

J. H. GOSS.
BOX COVER.
APPLICATION FILED MAY 27, 1912.

1,043,519.

Patented Nov. 5, 1912.

Fig. 1.

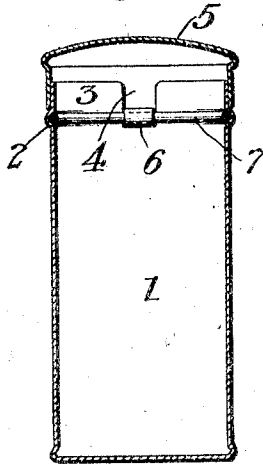


Fig. 2.

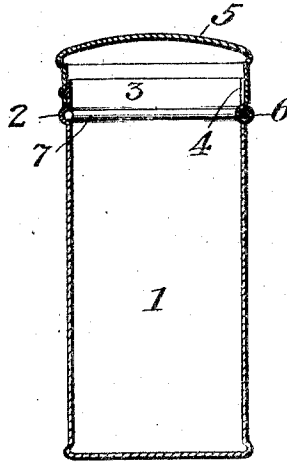


Fig. 3.

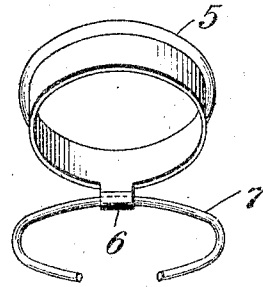


Fig. 8.

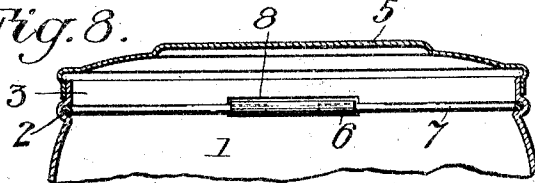


Fig. 5.

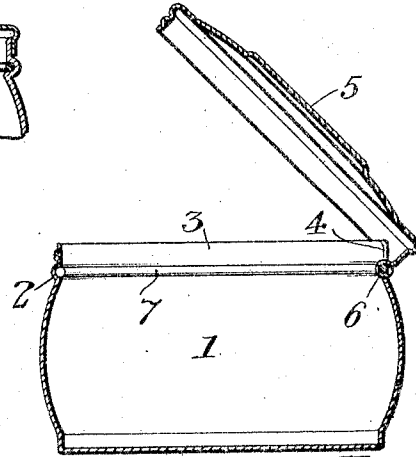


Fig. 4.

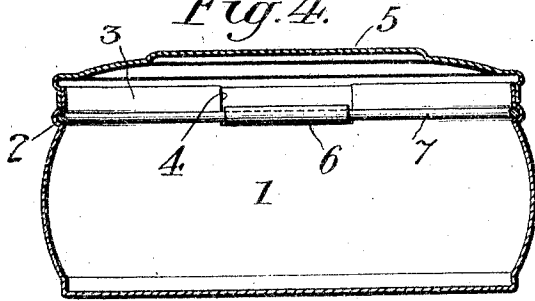


Fig. 7.

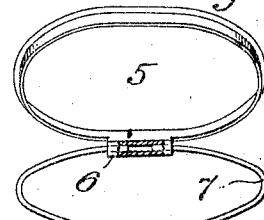
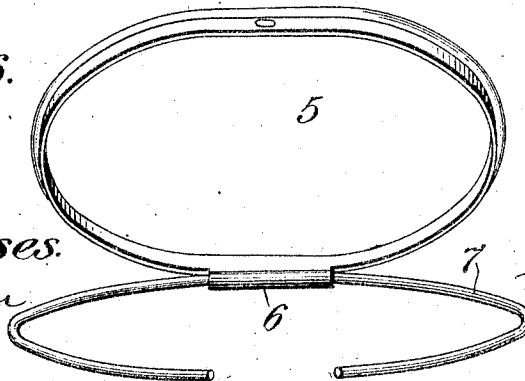


Fig. 6.



Witnesses.
D. W. Edlin
L. M. Cary

Inventor.

John H. Goss
by
W. M. Finckel
Att'y

UNITED STATES PATENT OFFICE.

JOHN H. GOSS, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BOX-COVER.

1,043,519.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed May 27, 1912. Serial No. 699,936.

To all whom it may concern:

Be it known that I, JOHN H. GOSS, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Box-Covers, of which the following is a full, clear, and exact description.

In my Patent No. 1,009,239, dated November 21, 1911 there are illustrated several forms of wire springs which are used as the pintle members of a hinge for hinging a cover or cap to a body and also as the means for securing the cover or cap to the body in a detachable manner. In all of these forms the portion of the wire which immediately forms the hinge pintle is offset for a purpose stated in the patent, and, further, the spring wire engages the body on the outside. The offsetting of the spring requires a special form of hinge knuckle on the cap, and this involves care in assembling. In all those cases where special forms of hinges are used, the cost of assembling, and loss by spoiled goods or parts are appreciable. Otherwise the patented invention is of great utility.

The object of the present invention is to produce a hinged cap of the patented kind, in which the wire spring is not offset and the cap knuckle is not specialized, so that the assembling of the parts is economized; and the spring is snapped into an inside instead of an outside groove and its rigidity and holding quality increased, whereby many of the advantages of the patented invention are retained and the cost of manufacture reduced.

The invention consists of a box-cover provided with a hinge knuckle, preferably integral therewith, and a spring wire which is both hinge-pintle and attaching medium for applying the cover to the body of the box, said wire being a plain curve or ring without offset portions, adapted to be threaded through the knuckle endwise to engage the cover and to be snapped into a groove within the interior of the box body to attach the cover to such body, the ends of the wire being outside of the knuckle or concealed within it as may be desired, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating the invention, in the several figures of which like parts are similarly designated,

Figures 1 and 2 are cross-sections at right angles to one another, of a box for containing a stick of shaving soap, and Fig. 3 is a perspective view of the detached cover and its spring for such a box. Fig. 4 is a longitudinal section and Fig. 5 is a transverse section illustrating the invention applied to a powder puff box, and Fig. 6 is a perspective view of the detached cover and its spring for the puff box. Fig. 7 is a perspective view showing the ends of the wire concealed within the knuckle, and the knuckle being broken out to show same. Fig. 8 is a partial longitudinal section showing a slot instead of a notch in the box body to receive the knuckle.

The following description will apply to both the shaving stick box and the powder puff box, excepting as specified.

1 is the box body, which may be of any approved construction, excepting that near its top is an interior knurled groove 2. Above this groove is the flange 3, which is cut away at 4 down into the groove, in those forms of the box body shown in Figs. 1, 2, 4 and 5. The cover or cap 5 has projecting from it the tubular hinge knuckle 6, preferably integral therewith. Within this knuckle is placed the wire spring 7. This spring is in the form of an open ring of circular or oval contour, in accordance with the profile of the body of the box to which it is to be applied, and I have herein shown both forms, but of course, it may be of any form adapted to correspond to the contour of the box or other object to which the cover is to be applied. The spring wire is without off-sets or other interruptions in the continuity of its curve from end to end, and hence it may be applied to a preformed hinge knuckle on the cap by threading it through such knuckle endwise, instead of being united with the knuckle by forming the knuckle over it or some special part of it, although in some cases it may be more convenient to form the knuckle about the wire. When the spring wire is applied to the knuckle, as just described, the cover or cap is applied to the body by snapping the ring within the groove in the body until the hinge knuckle fully seats itself in the cut out portion 4 of the flange 3. Obviously, the spring when thus applied expands within the groove and thereby rigidly holds the cap to the body.

As shown in Figs. 1 to 6, the ends of the spring ring or wire are outside of the knuckle, but as shown in Fig. 7, they may be concealed within the knuckle with substantially the same operative snapping effect in seating the wire in the groove; and in this case the ends of the wire may be straight where they enter the knuckle. This arrangement gives a continuous effect to the wire, making a somewhat neater finish when the parts are assembled and giving a somewhat firmer hold on the box body, and for these and other reasons this arrangement is desirable from a manufacturing view point. These ends, of course, are free to approach one another within the knuckle as the ring is contracted to enter the groove, and as readily spring apart within the knuckle after the ring is in position in the groove. The invention, however, is not limited to the use of a wire the ends of which are straight where they enter the knuckle. Thus it will be seen that the box consists of three parts, namely, a cover or cap, a hinge wire and a box body, which when assembled make a complete box. Each of these parts may be constructed and finished complete in itself, and when so finished, the component parts may be assembled at a minimum labor cost.

In manufacturing articles of this character, there is always a certain percentage which is spoiled in various ways, and if some such features of invention as above described are not adopted, this element of spoiled parts would necessitate the rejection or reconstruction of the box as a whole or in part, and thus involve a great addition to the expense of manufacturing. On the other hand, after each of the three parts comprising the box of this invention has been manufactured complete, including the various lusters of finish, they may be assembled readily and economically; and if for any reason it is desired to separate the parts, the wire can be readily displaced from the groove in the box body by raising the cover and wire out of the body, when the wire may be slipped out of the hinge knuckle. Hence, in case of damage the three parts may be disconnected and any good parts utilized, thus obviating the necessity of the destruction or loss of all of them.

It is possible to use a construction of cover and hinging ring in a box body in which instead of cutting a notch 4 in the flange of the body, as shown in Figs. 1, 2, 4 and 5, a slot 8, Fig. 8, may be cut in the groove of a size to permit of the insertion of the knuckle through the slot into the groove 2, after which the wire 7 may be inserted in the

knuckle 6 and snapped into said groove. Having a slot instead of a notch for the reception of the knuckle permits of the use of a continuous edge flange 3, and this construction is desirable and preferred in some boxes and by some users. Each of these three parts may be carried in large quantities in separate boxes or receptacles to the place of assembling; and as the several parts are duplicated there is no necessity of any special care for the proper fitting of the various parts in assembling. Further, it is to be noted that the interior groove into which the hinge wire is snapped, does not materially reduce the interior area of the box; nor is it necessary to fasten the wire in the groove by the use of solder or riveting or other extraneous means. Finally, it is to be noted that the hinge wire, instead of being inserted in an outside groove, is inserted in an inside groove, with the result that the fastening is very much more rigid and the wire is interchangeable with any of the covers.

The invention is not limited to a use in connection with covers for shaving stick boxes, or powder puff boxes, since obviously it may be applied to boxes for a variety of purposes and of a variety of constructions.

What I claim is:—

1. A box cover, having a hinge knuckle, in combination with a combined hinge-pintle and cover-attaching member consisting of a spring wire having an uninterrupted contour from end to end and set to expand into holding engagement with a box and adapted to be connected with the said hinge knuckle at any point throughout its length.

2. A box cover, having a hinge knuckle, and a combined pintle and cover-attaching device consisting of an open-ended expansion spring ring adapted to be connected with the knuckle to complete the hinge, in combination with a box body having an interior knurled groove within which the ring is snapped and expands to hold the cover to such box body.

3. A box cover, having a hinge knuckle, in combination with a combined hinge-pintle and cover-attaching member consisting of an open-ended spring ring set to expand into cover-holding engagement with the box and having its ends arranged and concealed within the hinge knuckle on the cover and movable therein to permit the spring to expand and contract.

In testimony whereof I have hereunto set my hand this 25th day of May, A. D. 1912.

JOHN H. GOSS.

Witnesses:

GEORGE R. LONG,
M. L. SERRY.