F. L. GREENE & S. D. WOOD.

CURRYCOMB.

(Application filed May 23, 1902.) (No Model.) I.L.Greene SII.Wood Wilnesses

United States Patent Office.

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CURRYCOMB.

SPECIFICATION forming part of Letters Patent No. 711,423, dated October 14, 1902.

Application filed May 23, 1902. Serial No. 108,699. (No model.)

To all whom it may concern:

Beit known that we, FRANK L. GREENE and SEBAD. WOOD, citizens of the United States, residing at Wellsboro, in the county of Tioga 5 and State of Pennsylvania, have invented a new and useful Currycomb, of which the fol-

lowing is a specification.

This invention relates to currycombs; and it has for its object to provide a device of this 10 class which shall not only be cheap, simple, and effective in operation, but which shall serve not merely for the purpose of cleaning or freeing the hair of the animal from dirt, but also to exercise a cutting or trimming ac-15 tion, whereby the hair of the animal shall be kept at the proper length without the necessity of clipping the same, as is usually done.

The invention consists in the combination, with a suitable handle or holder, of a frame 20 vertically adjustable with relation thereto and flexible strips arranged at the ends of said frame and held securely in contact therewith, the said flexible strips being held stationary with relation to the holder or handle, 25 so that by vertically adjusting the frame a greater or less portion of teeth or cutters, formed at the lower edges of the said flexible strips, will be exposed, said teeth or cutters being constructed with a view of acting also 30 as cleaners, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a top plan view of a currycomb constructed 35 in accordance with our invention. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a vertical transverse section taken on the line x x in Fig. 2 and looking in the direction of the handle. Fig. 4 is a trans-40 verse sectional view taken on the line y y in Fig. 2 and looking in the direction opposite to the handle. Fig. 5 is a detail view, on a larger scale, showing a portion of one of the cleaners or cutters. Corresponding parts in the several figures

are indicated by like characters of reference.

1 designates a yoke or holder, to the rear arm of which a handle 2 is attached by means of a bolt 3, extending through said handle 50 and provided with a fastening-nut 4. The arms 5 and 6 of the yoke 1 are preferably made

of unequal length, the arm 5 being the longer. This is for the purpose of giving to the device the slant which is requisite and desirable in an article of this class.

The arms 5 and 6 of the yoke 1 are provided at their lower ends with perforations 7 for the reception of thumb-bolts 8, having nuts 9. These thumb-bolts serve for the attachment of the frame 10, which may be of any desired 60 shape, it being preferably constructed of a hoop or band bent to the desired shape and having its ends connected by means of a rivet 10a. The preferred construction of said frame, however, has been illustrated in the draw- 65 ings hereto annexed, by reference to which it will be seen that its sides 20 20 are made straight, parallel to each other, and at right angles to the rear piece 21, while the front piece 22 of said frame is curved to an approxi- 70 mately semicircular shape. The reason for this preferred construction of the frame will be hereinafter set forth. The front and rear cross-pieces 21 and 22 of the frame are provided with vertical slots 11 to receive the 75 thumb-bolts 8, upon which the said frame is thus made vertically adjustable, as will be readily understood.

12 and 12^a designate the combined cleaners and cutters, which are mounted upon the 80 thumb-bolts 8 within the frame 10 and in contact, respectively, with the rear and front cross-bars of said frame. These combined cleaners and cutters are constructed of strips of steel, at the lower edges of which are 85 formed teeth 13, not unlike saw-teeth, and having their adjacent edges filed, so as to form sharp cutting edges 14. The cutting edges of the strips 12 and 12° should be faced in opposite directions, as will be best seen by 90 reference to and comparison of Figs. 3 and 4 of the drawings, by reference to which it will appear that the filed sides of the teeth are exposed toward the inner side of the frame. The position, however, of the cutting-strips 95 may be reversed, as long as the cutting edges are exposed in opposite directions. It will be seen that these combined cleaners and cutters, which are mounted upon the thumbbolts 8 by means of perforations 15 in the 100 flexible steel strips constituting said cleaners and cutters, said perforations fitting snugly

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upon the said bolts, are adjustable with relation to the frame 10, which latter may be moved vertically upon the thumb-bolts 8 by reason of the slots 11 in said frame. The op-5 eration of the invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The device is grasped by the handle in the fashion of an ordinary currycomb and to is used in precisely the same manner. The teeth 13 of the combined cleaners and cutters will serve like the teeth of an ordinary currycomb to disengage and loosen the dust and dirt from the hair and hide of an animal, and rs such dust and dirt will escape through the open frame 10 without clogging the device; but in addition to their cleansing action the teeth 13 by reason of their cutting edges 14 will serve to cut or clip the hair, which by 20 the use of our improved device will be kept constantly at an even length, which may be regulated by raising or lowering the frame 10, so as to expose more or less of the teeth 13 below the lower edges of the said frame. The 25 action and efficiency of the device may thus be properly regulated. The cutting edges of the teeth being faced in opposite directions, the cutting action of the device will be exercised when the device is moved in either 30 direction with relation to the handle thereof. It is not claimed that the flexible steel strips which constitute what we call "combined cleaners and cutters" are actually "cutters," as understood when that name is applied to

35 shears or to tools having a shearing action, such as are usually employed for clipping horses; but we have found that the device constructed by us will exercise a regular trimming action, in which it vastly differs 40 from the operation of the ordinary curry comb. Ordinary currycombs simply serve to rake the coat of the animal, thus removing or loosening the dirt and removing loose hairs, the operation of the currycomb being always ac-45 companied by or followed by the application of the brush. The improved device is, as stated, provided with flexibly-mounted strips having sharp pointed teeth that are beveled to form sharp cutting edges, which at the 50 front and rear ends of the tool are so disposed as to face in opposite directions. Obviously the cutting action of the tool is only exercised by the teeth, the bevels of which are facing rearwardly at the time of operation. 55 These teeth will naturally exercise a cutting action, for the reason that by the pressure exerted upon the tool against the hide of the animal the hair will be crowded into the contracting spaces between the pointed teeth,

60 being thus subjected to a direct cutting action, which as the tool is drawn forwardly over the coat of the animal will be continued in a perfectly natural way as the tool or comb progresses over the coat—that is, the hairs of the coat will be successively crowded in

65 of the coat will be successively crowded in between the teeth, and will thus be successively acted upon, with the result indicated.

This result may be somewhat assisted by imparting to the tool a slightly swaying or vibratory movement; but this is not essen- 70 tial to the perfect operation of the device. It is also obvious that by adjusting the flexible steel strips with relation to the frame so as to expose a greater or less portion of the teeth or cutters the work may be regulated 75 so as to leave the hair at any desired length. It is not to be understood, as already stated, that a continuous or complete shearing or clipping operation is performed, but that by the use of our device the hair of the animal 80 will be kept constantly and continuously trimmed and maintained at any desired length.

The general utility of our improved device is enhanced by the fact that the ends of the 85 flexible strips constituting the cleaners and cutters are left free, the said strips being secured with relation to the frame at their central points only. By this construction the ends of the strips are left free to vibrate 90 within certain limits, and such vibratory movement will naturally assist not only in stirring and loosening the dirt and removing the loose hair, but also to assist the hair in bunching or crowding into the spaces be-95 tween the teeth to be thus subjected to the

cutting action of the latter.

While the frame 10 of our device may be of any shape, we prefer to construct it with the semicircular or rounded frontside, (clearly 100 illustrated in Fig. 1 of the drawings,) for the reason that practical experience has proven that the cleaner and cutter arranged adjacent to the said curved front side being thus sprung to a correspondingly-curved shape is 105 thereby rendered more efficient in operation, the cutting edges of the teeth being, owing to this construction, placed at angles to each other instead of being in the same vertical plane, as is the case with the cutting edges 110 of the teeth of a strip arranged in contact with the straight side of the frame. The said teeth will therefore be caused to perform the cutting function in a more thorough manner, while the teeth of the strip placed 115. in contact with the straight side of the frame are depended upon more to exercise a cleaning action only.

Our improved currycomb, as will be seen from the foregoing description, is extremely 120 simple in its construction, and it may be manufactured at a small expense, while in practical operation it will be found to be highly efficient. The parts are simple and easily put together, and the necessary adjustment may 125 be easily effected, while by tightening the thumb-bolt 8 the parts are securely bound together in position for operation

gether in position for operation.

Having thus described our invention, we claim and desire to secure by Letters Patent 130 of the United States—

1. In a device of the class described, the combination with a yoke having a handle securely attached thereto, of a frame connected

with the arms of said yoke, flexible strips secured within said frame adjacent to and in contact with its front and rear sides and having teeth at their lower edges, and means for so securing the said flexible strips within said frame as to leave their ends free, substantially as set forth.

2. In a device of the class described, the combination of a yoke having a handle se10 curely attached thereto, a frame connected adjustably with the arms of said yoke and flexible strips disposed in contact with the said frame adjacent to the front and rear sides thereof and having teeth at their lower edges, said strips being centrally secured and having free ends, substantially as set forth.

3. In a device of the class described, the combination with a yoke having a handle securely attached thereto, of a frame connected with the arms of said yoke and vertically adjustable with relation thereto, and flexible toothed strips connected centrally with the arms of said yoke and disposed within said frame adjacent to the front and rear inner sides.

4. In a device of the class described, the combination of a yoke having a handle attached thereto, a frame having vertically-slotted front and rear sides, flexible strips arranged within said frame adjacent to its front and rear sides and having toothed lower edges and transverse perforations, and connecting-bolts extending through and fitting snugly in said perforations, through the vertical slots in the frame, and through perforations in the arms of the yoke, and having fastening-nuts thereon, substantially as set forth.

5. In a device of the class described, the combination with a frame, of flexible strips arranged within said frame adjacent to its 40 front and rear sides and provided at their lower edges with teeth having sharp cutting edges, the cutting edges of the teeth of said strips being faced in opposite directions, substantially as set forth.

6. In a device of the class described, the combination with the combined cleaners and cutters consisting of flexible strips having teeth provided with sharp cutting edges, of a handled yoke, a frame having vertical ad-50 justment with relation to the said yoke and to the combined cutters and cleaners, and suitable connecting means, substantially as set forth.

7. In a device of the class described, the 55 combination of a handled yoke, combined cleaners and cutters consisting of steel strips provided at their lower edges with teeth having sharp cutting edges, a frame, mainly rectangular but having a semicircular or rounded 60 front side and provided in its front and rear sides with vertical slots, whereby it may receive vertical adjustment with relation to the yoke and the toothed strips, and suitable connecting means, substantially as set forth. 65

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

FRANK L. GREENE. SEBA D. WOOD.

Witnesses:
W. S. Brooks,
FRANK L. FISCHBEFE.