

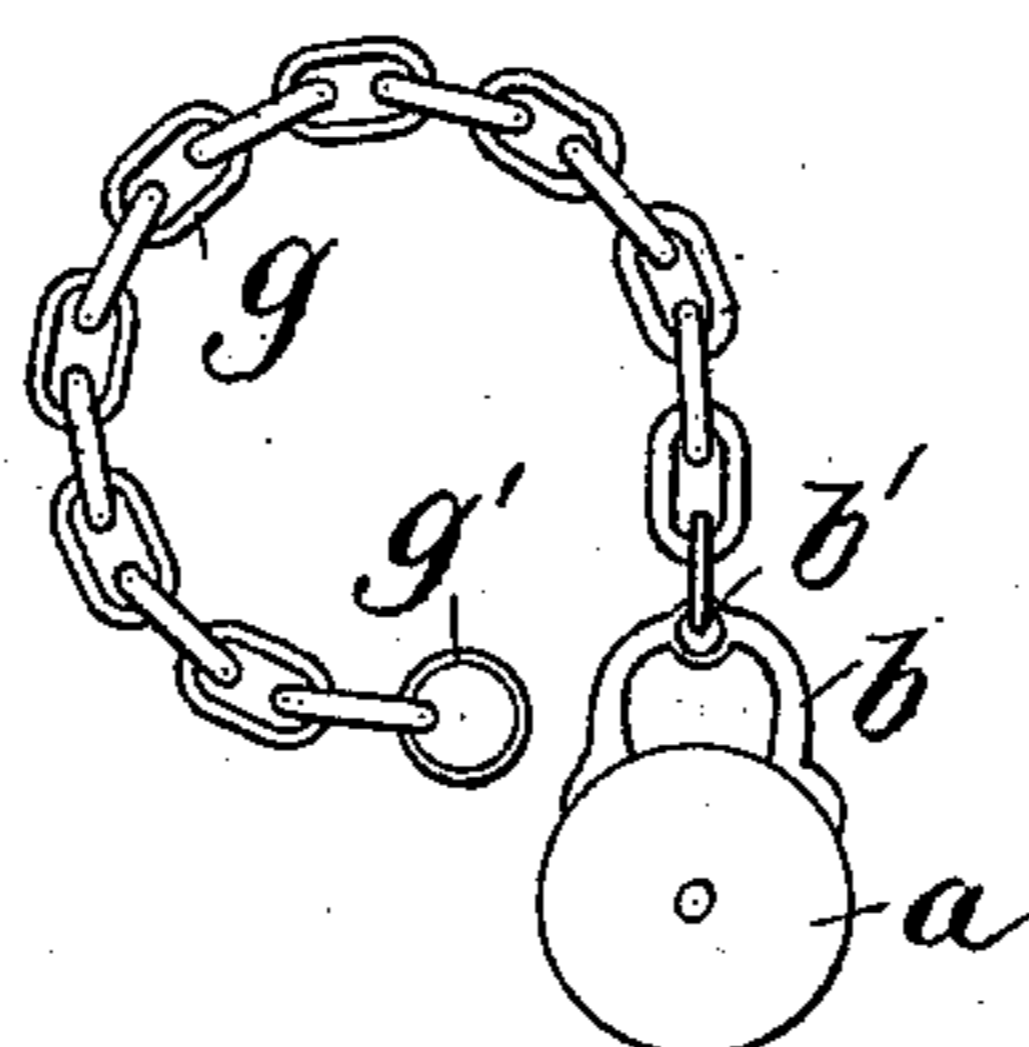
(No Model.)

G. BRADFORD.  
PADLOCK AND CHAIN.

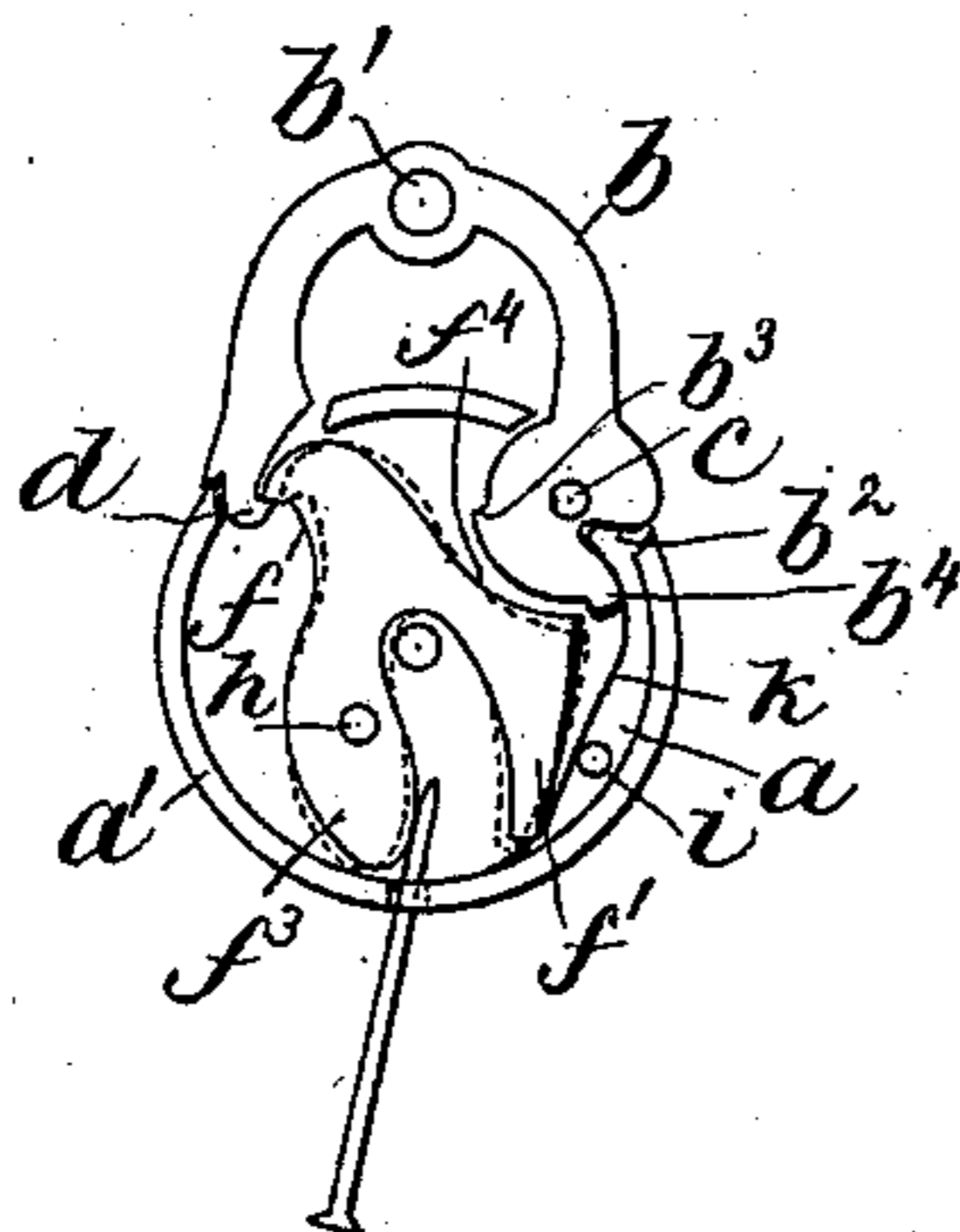
No. 373,218.

Patented Nov. 15, 1887.

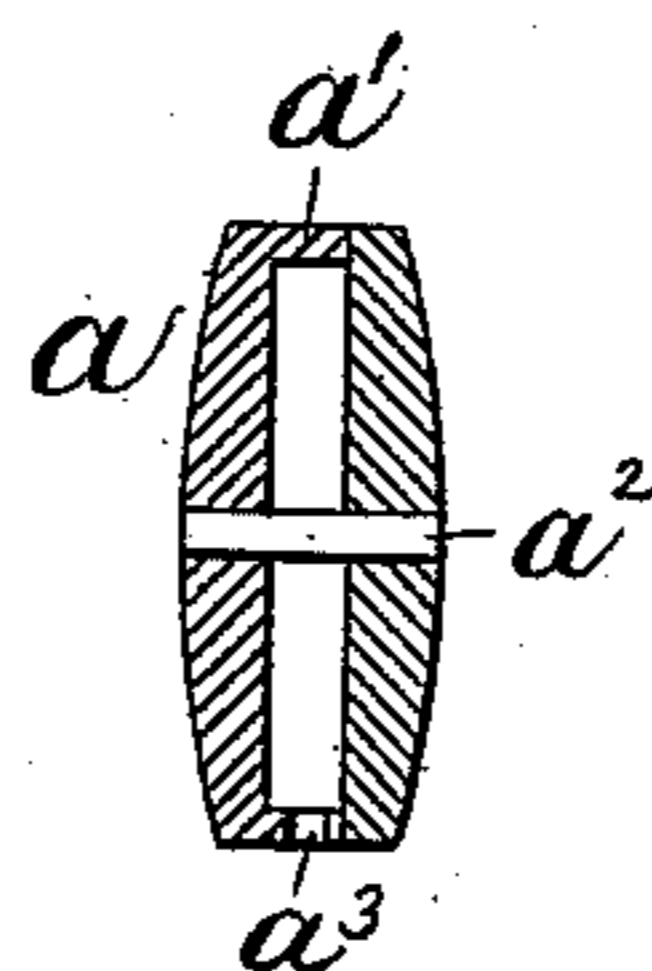
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses.

*Jas. J. Maloney.*  
*H. J. Locke.*

*Inventor,*  
*G. Bradford,*  
*by Jos. P. Livermore*  
*Att'y.*

# UNITED STATES PATENT OFFICE.

GAMALIEL BRADFORD, OF CAMBRIDGE, ASSIGNOR TO THE AMES SWORD COMPANY, OF CHICOPEE, MASSACHUSETTS.

## PADLOCK AND CHAIN.

SPECIFICATION forming part of Letters Patent No. 373,218, dated November 15, 1887.

Application filed April 2, 1887. Serial No. 233,387. (No model.)

*To all whom it may concern:*

Be it known that I, GAMALIEL BRADFORD, of Cambridge, county of Middlesex, State of Massachusetts, have invented an Improvement in Padlocks and Chains, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relates to a padlock and chain suitable for holding a bunch of keys or for other similar use, the lock being constructed to hold securely and adapted to be unlocked by a common pin. The bow of the padlock is provided with an eye, to which one end of the chain is attached, and the bow is fastened by a spring catch or tumbler pivoted in the lock-case in such position as to be operated by a common pin or a piece of slender wire inserted through a suitable opening in the edge of the case.

The invention consists in a padlock and chain constructed and arranged to operate substantially as I will now proceed to more particularly set forth and claim.

Figure 1 is a side view of a padlock and chain embodying this invention; Fig. 2, a side view of the lock with the side of the case removed; and Fig. 3, a longitudinal section of the case, Fig. 2 and 3 being on a larger scale than Fig. 1.

The lock comprises a case, *a*, and a bow, *b*, pivoted at *c* in the said case, and provided at its free end with a hook or shoulder, *d*, to be engaged by the catch or tumbler *f* of the lock. The said bow *b* is provided with an opening or eye, *b'*, to which is connected one end of a chain, *g*, which may be threaded through the parts to be fastened—as, for instance, the bows of keys—and is provided at its other end with a ring, *g'*, through which the bow *b* of the lock may be passed to fasten the said articles on the chain.

The case *a* of the lock is shown as made in two parts, one of which is provided with an annular flange, *a'*, having suitable notches for the bow, and the other of which parts is fastened down upon the said flange by a pin or rivet, *a''*, as shown in Fig. 3. The sides of the case are bored part way through at three points to form bearings for pins *c*, *h*, and *i*,

the former of which constitutes the pivot for the bow *b*.

The pin *h* constitutes the pivot for the catch or tumbler *f*, and the pin *i* a bearing for a spring, *k*, that enters a notch, *b''*, in the pivoted end of the bow *b*, and bears against a projecting finger, *f'*, on the catch or tumbler *f*, tending to throw the said catch into engagement with the shoulder *d*, and also tending to throw the bow *b* outward from the case as soon as it is disengaged from the catch.

The flange *a'* of the case is provided with a pin-hole, *a'''*, and the lower part of the catch or tumbler *f* projects inward over said pin-hole, as shown at *f'''*, so that a pin or similar piece of wire inserted through the said hole *a'''* will bear against the said portion *f'''* of the tumbler, and by slightly rocking the said pin it will pry the tumbler over against the pressure of the spring *k* on the finger *f'*, and thus release the catch or shoulder *d*, as shown in dotted lines, Fig. 2.

The pivoted end of the bow *b* is made substantially circular, so as to fill the notch in the flange of the case and prevent entrance of dust, and the said circular portion is provided with a shoulder, *b'''*, constituting a stop that limits the outward movement of the bow. The said hub portion of the bow *b* is also provided with a projection, *b''''*, that co-operates with the upper part of the tumbler *f*, which is curved, as shown at *f''''*, so as to permit the said projection *b''''* to pass over it when the tumbler *f* has been turned aside to disengage the shoulder *d*. The said projection *b''''* holds the tumbler back when the bow *b* is turned outward, and thus facilitates the passage of the shouldered end *d* of the bow past the tumbler when the bow is pressed back into the case. Without this projection *b''''* and co-operating seat on the tumbler, the end of the latter might be thrown forward so far as to prevent the ready entrance of the shouldered end *d* into the lock-case.

While the lock is very small and ornamental in appearance, it is strong and positive in action and not likely to get out of order. The tumbler and bow may both be cut from sheet metal and both of the same thickness and equal to the depth to which the main part of the case *a* is bored.

I claim—

The chain *g*, combined with the bow *b*, having the eye *b'*, in which one end of the chain is secured, the other and free end of the chain  
5 being engaged and disengaged at pleasure with the free end of the bow, the catch *f* to engage and release the bow, and a case containing the catch and receiving and securing the bow, and provided with an opening for the insertion of

an independent or separate pin to operate the catch, substantially as described.

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

GAMALIEL BRADFORD.

Witnesses:

JOS. P. LIVERMORE,

JAS. J. MALONEY.