July 4, 1950 J. HAZZA ET AL 2,513,865

COMB FOR APPLYING FLEA EXTERMINATING POWDER

Filed April 27, 1948

Fig. 1.

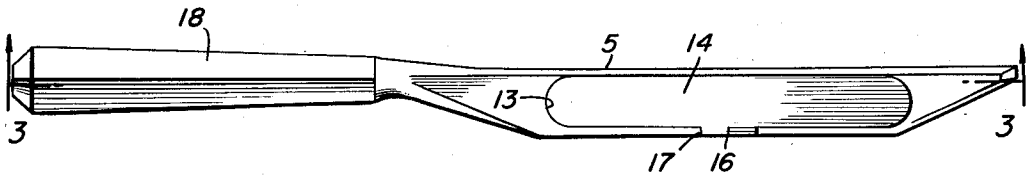


Fig. 2.

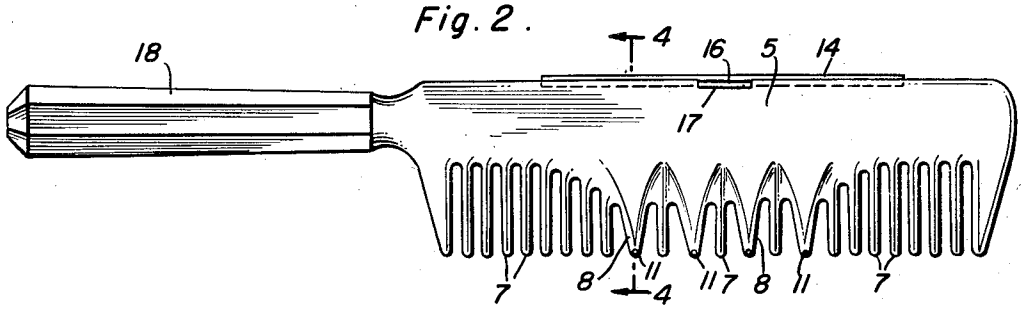


Fig. 3.

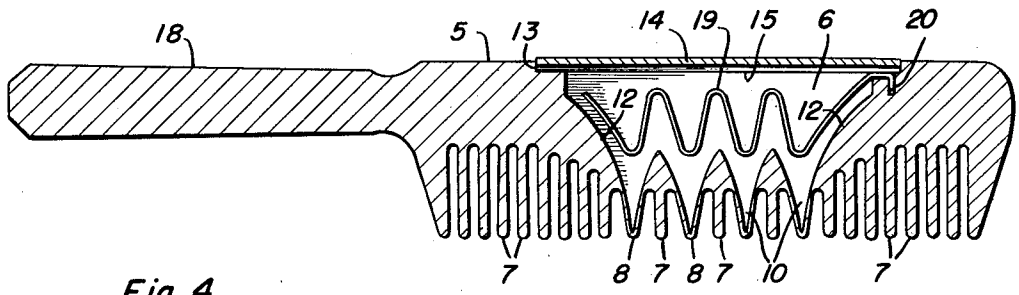
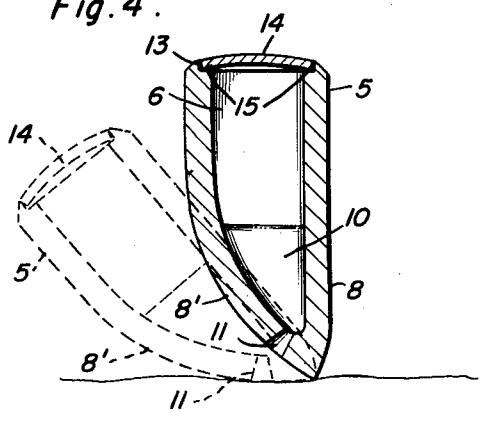


Fig. 4.



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COMB FOR APPLYING FLEA EXTERMINATING POWDER

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3 Claims. (Cl. 132—13)

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This invention relates to a comb particularly designed for use in applying flea exterminating powder to dogs, although capable of general use for applying hair powders.

The primary object of the present invention is to provide a comb of the above kind which is efficient in use and which is so constructed as to not require the use of valves or like means to control the flow of powder therefrom.

Another object of the invention is to provide a comb of the above kind by means of which a hair combing action may be obtained simultaneously with direct application of powder to the skin.

Other objects and features of the invention will become apparent from the following description when considered in connection with the accompanying drawings, in which:

Figure 1 is a top plan view of a comb constructed in accordance with the present invention,

Figure 2 is a side elevational view thereof,

Figure 3 is a longitudinal vertical section taken on the line 3—3 of Figure 1,

Figure 4 is an enlarged transverse vertical section taken on the line 4—4 of Figure 2.

Referring in detail to the drawing, the present comb comprises an elongated back member 5 having an open top chamber 6 which forms a reservoir for reception of flea exterminating powder or the like. The back member 5 is provided with a row of depending solid teeth 7 and hollow teeth 8, the teeth 7 being relatively slender so as to have an efficient hair combing action, and the teeth 8 being stout and constructed for the discharge of powder therethrough. The teeth 8 are preferably provided in a group intermediate the ends of the row, and with a single solid tooth 7 between adjacent ones thereof. Also, they are tapered and hollow or formed with tapered axial passages 10 so as to communicate at their upper ends with the chamber 6. Also, the teeth 8 have rearwardly inclined flared outlet openings 11 in the rear sides of their lower ends so as to cause direct application of the powder to the skin by a wiping action when the comb is tilted backwardly at an acute angle to the skin to vertically dispose the openings 11 as shown by dotted lines in Figure 4. In practice, it has been found that the powder will pack sufficiently so as to not flow from the teeth 8 unless it is wiped onto the skin at the openings 11 in the manner stated. Thus, no valve control is needed for preventing accidental discharge of the powder from the comb. As indicated at 12, the end walls of the chamber 6 converge downwardly so as to lead the powder to the hollow teeth 8. It will be noted that teeth 8 are straight at the front and have their free ends curved forwardly at the back as at 8'.

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As shown, the back 5 is recessed at the top as at 13 to frictionally receive a transversely arched flexible resilient cover plate 14, and to provide internal shoulders 15 on which the longitudinal edge portions of the cover plate are seated. By removing the cover plate 14, introduction of the powder within the chamber 6 may be effected. A tongue 16 is provided on one side of cover plate 14 and is seated in a notch 17 of the back 5 to provide a finger piece for use in facilitating removal of the cover plate.

An elongated handle member 18 is preferably formed integral with one end of the back 5.

Horizontally and longitudinally disposed in chamber 6 is a serpentine or zig-zag wire spring 19 which is free at one end and attached at its other end to the back 5, as at 20. In using the comb, this spring is naturally vibrated to keep the powder in chamber 6 loose or to prevent undue packing thereof.

In use, the powder is introduced into the chamber 6 and the cover plate 14 is set in recess 13 to close the top of said chamber. By grasping the handle 16, the comb may be manipulated so as to pass the teeth 7, and 8 through the hair in contact with the skin. When this is done, the comb is tilted to a position at an acute angle to the skin as indicated by dotted lines in Figure 4 so that the powder directly at the openings 11 is applied directly to the skin by a wiping action. In this way, the powder is applied in stripes and spread by a wiping action when applied. None of the powder is lost or allowed to settle on the hair away from the skin, so that effective action of the powder is insured. By continuing use of the comb in this way, complete combing of the hair and powder application to the skin of the animal may be quickly effected.

From the foregoing description, it is believed that the construction, operation and advantages of the present invention will be readily understood and appreciated by those skilled in the art. Modifications and changes in details of construction are contemplated, such as fairly fall within the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

1. A comb for applying flea exterminating

powder or the like comprising a back member having an open-top chamber provided with downwardly converging end walls and forming a reservoir for reception of powder, said back member being provided with a row of depending teeth intermediate the ends of the back member, certain of said teeth being hollow and communicating at their upper ends with the bottom of said chamber for reception of the powder therefrom, said hollow teeth being straight at the front and having their lower ends curved forwardly at the back and provided with rearwardly inclined outlet openings to cause direct application of the powder to the skin by a wiping action when the comb is tilted rearwardly at an acute angle to the skin, the remaining teeth at the end of the back member being solid, and a removable cover plate for the top of said chamber to facilitate introduction of the powder into the latter.

2. A comb for applying flea exterminating powder or the like comprising a back member having an open-top chamber forming a reservoir for reception of powder and provided with a row of depending teeth, a group of said teeth intermediate the ends of the row being hollow and communicating at their upper ends with the bottom of said recess for reception of the powder therefrom, said hollow teeth being straight at the front and having their lower ends curved forwardly at the back and provided with rearwardly inclined outlet openings to cause direct application of the powder to the skin by a wiping action when the comb is tilted rearwardly at an acute angle to the skin, the remaining teeth being solid, the end walls of said chamber converging downwardly to lead the powder to said hollow teeth, and an openable cover plate carried by the back member for closing the top of said chamber.

3. The combination defined in claim 1, in combination, with a serpentine wire spring agitator disposed within said chamber and attached at one end only to the back member at one end of the chamber.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
940,196	Sartell	Nov. 16, 1909
1,451,260	Holland	Apr. 10, 1923
2,381,048	Habostad	Aug. 7, 1945
2,430,303	Ruhl	Nov. 4, 1947

FOREIGN PATENTS

Number	Country	Date
20,075	Great Britain	Oct. 4, 1905
190,353	Switzerland	Oct. 16, 1937