H. AHREND.

Seal-Lock.

No. 201,147. Patented March 12, 1878.

Fig.1.

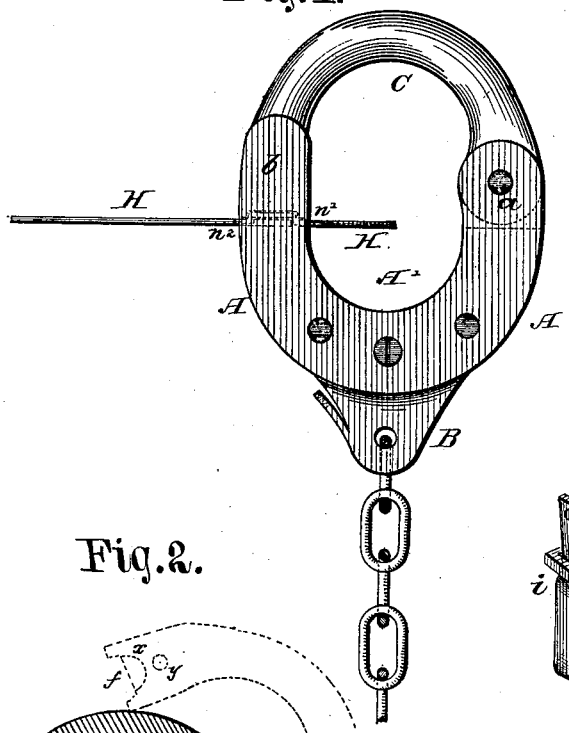


Fig.5.

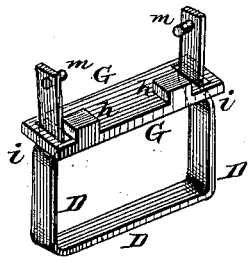


Fig.2.

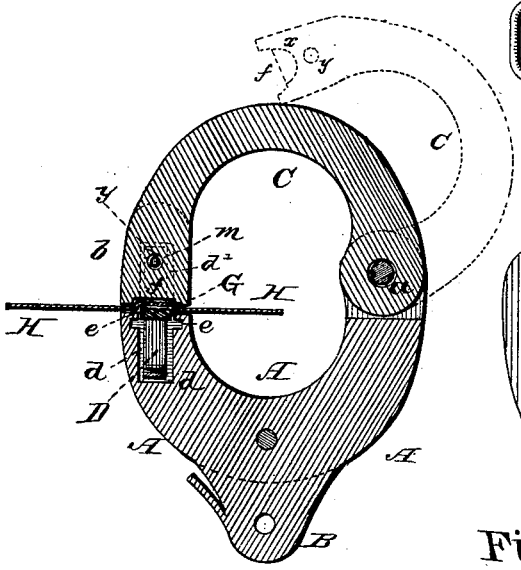


Fig.3.

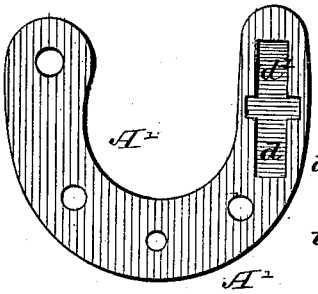


Fig.6.

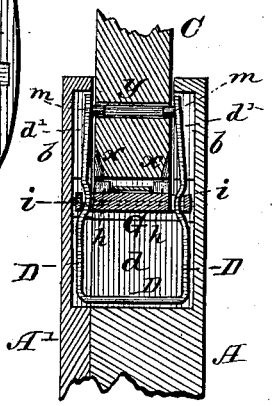
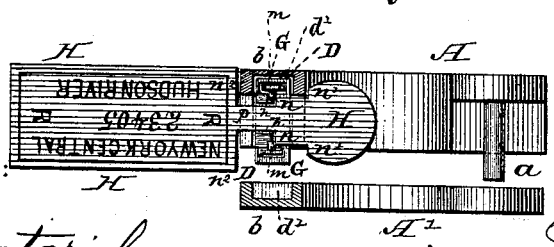


Fig.4.



Witnesses:

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UNITED STATES PATENT OFFICE.

HERMANN AHREND, OF NEWARK, NEW JERSEY, ASSIGNOR TO ROMER & CO., OF SAME PLACE.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. **201,147**, dated March 12, 1878; application filed February 20, 1878.

To all whom it may concern:

Be it known that I, HERMANN AHREND, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Seal-Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a seal-padlock, as will be hereinafter more fully set forth.

In the annexed drawing, to which reference is made, and which fully illustrates my invention, Figure 1 is a side view of my improved seal-padlock. Fig. 2 is a central section of the same. Figs. 3, 4, 5, and 6 are detailed views of parts thereof.

A represents the body of the lock, made in semicircular form, with a projection, B, at the bottom, for the attachment of a chain or other device to connect it to the car or other place where the lock is used. The body A may be either formed in a single piece, or it may have a plate, A′, attached on one side to complete said body. One end of the body A, whether made of one or two pieces, is forked, with a pin, *a*, passing through the same, for pivoting the shackle C at one end. The other end of the semicircular body A is also forked, forming two parallel jaws, *b b*. Below these jaws, in the body A, is a recess, *d*, with shoulders *e e* in its side walls, near the top, and in the inner sides of the jaws *b b* are made grooves *d′ d′*, forming, as it were, continuations of the ends of the recess *d*. The free end of the shackle C, which fits between the jaws *b b*, is recessed, as shown at *f*, in its end, to correspond with the recess *d*, and on each side of said shackle at this end is a bevel, *x*. Above this bevel, on each side a suitable distance, is a hole, *y*, as shown. In the recess *d* of the lock-body is placed a spring, D, bent somewhat in stirrup form, its two arms projecting upward into the grooves *d′* in the inner sides of the jaws *b*. The arms of the spring-stirrup D are bent inward, as shown at *i i*, and pass through the ends of a plate, G, which is of such dimensions as to fit above the shoulders *e e*, made in the side walls of the recess *d*. On the top of this plate G, at the front edge, are two lugs, *h h*, as shown. At the upper end, on the inner side of each arm of the stirrup D, is a round projection, *m*, of such size that when the lock is closed it will enter the hole *y* in the end of the shackle C. H represents the seal used in this lock, made of thin sheet metal. This seal is formed with a neck, *p*, of such width as to fit between the lugs *h h* on the plate G, and the seal is formed with shoulders *n n* in front of the lock, and with shoulders n^1 n^1 in rear of the lugs *h*, as shown.

The inner end of the seal forms a head, while the outer end forms the ordinary stamp; and it will be noticed that the head at the inner end forms shoulders n^2 n^2. The seal is placed in position, as shown in Fig. 4, with its neck *p* between the lugs *h* on the plate G.

This plate, in its normal position, has its upper surface above the end of the lock, and is located at or just above the bends *i* in the arms of the stirrup. When the shackle C is now shut down, it presses down the plate G, which thereby is forced over the bends *i* of the stirrup, so as to throw the arms thereof inward, to cause the projections *m* thereon to enter the holes *y*. At the same time the seal H is bent between the shoulders *n* and n^2 by the shoulders of the shackle formed by the recess *f*, and it prevents the plate G from springing upward into said recess *f*, which would release the shackle. As soon, however, as the seal is removed, the spring-stirrup arms, by their bends *i i*, cause the bar or plate G to move upward and throw the projections *m* out of the holes *y*, and thus unlock the shackle; but the seal H cannot be removed without being twisted off at its outer end. In locks of this character it has been sometimes the case that the inner end has been twisted off by unauthorized persons, the seal pulled out from the outside and afterward put in again, and by oversight this has failed to be discovered. With my seal this is impossible, for even if the inner end or head of the seal should be twisted off, it cannot be pulled out on account of the shoulders n^1 n^1. It is the outer portion

that must be twisted off, and the seal be pulled out from the inside; hence, if the seal has been tampered with, it is not liable to remain undiscovered.

Another great advantage of my lock is as follows: In locks of this class there has heretofore only been one latch on one side, and this has been beveled, so that a thin piece of metal or other material could be inserted to push the latch back and unlock the lock without destroying the seal.

In my lock there are two latches or locking projections, *m m*, one on each side, and these are of cylindrical form, so that if it were possible to insert a piece on each side of the shackle, the latches could not be forced back, as such pieces would meet square shoulders and be stopped by them.

The lugs *h* on the plate G being on one side only allows of the extra set of shoulders on the seal, as described.

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

1. In a seal-padlock, the spring-stirrup D, with cylindrical projections *m m* upon its arms, to form a lock or latch on each side of the shackle C, substantially as herein set forth.

2. The sliding plate G, in combination with the spring-arms, having bends *i i*, substantially as and for the purposes herein set forth.

3. The sliding plate G, provided with lugs *h h* on its upper surface, at or near one edge, for the purposes set forth.

4. The combination of the spring-stirrup D, with bends *i i* and projections *m m*, the plate G, having lugs *h h*, and the seal H, with the padlock A C, substantially as and for the purposes herein set forth.

5. The seal H, constructed, as described, with shoulders n^1 n^1, concealed within the recess of the shackle when closed, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HERMANN AHREND.

Witnesses:

C. H. WATSON,

JOHN H. WILKINS.