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R. I. RHODES

JEWELRY BOX HINGE

Filed Nov. 25, 1924

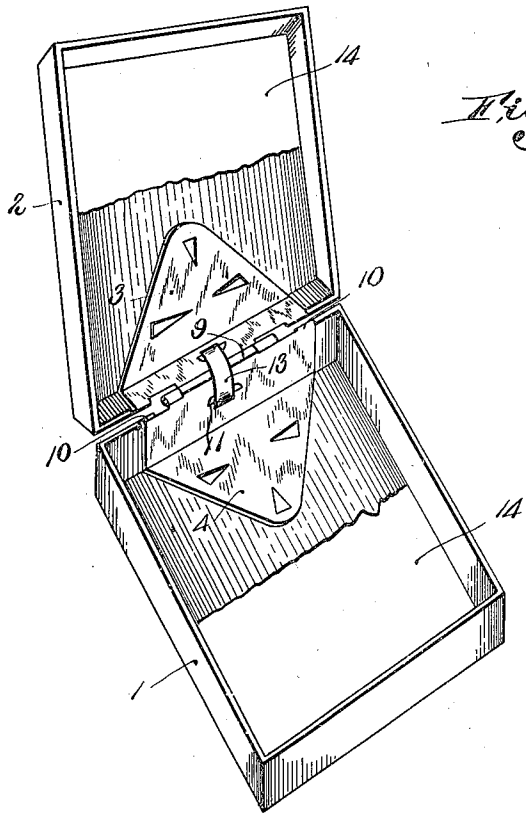


Fig. 1

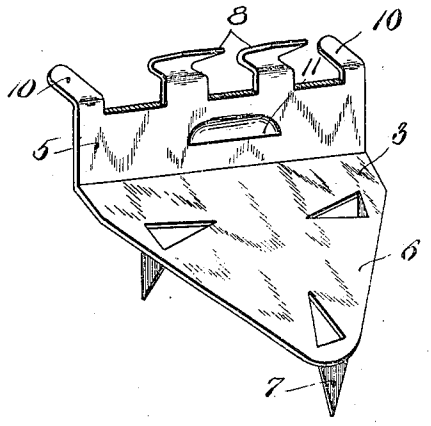


Fig. 2

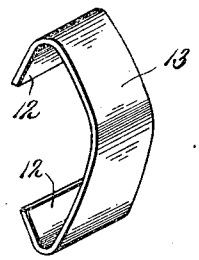


Fig. 3

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UNITED STATES PATENT OFFICE.

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JEWELRY-BOX HINGE.

Application filed November 25, 1924. Serial No. 752,174.

This invention relates to hinges for cases or boxes and particularly jewelry boxes and a principal object of this invention is to provide a durable and reliable hinge for such boxes which is simple in construction, inexpensive to manufacture and has the new and improved features of construction and arrangement hereinafter described.

In the drawings:

Fig. 1 is a perspective of a jewelry box embodying the invention;

Fig. 2 is a perspective of one of the hinge members; and

Fig. 3 is a perspective of the spring.

The preferred embodiment of the invention illustrated on the accompanying drawings comprises a jewelry box having a lower portion or body 1 and a cover or lid 2 which may be constructed of any suitable material such as cardboard, sheet metal or the like. The cover 2 is hinged to the body 1 by a hinge which consists of an upper hinge member 3 connected to the cover and a lower hinge member 4 connected to the body 1, the two members being pivotally connected by intermeshing knuckles.

Each hinge member is formed from a single piece of material such as sheet metal in any suitable manner as by stamping and comprises a leaf 5 which fits snugly against one side of the body of the box, and a plate 6 which extends at substantially right angles to the leaf 5. Struck out of the plate 6 are pointed tongues 7 which are adapted to extend through the material of the box and when bent over securely hold the plate thereto. It will be observed that the plate extends a considerable distance toward the opposite end of the box and by virtue of this construction the strength and durability of the hinge are materially enhanced as the strain on the hinge is distributed throughout a greater area. Such construction also serves to reinforce the box structure, thus increasing its period of usefulness.

Each leaf 5 extends a substantial distance parallel to the walls of the box and is of a width equal to the adjacent wall, the body of the box having a deeper wall than that of the cover so that the leaf connected thereto is slightly wider than the leaf which is connected to the wall of the cover. Integral with the free longitudinal margin of the upper leaf 5 are knuckles or tabs 8 which are bent around a pin, similar knuckles 9 being integral with the lower half and arranged to extend between and on each side of the knuckles 8 thereby pivotally to connect the upper and lower hinge members.

For securely fastening the leaves 5 of the upper and lower hinge members to the adjacent walls of the box cover and body respectively lips 10 are integral with free longitudinal margins of the leaves and are arranged at opposite ends thereof. It will be apparent that by bending the lips 10 over the edges of the cover or box relative movement between the leaves and box structure is prevented. This is particularly advantageous because danger of the box walls to which the leaves 5 are connected being jammed outwardly and crushed is eliminated.

Formed on each leaf 5 between the sides thereof and extending substantially parallel to the pivotal axis of the hinge is a lip 11 formed by extruding a portion of the material. The lips 11 are constructed to receive the hooked ends 12 of a leaf spring 13 which is normally of the shape shown in Fig. 3. When the hinge members are rotated relatively to each other about the pivot from the position in which the box is open to closed position the ends of the spring swing backwardly bending the body of the spring. The bending force is greatest when the cover is in fully closed position and diminishes as the cover opens returning the spring toward its normal shape. The force of compression exerted by the body of the spring whereby the hooked ends of the hinge are pressed toward each other will not tend to open the box when fully closed since the line of pressure is on the inside of the axis of the hinge, but as the box opens the position of the line of compression changes and this compressive force becomes operative to continue the opening movement.

As is customary with jewelry boxes the plates 6 of the hinge members may be covered with a lining 14 of velvet, plush or other suitable material to present a pleasing and attractive appearance.

An outstanding characteristic of this invention consists in the provision of lips on the hinge leaves which serve securely to connect the leaves to the box structure. Another feature consists in the construction and arrangement of the spring which may readily and conveniently be attached and detached without disassembling hinge structure. Owing to the extreme simplicity of construction such spring may be manufac-

tured at a relatively low cost, and by making the spring in one piece and of sturdy material liability of breakage is reduced to a minimum. The fastening prongs as disclosed also contribute to the production of a hinge which is efficient, dependable and durable.

Although I have shown and described a construction which at the present time is the best form known to me, it is to be understood that changes in details of construction and arrangement may be effected without departing from the spirit of the invention especially as defined by the appended claims.

I claim:

1. A hinge for jewelry boxes and the like comprising a pair of pivoted hinge members, each member having a metal base plate of a length to cover a substantial part of the bottom portion or cover portion of the box respectively, and designed to be secured thereto by means penetrating said portions respectively, and a leaf integral with the base plate and extending at substantially right angles therefrom, the edges of said leaves each having at least one outstanding portion bent to form a hinge knuckle and another outstanding ductile portion arranged to be bent over the edge of the box portion to which it is affixed to provide a fastening means at that point which does not penetrate the material of said portion.

2. A hinge element for jewelry boxes or the like comprising a base plate of a length to cover a substantial part of the bottom or cover portion of the box and provided with stuck out prongs to penetrate such a portion at a distance from its edge, and a leaf integral with the base plate and extending at substantially right angles to the same, the edge of said leaf being provided with an outstanding lip bent to provide a hinge knuckle at the side of the leaf opposite said plate in order to lie in substantial alignment with the edge of the box or cover against which the leaf is designed to be engaged, and another lip extending from the same edge of the leaf and adapted to be bent over said edge of the box to compose means for securing the hinge element to the edge of the box without penetrating the same.

Signed by me at North Attleboro, Massachusetts, this 21st day of November, 1924.

RUSSELL I. RHODES.