G. G. GIVENS.

COMB.

APPLICATION FILED AUG. 17, 1918.

1,340,948. Patented May 25, 1920.

Fig. 1.

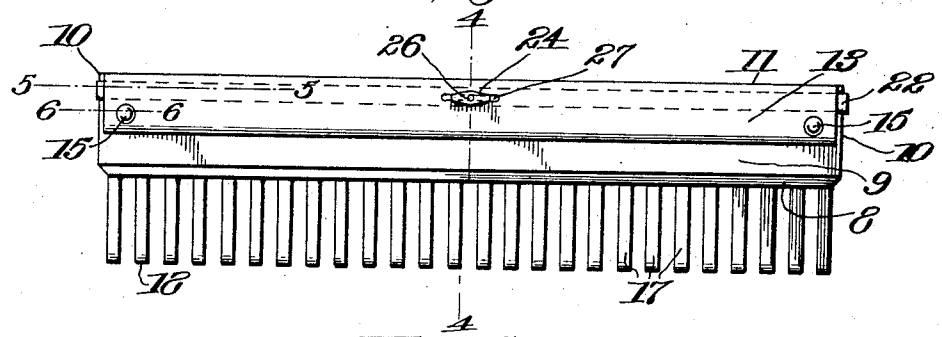


Fig. 2.

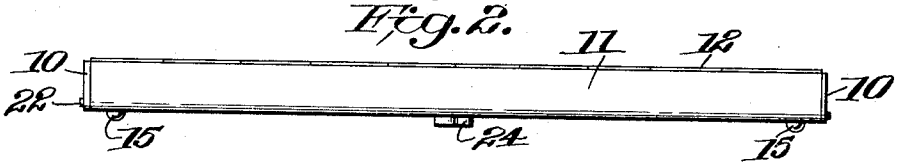


Fig. 3.

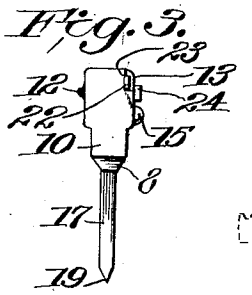


Fig. 5.

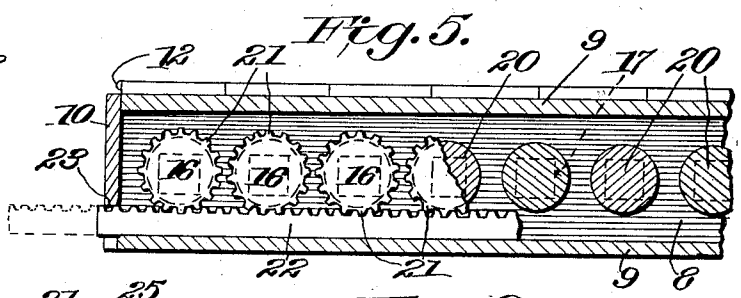


Fig. 6.



Fig. 4.

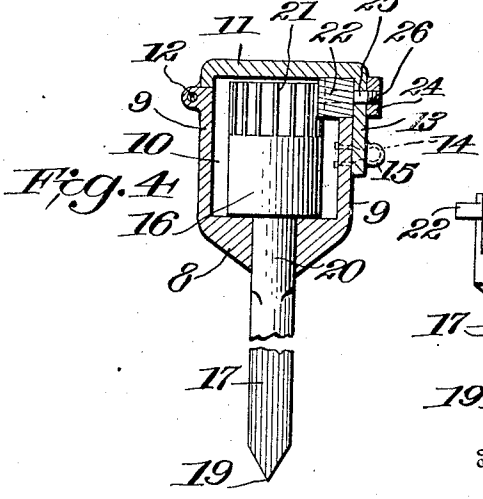
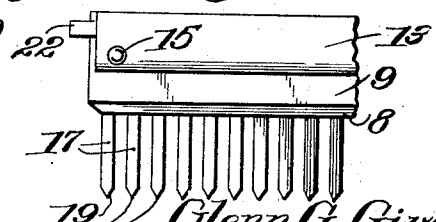


Fig. 7.



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COMB.

1,340,948. Specification of Letters Patent. Patented May 25, 1920.

Application filed August 17, 1918. Serial No. 250,318.

To all whom it may concern:

Be it known that I, GLENN G. GIVENS, a citizen of the United States, residing at Newport News, in the county of Warwick and State of Virginia, have invented certain new and useful Improvements in Combs, of which the following is a specification.

My invention relates to a comb.

The principal object is to provide one in which the teeth may be rotated or moved relatively to dislodge adhering matter and so as to present portions of the teeth, differing in shape, in operative position.

Additional objects and advantages will be come apparent as the invention is described hereinafter with relation to accompanying drawings.

In said drawings:

Figure 1 is a front view of the comb;

Fig. 2 is a plan view of the comb;

Fig. 3 is an end view of the comb;

Fig. 4 is a cross sectional view on the line 4—4 of Fig. 1;

Fig. 5 is a cross sectional view taken substantially on the line 5—5 of Fig. 1;

Fig. 6 is a cross sectional view on the line 6—6 of Fig. 1, and

Fig. 7 is a fragmentary side elevational view, with the teeth moved 90° relatively to Fig. 1.

In carrying out my invention, a casing or case is provided having a retainer section comprising a bottom wall 8, side walls 9 and end walls 10. All of said walls are integral and rigid with each other. The case is completed by a closure section 11, pivoted at 12 to one of the walls 9 and having a depending front wall 13 overlapping the other wall 9. The case may be made of any suitable material, for instance, metal, celluloid or hard rubber. Any suitable means may be used to fasten the closure 11 to one of the walls 9 against accidental movement. To this end, resilient split balls 14 may be fastened to one of the walls 9 and extend into receiving socket 15 carried by the wall or flange 13. It will be understood that the ball 14 will compress and expand as it is inserted and withdrawn from the socket 15. It will also be understood that but one of these fastening devices need be used or that any other form may be substituted.

Within the hollow portion of the case between the walls 9 and 10, the heads 16 of the teeth 17 are disposed. Viewed from one position, the teeth terminate in a broad edge 18 while viewed from a position at 90° therto, they are pointed as at 19. The teeth are rotatably mounted in the wall 8 by means of round portions of the teeth 20, journaled therein. The teeth cannot fall from the case downwardly, since the head 16 overlaps the wall 8. Said wall 8 also from opposite sides, inclines inwardly and downwardly to increase the ornamental effect.

Heads 16 are provided with gear teeth at 21 and these teeth may extend completely around the heads as shown in Fig. 5, or they may extend but partly around the same, as preferred and according to the extent of turning desired. Meshing with the teeth 21, are teeth of a rack bar 22. This rack bar 22 rests on top of the front walls 9 and on the end walls 10 at cut-away portions 23. This rack bar 22 is slidable longitudinally of the case, being operable upon manipulating a lug 24 disposed on the exterior of front wall 9 and connected to the bar 22 by means of a pin 25. Any means may be used to secure these parts together, but the pin 25 is preferably provided with screw threads at 26, which the lug 24 engages. Pin 25 also moves in an elongated slot 27 provided in the flange 13.

In order to remove or replace the teeth, the fastenings 14—15 are detached, whereupon the closure 11, carrying the rack bar 22, may be swung toward and beyond the rear wall 9, thus completely exposing the space in which the heads 16 are disposed. The teeth while the closure is in this position, may be readily withdrawn or replaced. When the closure 11 is moved to closed position, and the teeth are in place, the rack bar 22 will mesh with the teeth 21. Lug 24 may be operated to reciprocate the rack bar 22 and thus turning the teeth of each pair in opposite directions, to effectively dislodge adhering matter. If desired, the lug 24 may be manipulated when a fine tooth comb is preferred over a broad tooth comb, that is to effect a change from the form of Fig. 1 to the form of Fig. 7. Attention may also be called to the fact that while the rack bar 22 is freely slidable, yet sufficient friction exists between it and the walls 9 and 13 and the top of closure 11, and the teeth 21, to

prevent movement thereof unless positively manipulated.

As merely the preferred embodiment of the invention has been illustrated and described, it is to be understood that changes in the details of construction may be resorted to without departing from the spirit and scope.

I claim:

1. In a comb, gear teeth on the teeth thereof, a rack bar meshing with the gear teeth, and means operable to reciprocate the rack bar.

2. In a comb, the free ends of the teeth from one direction being sharpened, said free ends from another direction being broad, and a means operable to rotate the teeth to bring the points or broad surfaces selectively into operative positions.

3. A comb having a case provided with a bottom wall, end walls, and a front and rear wall, teeth having portions journaled in the bottom wall, a closure pivoted to the rear wall and extending across the top of the case, said closure having a depending flange overlapping the front wall, said teeth having heads within the case resting on the bottom wall, said head being provided with gear teeth, a rack bar resting on top of the front wall meshing with said gear teeth, said flange having an elongated slot, a pin extending from the rack bar through said slot, a lug engaging said pin for manipulation, and a means to prevent accidental separation of the closure and case.

4. A comb having a case, teeth passing through the bottom of said case, heads on said teeth disposed within the casing, said heads having their upper portion provided with teeth, a rack bar extending along the side of said case meshing with said gear teeth, and means to reciprocate the said rack bar.

5. A comb having a case, movable teeth carried by the case, the free ends of the teeth from one direction being sharpened, said free ends from another direction being broad, and means for rotating the teeth to bring the point or broadened surfaces selectively into operative position.

6. A comb having a case, movable teeth carried by the case, heads on said teeth inclosed within the casing and overlapping the bottom wall thereof, said teeth having their shanks cylindrical in shape a proportional distance below the head, the free ends of the teeth being square, gear teeth formed on the heads, and a rack bar for reciprocating the teeth for the purpose set forth.

In testimony whereof I have affixed my signature in the presence of two witnesses.

GLENN G. GIVENS.

Witnesses:
CLAUDE C. CRONK,
LILLIAN M. SENIE.