H. T. LOVE.

TRAY.

APPLICATION FILED JAN. 4, 1912.

1,114,998. Patented Oct. 27, 1914.

Fig. 1.

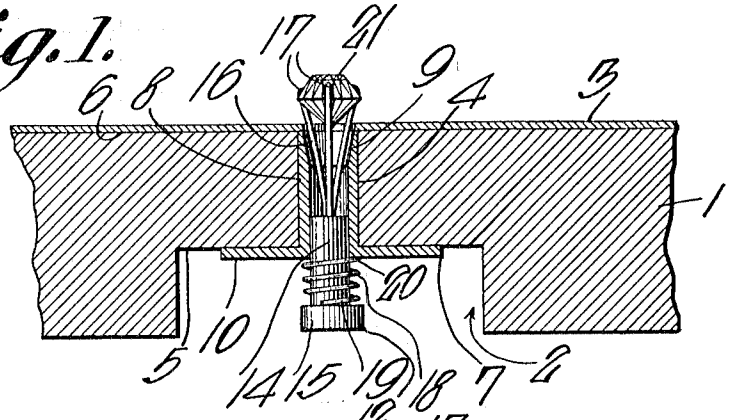


Fig. 2.

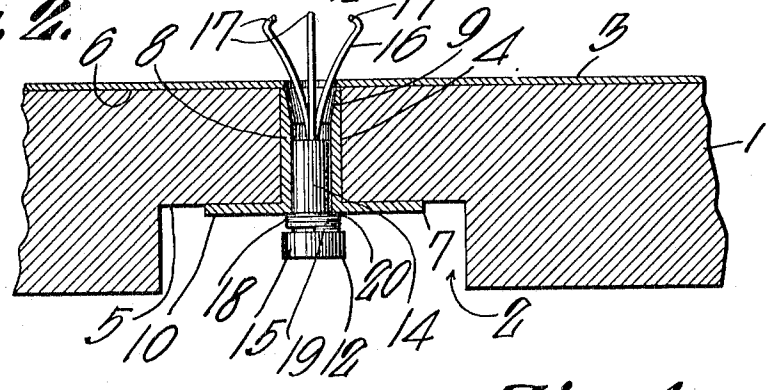


Fig. 3.

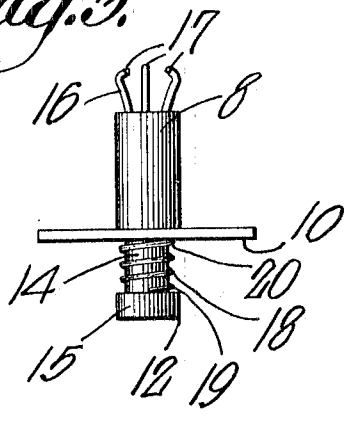
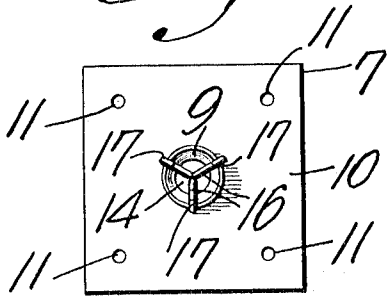


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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TRAY.

1,114,998. Specification of Letters Patent. Patented Oct. 27, 1914.

Application filed January 4, 1912. Serial No. 669,393.

To all whom it may concern:

Be it known that I, HARRY T. LOVE, a citizen of the United States, residing at La Grande, in the county of Union and State of Oregon, have invented a new and useful Tray, of which the following is a specification.

The device forming the subject matter of this application, is a tray, adapted for the display of jewels and like articles.

One of the objects of the invention is to provide, in combination with a tray, a jewel-holder, adapted to retain a jewel above the tray, the holder being manipulable, to effect a release of the jewel or other article, only when the tray is lifted free from the support upon which it is mounted.

A further object of the invention is to provide, as an article of manufacture, a jewel-holder, of novel and improved form, adapted to be assembled with a tray, the holder being spring-actuated in one direction to effect a grip upon the jewel or other article, and being manually movable in an opposite direction, to effect a release of the article.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described, and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings,—Figure 1 shows the invention in fragmental vertical section, a jewel being engaged with the jewel-holder; Fig. 2 is a similar view, showing the movable element of the device uplifted, the jewel-engaging arms being separated, to receive the jewel; Fig. 3 is an elevation of the holder proper, removed from the tray; and Fig. 4 is a top plan of the structure appearing in Fig. 3.

In carrying out the invention there is provided a tray 1, which may be fashioned from wood or other suitable substance. The tray 1 is provided in its lower face with a recess 2. Applied to the upper face of the tray 1 is a covering 3, which may be velvet, celluloid or the like. There is a passage 4 extended through the tray 1, at right angles to the plane of the tray, the passage 4 intersecting the upper wall 5 of the recess 2, and intersecting also the upper face 6 of the tray 1.

The invention further includes a casing, denoted generally by the numeral 7. The casing 7 includes a tubular body 8, inserted into the passage 4, and terminated approximately flush with the upper face 6 of the tray 1, the upper end of the tubular body 8 terminating in a flaring mouth 9. The upper end of the tubular body 8 is housed beneath the covering 3, so that the upper face of the tray 1 will not present an unsightly appearance. The casing 7 also includes a laterally projecting securing member, preferably taking the form of a flange 10, secured to, or formed integrally with, the lower end of the tubular body 8. The flange 10 is located within the recess 2, and bears against the upper wall 5 of the recess. There are openings 11 in the flange 10, which openings 11 are adapted to receive securing elements, whereby the casing 7 may be secured to the tray 1.

The device further includes a jewel-holder, denoted generally by the numeral 12. The holder 12 comprises a spindle 14, mounted to slide in the tubular body 8, the spindle 14 being equipped at its lower end with a laterally projecting head 15, located in the recess 2. Fixed to and upstanding from the upper end of the spindle 14, are diverging spring arms 16, terminating, above the covering 3, in inwardly projecting, jewel-engaging fingers 17. A helical compression spring 18 surrounds the spindle 14, the spring bearing at one end against the head 15, and at the other end against the flange 10, the point of engagement between the spring 18 and the head 15 being denoted by the numeral 19, and the point of engagement between the spring 18 and the flange 10 being denoted by the numeral 20.

It is to be observed that the spring arms 16 bear laterally against the tray 1 adjacent the upper end of the tube 8. The spring 18, therefore, exercises two functions, since it serves to draw the arms downwardly into engagement with the jewel and serves also to force the tube 8 upwardly, the spring tending to force the tube upwardly and hold the same in place, the flange 10 tending to limit the upward movement of the tube.

In practical operation, the finger of the operator is pressed against the head 15, the tray 1 having first been lifted free from the support upon which it is mounted. The

spindle 14 of the holder will be slid upwardly in the tubular body 8, to effect a compression of the spring 18. The spring arms 16 will spread apart, as shown in Fig. 2, whereupon the jewel 21 may be mounted within the fingers 17. When the finger of the operator is removed from the head 15, the spring 18 will thrust the spindle 14 downwardly, the arms 16 engaging with the flaring mouth 9 of the tubular member 8, effecting a compression of the said arms 16, whereby the fingers 17 will engage with the jewel 21.

Owing to the fact that the tray 1 is recessed in its lower face, as shown at 2, the tray may be placed upon a support, without causing an upward movement of the spindle 14, and a consequent release of the jewel 21. In practical operation, when it is desired to release the jewel 21, the tray 1 must first be lifted free from the support upon which it is mounted, thereby giving access to the head 15 of the spindle 14. Owing to the fact that the tray 1 must first be uplifted, before the jewel 21 is released, it is a matter of great difficulty, to remove the jewel 21 surreptitiously, the raising of the tray 1, to give access to the head 15, being an operation which will attract the attention of the person into whose custody the tray 1 is placed.

The device as shown in Figs. 3 and 4, is of simple construction, and, as an article of manufacture, may readily be assembled with a tray which is provided with any suitable means for spacing its lower face from a support.

Having thus described the invention, what is claimed is:—

In a device of the class described, a tray having a recess in its bottom and provided with a reduced passage opening into the recess; a tube upwardly insertible into the recess and provided at its lower end with an outstanding flange engaging the upper wall of the recess; a plunger slidable in the tube and provided at its lower end with a head located in the recess; a compression spring located in the recess and engaging the flange and the head; and spring fingers secured to the upper end of the plunger and engaging the upper end of the tube, the fingers diverging continuously from a common point on the top of the plunger and the bore of the tube being flared at its upper end to permit the fingers to expand, the bore of the tube being of a fixed diameter below the flared portion to permit the plunger and the fingers to be pushed upwardly into the tube.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HARRY T. LOVE.

Witnesses:
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J. F. PHY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."