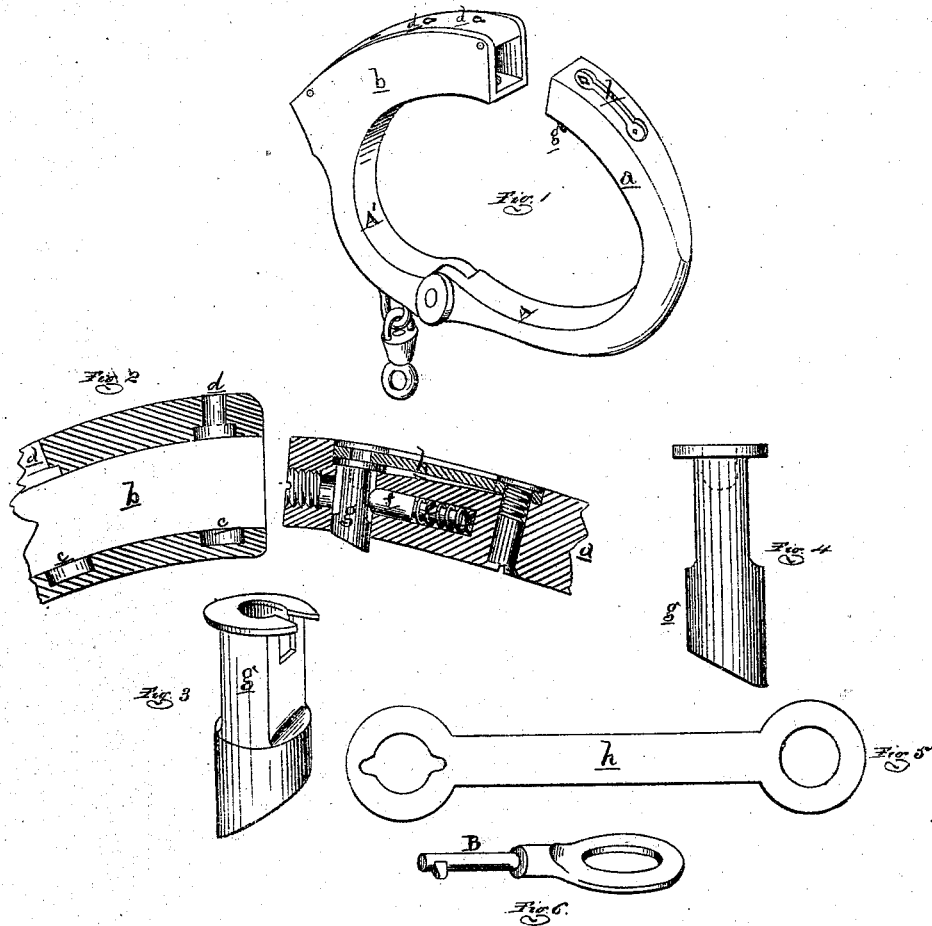


H. H. Cheney,

Hand Cuff Lock.

No. 113499.

Patented Apr. 11, 1871.



ATTEST

W. F. Eberts.
Notary Public.

INVENTOR

Horace H. Cheney
per Attorney
Wm. B. Symonds

United States Patent Office.

HORACE H. CHENEY, OF EAST SAGINAW, MICHIGAN.

Letters Patent No. 113,499, dated April 11, 1871.

IMPROVEMENT IN LOCKS FOR HAND-CUFFS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern :

Be it known that I, HORACE H. CHENEY, of East Saginaw, in the county of Saginaw and State of Michigan, have invented a new and useful Improvement in Hand-Cuffs; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of a hand-cuff open;

Figure 2 is a vertical section of the locking parts;

Figure 3 is an enlarged elevation of the rotating latch-bolt;

Figure 4 is an enlarged perspective view of the same;

Figure 5 is an enlarged plan of the spring; and

Figure 6 is an enlarged perspective view of the key.

Like letters indicate like parts in each figure.

This invention has for its object the construction of self-adjusting hand-cuffs in such a manner that they cannot be picked or unlocked except by the proper key; and it consists in the peculiar construction and arrangement of the locking parts and the method of operating the same, as more fully hereinafter set forth.

In the drawing—

A, A' represent the segments or shackles of a hand-cuff hinged together, the former terminating in a squared head, *a*, and the latter in a socket, *b*, to receive the head *a*.

On the interior surface of the inner or under plate of the socket *b* is formed a series of ratchet notches *c*. Through the top plate of the socket are several small key-holes *d*. Near the end of the head *a* a vertical hole is drilled through it. A longitudinal hole is drilled from the end of the head backward through the first hole, extending some ways back of it. In the bottom of this hole is a spiral spring, *e*, on which rests a small stud, *f*, whose head is thus forced out into the vertical hole in the head *a*. In the vertical hole a rotating latch-bolt, *g*, figs. 3 and 4, is inserted, its oblique point projecting through the inner end of the opening. This bolt is kept in place and pressed inward by a spring, *h*, recessed in and secured to the upper surface of the head *a*. The stud *f* bears against the bolt *g*, and, when the latter is so turned as to present either of its flattened surfaces to the stud, it cannot be turned except upon the application of a key to the slot in its head, the form of which is fully shown in fig. 5, consisting of a central socket and a radial slot.

The hole at the extremity of the head *a* should be closed by a proper screw after the spring *e* and stud *f* are in place.

The spring *h* is slotted over the bolt *g* to admit the key to the top thereof in its locked or unlocked position.

The bolt, when the obliquity of its end is presented to the sockets or ratchets *c*, readily engages with the latter, and cannot be withdrawn until turned in the other direction; in this position the slot of a key-hole, *d*, is coincident with the radial slot in the head of the bolt. To lock the shackles together, insert the key *B* in the head of the bolt and turn it as above described; withdraw the key and insert the head *a* into the socket *b*; as it enters the end of the bolt is forced upward until it comes to a notch, *c*, when the spring *h* forces it to enter it, which completes the locking process. The circumference of the cuff can, of course, be reduced by causing the head to enter further into the socket and the bolt to engage with other notches. To unlock the shackles, the key must be inserted in the proper key-hole, when it will strike against the solid portion of the bolt-head; by turning the key half-way around, its blade or projection may enter the radial slot in said bolt-head; and then, by turning half a revolution, the oblique end of the bolt is presented to the square shoulders of the sockets or notches *c*, when the segments may be drawn apart.

It will readily be seen that the bolt cannot be turned by shaking, jarring, or pounding on the shackles, nor picked by a key not having a leaf or ward of such shape as to fit the bolt-slot, and so placed on the shaft of the key as to turn with the bolt under the spring.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction and arrangement of the bolt *g*, spring *h*, stud *f*, and spring *e* in the head *a*, of the shackle-segment *A*, the segment *A'* provided with a socket, *b*, at its end, having the ratchet notches *c* and key-holes *d* formed therein, as described, said shackle-segments being hinged together and arranged to be operated by means of the key *B*, all substantially as herein described.

HORACE H. CHENEY.

Witnesses:

H. F. EBERTS,

MYRON H. CHURCH.