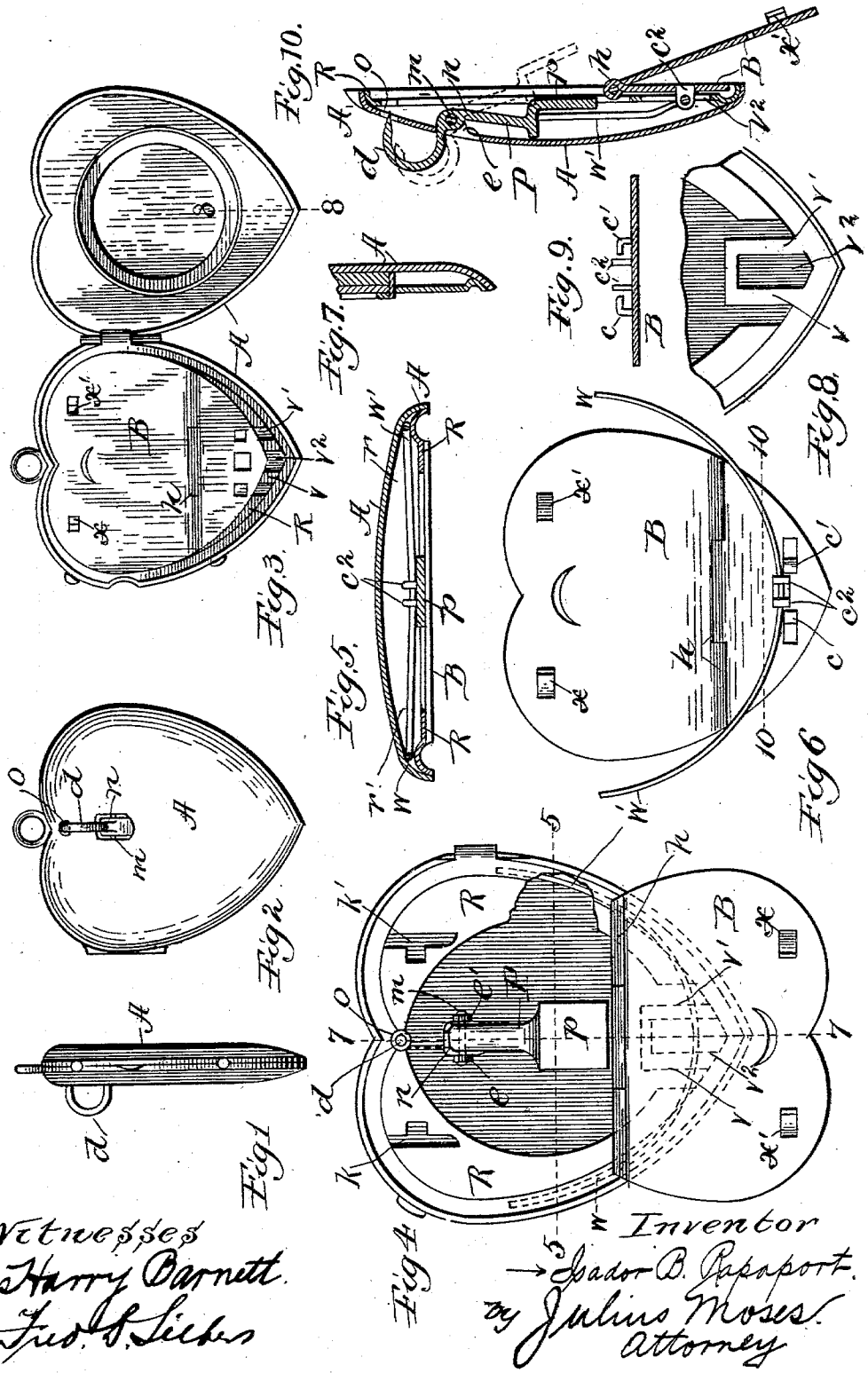
(No Model.)

I. B. RAPAPORT.

LOCKING DEVICE.

No. 563,882. Patented July 14, 1896.



Witnesses
Harry Barnett.
Fred. S. Lieber

Inventor
Isador B. Rapaport.
by Julius Moses.
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ISADOR B. RAPAPORT, OF CHICAGO, ILLINOIS.

LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 563,882, dated July 14, 1896.

Application filed January 8, 1896. Serial No. 574,684. (No model.)

To all whom it may concern:

Be it known that I, ISADOR B. RAPAPORT, a citizen of the United States, residing in the city of Chicago, county of Cook, and State of Illinois, have invented a certain new and useful Improvement in Locking Devices, of which the following is a specification.

The object of my invention is to provide a new and improved pin-locking device to be used in connection with lockets or other ornamental wear of like nature; and it consists in the features, arrangements, and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of the locket to which my locking device may be applied. Fig. 2 is a rear elevation of said locket, showing the pin of my improved locking device projecting from the same. Fig. 3 is an elevation of the interior of said locket, when the same is open, showing part of the locking mechanism. Fig. 4 is a front elevation of the interior of one-half of said locket, showing the arrangement of the parts forming the locking mechanism when the same is unlocked. Fig. 5 is a sectional view through line 5 of Fig. 4, looking in the direction of the arrow. Figs. 6, 7, 8, and 9 show details of construction. Fig. 10 is a sectional view of my improved locking device through line 7 of Fig. 4, looking in the direction of the arrow.

In describing my improvement I have chosen to describe it as being applied to a locket. Said locket in this instance is heart-shaped, and consists of two parts hinged together, as shown in the drawings. This choice is made, however, merely for the purposes of description, and I do not intend to limit myself thereto, but my improved locking device may be used in connection with any other ornament or receptacle of any shape and size. The locking device about to be described is adapted to be attached to one-half of this locket.

In constructing my improvement I use a locket having a case A of any desired shape, but consisting of two parts joined together by a hinge, as shown in Fig. 3. The interior edge of the half of this locket is provided with an overhanging rim R, (shown in Fig. 4,) which, in conjunction with the casing of the locket, forms the recess shown more plainly in the cross-section, Fig. 5, (designated by r and r'.) At the lower part of the locket this rim is so extended as to form the slotted piece shown in Fig. 4 and on a larger scale in Fig. 8, and designated by v and v'. The upper part of this inner rim is also provided with notched slots k and k', Fig. 4, which are cut symmetrically on opposite sides of said rim. A little above the center of the outside casing, and projecting inward from said casing of said locket, are stamped the two little ears e and e', Fig. 4. These ears support the hook-shaped pin (shown more plainly in Fig. 10 and designated by letter P) by means of the rivet m, Fig. 4, which rivet passes through the ears and the pin just where the hook d of said pin meets its shank n. The pin is so placed that its hook-shaped portion d lies on the outside of the locket-casing, while its shank n and its plate p, Fig. 4, lie on the inside of the locket-casing. The casing where the point of the pin meets said casing when the pin is locked into position is provided with a small hole o, Fig. 4, to receive the point of said pin.

The interior of the locket is provided with a cover-plate, (designated by letter B, Fig. 4, and also shown in Fig. 6.) This cover-plate fits onto the interior of the locket over the rim heretofore mentioned. It is loosely fastened onto said rim at its lower portion by means of the spring-catches c and c', Fig. 6, situated at the lower part of the cover-plate, which cling onto and partly surround that portion of the rim indicated by letters v and v', Fig. 4. Into the slot at v^2 there fits the small ear c^2, stamped out of and projecting from the lower part of the cover-plate heretofore mentioned. Through this ear, after the cover-plate has been placed in position upon the rim and the ear c^2 has passed through the slot v^2 and projects on the inner side, there passes a wire spring $w\ w'$, Fig. 4, which serves the purpose both of locking the rim and cover-plate securely together, as by its tension, tending to throw the entire cover-plate upward, so that the spring-catches situated in the upper part of said cover-plate and designated by letters x and x', Fig. 6, are kept beyond the notches in the slots k and k'. The two ends of this spring fit into the recess heretofore mentioned, formed by the rim and the casing.

The position of this spring and the cover-plate and the projecting ear is more clearly shown in Fig. 5. The cover-plate is divided into an upper and lower portion by the hinge *h*.

In using my improved locket, and in order to attach the same, the locket is opened, as shown in Fig. 3, the cover-plate is pushed downward until the spring-catches *x* and *x'*, Fig. 3, come in line with and fall opposite the notched slots *k* and *k'*, (shown in Fig. 4.) The upper flap of the cover-plate is then turned back completely, thus releasing the plate *p* of the pin and permitting the pin P, Fig. 4, to be rotated in a position at right angles with the locket-casing. The point of the pin is then attached to the desired object, and is turned on its axis until the point of the pin enters the hole at *o*, Fig. 4, at the upper part of the locket-casing, when the plate of the pin (designated as at *p*, Fig. 4, and situated in the interior of the locket-casing) will lie flush with the cover-plate.

The upper flap of the hinged cover-plate is thereupon closed over this interior mechanism and the entire cover-plate is pressed downward against the tension of the wire spring *w w'*, Fig. 4, until the spring-catches at *x x'*, Fig. 3, come into line with and opposite to the notches in the slots at *k* and *k'*, Fig. 4, and enter the same. The pressure on the cover-plate being then released the tension of the spring forces the cover-plate upward, and the spring-catches pass the notches in the slots at *k* and *k'* and remain in position beyond said notches. The vertical movement of the cover-plate is guided by the slot and flange mechanism of the cover-plate and rim, which permits only such vertical motion.

The advantage of my improvement is to provide a locking device so constituted that when once securely attached by its hook it cannot of itself become loosened and undone, and, in fact, cannot be removed at all except by one acquainted with its mechanism.

I claim—

1. In a locking device, the combination of a casing, a hook-pin lying and rotating entirely without said casing, a shank lying and rotating entirely within said casing, said pin and shank being rotatable at their juncture about an axis lying within said casing, and a movable plate within said casing adapted to cover the shank portion of said pin, whereby the same is locked into position, substantially as described.

2. In a locking device, the combination of a casing provided with a pin rotatable at right angles to said casing about an axis lying within said casing, an overhanging rim surrounding the interior edge of said casing, and a cover-plate adapted to fit over said rim, whereby said pin is locked into position, substantially, as described.

3. In a locking device, the combination of a casing, a hook-shaped pin rotatable at right angles to said casing about an axis lying within said casing, an interior rim surrounding the interior edge of said casing, a cover-plate adapted to fit over said rim and cover the interior of said casing, the means for rendering the interior pin mechanism accessible for the purpose of attaching or disconnecting the locket, substantially, as described.

4. In a locking mechanism, the combination of a hook-shaped pin rotatable at right angles to the casing, a rim surrounding the inner edge of said casing, a cover-plate consisting of two parts hinged together, the lower part adapted to be fastened to the interior rim, the upper portion adapted to swing outward upon said hinge, whereby the inner pin mechanism is rendered accessible when the locket is to be attached or detached.

ISADOR B. RAPAPORT. [L. S.]

Witnesses:
HARRY BARNETT,
JULIUS MOSES.