

June 24, 1930.

L. ZEITLIN

1,766,476

METHOD OF PREPARING HAIR

Filed Sept. 13, 1928

FIG. 1.

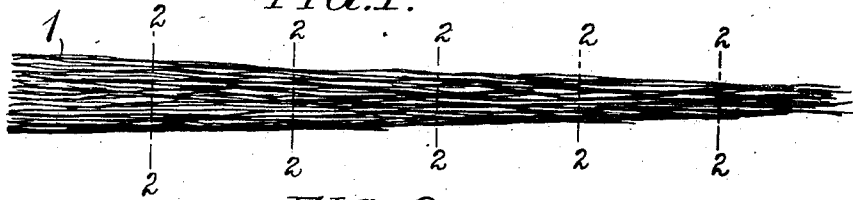


FIG. 2.

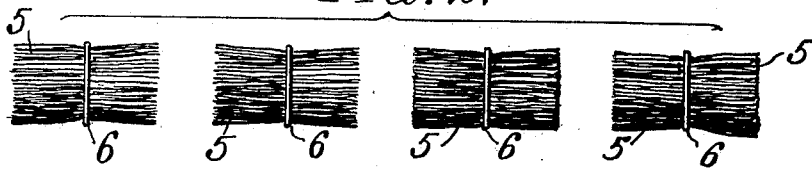


FIG. 3.

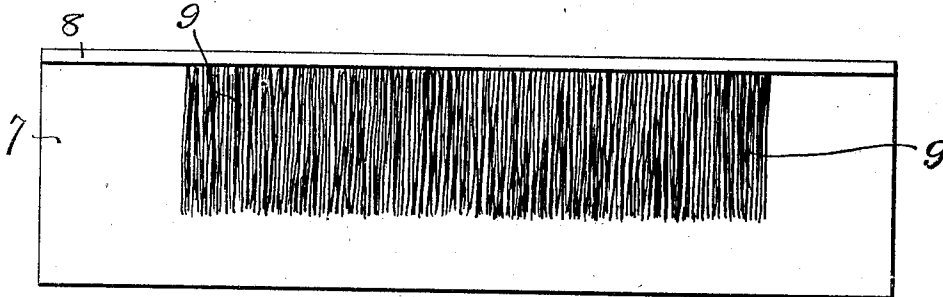


FIG. 4.

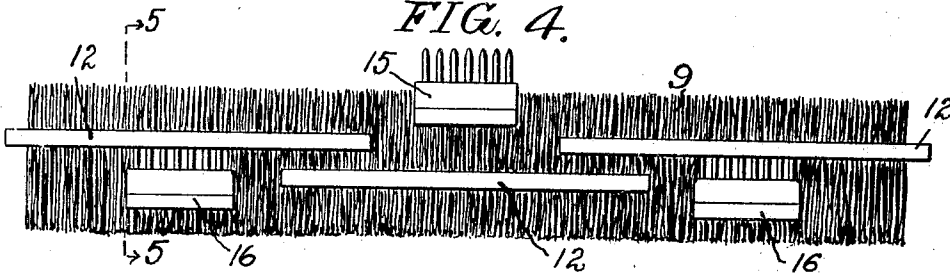


FIG. 5.

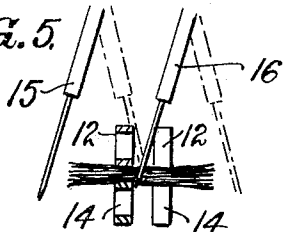


FIG. 6.

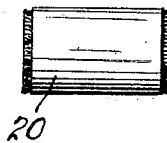
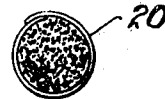


FIG. 7.



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METHOD OF PREPARING HAIR

Application filed September 13, 1928. Serial No. 305,713.

My invention relates to improvements in the method of preparing hair, and particularly to the method of preparing horse hair for the brush industry. Heretofore the hair has been prepared by hackling the hair, then drawing the hair to arrange it according to the length of the hairs. This drawing operation required skilled labor which added greatly to the cost of production. The hair was then arranged into bundles and tied with cords, ready to be supplied to the brush trade or industry. The tying of the bundles with cord also required skilled labor. The brush maker would then cut the full length bundle of hair into lengths suitable for making brushes.

The object of my invention is to improve and cheapen the cost of preparing the horse hair for the market and to better meet the brush makers' requirements; a further object is to entirely dispense with the drawing operation, thereby greatly reducing the cost of manufacture; and a still further object of my invention is to comb and clean the hair in a novel and rapid manner and wrap the finished hair into bundles, encased in paper tubes, adapted for holding the hair firmly together without crimping the hair, as when tied with string.

Referring to the accompanying drawing Fig. 1 is a side elevation of a bundle consisting of hair as cut from the animal; Fig. 2 is a side elevation showing detached sections formed by cutting the bundle, shown in Fig. 1; Fig. 3 is a plan view of a table showing the hair spread loosely in a row upon the table; Fig. 4 is a plan view of a row of hair, illustrating clamping means for holding the hair and showing combs used for combing the hair; Fig. 5 is a transverse section on line 5—5 Fig. 4; Fig. 6 is a side elevation of the finished hair shown encased in a wrapper; and Fig. 7 is an end view of Fig. 6.

In the accompanying drawing in which like reference characters refer to like parts, 1 represents a bundle of hair which is first combed and cleaned by the well known hackling process. A bundle 1 of hair, or if the bundles are small, two or more bundles may

be placed together and cut transversely, upon the dotted lines 2—2, shown in Fig. 1, thus forming sections 5, shown in Fig. 2, each of which is held together by a suitable device, such as a rubber band 6.

A table 7, having a vertical guide 8 is provided, against which guide one end of the hair 9 is abutted. The band 6 is first removed from a section 5 and then the hairs 9 are spread loosely in a thin layer upon the table 8, with the hairs arranged parallel to each other, then another section 5 is spread upon the first layer, thus mixing the hair of the different sections. The sections 5 may be alternately reversed endwise as the hair is spread upon the table 8, thus more thoroughly mixing the hair.

The hair 9 is then removed from the table 7 and placed between suitable strips 12 and 14, positioned above and below the hair, as shown in Figs. 4 and 5. While the hair is held between the strips 12 and 14, in a thin continuous row it is combed by suitable combs 15 and 16, illustrated in Figs. 4 and 5, which are moved by hand or by a machine, from the full line position to the position shown in dotted lines. The combing process is continued throughout the entire length of the row of hair.

The clamping strips 12 and 14 may be in the form of endless belts located above and below the row of hair and operated in a manner for moving the hair lengthwise of the belts and transversely relatively to the motion of the combs, or the combing and mixing process may be performed on a bristle combing and mixing machine, such as now in general use for combing bristles. Such machines are well known in the art and therefore are not illustrated in the drawing of the present application.

After the hair has been thoroughly mixed and combed it is gathered up into bundles and encased in a paper wrapper 20, having its ends pasted together to form a tube, as shown in Fig. 7. The ends of the bundle of hair are trimmed or cut evenly so that all the hair in the bundle will be of uniform length. The paper wrapper 20 is wrapped tightly enough about the bundle of hair to

hold the bundle in shape. It therefore does not crimp the hair as did the string wrappings used heretofore for tying the bundles.

By the above described novel method of preparing hair the entire drawing operation is dispensed with, thereby greatly reducing the cost of manufacture and producing hair in the form desired by the brush industry.

I claim:

10 1. The method of preparing horse hair, comprising hackling a bundle of long hair, cutting the bundle of hair into sections of suitable length for the brush industry, mixing the hair of sections of similar length, and
15 combing the hair.

2. The method of preparing horse hair, comprising hackling a bundle of long hair, cutting the bundle of hair into sections of suitable length for the brush industry, mixing the hair of sections of similar length,
20 combing the hair, and again mixing and combing the hair.

3. The method of preparing hair, comprising hackling a bundle of long hair, cutting
25 the bundle of hair into sections of suitable length, combing the hair, and mixing the hair by spreading it in thin superimposed layers and again combing of the same.

4. The method of preparing horse hair, comprising hackling a bundle of long hair,
30 cutting the bundle of hair into sections of suitable length for the brush industry, spreading the hair of sections of similar length loosely in thin superimposed layers with the hairs extending parallel for mixing
35 the hair, combing the hair, and again mixing and combing the hair.

5. The method of preparing horse hair, comprising hackling a bundle of long hair,
40 cutting the bundle of hair into sections of suitable length, reversing said sections end for end, spreading the hair of the sections of similar length loosely in a thin layer, combing the hair, and mixing the same.

45 6. The method of preparing hair, comprising hackling a bundle of long hair, cutting the bundle of hair into sections, mixing and combing the hair, and encasing a bundle of the finished hair in a sheet of flexible material in tubular formation about the bundle
50 of hair.

In testimony whereof I affix my signature.

LOUIS ZEITLIN.

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