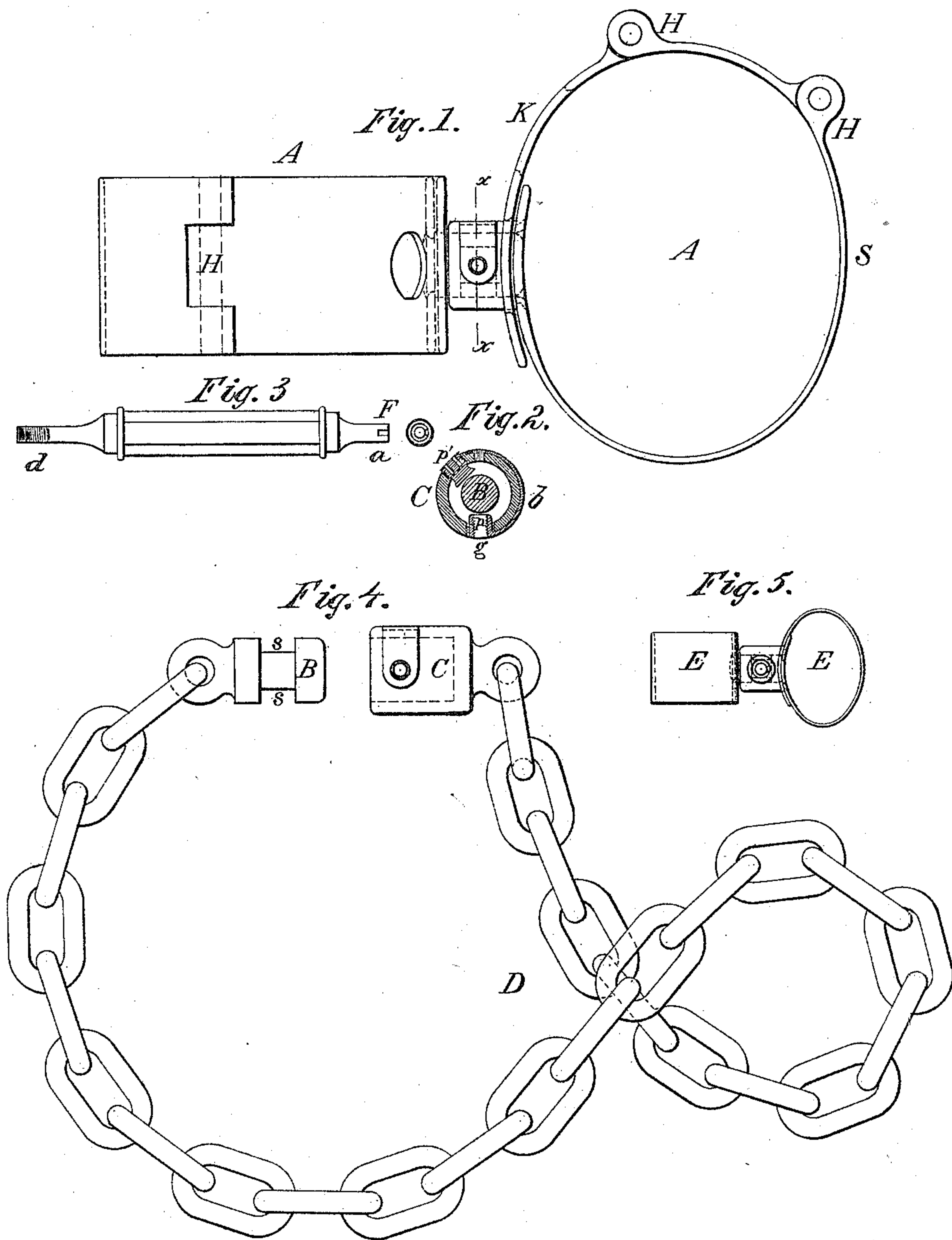


J. C. PALMER.

SHACKLES.

No. 172,476.

Patented Jan. 18, 1876.



Witnesses:

Chas. Supperman.

C. H. Watson

Inventor:

James C. Palmer

UNITED STATES PATENT OFFICE.

JAMES C. PALMER, OF UNITED STATES NAVY.

IMPROVEMENT IN SHACKLES.

Specification forming part of Letters Patent No. **172,476**, dated January 18, 1876; application filed December 10, 1875.

To all whom it may concern:

Be it known that I, JAMES C. PALMER, of the United States Navy, have invented certain new and useful Improvements in Gyves, Manacles, and Thumb-Fasts; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to furnish means of securing, by the hands or feet, or both, any unruly or other person requiring restraint, without causing any pain or greater inconvenience than that of restraint alone; and to this end the nature of my invention consists in the construction and arrangement of curved steel manacles, with their fastenings, which may also be applied to gyves for the ankles, and to thumb-fasts for the thumbs, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a side view of my improved manacles. Fig. 2 is a cross-section of the lock or fastening, through the line *x x*, Fig. 1. Fig. 3 is a view of the key used to unlock the manacles. Fig. 4 shows the mode of applying my invention to gyves for the ankles. Fig. 5 represents thumb-fasts constructed on the same principle.

S represents a curved band of steel or other suitable metal, provided at one end with a hinged piece, H, beyond which is a steel or other metal joint, K. In order to leave an opening wide enough for the wrist or ankle, this joint K is provided with two holes to fit the corresponding lock-fastenings at B and C.

Additional joints may be used, if desired, as in bracelets.

C represents the cylindrical lock, to receive the bolt B, which latter is formed with a circumferential groove, *s*, into which small steel buttons *p p'* fit easily, so as to allow free circular motion of the hands. The button *p* is attached to the free end of a spring, *b*, and works through a hole at *g*, which is cut with a female screw-thread, so that in case of breaking the spring, an extra screw-button,

like the button *p'*, may be substituted. The spring *b* is permanently secured to the outside of the lock C.

The screw-button *p'* is intended as a fixture, and insures, with the button *p*, equal bearings upon the bolt B, which is thereby securely and strongly clamped in the lock C. The button *p'* is turned in for fastening, and out for opening, by means of a peculiar semi-lunar-shaped key, *a*, at one end of a handle, F. At the other end of this handle is a small male screw, *d*, fitting into the hole in the spring-button *p*, to provide a purchase for pulling out the spring when the prisoner is to be released. The bolt B and lock C are sprung into their proper holes in the joints K, and held around the wrists by the tension of the steel bands S. Then crossing the hands the bolt is inserted into the lock, and the button *p* springs into the groove *s*, thereby instantly securing the prisoner. In the process of release these motions are reversed, by use of the key and screw on the handle F.

The manacles, at their utmost stretch, will, in many cases, fit for gyves also, though a larger size is provided, which, in turn, will fit an unusually stout wrist. Otherwise, there is no difference in the fastenings for wrists and ankles; but when the prisoner is not ill-behaved, the gyves may be connected by a chain, D, provided at its ends with the fastenings B and C, as shown in Fig. 4, and adapted both to wrists and ankles.

For securing women or boys the thumb-fasts E are fitted like the manacles, but sufficiently locked by the set-screw button *p'*, which can never be reached by the prisoner's own fingers. In these, therefore, the spring-button is omitted.

It will be observed that this device contemplates the free use of the prisoner's hands for feeding himself, and also for climbing up a ladder when the feet are free or attached by the chain; and, further, that prisoners of state are saved the mortification of public exposure, as the fastenings may easily be concealed under ordinary garments.

Although this apparatus is expressly designed for humane confinement, yet it is evident that, by putting the hands behind the back, and bringing the feet close together, it

may, without any addition, serve the purpose of much severer punishment.

Having thus fully described my invention, I claim as new, and desire to secure by Letters Patent, as follows:

1. In manacles for wrists or gyves for ankles, the bands S, provided with the hinged parts H and joints K, having two or more size-adjusting holes, substantially as and for the purposes herein set forth.

2. The combination of the cylindrical lock

C, bolt B, with circumferential groove s, the spring b, and button p, attached to the spring and band S, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAS. C. PALMER.

Witnesses:

WILLIAM L. BRAMHALL,
F. H. DUFFY.