No. 812,241. PATENTED FEB. 13, 1906.

C. M. SHUBERT.

COMB.

APPLICATION FILED JUNE 7, 1905.

Fig. 1.

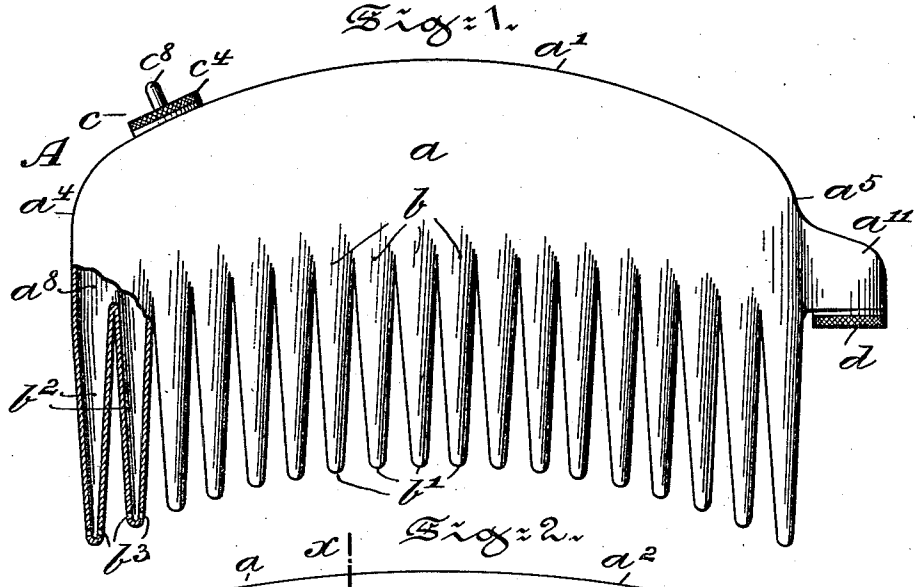


Fig. 2.

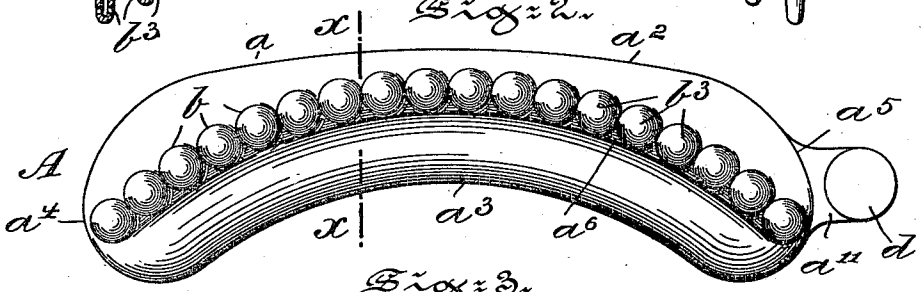


Fig. 3.

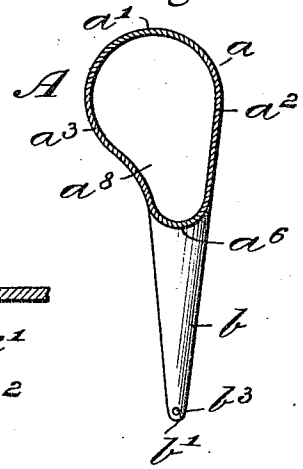


Fig. 4.

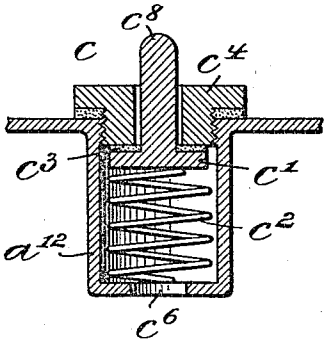
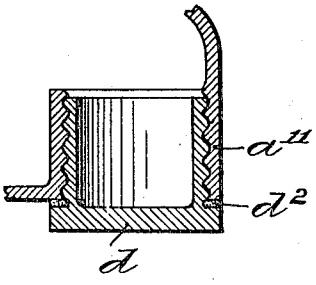


Fig. 5.



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UNITED STATES PATENT OFFICE.

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COMB.

No. 812,241. Specification of Letters Patent. Patented Feb. 13, 1906.

Application filed June 7, 1905. Serial No. 264,120½.

To all whom it may concern:

Be it known that I, CHARLES MILTON SHUBERT, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Combs, of which the following is a specification.

My invention has relation to combs; and in such connection it relates more particularly to the construction and arrangement of the teeth and of the body of the same.

The principal objects of my invention are, first, to arrange the free ends of the teeth of a comb in a horizontal as well as vertical plane with respect to the body of the same in a curve, following closely the outline or contour of a portion of the head of a person, so that the ends of all the teeth will simultaneously engage the scalp of the head when the comb held in a certain oblique position is brought into engagement therewith; second, to provide each of the teeth with a chamber terminating near the free end thereof and with outlets connecting this chamber with the exterior of the tooth and terminating a certain distance above the free end thereof to prevent the closing of the same by dandruff or other impurities when the teeth are brought into engagement with a scalp; third, to provide the body of the comb with a chamber communicating with each of the chambers of the teeth and forming a reservoir for a liquid preparation to be applied to the scalp or hair; fourth, to arrange the body portion of the comb so as to be flexible to permit when the body is compressed of the forcing outward of the liquid preparation through the outlets in the teeth; fifth, to provide an air-inlet valve in the body of the comb which can be readily manipulated by a finger of the hand of the operator which holds the comb; and, sixth, to provide a screw-cap in the body thereof, which permits of a ready filling of the same with a liquid preparation.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a view, partly in side elevation and partly in section, of a comb, illustrating the arrangement of the ends of the teeth in a curve, a chamber arranged in each of the teeth thereof and communicating with a chamber in the body of the comb, and outlets arranged above the free ends of the teeth, all embodying main features of my present invention. Fig. 2 is a front elevational view of the comb, illustrating the arrangement of the teeth in a curve, differing slightly from the curve of the teeth as shown in Fig. 1. Fig. 3 is a cross-sectional view taken on the line x x of Fig. 1 and illustrating the outline of the body of the comb. Fig. 4 is a detail view, enlarged, illustrating in vertical section an air-inlet valve and a portion of the body of the comb; and Fig. 5 is a detail view, enlarged, illustrating in vertical section a screw-cap and a portion of the body of the comb.

Referring to the drawings, a represents the body of the comb A of a substantially semicircular outline at the free end a' and at the upper and lower sides a^2 and a^3 thereof and which is rounded at its ends a^4 and a^5, as shown in Figs. 1 and 2. In cross-section the body of the comb is substantially pear-shaped, the lower end a^6 of which being of less diameter than the upper end a' thereof, as shown in Fig. 2. The object of arranging the body of the comb A in the manner described is to follow to some extent the outline of a portion of the head of a person and to prevent the contacting of the body a with the head when the comb engaging the head is held closely and in an oblique position with respect thereto. From the contracted end a^6 of the comb extend tapering teeth b, the free ends b' of which are arranged in a curve with respect to the horizontal as well as vertical axis of the body a of the comb A. The combined curve of preferably different outlines in which the ends of the teeth are arranged follows closely the outline of the upper portion and sides of a normal-shaped head, the object being to permit of the simultaneous engagement of the ends b' of the teeth b with the scalp of the head to quickly remove dandruff, dust, or other impurities therefrom and, if desired, conduct and evenly distribute a liquid preparation over the same and to the roots of the hair. For this purpose each of the teeth b is provided with a chamber b^2, terminating in the end b' of the same and communicating at its upper end with the chamber a^8, arranged in the hollow body a of the comb A. At the lower end the chamber b^2 by means of outlets b^3 communicates with

the exterior surface of its tooth, and a liquid preparation stored in the chamber a^8 of the body a will readily be conducted into the chamber b^2 of the teeth and from thence through the outlets b^3 will issue from the same in the form of fine streams, which by flowing to the end b' of the teeth b are evenly spread by the same over the scalp. The outlets b^3 being arranged a certain distance above the ends b' of the teeth will not be brought into direct contact with dandruff or other impurities of the scalp, and hence the same will not be liable to be closed by the entering of impurities into the same, as is the case with combs in which the outlet-opening terminates in the free end of the teeth.

Preferably at the left-hand end of the upper portion a' of the body a of the comb is arranged an air-inlet valve c, consisting in the present instance of a disk-shaped valve c', a yielding washer c^3 of which by means of a spring c^2 is held in engagement with a threaded seat c^4, engaging the housing a^{12} of the valve c. The housing a^{12} is formed by a depression in the walls of the body a of the comb A, and an opening c^6, arranged in the housing a^{12}, connects the interior of the same with the chamber a^8 of the comb. The valve c' is provided with a stem c^8, extending through the seat c^4 and terminating a certain distance above the upper portion a' of the body a of the comb, so as to be readily accessible to the finger of the hand of the operator which holds the comb A. When the stem c^8 is depressed, the valve c' and the washer c^3 are disengaged from their seat c^4, and air is permitted to readily enter the chamber a^8 to regulate the outflow of the liquid preparation from the outlets b^3 of the teeth b. In addition thereto the body a of the comb is made of a yielding material which permits of a movement of the side walls a^2 and a^3 thereof toward each other, by which movement the liquid preparation in the chamber a^8 will be forced through the outlets b^3 of the teeth b if a rapid flow of the liquid is desirable. A screw-cap d, preferably arranged in an extension a^{11} of the body a of the comb A and in alinement with the lower end a^6 thereof, permits when the same is removed from its housing formed by the extension a^{11} of the ready filling of the same with a liquid preparation. A washer d^2, interposed between the housing a^{11} and cap d, assists in rendering the same liquid-tight.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A comb having a body portion, teeth extending from said body portion and arranged in a curve with respect to the same, the ends of said teeth being arranged in a curve with respect to the longitudinal axis of the teeth so as to permit of a simultaneous engagement of all the teeth with the scalp of a head, when the comb assumes a certain oblique position with respect thereto.

2. A comb having a body portion, teeth having a chamber extending from said body portion and arranged in a curve with respect to the same, outlet-openings arranged above the closed ends of said teeth and adapted to connect the chamber thereof with the exterior surface of the same and the free ends of said teeth being arranged in a curve with respect to the longitudinal axis of the same.

3. A comb having a hollow body portion formed of yielding walls adapted to receive a liquid preparation, teeth having a chamber extending from said body portion and arranged in a curve with respect to the same and adapted to receive the liquid preparation from said body portion, outlet-openings arranged adjacent to the ends of said teeth and adapted to connect the chamber thereof with the exterior surface of the same and to conduct the liquid preparation thereto, the free ends of said teeth being arranged in a curve in respect to the longitudinal axis of the same, and the yielding walls of said body portion being adapted when moved toward each other to force the liquid preparation into the teeth and from the same over the free ends of the teeth.

4. A comb having a hollow body portion, an air-valve having a projecting stem adapted, when depressed, to permit of the entrance of air into said body portion, hollow teeth extending from said body portion and arranged in a curve with respect to the same, openings arranged in each of said teeth adjacent to the closed end of the same and adapted to connect the interior of the teeth with the exterior surface thereof, said body portion and teeth adapted to receive a liquid preparation and to permit of an outflow of the same through said openings, and the free ends of said teeth arranged in a curve in respect to the longitudinal axis to permit in conjunction with the curvature in the location of the same with respect to the body portion of a simultaneous engagement of all the teeth with the scalp of the head.

5. A comb having a hollow body portion, an air-valve having a projecting stem adapted when depressed to permit of the entrance of air into said body portion, a screw-cap arranged in said body portion and adapted when removed therefrom to permit of the entrance of a liquid preparation into said body portion, hollow teeth extending from said body portion and arranged in a curve with respect to the same, openings arranged in each of said teeth adjacent to the closed end and adapted to connect the interior of the teeth with the exterior surface thereof, said body portion adapted to conduct the liquid into said teeth and to permit of an outflow

through said openings and the free ends of said teeth arranged in a curve with respect to the longitudinal axis to permit in conjunction with the curvature in the location of the teeth with respect to said body portion of a simultaneous engagement of all the teeth with the scalp of the head.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

CHARLES MILTON SHUBERT.

Witnesses:

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