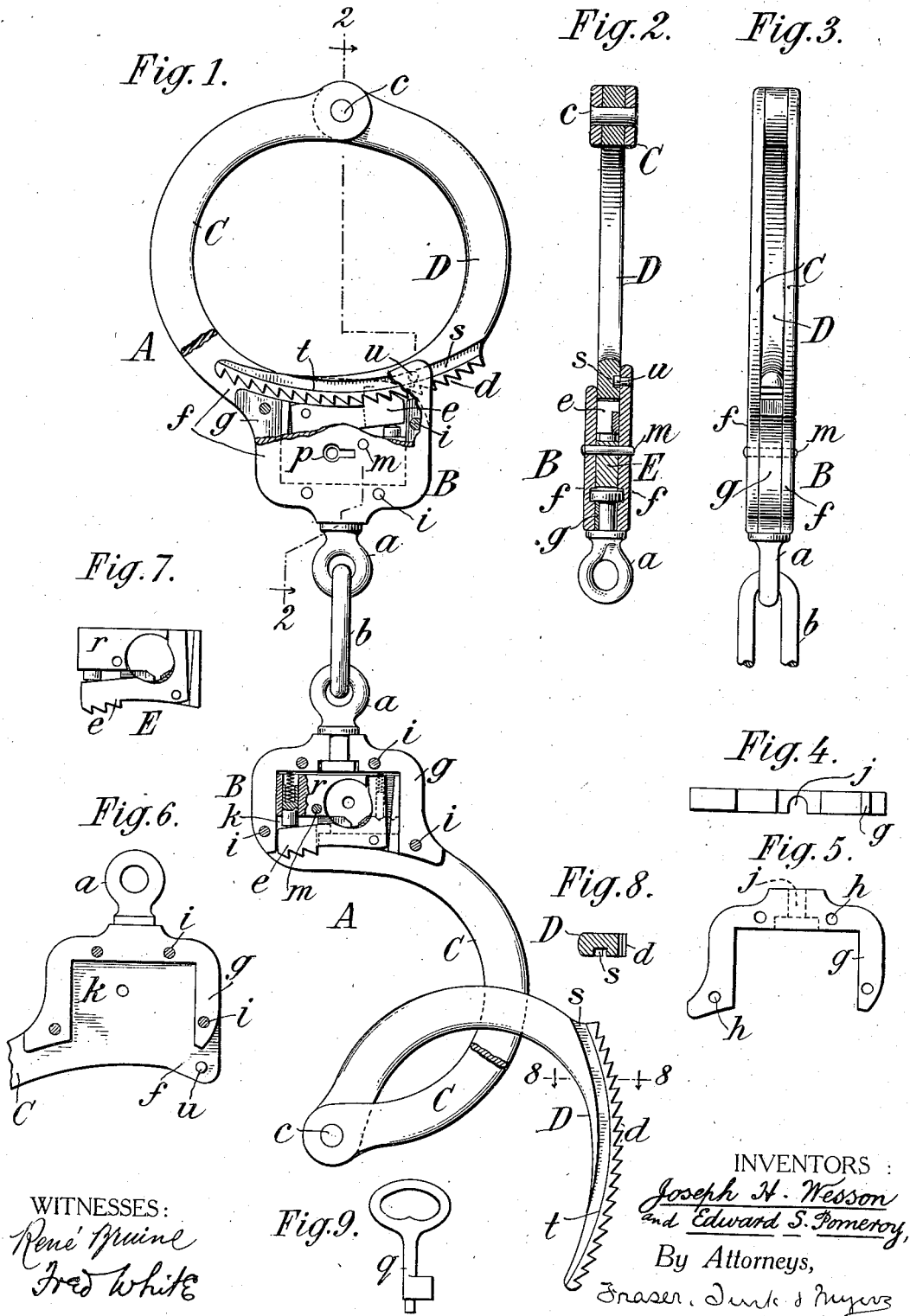


J. H. WESSON & E. S. POMEROY.
HANDCUFF.
APPLICATION FILED JAN. 2, 1915.

1,157,135.

Patented Oct. 19, 1915.



UNITED STATES PATENT OFFICE.

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HANDCUFF.

1,157,135.

Specification of Letters Patent.

Patented Oct. 19, 1915.

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To all whom it may concern:

Be it known that we, JOSEPH H. WESSON and EDWARD S. POMEROY, both citizens of the United States of America, and residents of Springfield, in the county of Hampden and State of Massachusetts, have jointly invented certain new and useful Improvements in Handcuffs, of which the following is a specification.

This invention relates to handcuffs which may be of the character set forth in the patent to G. A. Carney No. 1,017,955, dated February 20, 1912.

The present invention is directed mainly to an improved construction whereby the lock may be inserted after the completion of the remainder of the handcuff. To this end the body portion of the handcuff which is to inclose the lock is made with two mating halves separated by a spacing piece in order to leave a cavity or recess between them into which the lock may subsequently be fitted. The parts are united, finished, plated and polished before the insertion of the lock. The lock is then introduced into the recess and fastened therein by a pin or other fastening means.

The accompanying drawings show the preferred embodiment of the invention.

Figure 1 shows a pair of handcuffs in elevation, each being partly broken away to show the internal construction; the upper cuff is shown in the locked position and the lower one in the open position. Fig. 2 is a section on the line 2—2 in Fig. 1; Fig. 3 is a side or edge elevation; Figs. 4 and 5 are respectively an edge view and face view of the spacer; Fig. 6 is a fragment of Fig. 1 showing the recess in the cuff before the insertion of the lock; Fig. 7 shows the lock detached; Fig. 8 is a cross-section through the hinged arm, on the line 8—8 in Fig. 1; Fig. 9 shows the key.

The handcuffs A A are shown as connected together by swivel eyes *a a* and a link *b* as usual. Each cuff A comprises a body portion or lock case B with a pair of arms C projecting therefrom in a suitable curve; another arm D is pivoted at *c* between the arms C and cooperates with them to encircle the wrist. The arm D has serrations or teeth *d* which are engaged at one point or another by the latch *e* of the lock. The construction is such that the cuff may be adapted to a

larger or smaller wrist by closing in the arm D more or less so that the latch shall engage at any suitable point in the range of serrations. The arm D is preferably made so that it may swing through a complete circle, and the lock is preferably so constructed that the latch *e* in one condition yields to permit closing together of the arms C, D, while in another condition the latch is unyielding, and in a third condition it is withdrawn by the key to unlock the handcuff. These features of the lock however are not essential to this invention, which is not concerned with the particular construction of the lock.

So far as described, the construction is or may be similar to that set forth in the aforesaid patent for the handcuff. The particular lock shown is set forth in an application for patent of J. H. Wesson filed Oct. 6, 1914, Serial No. 865,286.

According to the present invention the lock case B is composed of two plates *f f* which are integral with the arms C and which are separated by a spacer *g*, the latter being shown separately in Figs. 4 and 5. The plates and spacer have coinciding holes *h* through which pins *i* are passed and riveted down to permanently unite the parts. A recess *k* is formed between them as shown in Fig. 6 for the reception of the lock.

The lock which as a whole is lettered E is shown separately in Fig. 7. It is wholly distinct and separable from the body of the handcuff. It may be of any suitable construction provided it be adapted to fit and conform to the recess *k* in the body of the cuff. The plates *f f* and some part of the lock have coinciding holes through which a fastening pin, wedge or key *m* is introduced to hold the lock in place. In one (or both) of the plates *f* is formed the usual key-hole *p* through which the operating key *q* may be introduced to operate the lock.

The lock shown in Fig. 7 comprises a base piece or block *r*, (through which is formed the hole for the pin *m*) the latch *e* pivoted thereto, and a suitable spring or springs therefor, and any desired bolt or tumbler for operating the latch. The spacer *g* is shown with a notch *j* to receive the shank of the swivel eye *a*, which is a convenient means of mounting the swivel.

Prior to this invention the construction

was such that the recess for the lock was formed in one side or half of the cuff and the lock had to be inserted therein before the other side of the plate was riveted in position. This necessitated the insertion of the lock before the cuff was polished and plated. Hence emery or other polishing material was liable to enter into the lock mechanism, and the plating solution also got into the lock and was apt to cause it to rust and stick. With the present invention the handcuff proper is constructed complete without its lock, so that the polishing and plating are accomplished before the lock is inserted. The lock is then introduced into the recess provided for it, and fastened in place by driving home the pin *m* or equivalent fastener. The construction is very simple and has the advantage that the lock is unaffected by the polishing and plating operations; it also has the advantage that in case the lock requires inspection, cleaning, oiling or repairs, it may be removed without disturbing the remainder of the cuff, it being only necessary to drive out the pin *m*.

The construction is susceptible of some variation or modification without departing from the essential characteristics of the invention. For example the spacer may be otherwise fastened than by pins or rivets, as by soldering or welding to one or both plates.

It has been found that with handcuffs of this character it is sometimes possible by striking the cuff a quick blow, to spring the parts sufficiently to release the interlocking teeth and enable the cuff to open. To prevent this the present invention provides the swinging arm with a concentric shoulder and the lock member with a projection engaging such shoulder in such manner that such springing is resisted and prevented. In Fig. 1, the arm *D* is shown as formed with a groove *s* concentric with the pivotal axis and the outer wall of which forms a shoulder *t*. One side of the lock case is formed with a pin or other projection *u*, Fig. 6, which enters the groove, and against which the shoulder *t* bears, so that the arm

cannot yield in direction away from the lock.

We claim as our invention:—

1. A handcuff comprising opposite plates and a spacer between them fastened together to provide a lock recess within the spacer, combined with a lock adapted for subsequent insertion into such recess.

2. A handcuff comprising opposite plates and a spacer between them fastened together to provide a lock recess within the spacer, combined with a lock inserted removably in said recess.

3. A handcuff comprising opposite plates and a spacer between them fastened together to provide a lock recess within the spacer, combined with a lock adapted for insertion in said recess, a part of the lock and said plates having coinciding holes, and a fastening introduced through said holes to hold the lock in place.

4. A handcuff having a swinging arm and having its body portion formed with a lock recess opening on the side toward the arm, combined with a self-contained lock adapted to engage said arm, inserted through such opening into such recess, and irremovable therefrom except through such opening, whereby it cannot be removed when the arm is in the locked position.

5. A handcuff having a swinging arm adapted to turn through a complete circle, said arm formed with a concentric shoulder and the lock member having a projection engaging such shoulder.

6. A handcuff having a swinging arm formed with a concentric groove and the lock member open on the side engaging said arm, and having a pin projecting into such groove.

In witness whereof, we have hereunto signed our names in the presence of two subscribing witnesses.

JOSEPH H. WESSON.
EDWARD S. POMEROY.

Witnesses:

H. L. POMEROY,
SEVERIN WALLENBERG.