

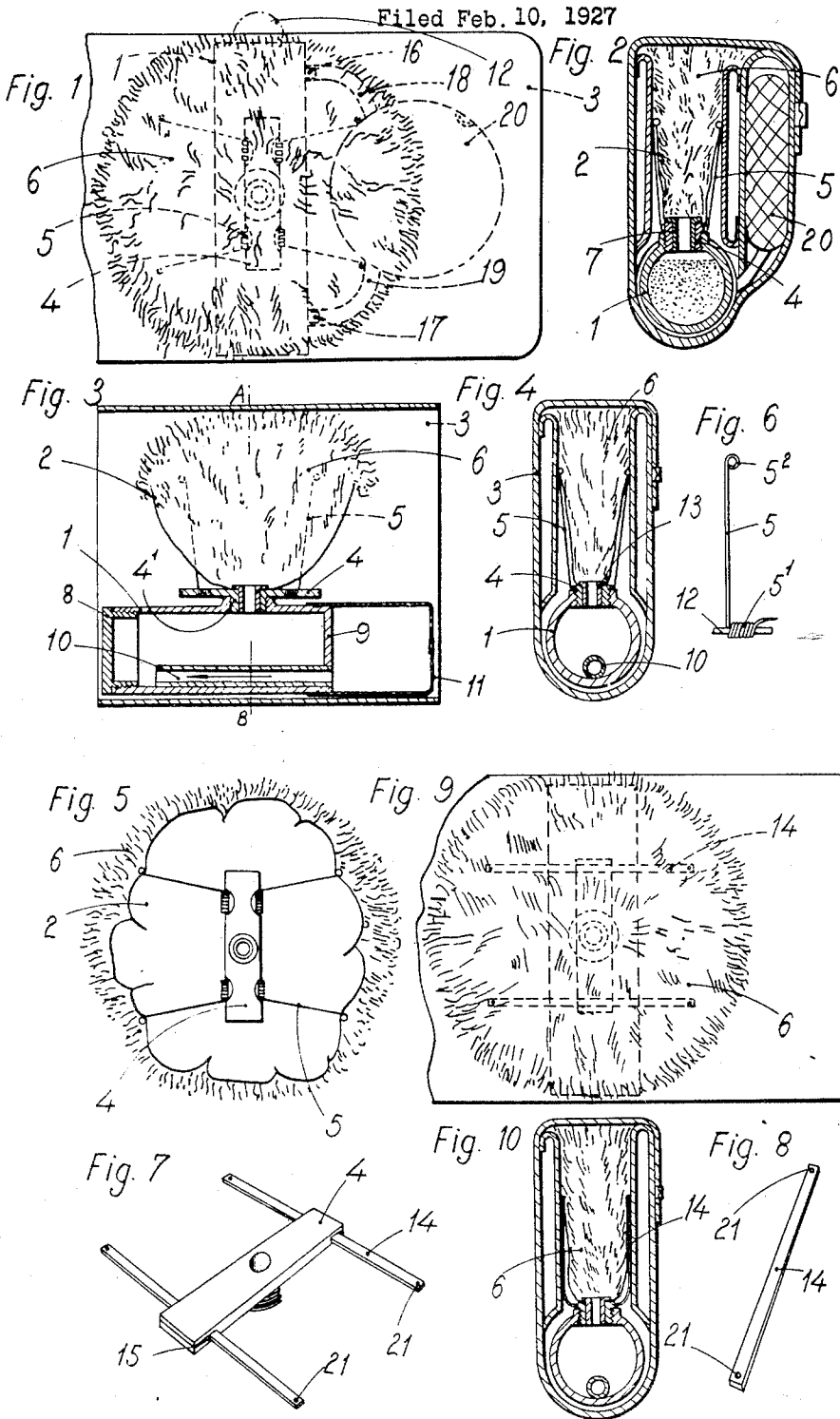
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FOLDING POWDER PUFF DEVICE

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FOLDING POWDER-PUFF DEVICE.

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My invention relates to improvements in folding powder puff devices, that is to say, devices in which the powder puff itself and the box containing the powder are combined in a single element, the powder being disposed in the interior of the member which supports the powder puff.

In these improvements, the folding powder puff is placed in a leather case or like device of the folding type and of the proper size, and is mounted upon a supporting cylinder which contains the powder and is horizontally disposed in the middle or folding portion of the leather case; the powder puff is mounted upon said cylinder by means of a tubular member upon whose periphery are mounted the springs which provide for the unfolding of the powder puff when the leather case is opened. The powder puff is held upon the said tubular member by means of a split sleeve. The powder contained in said cylinder can be brought through the tubular member and the said sleeve, and thence upon the outer surface of the powder puff, under the effect of a current of air which is produced by a slight pressure upon a rubber recipient disposed at one end of the said cylinder and acting after the manner of the rubber bulb of a spraying device. For the proper distribution of the powder, I dispose in the said cylindrical powder container a small tube of about the same length, which is connected at one end with the said rubber bulb, in such manner that air will be expelled from the latter by suitable pressure and will traverse the small tube before acting upon the powder.

The springs employed for the unfolding of the powder puff, which are mounted upon the said tubular member and consist of wire members suitably bent into shape and wound into a spiral, may be replaced by flat springs engaged in slots provided upon the said tubular member and held in place by a tight fit.

Due to the fact that the powder puff itself is mounted upon a tubular member, the powder puff will form a removable device which may be readily detached from the cylindrical part holding the powder, and may be replaced thereon in like manner.

The appended drawings show various embodiments of the invention.

Figs. 1 and 2 are respectively a plan view and a cross section of the device according to the invention.

Fig. 3 is a lengthwise section of a modified device.

Fig. 4 shows a section on the line A—B of Fig. 3.

Fig. 5 is a plan view showing the folding powder puff removed from its supporting cylinder.

Fig. 6 shows one of the springs.

Fig. 7 relates to a construction of flat springs for unfolding the powder puff.

Fig. 8 shows a flat spring.

Figs. 9 and 10 are respectively plan and sectional views showing a folding powder puff comprising the springs shown in Figs. 7 and 8.

In the constructional form which is shown in Figs. 1 and 2, the folding powder puff device is disposed in the interior of a leather case or like device 3 which may be opened out. The hollow cylinder 1 is in the horizontal position, and the member 4 upon which are mounted the springs 5 has an elongated form, and is placed in the same direction as the cylinder 1.

The leather piece 2 supporting the powder puff 6 is in all cases secured to the member 4 by means of the split sleeve 7 having a central aperture for the discharge of the powder contained in the recipient 1. The two conduits 16—17 disposed at the ends of the cylinder 1 are adapted for the insertion of the respective tubes 18—19 ending in a flattened bulb 20 which is placed in one side of the said leather case.

When the leather case is in the folded position, as shown in Fig. 2, the springs 5 will be brought towards one another by the sides of the said case, but when the latter is opened out, the said springs will move apart and the powder puff 6 will expand. By pressing upon the bulb 20, the powder will be expelled from the cylinder 1 through the sleeve 7 and will be brought into the powder puff. The bulb 20 disposed within the walls of the leather case may be replaced by a bulb disposed upon the plug 12 which serves for the filling of the cylinder 1.

In the device which is shown in Figs. 3 and 4, the cylindrical support 1 holding the powder is placed horizontally in the middle part of the leather case or like device 3; said cylinder is provided with a plug 8, known per se, which closes the end at which the powder is supplied. In the other end of the cylinder is an orifice in which is mounted a tube 10 which is disposed against the wall

of the cylinder and has about the same length as the latter. A rubber cap or bulb 11 for air pressure purposes is mounted on the end of the cylinder 1, and in this manner the air which is expelled from the said bulb by a slight pressure thereon will only enter the cylinder after passing through the whole length of the tube 10, and the air will thus act upon the entire mass of the powder contained in the cylinder 1.

In this device, the member 4 supporting the powder puff 6 comprises an elongated flat part having at the center a downwardly extending tubular screwthreaded portion 4' which is screwed into the cylinder 1. The flat part or disk 4 is slotted for the insertion of a small rod 12 about which are wrapped the lower turns of the wire forming the springs 5, whereby said springs will be supported. The leather piece 2 maintaining the downy substance which forms the powder puff 6, is pierced at the center with an aperture in coincidence with the aperture in the member 4, and is sewed to the ends 5² of the springs 5; its middle part is held upon the piece 4 by a split sleeve 13 forming a spring. By thus mounting the powder puff on the member 4, I obtain a movable element which may be removed from the supporting cylinder when the powder puff is to be replaced after long use.

It will be thus observed that upon opening the leather case or like device, the springs 5 will tend to assume the horizontal position, thus opening out the powder puff into the proper position for use, and when in this position, a slight pressure is exercised upon the bulb 11 in order to expel the air through the tube 10; the air thus acts upon the powder in the cylinder 1 and drives it through the sleeve 13 serving to secure the powder puff to the member 4, so that the powder will be brought upon the outer surface of the powder puff.

Upon closing the leather case, the springs 5 will be brought towards the vertical position by the sides of the said case, and the powder puff will assume the folded position, as shown in Figs. 2 and 4.

Fig. 5 shows the bottom part of the powder puff 6; it is separated from the cylindrical support 1 serving as a recipient for the powder, to show the arrangement of the springs 5—four in number—upon the piece 4, and the connection between their ends 5² and the leather or like member 2, by suitable stitches. The downy substance is disposed upon the leather member 2, and the device thus formed constitutes the powder puff itself. It will be noted that by the use of this disposition the powder puff can be separated at will from the cylindrical support 1.

The springs 5 shown in Fig. 6 which are mounted on the plate 4 may be replaced by

the flat springs 14, as shown in Fig. 8. In this event the springs 14 are secured at the middle part in the slots 15 formed in the ends of the member 4, and after inserting the springs 14 into the said slots, the edges of the slots may be pressed together by suitable means, as shown in Fig. 7. The ends of the springs are apertured at 21 for the proper connection with the leather member 2. When in use, the said springs will act in the same manner as the springs 5, so that when the leather case is opened they will tend to assume the horizontal position, and in this manner the powder puff will be opened out as shown in Fig. 9; when the leather case is closed, its sides will be brought together and the springs will assume the vertical position, as shown in Fig. 10.

I claim:

1. A folding powder puff device, comprising a folding case, a cylindrical support horizontally disposed in the folding portion of the case and providing for a powder container, a filling plug at one end of the support for the introduction of the powder, a powder puff mounted on the support, means for conducting powder from the support to the powder puff, a rubber powder spraying bulb inside the case, and connecting means between the bulb and the cylindrical support.

2. A folding powder puff device, comprising a folding case, a cylindrical support horizontally disposed in the folding portion of the case and providing for a powder container, a filling plug at one end of the support for the introduction of the powder, a powder puff mounted on the support, means for conducting powder from the support to the powder puff, a rubber powder spraying bulb inside the case, a tube mounted inside the cylindrical support opposite the filling plug and connecting the support with the rubber bulb.

3. A folding powder puff device, comprising a folding case, a cylindrical support horizontally disposed in the folding portion of the case and providing for a powder container, a filling plug at one end of the support for the introduction of the powder, a threaded tubular piece mounted on the cylindrical support, a powder puff, springs connected to the puff and the tubular piece, said puff having a central aperture, and a split sleeve inserted in the central aperture acting as a spring and holding the powder puff on the threaded tubular piece, a rubber powder spraying bulb inside the folding case, and connecting means between the bulb and the cylindrical support; the tubular piece, the powder puff, the springs and the sleeve forming a whole removable from the cylindrical support.

4. A folding powder puff device, comprising a folding case, a cylindrical support

horizontally disposed in the folding portion of the case and providing for a powder container, a filling plug at one end of the support for the introduction of the powder, a threaded tubular piece mounted on the cylindrical support, a flat part on the upper end of the threaded piece, slots formed in the thickness of the flat part, and whose edges are pressed together, flat springs secured at their middle part in the slots, a leather piece holding the down and constituting the powder puff, stitches attaching the leather piece to the ends of the flat springs, a central aperture in the leather piece, a split sleeve inserted in the central aperture, acting as a spring and holding the leather piece on the threaded tubular piece of the cylindrical support, a rubber powder spraying bulb inside the folding case, and connecting means between the bulb and the cylindrical support.

In testimony whereof I affix my signature.

ALEXANDRE WILLK.