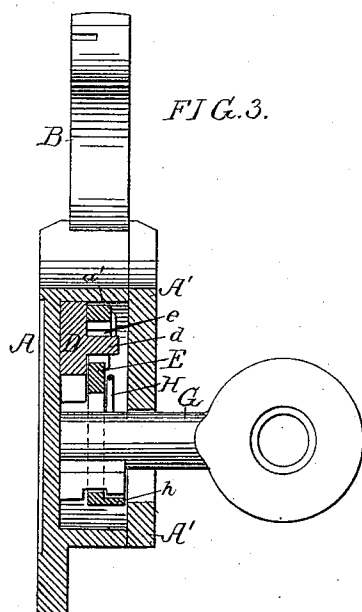
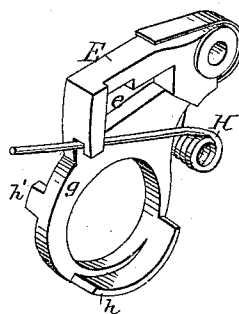


FIG. 4.



Witnesses—

William G. Davis
James F. Robin

Inventor—
Arthur Stewart—
by his Attorneys
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UNITED STATES PATENT OFFICE.

ARTHUR STEWART, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE STEWART & MATTSON MANUFACTURING COMPANY, OF SAME PLACE.

PADLOCK.

SPECIFICATION forming part of Letters Patent No. 345,187, dated July 6, 1886.

Application filed September 8, 1885. Serial No. 176,466. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR STEWART, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Padlocks, of which the following is a specification.

My invention consists of certain improvements in padlocks, in which the key is retained in the lock while the shackle is open, as fully described hereinafter.

In the accompanying drawings, Figure 1 is a face view of a lock embodying my improvement, with the cover-plate removed, and showing the bolt in engagement with the shackle. Fig. 2 is a view similar to Fig. 1, showing the shackle released. Fig. 3 is a section on the line 1 2, Fig. 2; and Fig. 4 is a detached perspective view of the tumbler.

A is the body or casing of the lock, made in the usual manner, and having projecting pins *a* for attaching the face-plate A' thereto. B is the shackle, hinged to the body A at *b*.

The working parts of the lock consist of a sliding bolt, D, and a tumbler, E, and springs, as hereinafter described.

In the drawings I have shown only one tumbler; but it will be understood that two or more may be used when necessary.

The front end of the bolt D is fitted between the upper rim, *a'*, of the casing and a lug, *a*², and the rear end of the bolt is slotted, so as to pass over the pivot-pin *c*, which acts as a guide, as shown by dotted lines, Fig. 1.

The tumbler E is pivoted to the casing by the pin *c*, and has an irregular opening, *e*, through which a lug, *d*, on the bolt D projects, and operates the same as in ordinary locks of this class.

A spring, H, secured to the lock-casing at *i* acts against the nose of the shackle, and also against the tumbler when the shackle is released by the bolt. A spring, H', which may be made of the same piece of wire as the spring H, acts on the rear end of the bolt to force it into the orifice in the nose of the shackle.

A small spring, *j*, attached to the tumbler E, bears against the rim *a'* of the case, and tends to keep the tumbler down when the spring H is pressed down by the nose of the shackle.

Extending from the lower portion of the tumbler E is a projection, *g*, made circular in

the present instance, and which surrounds the key-hole, and is of such proportion in respect to the key that when the lock is closed the key is free to be removed, as the lower edge of the projection is down out of the path of the bit of the key; but as soon as the key is inserted into the lock and turned so as to raise the tumbler to release the shackle the tumbler assumes the position shown in Fig. 2, so that the portion *h* of the projection will engage with the bit of the key and prevent the latter from being withdrawn, and the spring H will keep the tumbler elevated until the shackle-nose depresses the spring. The portion *h* of the projection may either act on the top of the bit or in one of the grooves, as shown in Fig. 3. This depends greatly on the style of lock and key, as the retaining device can be made to suit the key.

I form on the back of the projection *g* a lug, *h'*, which, in connection with the portion *h* on the front, keeps the tumbler in place and prevents it from being bent out of position.

I am aware that key-retaining padlocks have heretofore been constructed in which springs to act on the shackle have been combined with key retaining tumblers; but in such cases one arm of the spring would bear on the shackle, while another arm would bear on the tumbler, these two arms constituting independent springs, like the springs H and H' in my lock, so that the closing of the shackle cannot affect the action of the spring bearing upon the tumbler. In my padlock, however, it is one and the same spring which acts upon both the nose of the shackle and upon the tumbler, so that the other arm of the same piece of wire can be used as a separate spring to operate the bolt.

I claim as my invention—

A lock having a shackle, bolt, and tumbler, the tumbler being provided with a key-retaining projection, and a spring, H, bearing on both the tumbler and the nose of the shackle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR STEWART.

Witnesses:

W. HENRY MATTSON,
HENRY HOWSON.