

(No Model.)

J. J. TOWER.

HANDCUFF.

No. 356,215.

Patented Jan. 18, 1887.

Fig. 1.

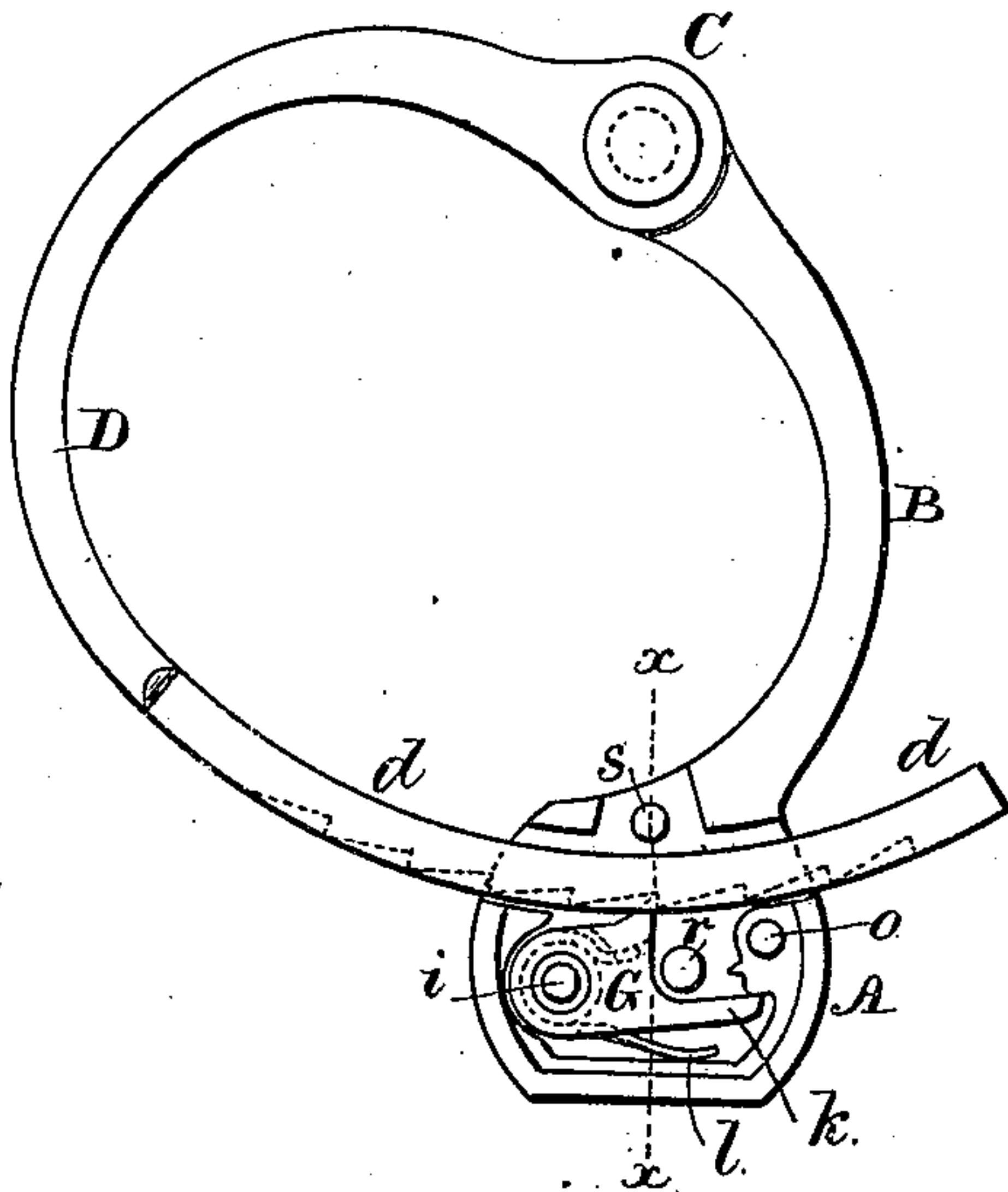


Fig. 2.

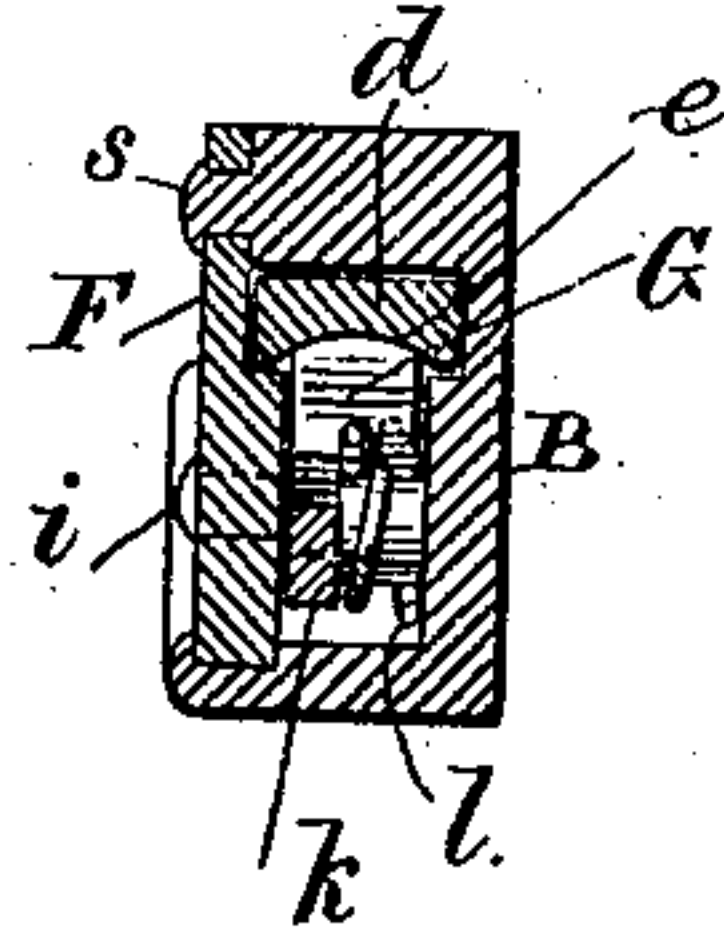


Fig. 4.

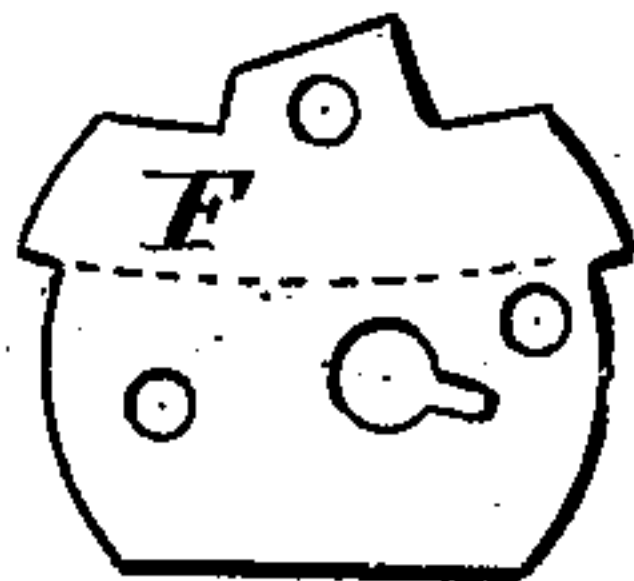


Fig. 3.

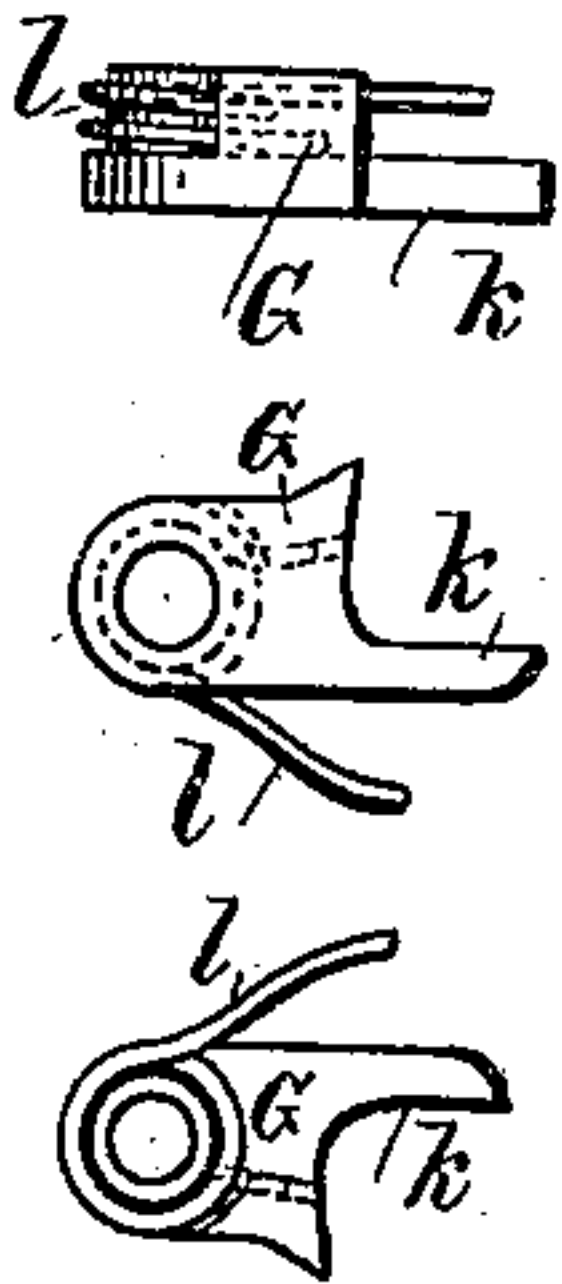
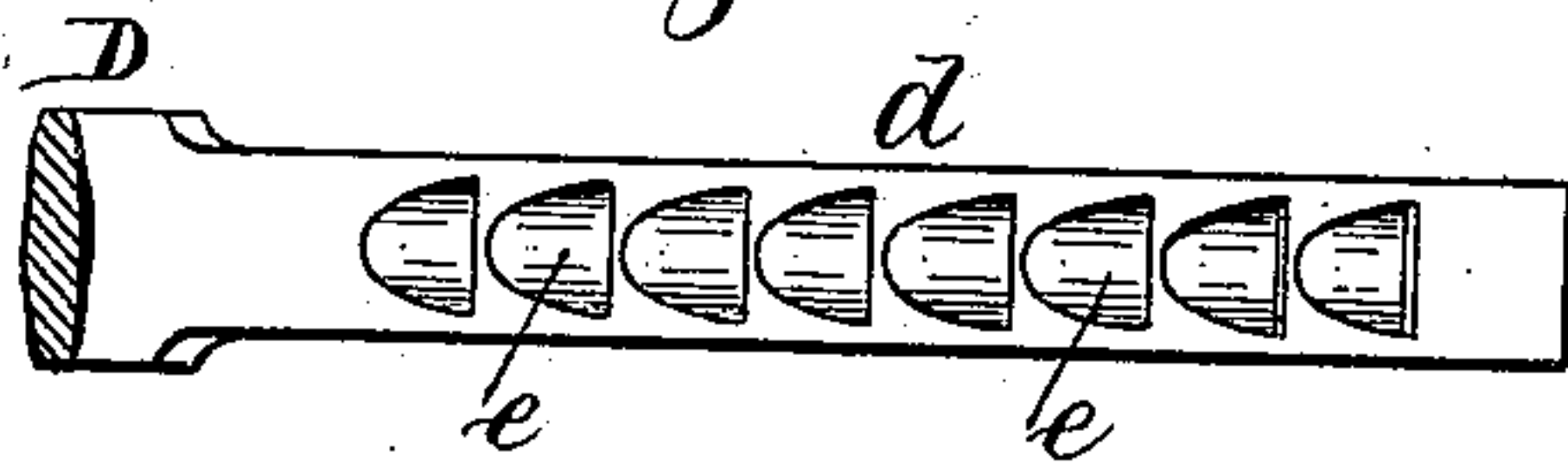


Fig. 5.



Witnesses

Chas. H. Smith  
J. Stair

Inventor

John J. Tower.

For Lemuel W. Perrell

att'y

# UNITED STATES PATENT OFFICE.

JOHN J. TOWER, OF BROOKLYN, NEW YORK.

## HANDCUFF.

SPECIFICATION forming part of Letters Patent No. 356,215, dated January 18, 1887.

Application filed December 16, 1885. Serial No. 185,820. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. TOWER, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Handcuffs, of which the following is a specification.

This handcuff is made for lessening the expense of the construction of the hasp and case of the lock, for lessening the weight of the handcuff, and for more firmly connecting the bolt and hasp and rendering the action of the key easy in opening the lock.

In the drawings, Figure 1 is an elevation of the handcuff with the lock-plate removed. Fig. 2 is a section at the line *xx*, Fig. 1. Fig. 3 shows detached views of the spring-bolt. Fig. 4 is a separate view of the lock-plate, and Fig. 5 shows the face of the shackle.

The lock-case A and bow B are made in one piece, and at C is the joint by which the swinging hasp D is fastened to the bow B. The chain connecting one handcuff to the other is usually affixed to the joint-pin by a yoke-piece. This may be of any desired character. The portion *d* of the swinging hasp D is made as an arc to the joint C, so that the same will swing freely through the mortise in the lock-case A, and the edges of this arc *d* are smooth, so that the same will pass freely through the mortise in the said case.

In the outer surface of the arc *d* are segmental recesses, (shown in Figs. 2 and 5,) the same being formed by a revolving milling-tool, so as to obtain the necessary depth to the recess *e*, for securely holding the hasp by the bolt of the lock; but these segmental recesses are only in the face of the arc *d*, leaving the corners of such arc smooth, in order that there may not be any offsets or shoulders to catch upon the metal of the case as the arc is forced into place in applying the handcuff to the wrist. Besides this, the portion of the bolt which enters these segmental recesses having a corresponding shape, the said bolt has a very firm hold upon the swinging hasp, and there is no opportunity to insert any instrument into the case by which the bolt may be pried out of the recess, and the recesses, being formed by a conical milling-tool, are easily and cheaply finished, whereas the cast or forged recesses before made are inaccurate and costly to finish.

The lock-case A is made with a plate, F. (Shown detached in Fig. 4.) It is of a shape to pass into the lock-case, and its inner surface comes against one edge of the arc *d*. There are rivets *i o s*, by which the lock-plate is securely held in place, the rivets *i* and *o* being upon the case at one side of the opening for the arc *d*, and the rivet *s* upon the case at the other side of the said arc, and in this lock-plate F is the key-hole for the tubular key, which is to be passed through said hole and over a stud, *r*, in the lock-case. The key-hole is only a little larger than the stud, so that the barrel of the key is of thin metal. This renders the interior of the lock difficult of access.

The bolt G swings upon the pivot-pin *i*, and at one side is the latch entering one of the recesses in the arc *d*, and at *k* is an arm against which the key acts in opening the lock; and *l* is a spring, preferably of wire, that acts to swing the bolt and throw the latch into one of the recesses in the arc *d*, the latch being in the middle, and the arm *k* projecting beyond becomes a lever for the key to act upon in opening the lock.

Within the lock-case are the usual wards, to which the key-bit is fitted to prevent the use of a wrong key.

It will now be understood that this handcuff is very simple and easy of manufacture, and it is strong and reliable, and easily applied to the wrist or ankle of the person under arrest, and the handcuff is very light, and at the same time the strength is maintained.

I claim as my invention--

The combination, in a handcuff, of the bow B and joint C with the swinging hasp D, having recesses that are segments of cones, the lock-case at the end of the bow B, through which the hasp passes, and a spring-bolt within the case, pivoted at one end, and having a catch in the middle portion thereof, and a lever end against which the key acts, substantially as specified.

Signed by me this 7th day of December, A. D. 1885.

JOHN J. TOWER.

Witnesses:

GEO. T. PINCKNEY,  
WILLIAM G. MOTT.