

(No Model.)

F. W. BRADLEY.  
PERMUTATION PADLOCK.

No. 601,034.

Patented Mar. 22, 1898.

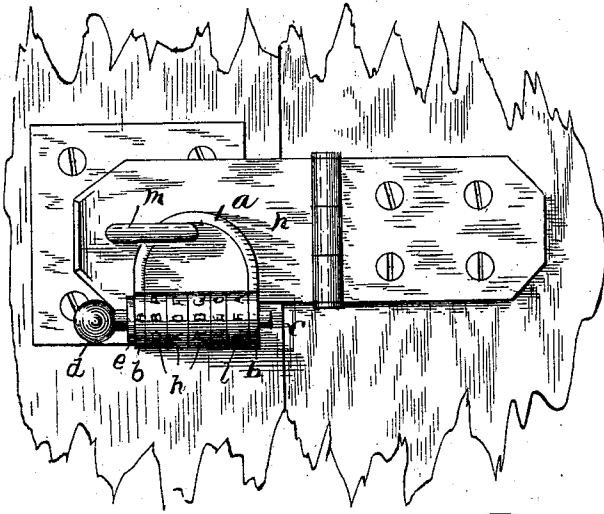


Fig. 1.

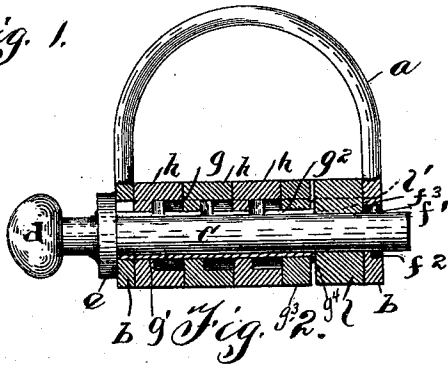


Fig. 2.

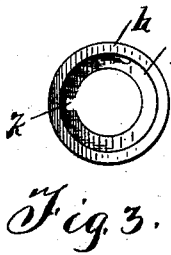


Fig. 3.

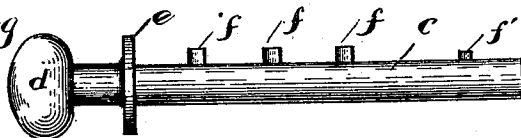


Fig. 5.

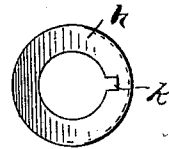


Fig. 4.

WITNESSES:  
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# UNITED STATES PATENT OFFICE.

FRANCIS W. BRADLEY, OF SHARPSBURG, PENNSYLVANIA.

## PERMUTATION-PADLOCK.

SPECIFICATION forming part of Letters Patent No. 601,034, dated March 22, 1898.

Application filed August 3, 1897. Serial No. 646,890. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS W. BRADLEY, a citizen of the United States of America, residing at Sharpsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combination-Padlocks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in combination-padlocks, and has for its object to provide a padlock having a series of numbered or lettered rings upon its shackle which must be placed in a certain position before the said pin can be removed, thus obviating the necessity of a key for unlocking and providing at the same time a safe, durable, and effectual lock.

The invention further aims to provide a lock of this nature that will be extremely simple in its construction, having no delicate parts to get out of order, and that may be employed for various purposes where a lock of this nature is required.

The invention finally consists in the novel construction, combination, and arrangement of parts, to be hereinafter more specifically described, and particularly pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a front elevation of the lock in position. Fig. 2 is a longitudinal sectional view of the lock. Fig. 3 is a plan view of one of the rings. Fig. 4 is a similar view of the reverse side from that shown in Fig. 3. Fig. 5 is a detail view of the locking pin or bolt.

Referring now to the drawings by reference-letters, *a* indicates the shackle, provided on its ends with eyelets *b b*, adapted to receive the locking-bolt *c*, having a handle *d* and a flange *e*, said flange serving to limit the movement of the locking-bolt. This bolt is also provided with lugs *f*, which are adapted to operate in annular channels *g*, formed in the numbered or lettered rings *h*, through which

the combination is operated. These rings are mounted upon a sleeve *g'*, secured in one of the eyelets *b* and extending part way to the opposite eyelet, said sleeve having a slot *g<sup>2</sup>* extending longitudinally therewith to admit the lugs *f*, the rings being also provided with notches *k* to receive said lugs, said sleeve having a collar *g<sup>3</sup>* secured on the free end to prevent the lateral rings from coming off, said collar *g<sup>3</sup>* being secured on the sleeve by means of the flange *g<sup>4</sup>*. The opening between the free end of the sleeve and the shackle is closed by means of a blank ring *l*, having a notch *l'* to receive the lug *f'* on the locking-bolt, said blank ring *l* performing no function as to the combination of the locking mechanism, but merely serves to fill the space between the end of sleeve *g'* and the end of the shackle, said lug operating in an annular channel *f<sup>2</sup>*, formed in this end of the locking-ring, said end being provided with a notch *f<sup>3</sup>* to admit and release the lug.

The lettered or numbered rings are operated so as to bring any desired combination of same in a line with a mark on the flange *e*, at which time the notches in the rings will be in alinement with one another, and the locking-bolt may be readily withdrawn, which will allow the blank ring *l*, which is provided with an opening to permit the bolt to pass through, to drop out of its position and form an opening by which the shackle *a* may be removed from the staple *m*, which receives the hasp *n*, said staple *m* and hasp *n* being of the ordinary and well-known construction. It will be noted that any number of these rings may be employed to form the combination and that various changes may be made in the details of the construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a combination-padlock, a shackle provided with openings in its ends, a locking-bolt, lugs formed on said bolt, a sleeve mounted in one opening of said shackle and carrying a collar on the opposite end, and provided

with a longitudinal slot, numbered or lettered rings mounted on said sleeve between the collar and the end of the shackle, said rings provided with annular channels and notches, and a blank ring mounted on the locking-bolt between the free end of the sleeve and the shackle, and a lug carried by said locking-bolt, to prevent the same from being entirely

withdrawn, substantially as shown and described.

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In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS W. BRADLEY.

Witnesses:

JOHN NOLAND,

GEO. B. PARKER.