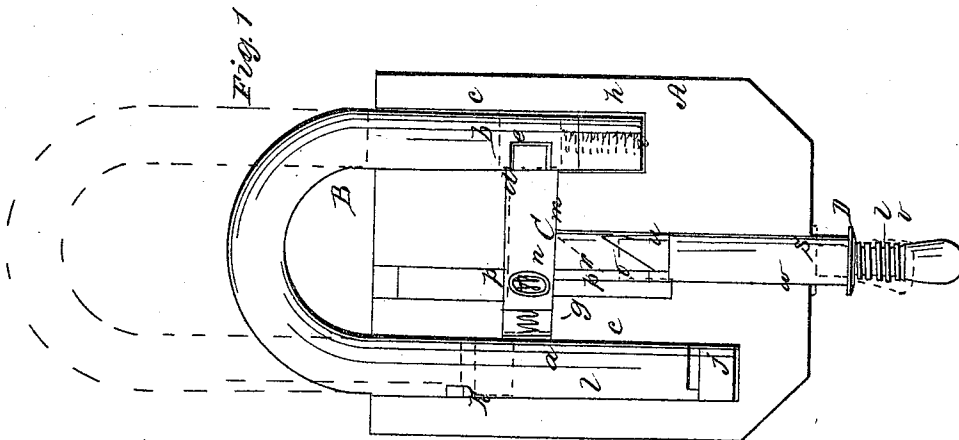
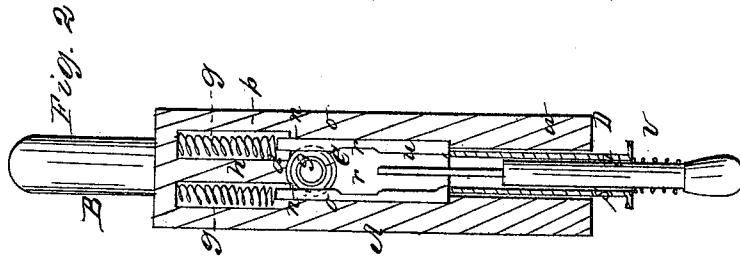


J. Harrison, Jr.,

Padlock.

N^o 14,059.

Patented Jan. 8, 1856.



UNITED STATES PATENT OFFICE.

JAS. HARRISON, JR., OF MILWAUKEE, WISCONSIN.

PADLOCK.

Specification of Letters Patent No. 14,059, dated January 8, 1856.

To all whom it may concern:

Be it known that I, JAMES HARRISON, JR., of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and Improved Padlock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1 and 2 are longitudinal sections of my improvement, the planes of section passing through the center and crossing each other at right angles.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in forming the body or case of the lock of a solid piece of metal, and having the shackle slide within the body or case and secured therein by a sliding bolt, the movement of which is controlled by rods which are acted upon by the key previous to the key acting upon the bolt, as will be presently shown and described.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the body or case of the lock, which is constructed of a solid block of metal, cast steel, or malleable cast iron case hardened being preferable.

B is the shackle one leg (*a*) of which is somewhat longer than the other (*b*). The legs of the shackle fit in holes (*c*), drilled in one end of the body or case A, as shown in Fig. 1. The legs of the shackle are allowed to slide freely in the holes (*c*).

C, represents a cylindrical sliding bolt which is fitted in a hole (*d*) in the interior of the body or case. This hole is drilled in at one side of the body or case A, and its outer end stopped by a screw plug. One end of this bolt is made square and fits in a recess (*e*), made in the shorter leg (*b*) of the shackle that is when the shackle is locked. See Fig. 1. The square end of the bolt C is kept in the recess (*e*) by a spring (*g*) at the opposite end of the bolt.

Directly underneath the short leg (*b*) of the shackle there is placed a short cylindrical stop (*h*), which has a spring (*i*) underneath it. This stop is pressed down at the bottom of its hole (*c*) by the leg (*b*), when the shackle is locked, see Fig. 1. The longer leg (*a*) has a recess (*j*) made in it

near its lower end, and a pin or stud (*k*) is secured in the upper part of the hole (*c*) in which the leg (*a*) is fitted a long recess (*l*) being cut in one side of the leg (*b*), so that said leg may be drawn a requisite distance in and out of the body of the case without being obstructed by the pin or stud (*k*).

An aperture (*m*) is made in the under surface of the sliding bolt C, and an aperture or groove (*n*) is made in opposite sides of the bolt in which rods (*o*) fit when the shackle B is locked. The rods (*o*) are fitted in holes (*p*), drilled into the upper end of the body or case A, the upper ends of said holes being stopped by screw plugs. Spiral springs (*g*) are placed one over each rod (*o*), said springs keeping the rods depressed in the holes (*p*). The rods (*o*) fit in the apertures (*n*), made in the sides of the sliding bolt C, as shown in Fig. 2.

The rods (*o*) prevent the sliding bolt C from being shoved back free from the leg (*b*) of the shackle, and consequently prevent the lock from being picked. Each rod has a recess (*r*) cut in it, and when the rods (*o*) are shoved upward so that the recesses (*r*) will be opposite the apertures (*n*) in the bolt, the bolt may be shoved back free from the leg (*b*) and the shackle may be drawn out from the body or case so that the leg (*b*) will be out of the body or case and the shackle may then be turned, the pin or stud (*k*) fitting in the recess (*j*) and allowing the shackle to turn a requisite distance but preventing the leg (*a*) from being withdrawn from the body or case A.

D represents the key which is formed of a tube (*s*), having a rod (*t*) fitted within it. One end of the rod (*t*) has a beveled bit (*u*) attached to it, and the opposite end of the rod has a spiral spring (*v*) around it. A hole (*w*) is drilled into the lower end of the body or case to receive the key, said hole intersecting the hole (*d*), in which the sliding bolt C is fitted.

The lock is unlocked in the following manner: The tube (*s*) of the key is inserted in the hole (*w*) and pressed upward so that the end of the tube will press upward the rods (*o*), till the recesses (*r*), are opposite the apertures (*n*), in the bolt C. The rod (*t*) is then pressed upward and the end of the bit (*u*) will enter the aperture (*m*) and throw the bolt C back free from the leg (*a*), which may then be with-

drawn from the body or case A, and the shackle turned. The stop (*h*) is forced upward by the spring (*i*) opposite the end of the hole (*d*), to keep the bolt C within its
5 hole. The shackle is locked by simply forcing the shackle down within the body or case, A.

The above invention is simple, not liable to get out of repair, may be manufactured
10 cheaply, and forms a burglar proof lock. The body or case A being formed of a solid block of metal prevents the lock being opened by force.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is—

The combination of the shackle B, sliding bolt, C, and rods (*o*), (*o*), when arranged as herein shown and fitted within a solid body or case A, constructed of suitable metal substantially as described where-
20 by a strong durable, and burglar proof lock is obtained.

JAS. HARRISON, JR.

Witnesses:

LOUIS WORCESTER,
JOHN R. SHURPSTEIN.