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2,174,995

SPRING CATCH

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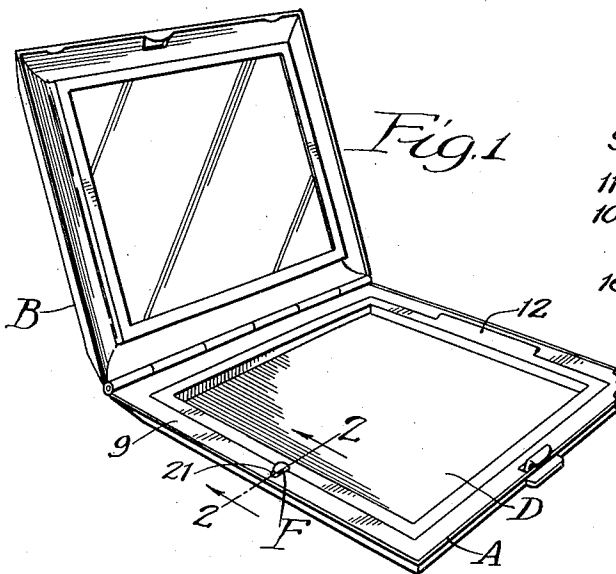


Fig. 4

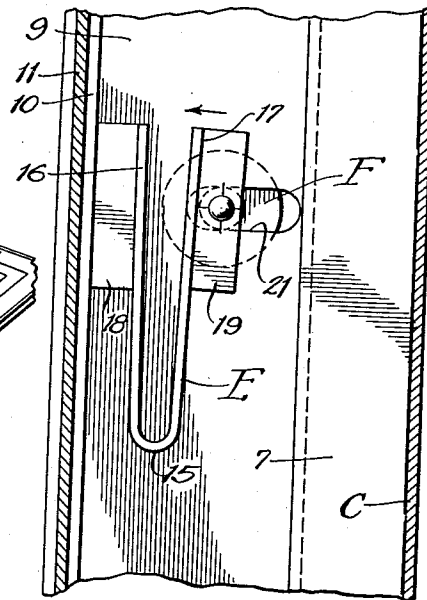
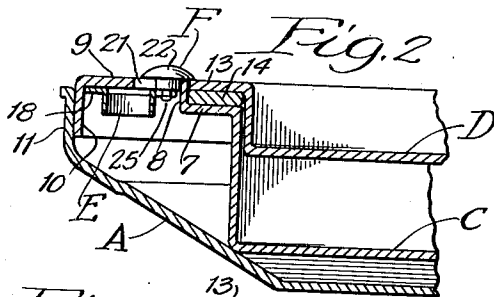


Fig. 2

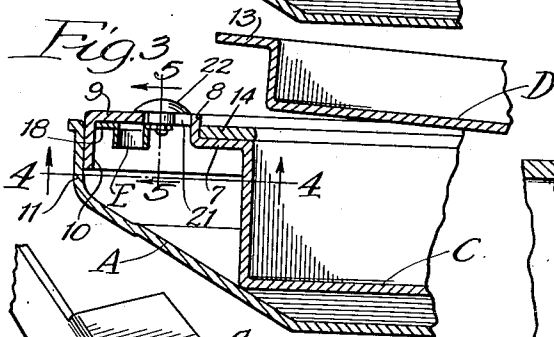


Fig. 3

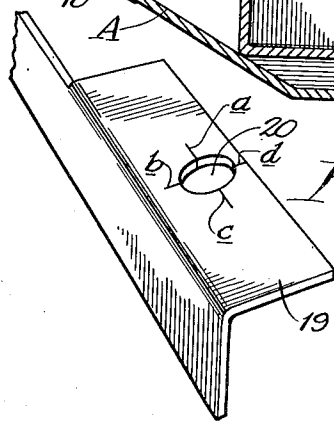


Fig. 6

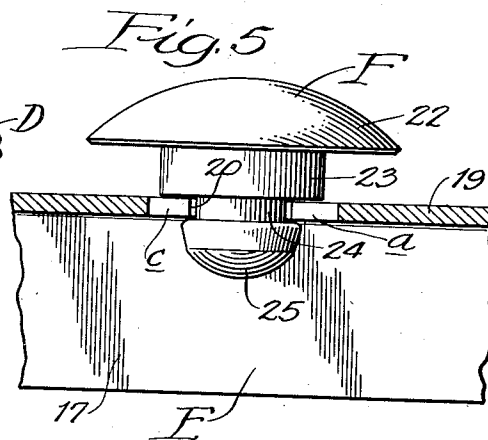


Fig. 5

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SPRING CATCH

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2 Claims. (Cl. 292—175)

This invention relates to a spring catch which may be advantageously employed with a small pocket case such as is designed for the reception of cosmetics, cigarettes, etc. In the description to follow a vanity case will be referred to by way of example.

The catch of this invention is an improvement over existing devices in that it is made of two spring-connected parts so as to facilitate assembly; it may be secured in operative position with a minimum of effort; it is effective to releasably secure in locked position a lid or other like part in a small case; and it is provided with a button forming an inconspicuous, yet comfortable, actuating element adapted to receive pressure from the finger whenever it is desired to operate the catch.

A vanity case having such a catch is illustrated in perspective in Figure 1 of the accompanying drawing, the case cover being shown as open; fragmentary details in section on an enlarged scale, each taken on line 2—2 of Fig. 1, are shown in Figs. 2 and 3, the lid being locked in the former and released in the latter; an enlarged detail in section taken on line 4—4 of Fig. 3, is shown in Fig. 4; an enlarged detail in section taken on line 5—5 of Fig. 3, is shown in Fig. 5; and a perspective view of the lid flange which is apertured and slitted to provide spring sections for co-operation with the actuating button, is shown in Fig. 6.

The case herein shown comprises a body A in the form of a shallow receptacle to one edge of which is hinged a cover B. Both the body and cover may be equipped with any desired fittings. As shown, there is fitted into the body a shallow inner receptacle C having a ledge 7 forming a seat from which rises a border wall 8 joining with a frame wall 9 which terminates in a depending marginal flange 10 that lies to the inside of a marginal wall 11 which is formed on the body. The marginal wall and flange are interfitted or otherwise secured so that the inner receptacle is fixedly mounted in the body of the case. A lid D is placed over the receptacle, being secured at one end by a hinge connection 12 permitting its opposite end which is free to swing open, thereby exposing the interior of the receptacle. As shown, the lid is offset adjacent its margin to provide an edge 13 adapted to rest upon the seat 7. If desired, a gasket 14 may be rested on the seat so as to form a seal which prevents escape of powder or other loose material from the receptacle when the lid is closed down tightly in place.

The construction thus far described is suggestive of one with which the present spring catch

may be advantageously employed. The catch E, as best shown in Fig. 4, comprises a leaf of spring metal. It may be of various forms—bowed, angular, straight, U-shape, etc. As illustrated, the leaf has a return bend at 15 so that its two ends 16 and 17 may lie in adjacent but spaced relation, each free to move toward or from the other. The spring in the region of each free end is provided with outwardly turned flanges, the one upon the end 16 being designated as 18, and the other upon the end 17 being designated as 19. Such a spring is adapted to be fitted within the space between the marginal wall 10 against which the lip 18 is rested, and the border wall 8 extending upwardly from the seat, the lip 19 being urged toward the border wall by tension of the spring.

The flange 19 is provided with an aperture 20 adapted to register with a slot 21 in the frame wall 9, the slot being elongated in a direction transversely of the spring. Extending away from the slot, but communicating therewith, are a plurality of slits *a*, *b*, *c* and *d*, preferably four in number and radially disposed, providing between them a like number of flexible tongues which may yield in either direction out of the plane of the flange. An actuating element for the spring is provided in a button F having by preference a convex crown 22 surmounting a shank which comprises (1) a head 23 whose diameter is such as to adapt it for slidable fitting within the elongated slot 21; (2) a neck 24 whose diameter is slightly less than that of the aperture 20 in the spring flange 19; and (3) a body flaring inwardly towards its bottom 25 which is rounded, the maximum diameter of the body being slightly greater than that of the aperture 20. When the button head is positioned in the elongated slot, its neck will lie in the plane of the spring flange 19 permitting the latter to be forced over the body 25, the spring tongues yielding as necessary during this operation. After clearing the sides of the body the spring tongues will snap back into their original position which is coincident with the plane of the flange, thereby releasably locking the button to the spring. Sufficient clearance should, of course, be provided to permit movements of the spring tongues through the necessary distance in order to enable the button to be snap-fitted in or out of place.

In the process of assembly, it may be found convenient to assemble a spring, button and inner receptacle before the latter is secured in the case body. The locking connection which is provided between the spring and button is, for all practical

purposes, permanent so that liability of disassembly of either the spring or the button from the receptacle is wholly avoided. For purposes of repair, if necessary, the button may be disconnected from the spring with the aid of an appropriate tool for this purpose.

With the button secured to the spring in the manner just explained, its head will normally remain at or near the slot end which is proximate to the lid. Either the end of the slot may be relied upon to furnish a stop for the expansion of the spring, or the edge of the flange 19 which is proximate to the border wall 8 may serve the same purpose, whichever is most convenient. In any event, the crown is normally projected, by tension of the spring, to a position which overhangs the border wall 8. If the lid D be swung down to its closed position upon the seat, the button will be forced back sufficiently to permit this movement taking place after which the button will advance again, in response to tension of the spring, to project one edge of the crown over the free edge of the lid to provide a releasable catch therefor. If the lid hinge be provided with a spring, as is common at the present time, the lid will at once rise upon being free from the catch.

I claim:

1. In a case having a marginal wall, a hinged lid, a seat against which the free edge of the lid may rest and a portion adjacent the marginal wall and the seat having a guide slot, a releasable catch adapted for engagement with the free edge of the lid, the catch comprising a leaf spring adjacent the marginal wall, said seat, and the portion having said slot and arranged to move to-

ward and from the free edge of the lid, the spring being provided with an opening from which extends a plurality of slits forming between them flexible spring tongues, a button having a neck of reduced diameter forming spaced shoulders and adapted to enter the spring aperture only when the spring tongues are flexed to enlarge the opening for such purpose, whereby the spring tongues are caused to engage said shoulders to fixedly attach the button to the spring, said button operating in said slot and positively securing the spring to the case, the button being normally urged by the spring towards the lid free edge, and means comprised in the button adapted to overlie the lid free edge to releasably secure the same.

2. In a case having a hinged lid, a seat against which the free edge of the lid may rest and a portion adjacent the seat having a guide slot, a releasable catch including a button comprising a shank slidable in said guide slot to move toward and from the free edge of the lid and having a neck of reduced diameter forming spaced shoulders and a crown adapted to overlie the lid free edge to releasably secure the same, and a button actuating member having an opening of a size to receive and confine said neck and less than that of said shoulders so as to be held between the same, said member being split adjacent said opening and having sufficient resiliency to be flexed by said shank to permit the same to enter said opening and position its neck within the same, whereby the button is positively secured to said actuating member and the actuating member positively secured to the case.

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