April 9, 1940. E. KREUTZIG 2,196,812

BRUSH TAIL COMB

Filed May 4, 1939 2 Sheets-Sheet 1

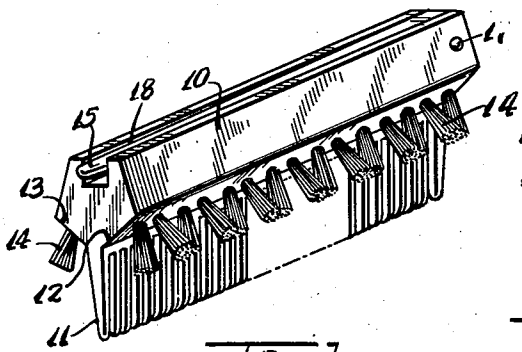


Fig. 1.

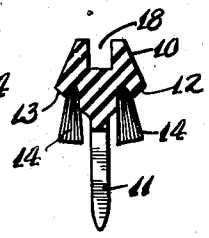


Fig. 3.

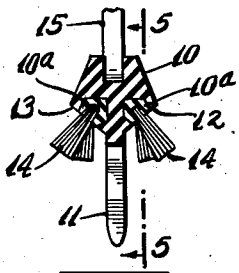


Fig. 4.

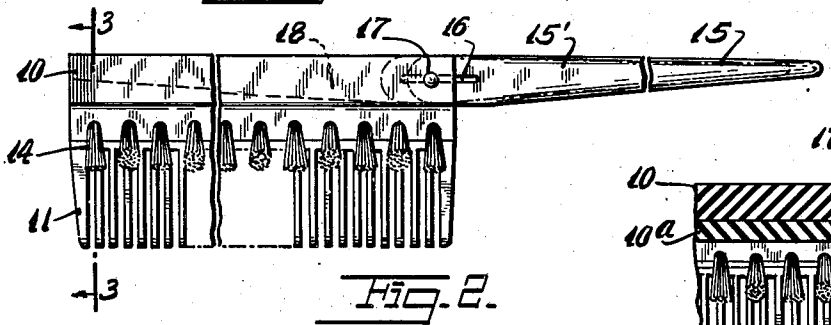


Fig. 2.

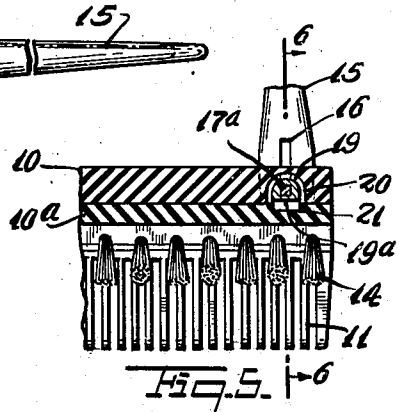


Fig. 5.

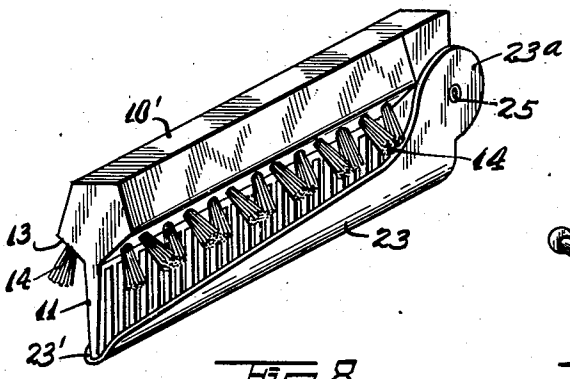


Fig. 8.



Fig. 7.

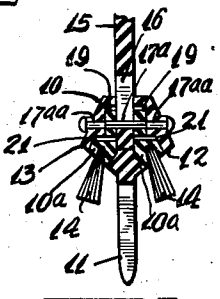


Fig. 6.

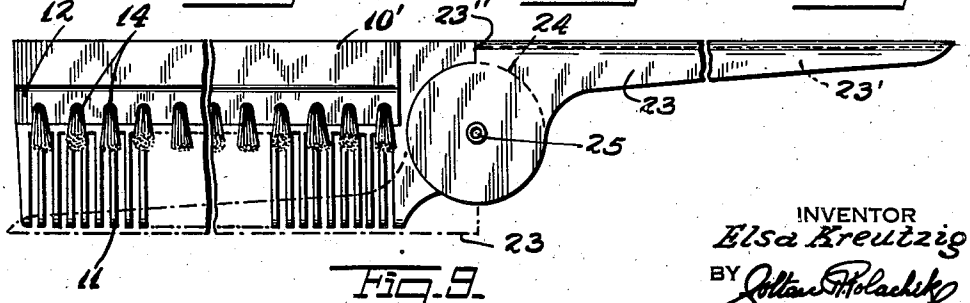


Fig. 9.

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BRUSH TAIL COMB

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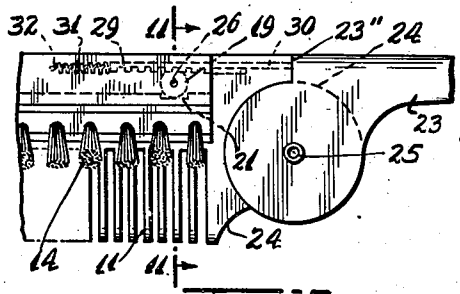


Fig. 10.

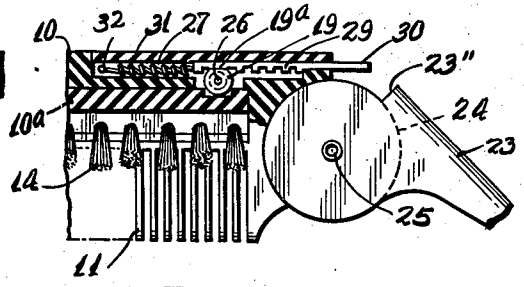


Fig. 12.

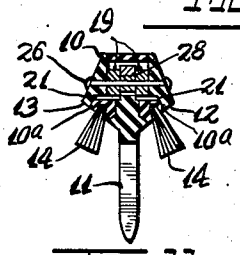


Fig. 11.

Fig. 14.

Fig. 13.

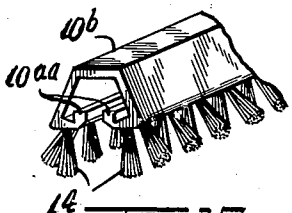


Fig. 17.

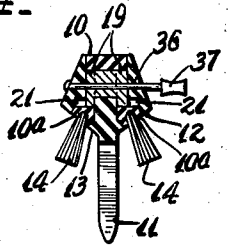


Fig. 16.

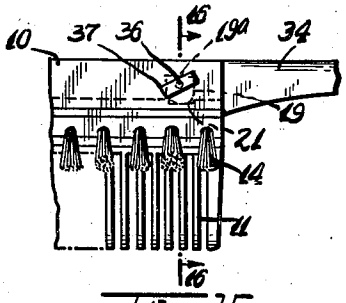


Fig. 15.

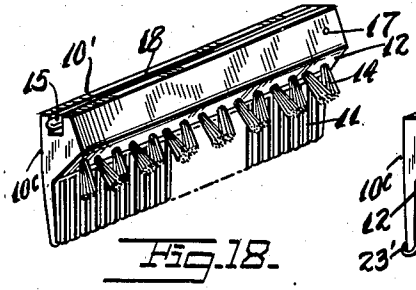


Fig. 18.

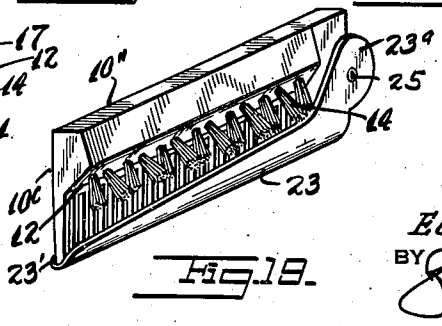


Fig. 19.

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Patented Apr. 9, 1940

2,196,812

UNITED STATES PATENT OFFICE

2,196,812

BRUSH TAIL COMB

Elsa Kreutzig, Jersey City, N. J.

Application May 4, 1939, Serial No. 271,646

8 Claims. (Cl. 132—85)

This invention relates to new and useful improvements in a brush tail-comb.

The invention has for an object the construction of a brush tail-comb which is characterized by a member having a longitudinal row of teeth, and outwardly and rearwardly inclined shoulders at the base ends of the teeth, and bristles mounted upon and projecting from said shoulders. With this arrangement it is possible to simultaneously use the comb and the brush bristles as required.

Still further the invention proposes a novel association of a handle with the member by which it may be conveniently manipulated.

As another object of this invention an arrangement is proposed whereby the bristles are mounted on strips slidably supported in the shoulders, a novel arrangement being provided for releasing these strips so that they may be removed and replaced when the bristles become worn.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a perspective view of a brush tail-comb constructed according to this invention.

Fig. 2 is a side elevational view of the brush tail-comb shown in Fig. 1 illustrated with the handle extended.

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view similar to Fig. 3 but illustrating a modified form of brush tail-comb.

Fig. 5 is a fragmentary longitudinal sectional view taken on the line 5—5 of Fig. 4.

Fig. 6 is a transverse sectional view taken on the line 6—6 of Fig. 5.

Fig. 7 is a perspective view of the pintle used in Figs. 5 and 6.

Fig. 8 is a perspective view of a brush tail-comb constructed according to another form of this invention.

Fig. 9 is a side elevational view of the brush tail-comb shown in Fig. 8 with the handle extended.

Fig. 10 is a fragmentary side elevational view of a brush tail-comb similar to that shown in Fig. 9 but of modified construction.

Fig. 11 is a transverse vertical sectional view taken on the line 11—11 of Fig. 10.

Fig. 12 is a longitudinal sectional view of the parts shown in Fig. 10 but illustrated in a somewhat different position.

Fig. 13 is another sectional view similar to Fig. 12 but illustrating the parts in another position.

Fig. 14 is a perspective view of a brush tail-comb constructed according to another form of this invention.

Fig. 15 is a fragmentary side elevational view of a brush tail-comb constructed according to another embodiment of this invention.

Fig. 16 is a transverse sectional view taken on the line 16—16 of Fig. 15.

Fig. 17 is a fragmentary perspective view of another form of brush attachment for the comb.

Figs. 18 and 19 are similar views to Figs. 1 and 8, respectively, but illustrating still further modified forms of the invention.

The brush tail-comb, according to this invention, includes a member 10 having a longitudinal row of teeth 11 and also having outwardly and rearwardly inclined shoulders 12 and 13 at the base ends of the teeth 11. Bristles 14 are mounted upon and project from the shoulders 12 and 13 so as to extend downwardly and outwardly relative to the teeth 11.

A handle is provided for assisting in manipulating the member 10. This handle includes a handle proper 15 provided with a slot 16 at one end engaged by a pintle 17 mounted through the material of the member 10. A groove 18 is formed along the top edge of the member 10 and the handle 15 is adapted to be pivoted and reposes within this groove when inoperative. In Fig. 1 the handle is shown disposed within the groove 18. In Fig. 2, in full lines, it is shown pivoted down to form an extension of the member 10. In dot and dash lines indicated by the reference numeral 15' it is shown slipped forwards as permitted by the slot 16 so that the bottom edge of the handle engages the bottom edge of the groove 18 to rigidly hold the handle in position. In this latter condition the brush comb-tail may be used. Before the handle 15 may be moved to its inoperative position it is required that it be pulled rearwards first and then pivoted around through substantially 180°.

In Figs. 4–7 inclusive a modified form of the invention has been disclosed which distinguishes from the prior form in the fact that the bristles 14 are mounted upon strip portions 10^a slidably engaged in receiving grooves formed inwards from the shoulders 12 and 13. These strip portions extend the entire length of the member 10 and may be slipped out from the front or rear end of the member under certain conditions. An arrangement is provided for normally locking the strips 10^a in fixed position.

The arrangement referred to above includes cams 19 disposed within recesses 20 formed in the material of the member 10 and mounted directly upon a square pintle 17^a used to support the handle 15. The handle 15 is provided with the slot 16 which is of a width to engage the sides of the square pintle 17^a. However, the pintle 17^a has end portions 17^{aa} (see Figs. 6 and 7) which en-

gage in the material of the member 10 to permit the handle 15 to pivot upwards and downwards. Each cam 19 is substantially of circular form but formed with a flat side 19a. When the handle 15 is in a vertical position these flat sides 19a are disposed above complementary cutouts 21 formed in the material of the strips 10a. In all other positions of the handle 15 the cams 19 will project into the cutouts 21 and so latch the strips 10a from being moved. In other respects this form of the invention is similar to the previous form.

In Figs. 8 and 9 another modified form of the invention is disclosed which distinguishes from the prior forms particularly in the construction of the handle. In this form the brush tail-comb is provided with a handle 23 having side lugs 23a engaging in opposite sides of a projecting lug 24 from the material of the member 10'. A pintle 25 engages through the lugs 23a and 24 to pivotally support the handle in position. The handle 23 has a hollowed out inner edge 23' adapted to engage over the extremities of the comb teeth 11 in the closed position of the comb. This position is shown by the full lines in Fig. 8 and by the dot and dash lines in Fig. 9. The handle 23 may be extended as shown by the full lines in Fig. 9. In this latter condition shoulder portions 23'' formed upon the handle 23 engage a complementary shoulder formed on the member 10' to limit pivoting of the handle to a position in which it is aligned with and extends from the rear of the member 10'. In other respects this form of the invention is similar to the previous forms.

In Figs. 10 to 13 another modified form is illustrated which distinguishes from the form shown in Figs. 8 and 9 in the fact that an arrangement has been provided for mounting the bristles 14 upon strips 10a. These strips are slidably engaged in receiving grooves formed in from the shoulders 12 and 13 of the member 10. A novel arrangement has also been provided for locking the strips 10a in fixed positions upon the member.

The arrangement referred to in the prior paragraph includes cams 19 mounted upon a pintle 26 extended transversely through the member 10. The cams 19 are disposed within recesses 27 formed in the member 10. The cams 19 have a common hub portion 28 formed with teeth meshing with the teeth of a rack 29 which is slidably supported on the member 10. This rack 29 has a tail end 30 adapted to extend from the shoulder complementary to the shoulder 23'' of the handle 23. A spring 31 is secured at one end by a pin 32 within the cavity 27 and at the other end is connected with the rack 29 to normally urge the rack into its extended position, illustrated in Fig. 12.

The cams 19 are cooperative with a complementary cutout 21 formed in the strips 10a. Each cam 19 has a flat side 19a which when disposed immediately above the cutouts 21 disengages from the strips 10a to permit the strips to be withdrawn. In other positions of the cams 19 they engage into the cutouts 21 holding the strips 10a fixedly in position.

In Fig. 10 the handle 23 is shown in its fully extended position in which the shoulder 23'' has engaged and pressed in the tail end 30 of the rack 29. In this condition the cams 19 are engaging the cutouts 21 locking the strips 10a which hold the bristles 14. In Fig. 12 the handle 23 is shown pivoted so that the spring 31 has completely ejected the rack 29 and again the cams 19 are in positions in which they extend into the cutouts 21 locking the strips 10a. However, in an intermediate closed position of the handle 23, as illustrated in Fig. 13, the tail 30 is partially pressed inwardly and in this partially pressed in position the cams 19 will be in a position in which the straight sides 19a are superimposed above the cutouts 21 of the strips 10a and the strips are therefore free to be withdrawn.

In Fig. 14 another modified form of the invention has been disclosed which distinguishes from the forms shown in Figs. 1 and 9 in the fact that the member 10 has a handle portion 34 integrally formed at its rear end and extending rearwards. In other respects this form of the invention is similar to the previous form.

In the form of the invention shown in Figs. 15 and 16 an arrangement is provided in conjunction with the integrally formed handle 34 for removing the bristles 14. According to this form of the invention the bristles 14 are mounted upon strips 10a slidably mounted in the member 10. These strips 10a have cutouts 21 formed at one point engageable by cams 19. The cams 19 have flat sides 19a which when superimposed over the cutouts 21 free the strips 10a. The cams 19 are supported on a spindle 36 which extends through the member 10 and has a projecting end provided with a small handle 37 by which the spindle may be turned, and hence the cams moved. The arrangement is such that the strips 10a may be locked in fixed positions or may be freed when desired.

In Fig. 17, the strips 10aa are joined by a bridging portion 10b, so that they may be removed together with bristles 14 from cutouts 21.

In Figs. 18 and 19 the members 10' and 10'' are flat at one side 10c, and at the other side, the bristles 14 are formed in the inclined shoulder 12, as illustrated in Figs. 1 and 8 respectively.

Suitable covers may be provided for carrying the brush tail-comb in one's pocket or handbag.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patents is:

1. A brush tail-comb comprising a member having a longitudinal row of teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, bristles mounted on and projecting from said shoulders, and a handle for said member, and pivotally mounted thereon to be foldable and extendable as desired, said bristles being mounted upon strips slidably mounted in grooves formed in said shoulders, and means for fixedly holding said strips controlled by the position of said pivoted handle, said means including cams cooperative with the strips, said cams being mounted upon a pintle directly moved by said handle.

2. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable means for locking said strips in position within said grooves so that said strips may be released when desired

to be interchanged with other strips when said bristles become worn.

3. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable means for locking said strips in position within said grooves so that said strips may be released when desired to be interchanged with other strips when said bristles become worn, a handle, and a pintle fixedly attached to said handle and turnably extended through said member for pivotally supporting said handle on said member, said means comprising cams fixedly mounted on said pintle and cooperative with recesses formed in said strips for locking said strips against moving, and flat sides formed on said cams and alignable with said recesses in one pivoted position of said handle to release said strips.

4. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable means for locking said strips in position within said grooves so that said strips may be released when desired to be interchanged with other strips when said bristles become worn, a handle, and a pintle fixedly attached to said handle and turnably extended through said member for pivotally supporting said handle on said member, said means comprising cams fixedly mounted on said pintle and cooperative with recesses formed in said strips for locking said strips against moving, and flat sides formed on said cams and alignable with said recesses in one pivoted position of said handle to release said strips, said pintle being squared where it passes through said handle and cams for locking these parts to said pintle to cause said cams to turn when said handle is pivoted.

5. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable means for locking said strips in position within said grooves so that said strips may be released when desired to be interchanged with other strips when said bristles become worn, comprising a pintle rotatively extended through said member at right angles to said strips and above said strips, cams fixedly mounted on said pintle and cooperative with recesses in said strips for locking said strips against being removed, a pinion mounted on said pintle between said cams, a rack slidably mounted in said member parallel to said strips and meshing with said pinion, resilient means urging said rack into a position in which one end extends beyond the end of said member to turn said cams into an operative position, flat sides formed on said cams and in one position of said rack being alignable with said recesses to free said strips, and a handle pivotally mounted on said member and engageable against the end of said rack for urging the same inwards against the action of said resilient means to turn said cam and align said flat sides with said recesses.

6. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable mean. for locking said strips in position within said grooves so that said strips may be released when desired to be interchanged with other strips when said bristles become worn, comprising a pintle rotatively extended through said member at right angles to said strips and above said strips, cams fixedly mounted on said pintle and cooperative with recesses in said strips for locking said strips against being removed, a pinion mounted on said pintle between said cams, a rack slidably mounted in said member parallel to said strips and meshing with said pinion, resilient means urging said rack into a postion in which one end extends beyond the end of said member to turn said cams into an operatve position, flat sides formed on said cams and in one position of said rack being alignable with said recesses to free said strips, and a handle pivotally mounted on said member and engageable against the end of said rack for urging the same inwards against the action of said resilient means to turn said cam and align said flat sides with said recesses, said resilient means, comprising an expansion spring operating between the inner end of said rack and a portion of said member.

7. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable means for locking said strips in position within said grooves so that said strips may be released when desired to be interchanged with other strips when said bristles become worn, comprising a spindle turnably extended through said member at right angles to said strips and having one end extended from one side of said member, cams fixedly mounted on said spindle and cooperative with complementary recesses formed in said strips for holding said strips in position, flat sides formed on said cams and alignable with said recesses in one turned position of said spindle for releasing said strips, and means for facilitating the turning of said spindle.

8. A brush-tail comb, comprising a member having a longitudinal row of comb teeth and outwardly and rearwardly inclined shoulders at the base ends of said teeth, strips slidably mounted in grooves formed in said shoulders, bristles mounted on said strips, and releasable means for locking said strips in position within said grooves so that said strips may be released when desired to be interchanged with other strips when said bristles become worn, comprising a spindle turnably extended through said member at right angles to said strips and having one end extended from one side of said member, cams fixedly mounted on said spindle and cooperative with complementary recesses formed in said strips for holding said strips in position, flat sides formed on said cams and alignable with said recesses in one turned position of said spindle for releasing said strips, and means for facilitating the turning of said spindle, comprising a small handle mounted on the extended end of said spindle to be manually grasped to turn said spindle.

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