

June 2, 1931.

P. M. WRIGHT

1,808,486

COMB CLEANER

Filed Feb. 12, 1931

Fig. 1.

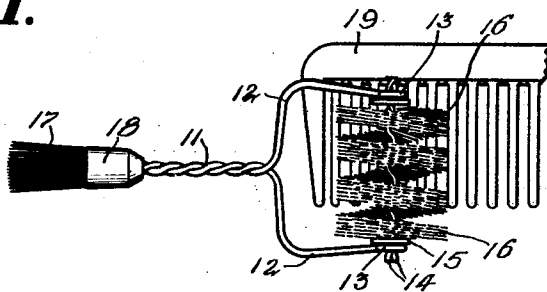


Fig. 2.

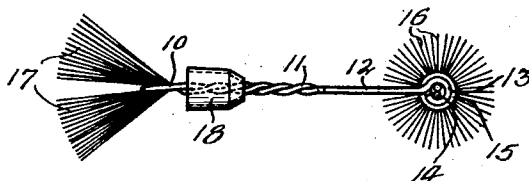
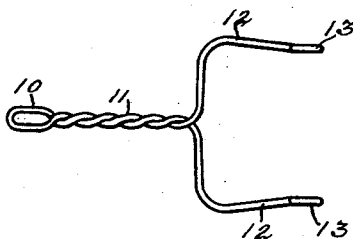


Fig. 3.



Inventor
P.M. Wright
By *Arthur H. Sturges*
Attorney

UNITED STATES PATENT OFFICE

PAUL M. WRIGHT, OF OMAHA, NEBRASKA

COMB CLEANER

Application filed February 12, 1931. Serial No. 515,285.

The present invention relates to an improved comb cleaner, adapted for use in cleaning hair combs and also combs which are used in factories or the like for coarse wool and the like.

An object of the present invention is to provide a small and easily handled implement or tool which is adapted to effectively remove the hair, wool, grease, oil and the like which accumulates upon and between the teeth of the comb and which are usually inaccessible to ordinary cleaning without an implement of some kind.

Another object of the present invention is to provide a tool or implement of this character which is provided with a rotary brush having the bristles so disposed therein as to not only dislodge the accumulations on the teeth of the comb but to also advance the accumulations toward the free ends of the teeth so that they may be more readily removed during the subsequent washing or cleaning of the comb.

A still further object of the present invention is to provide a construction of implement wherein the rotary brush is provided with a spiral row of radially disposed bristles, and wherein the brush is supported upon the end of a shank which has a construction at its opposite end providing a suitable handle to facilitate the firm holding of the shank. This feature of the invention also embodies a particular handle construction which constitutes a brush with peculiarly mounted bristles which, upon adjustment of a portion of the handle permits the bristles to expand so that they may more readily enter into the spaces between the teeth of the comb.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views.

Figure 1 is a plan view of the comb cleaner as applied to a comb and showing the rotary brush in position of use.

Figure 2 is an edge elevation of the same, showing the handle adjusted to free the bristles thereof, and

Figure 3 is a plan view showing in detail the frame or shank of the implement.

Referring now to the drawings, the frame or shank of the tool or implement is constructed preferably of a single length of wire which is returned upon itself to provide a pair of branches of equal length and the overturned portion is bent into the form of a closed loop 10. From the loop 10, the branches of the wire are twisted upon each other to provide a shank 11 which is of double thickness of the wire and which is of desired length. The free ends of the wire are bent outwardly away from each other at the end of the shank 11 and at substantially right angles thereto, and are thence bent in a general longitudinal direction of the shank to form a pair of fork arms 12. The ends of the wire terminate at the ends of the fork arms 12 and are rolled over to provide a pair of eyes or bearings 13.

A rotary brush is mounted in this fork of the frame or shank 11 and preferably comprises two strands of wire 14 which are twisted together to provide a shaft and with the opposite ends of the shaft engaging through the bearings 13. The free ends of the shaft wires are preferably spread apart or diverge, as shown at Figure 1, to hold the shaft from shifting longitudinally through the bearings 13. The shaft 14 may be provided near its opposite ends with bearing washers 15 adapted to engage against the inner opposite sides of the bearings 13, and the shaft 14 carries a spiral row of radially extending bristles 16 which are preferably interposed at their intermediate portion between the wires of the shaft 14 during the construction of the latter.

The loop 10 is adapted to engage about the intermediate portion of a bunch of bristles 17 which may be of any desired length and texture and which are overturned at their intermediate portions, as shown in Figure 2, so as to provide a flaring or spread brush. Normally, these bristles 17 are

adapted to be held together compactly, as shown in Figure 1, and for this purpose a ferrule or sleeve 18 is slidably mounted upon the shank 11. This sleeve 18 is reduced at its inner end so as to fit somewhat snugly upon the shank 11 and prevent the passage of the sleeve 18 outwardly over the loop 10. The other end of the sleeve 18, toward the bunch of bristles 17, is of sufficient internal diameter to not only guide over the loop 10 but to also fit over the bunch of bristles 17 at their overturned intermediate portion. Thus, when the sleeve 18 is slid backwardly upon the shank it engages over the folded bristles 17 and compresses the same together into the form of a compact brush, as shown in Figure 1. This sleeve 18 together with a bunch of bristles 17 provides a compact handle for the end of the shank 11 and, incident to the flexible nature of the bristles 17 the handle will conform readily to the hollow of the hand when it is grasped for the use of the rotary brush 16. When the bristles 17 are used to scrape out the accumulations between the inner ends of the teeth of a comb, the fork arms 12 together with the rotary brush 16 provide an ample hand hold for securing the other end of the shank. The implement or tool may thus be made relatively small and yet be grasped at either end so as to properly operate upon the comb in order to carry out the brushing and picking operations which are necessary in order to thoroughly cleanse the comb.

The sleeve 18 is sufficiently long at its enlarged end to engage over the bunch of bristles 17 and hold the same folded compactly and without the inherent resiliency of the bristles springing the sleeve 18 forwardly onto the shank.

In operation, the rotary brush 16 is first applied to the comb as shown at 19 in Figure 1. As the bristles of the rotary brush are arranged spirally, the operation of the brush across the side of the comb and over the teeth thereof causes the accumulations on the comb to be moved lengthwise of the teeth, and if the tool is given a movement in one direction over the teeth of the comb, it is evident that the accumulations may be worked toward the free ends of the teeth. Thus, the brush 16 not only dislodges the accumulations upon the teeth of the comb but also imparts a wiping action to the teeth so as to more thoroughly and surely dislodge the accumulations.

After the teeth have thus been thoroughly cleaned, the accumulations between the inner ends or throats of the teeth may be readily and easily removed by use of the bristles 17. This is accomplished by sliding the sleeve 18 forwardly along the shank 11 so as to free the bristles 17 and permit the same to expand or spread out as shown in Figure

2. These bristles are then in proper position to be forced in between the teeth and to thus scrape out the accumulations from the inner ends of the throats of the teeth. It is apparent that the implement may be readily washed or cleansed after the operation upon the comb and the bristles 16 and 17 are relatively widely spaced apart, particularly when the sleeve 18 is slid along the shank as shown in Figure 2 and thus the bristles may be quickly and easily cleansed of any accumulations which they have picked up from the comb 19.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:—

1. A comb cleaner, comprising a shank having a laterally enlarged fork at one end and a loop at its other end, a shaft rotatably mounted across the ends of the fork, a spiral row of radiating bristles mounted on the shaft, a bunch of bristles overturned and secured intermediate their ends through said loop of the shank, and a ferrule slidably mounted on the shank and having an enlarged open end for passage over the loop and the overturned portion of the bunch of bristles.

2. A comb cleaner comprising a shank, a handle on one end of the shank, said handle comprising a shiftable ferrule and a bunch of bristles overturned through the adjacent end of the shank and adapted to support said ferrule over the overturned portion of the bristles, said shank having a fork upon its opposite ends, and a rotary brush mounted in said fork, said brush having a spiral row of bristles radiating therein.

3. A comb cleaner comprising a shank having a closed loop at one end and an open fork at its opposite end, a shaft rotatably mounted in the fork, a spiral row of bristles mounted radially upon said shaft, a bunch of bristles overturned at its intermediate portion through the loop of the shank, and a sleeve slidably mounted on the shank and having an enlarged open end adapted for engagement over said loop and the overturned portion of the bunch of bristles.

4. A comb cleaner comprising a single length of wire overturned upon itself and twisted to provide an intermediate shank with a closed loop at one end and an open enlarged portion at its other end, a bunch of bristles overturned and secured intermediate their ends through said closed loop, a sleeve slidably mounted on said shank and having one end reduced for confining the sleeve between the fork and the loop and

having an enlarged end adapted to engage
over the overturned intermediate portion of
the bunch of bristles for holding the latter
in compact form, a shaft rotatably mounted
5 in the fork, and a plurality of bristles car-
ried radially upon the shank and arranged
in a spiral row from end to end of the shaft
to effect a wiping action lengthwise of the
shaft during the rotation of the shaft and
10 the bristles.

In testimony whereof, I have affixed my
signature.

PAUL M. WRIGHT.

15

20

25

30

35

40

45

50

55

60

65