(No Model.)

# E. D. BEAN.

## HANDCUFFS.

No. 372,510. Patented Nov. 1, 1887.

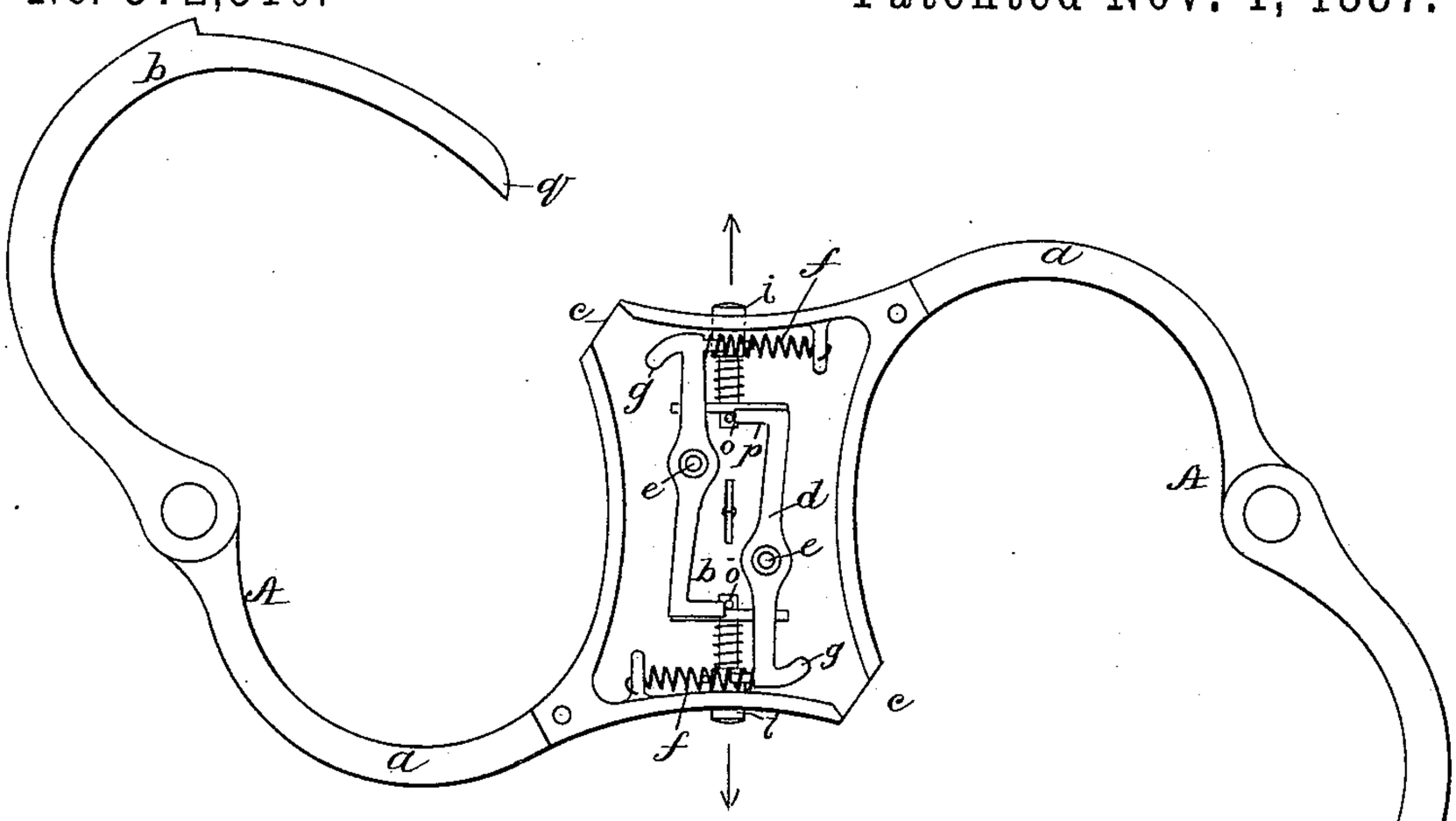


Fig. 1.

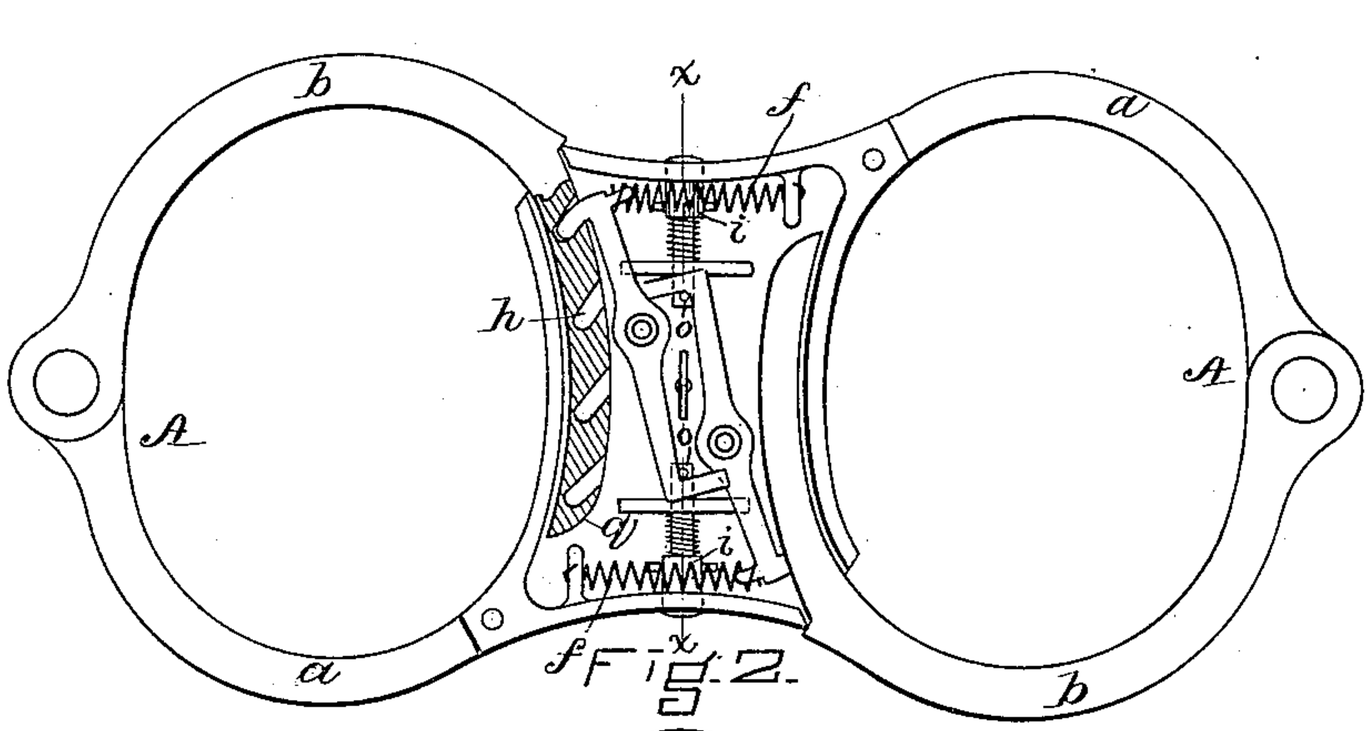


Fig. 2.

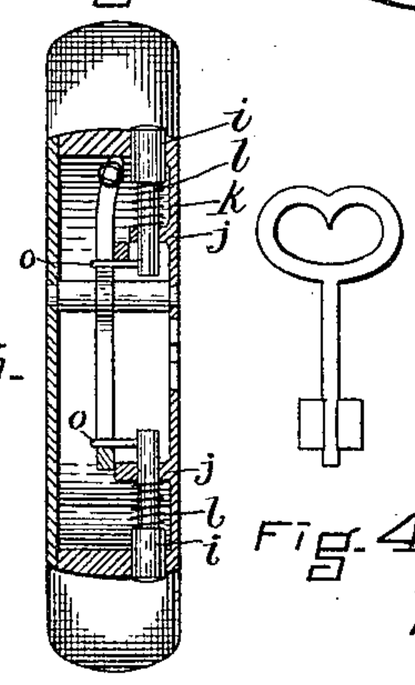


Fig. 3.




Fig. 4.

WITNESSES.
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# UNITED STATES PATENT OFFICE.

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## HANDCUFFS.

SPECIFICATION forming part of Letters Patent No. 372,510, dated November 1, 1887.

Application filed August 6, 1887. Serial No. 246,258. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD DAVIS BEAN, of Arlington, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Handcuffs, of which the following is a specification.

My invention relates to handcuffs or manacles, and has for its object, first, to provide a handcuff which it will be impossible for the wearer to unlock and release, even though he should be provided with a key thereto; second, to provide a handcuff which, while occasioning no torment or undue discomfort to the wearer, will hold him more securely against unruly depredations with his hands than any handcuff now known to me; third, to provide improvements incidental to the foregoing, all as is hereinafter described and claimed.

My invention will first be fully described hereinafter, and subsequently pointed out in the claims.

Reference is to be had to the accompanying drawings and to the letters of reference marked thereon, forming a part of this specification, the same letters indicating the same parts in all of the views.

Of the drawings, Figure 1 represents a side elevation of a handcuff constructed in accordance with my invention, the wrist-encircling bows or rings being shown as unlocked or open and the plate covering the locking devices removed. Fig. 2 is a view similar to Fig. 1, the wrist-encircling bows being shown as locked, and the hasp of one of the bows being shown as in section. Fig. 3 is a sectional view through the bow-connecting part and locking devices. Fig. 4 is a side view of the key for unlocking the cuffs.

In the drawings, A A designate the wrist-encircling rings, the bows *a a* of which are connected by means of a rigid casing, B, in which casing the locking devices are located. The hasp-bows *b b* are pivoted or hinged to the bows *a a*, their free ends being adapted to enter the lock-casing B through the apertures *c c*.

*d d* designate locking-bolts pivoted on studs *e e* in the casing, a spring, *f*, being interposed between one end of each of said bolts and the casing and operating with a tendency to press said end of the bolt toward the hasp-bow *b*, so that the dog *g*, formed on the bolt, may snap into one of the notches or holes *h*, formed in the adjacent face of that portion of the hasp-bow *b* that is adapted to enter the casing B.

*i i* designate pins passing through the upper and lower portions of the casing, and each having a bearing in a lug, *j j*, formed on the interior face of the casing. A spiral spring, *k*, surrounding each pin *i*, and bearing at one end on the lug *j* and at the other against a shoulder, *l*, or similar feature, on pin *i*, operates with a tendency to press said pin outward or in the direction of the arrows marked on Fig. 1. When, now, the bolts *d d* are rocked on their fulcrums *e e* against the stress of springs *f f*, which may be done by means of the key *m*, inserted through the key-hole *n* in the front plate of the casing, pins *i* will be pressed outward by springs *k*, so that the lugs or pins *o* on the inner ends of said pins *i* will fall behind dogs *p*, formed on the inner ends of bolts *d*, holding the levers in the position represented in Fig. 1, and so that the dogs *g* will not engage the notches *h* of the hasp-bows *b*, and the latter may be opened. By pressing pins *i* inward the dogs *p* of the locking-bolts will be released from the pins or lugs *o* and be thrown by springs *f* to the position represented in Fig. 2, so as to engage any of the notches *h* with which they may be brought in contact.

The ends *q* of the hasp-bows *b* are beveled or inclined, as shown, so that when the locking-bolts *d* are in the position represented in Fig. 2, and the hasp-bows are open, as represented in Fig. 1, said bows may be inserted through the apertures *c* of the casing, and pass under dogs *g* and become engaged with any of the notches *b* brought in contact therewith, in this way rendering the wrist-encircling rings adjustable to any size of wrist.

In use it is intended that one hand shall be passed through one of the rings in one direction and the other hand in the opposite direction.

The connection between the wrist-encircling rings being rigid, it is impossible for the wearer to so manipulate a key as to unlock the cuffs, even though he should be provided with a

key. Again, this rigid connection of the two rings operates to effectually hold the wearer against unruly depredations with his hands without tormenting him.

Another important feature of the invention is the location of the locking device between the two rings, so that one operation of a single key will unlock both cuffs.

Though I have been particular to describe the form and arrangement of parts as here shown, it is obvious that these may be varied within the limits of mechanical skill without departing from the nature or spirit of the invention.

Having thus described my invention, what I claim is—

1. A handcuff consisting of the bows *a a*, a lock-casing intermediate of said bows and to which they are rigidly connected, said casing being provided with a key-hole and with openings or apertures *c c*, hasp-bows *b b*, hinged to said bows *a a* and constructed to have their free ends enter the apertures or openings *c c* in said casing, locking bolts or dogs within the casing to engage and lock said hasp-bows therein, and a single key to enter the key-hole of the casing, engage said dogs, and release the hasp-bows, as set forth.

2. The combination, with the hasp-bows *b*, having the notches *h*, of the bolt *d*, having the dogs *g p*, spring *f*, and spring-pressed pin *i*, provided with the lug *o*, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of July, A. D. 1887.

EDWARD DAVIS BEAN.

Witnesses:

ARTHUR W. CROSSLEY,

WILLIAM C. RAMSAY.