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W. BOCKIN

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SELF LOCKING ADJUSTABLE HANDCUFF AND LEG SHACKLE

Filed Oct. 22, 1918

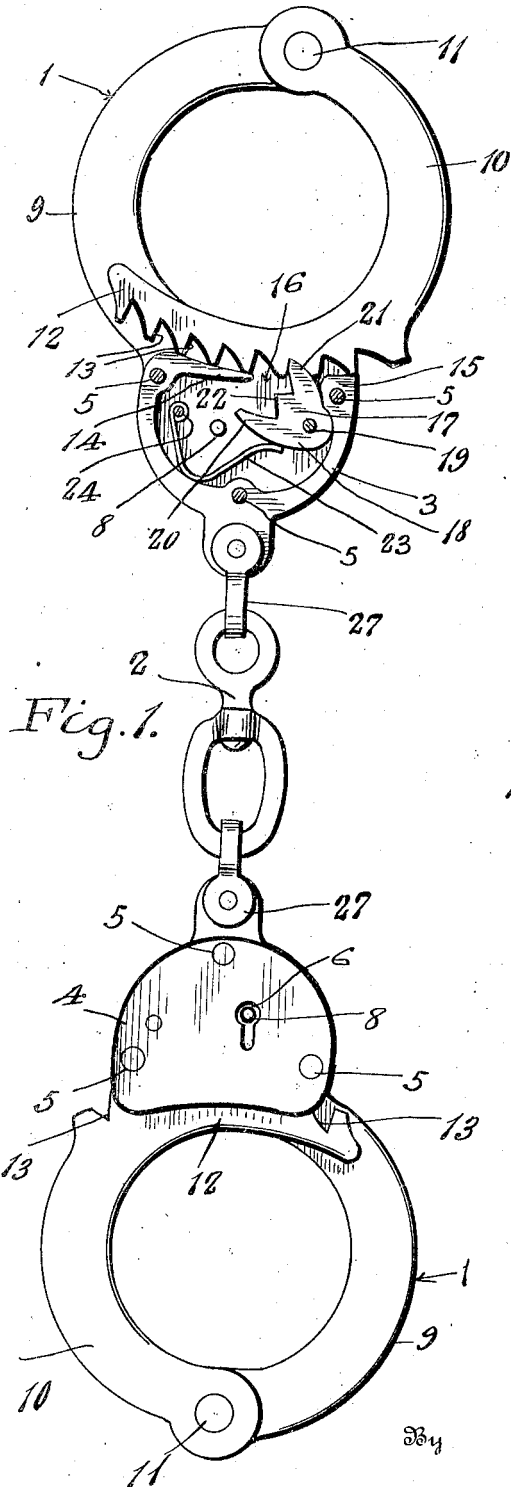


Fig. 1.

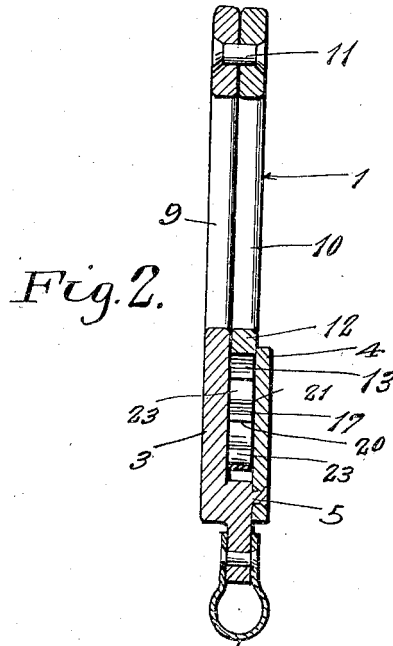


Fig. 2.

Fig. 3.

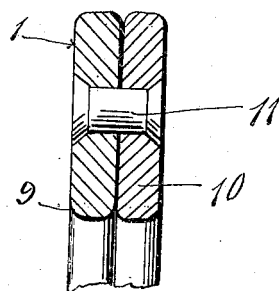


Fig. 3.

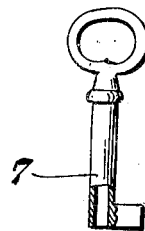


Fig. 4.

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# UNITED STATES PATENT OFFICE.

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SELF-LOCKING ADJUSTABLE HANDCUFF AND LEG SHACKLE.

Application filed October 22, 1918. Serial No. 259,266.

*To all whom it may concern:*

Be it known that I, WILLIAM BOCKIN, a citizen of the United States, residing at Union Hill, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Self-Locking Adjustable Handcuffs and Leg Shackles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in hand cuffs and has for one of its objects the provision of a device of this character which can be only locked after the same has been applied to the arms of a person, thus obviating the use of a key when applying the cuffs.

Another object of this invention is the provision of means for permitting the shackle of each cuff to adjust itself to arms of persons of different sizes and which means permits one section of the shackles to be free until the cuffs are applied, thus providing an ever set device and one that can be applied without the use of a key.

A further object of this invention is the provision of a locking dog so constructed that it normally occupies a position ready to lock the pivoted section of the shackle after once being unlocked by a key to remove the shackle from the arm of a person and which permits of the pivoted section of the shackle to be revolved about the stationary section of the shackle to apply the same to the arm of a person.

A still further object of this invention is the provision of hand cuffs of the above stated character, which shall be simple, durable and efficient and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which:

Fig. 1 is a plan view of hand cuffs, constructed in accordance with my invention

and illustrating the lock construction of one of the cuffs,

Fig. 2 is a vertical sectional view of one of the cuffs,

Fig. 3 is a detail sectional view of the pivot connection between the sections of the shackle,

Fig. 4 is a detail sectional view of a key.

Referring in detail to the drawings, the numeral 1 indicates a pair of hand cuffs and as each cuff is of the same construction reference to one is thought sufficient for both. The cuffs are connected together by a swivel connection 2, so that the cuffs can have movement in relation to each other, thus rendering easy application of them to a person's arms.

The hand cuff includes a lock casing 3 having a cover 4 secured thereon by studs or rivets 5. The cover is provided with a key hole 6 for receiving a key 7 of the female type and which rotates about a pin 8 formed in the rear wall of the lock casing 3. The lock casing 3 has cast thereto the stationary arm portion 9 of the shackle 10 and which arm portion is substantially arcuate shape and has an opening in its end to receive a pivot pin 11 that connects the arm portion 12 to the same. The arm portion 12 is of arcuate shape and has formed on its outer edge adjacent its free end a plurality of teeth 13 for engagement with a locking dog 14 located in the lock casing 3. The lock casing 3 has formed on its upper edge an extension 14 that extends across the upper edge of said casing and forms a part closure therefor. The extension 14 has its upper edge concaved so as to permit the teeth 13 to pass the same when the arm portion 12 revolves about the pivot during the first movement of the shackle when applying it to the arm of a person. A shoulder 15 is formed on the lock casing 3 and spaced from the end of the extension 14 to form a space 16 that permits a portion of a locking dog 17 to extend exteriorly of the lock casing 3 for engagement with the teeth 13 of the shackle. Portions 14 and 15 reinforce the casing at the upper ends of its arcuate wall particularly about the two upper rivets 5. The locking dog 17 consists of a body 18 pivoted to the casing 3 as illustrated at 19 and has formed thereon spaced end shoulders 20 and 21 and an intermediate shoulder 22. The shoulder 21 extends outwardly through the space 16 to

engage the teeth 13 and which is so shaped that it interlocks with said teeth and prevents the pivoted arm portion 12 from swinging away from the arm portion 11 or from the casing 3, but will permit the arm portion 12 to revolve about its pivot in the direction of the arm portion 11 so that the shackle can readily be applied to the arm of a person without the use of a key and permits the carrying of the shackle in a closed position when not in use. Thus it will be seen that the cuff can be easily carried in a person's pocket and that it will not be necessary to use a key to unlock the device when applying the same to a person. A leaf spring 23 is secured in the casing 3 as shown at 24 and has one end against the shoulder 20 so as to force the shoulder outwardly of the casing at all times or after each time the same is retracted by the key, thus providing an ever set lock. To free the shackle from a person's arm the key 7 is placed through the key hole onto the pin 8 and on turning the same the bit thereof engages the opposite face of the shoulder 20 from that of the spring 23 and causes the body of the dog to turn about its pivot disengaging the shoulder 22 from the teeth 13. A stop 25 is formed in the casing 3 adjacent the pin 8 for limiting the movement of the key thereby obviating the danger of breaking the spring and the displacement of the locking dog.

The arm portions of the shackle are disposed in different planes by the pivotal connection and the free end of the arm portion 12 rides over the arm portion 9 at the point of formation of the casing 3 the cover 4 projecting beyond the extension 14 and shoulder 15 so as to overlie one face of the arm portion 12 while the base portion of the arm portion 11 overlies the other face of said arm portion 12 to prevent a person from inserting an instrument under the teeth to disengage the locking dog therefrom. The arm portion 12 has shoulder 26 formed adjacent the outermost tooth of the series of teeth to cooperate with the shoulder 15 in preventing an instrument from being inserted between the teeth and the locking dog to force the shoulder 21 inwardly of the casing 3 for freeing the pivoted arm portion 12.

The lock casing 3 has formed thereon an ear to which is connected a clip 27 for connection with the swivel 2 that connects the

cuffs in pairs. It is to be noted that the device can be readily used as leg shackles by increasing the size of the various parts of the device.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination, and arrangement of parts may be made without departing from the spirit and scope of the invention, as claimed.

Having thus described my invention, what I claim is:

A hand cuff having a movable locking arm, a lock casing to receive the arm having a relatively large flat wall portion, an arm integral with and extending from said portion and pivoted at its free end to and against one side of the locking arm, a laterally projecting substantially U-shaped wall integral with said wall portion and of a depth slightly greater than the thickness of the distal end portion of the locking arm and partly closing the open end thereof, a cover, fastening members adjacent the free ends of said wall and integral with said wall securing said cover against said wall, one end of said wall having an inward extension provided with a concaved upper surface along which said locking arm is movable said extension serving to reinforce said arm about one of said fastening members, the other end of said wall being inwardly enlarged to reinforce said arm about another fastening member, a locking member pivoted within the casing for projection intermediate the free end of said extension and said enlargement to engage said locking arm, said locking member having direct contact with the enlarged end of said wall, a spring within the casing in engagement with said wall and with said locking member to urge projection of the locking member into engagement with said locking arm and into its path of locking movement when said locking arm is unlocked and said locking member having spaced shoulders one engageable by a key and the other directly engageable with the locking arm.

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

WILLIAM BOCKIN.

Witnesses:

CHAS. F. KOSTER,  
WILLIAM WALTERS.