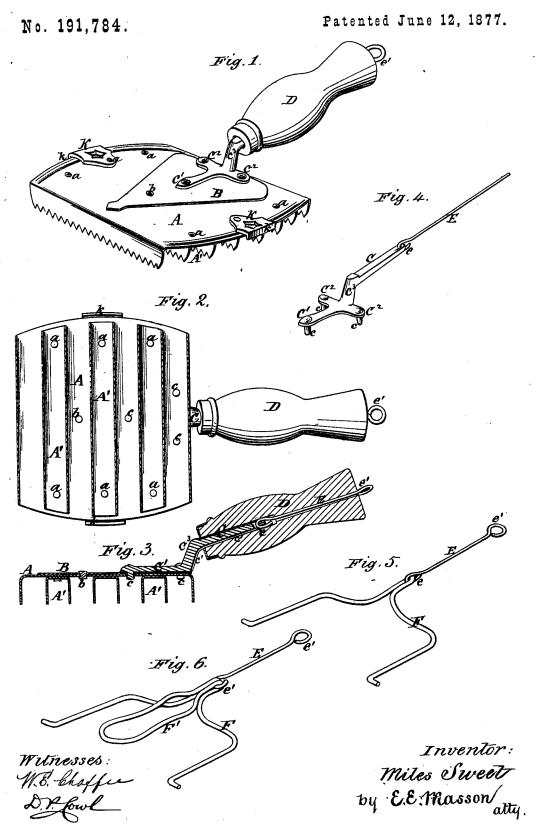
M. SWEET. CURRY-COMB.



## NITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CURRY-COMBS.

Specification forming part of Letters Patent No. 191,784, dated June 12, 1877; application filed November 16, 1876.

To all whom it may concern:

Be it known that I, MILES SWEET, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Curry-Combs; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this

specification, in which-

Figure 1 represents a perspective view of the curry-comb. Fig. 2 represents a face view of the same. Fig. 3 represents a longitudinal section through the comb and handle. Fig. 4 represents a detached view of the shank and wire fastening. Figs. 5 and 6 represent the wire fastening applied to the wire frame and shank of curry-combs.

My invention relates mainly to that class of curry-combs called "English combs," in which the back is made of sheet metal of about the same thickness as the bars attached to it, and said back is re-enforced by an additional plate of sheet metal; but it can also be applied to

other combs.

My invention consists in providing a currycomb with a grooved malleable shank of a T form, or having, besides the ordinary extension in the same vertical plane with the grooved shank of the handle, two lateral arms, as braces for the shank, that are riveted to the body of the curry-comb, and connect it, at the same time and by the same operation, with the re-enforcing plate of the comb.

My invention consists, also, in connecting and securing the shank of a curry comb to its handle by an independent and separate wire fastened at one end to the shank, and bent or looped at the other end, where it issues from

the handle.

My invention consists, also, in providing a circular English comb, made with a back of sheet metal, with an independent knocker riveted in the center of the arc formed by each curved end of the comb, as will be more fully described hereinafter.

In the drawings, A represents the sheetmetal back of the comb, to which are riveted the comb bars A' by means of rivets a, and thus the back of the comb is stiffened or strengthened in one direction. To strengthen or re-enforce it in the opposite direction, the | shank is wholly introduced within the handle

sheet-metal trowel-shaped piece B is used and secured by the rivet or rivets b. The trowelpiece B and the back A are then punched, and riveted together with the shank C, at the same time and by the same operation, and to facilitate this operation the lower portion of the shank is provided with rivet-studs c. The shank C is grooved at c' so as to form acute angles to cut into the handle, and is made of malleable cast metal with a thumb-rest,  $c^3$ , and its lower portion has, besides the ordinary extension C<sup>1</sup>, on a line with the shank two lateral arms, C<sup>2</sup>, acting as braces for the shank, and as additional fastenings to connect the shank, trowel-piece, and back of the comb Combs of this class have been made with a malleable shank, having simply, on a line with the shank, an extension connected by two rivets to the trowel-piece, to give it a broad base, and the trowel was then riveted to the back of the comb; but this mode of connecting the shank to the comb, although requiring more rivets, left the shank without any side support of its own metal at the point of junction with the trowel-piece, and thus were easily broken if not handled with care, or while rapping the dust and hair out of them. But by my peculiar construction of the lower portion of the shank I obtain a strong fastening, and simplify the operation of connecting the shank, trowel-piece, and back of the comb together.

Curry-combs having a short shank are liable to become loose within the handle D, under the rapping to which they are subjected. To provide against this defect, I groove and connect the short shank with an independent wrought-metal or wire extension, E, that can be clinched, riveted, or bent at the rear of the handle, and thus secure it against any possible contingency of becoming loose. For this purpose the shank C is cast or formed with a perforation near its extreme end, through which the wire E can be passed and looped at e, the handle D having previously been bored through its length, preferably with two bits of different sizes, the widest opening being next to the ferrule. The handle is passed over the straight wire E and grooved shank C, and forced, by hammering or otherwise, until the

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and the wire E projects beyond. The projecting end is then bent over or looped at e' against the rear of the handle, and thus secures it immovably. The ring e' thus produced will be found very convenient to hang the comb on a nail or hook in the stable. In Figs. 5 and 6 the independent wire-extension fastening E is shown as applied to the wire shank of a curry-comb frame made of wire, the shank in Fig. 5 being made of a single wire F bent over, while in Fig. 6 the wire frame is bent over twice at the shank and forms an additional wire handle, F', as shown in former patents granted to me. The wire fastening E could be similarly used to connect the wire frame at the shank, if said wire frame was made of separate wires looped at the shank.

The curry-comb, as shown in Figs. 1 and 2, has circular ends, and, being made of thin sheet metal, would be liable to be bent over and deformed by rapping against hard substances. To provide against this, a broad independent knocker, K, is riveted to the comb in the center of each curved end, using for convenience the same rivets that connect one of the serrated bars to the back of the comb.

This knocker is made, preferably of cast malleable metal, of suitable design, and is flanged at k, so that a single rivet will keep it in place, cover the edge of the back A, and present a broad surface against abrasion.

I am aware that the frames of circular or semi-circular curry-combs have been made wholly of malleable iron, said frames having projections at each end that could be used as knockers, and I do not claim this mode of constructing circular combs.

I am also aware that curry-combs having a straight malleable shank have been braced and re-enforced by means of lateral extensions.

Having thus fully described my invention, what I claim is—

1. In combination with the comb-back A and re-enforcing piece B, a malleable metal grooved shank having the extension C¹ and two lateral arms or braces, C², provided with rivets or rivet studs for connecting, by the same operation, the re-enforcing-piece, the back of the comb, and the shank, substantially as and for the purpose described.

2. In combination with the shank of a curry-comb and its handle, the independent and separate wire E fastened at one end through the end of the shank, and bent or looped at the other, where it issues from the handle, substantially as and for the purpose set forth.

3. In combination with the sheet-metal back of a comb having circular ends, the independent knocker K riveted and flanged to said back in the center of each circular end, substantially as and for the purpose described.

MILES SWEET.

Witnesses:

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