(No Model.)

L. M. DEVORE.

CURRY COMB.

No. 409,458. Patented Aug. 20, 1889.

Fig. 2

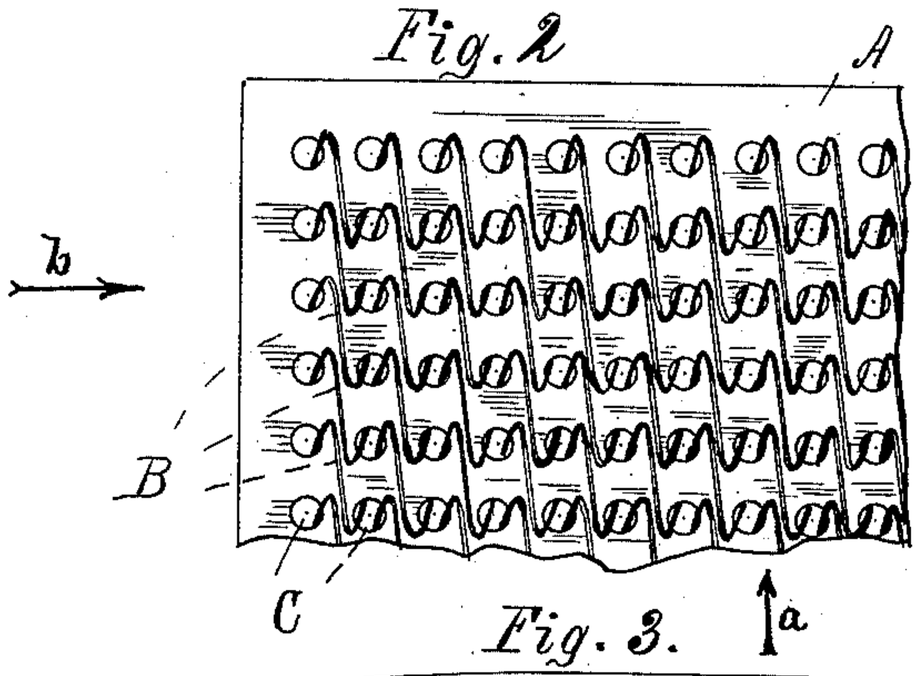


Fig. 3.

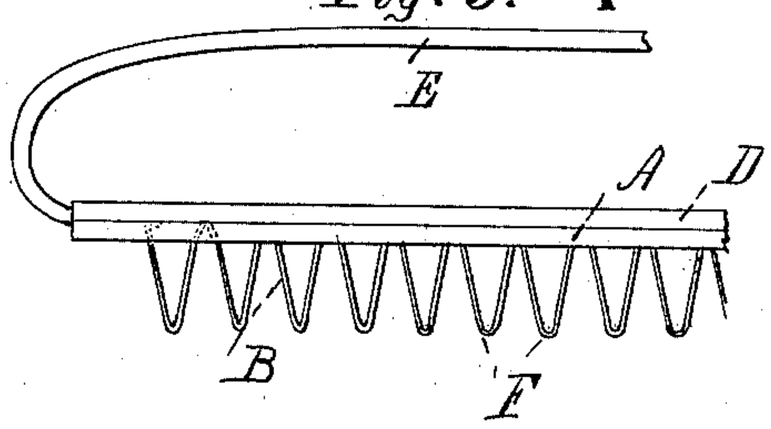


Fig. 4.

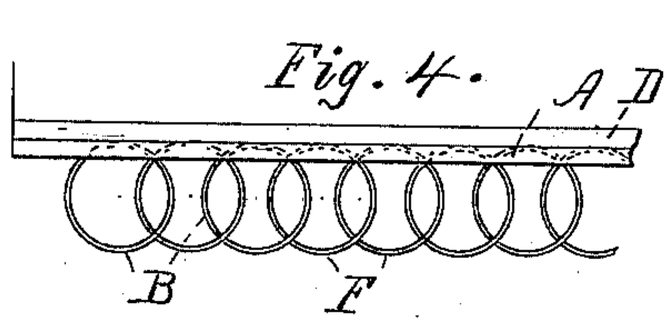


Fig. 1.

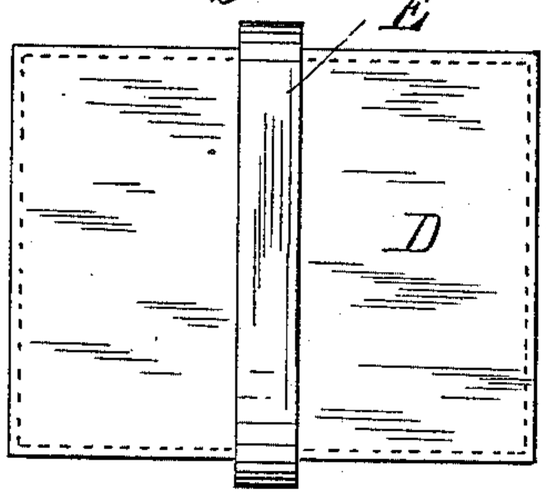
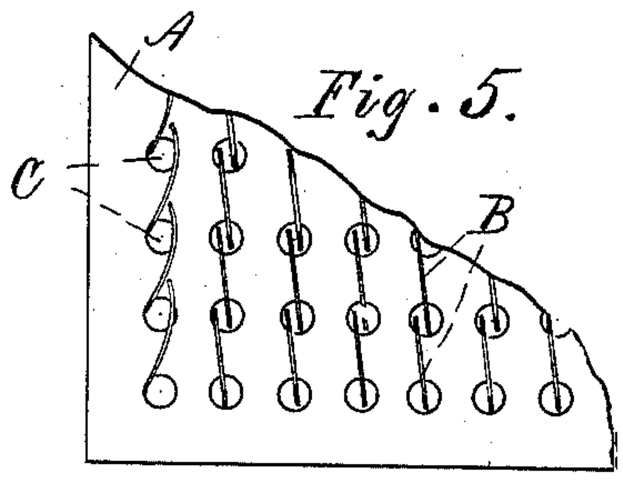


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

LEVI M. DEVORE, OF FREEPORT, ILLINOIS.

CURRY-COMB.

SPECIFICATION forming part of Letters Patent No. 409,458, dated August 20, 1889.

Application filed August 15, 1887. Serial No. 246,928. (No model.)

To all whom it may concern:

Be it known that I, LEVI M. DEVORE, a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Curry-Combs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The accompanying drawings fully illustrate my invention.

Figure 1 is a top or back view of the device. Fig. 2 is an enlarged view of the opposite side of one corner of the device. Fig. 3 shows on the same scale an edge looking in the direction of the arrow *a*, Fig. 2. Fig. 4 is a similar view looking in the direction of the arrow *b*. Fig. 5 illustrates the manner of securing the wire ends.

The curry-comb consists of a series of wire helices in the same plane held by a double back of leather or similarly flexible material. The helices are preferably parallel and not interlocked with each other, so that along lines parallel to the coils the curry-comb has all the flexibility of the leather, while along lines at right angles to the coils this flexibility is somewhat less, being diminished by the resistance of the coils to lateral bending. Along other lines the degree of flexibility is intermediate between these two. The rounded coils of the helices form the working-points of the comb and take the place of the usual teeth.

In the drawings, A is a leather sheet perforated at regular intervals, and B are wire helices whose turns pass successively through the perforations C. The distance between the perforations is approximately equal to the distance between the successive turns of the helices in one direction, and in the other direction the distance between them (or between the rows) is materially less than the diameter of the coils. From the latter circumstance it follows that the body of each coil must be and remain upon one side of the perforated sheet. As shown, the adjacent coils pass through the same apertures, and consequently interlap, though not interlocking; but this is not an essential feature of construction. The ends of the several coils are bent into the plane of the upper surface of the sheet A, and over the whole is placed a sheet D, similar in size and form to the first. The edges of the two sheets and intermediate lines or points, if desired, are then stitched or otherwise fastened together, a hand-loop E is attached, and the structure is a complete flexible curry-comb. It is not essential that the coils be cylindrical, and the working-points F may be as small or sharp as desired; but if they be formed of a loop or bend they will always present a rounded surface not calculated to mar or injure the skin of an animal.

I am aware that coils of wire have been employed for the working-surfaces of curry-combs; but this combination of coils with a flexible back is thought new, as is also the method of fixing the coils without interlocking and consequent decrease of flexibility, with certain other points of construction, and particularly the manner of securing the ends of the coils. Various methods have been tried—*e. g.*, the ends have been formed into small loops and riveted separately to the back, and they have been passed through the back and bent sharply upon themselves to inclose a small portion of the back itself; but the method illustrated has material advantages over such constructions, in that the cost of manufacture is less and the comb more durable. If the ends be secured rigidly, the light blows that the comb receives in actual use soon tear one or more of the ends loose, and when even a single end is freed the comb is useless; but when, as shown, about one-third of the last coil is carried to the upper side of the lower layer of the back, and is then bent bodily to one side, so that it lies upon the surface of the leather, there is little liability to such injury, for the wire is not at any point bent at an acute angle, and the end may be readily pushed inward or withdrawn to a considerable distance without passing the limit of elasticity of the wire, and hence it automatically returns without injury to its original position. No blow forces it beyond this limit, and practically it cannot be permanently displaced except by design, and even in such case it is a matter of some difficulty. Moreover, when the coils are of proper length and properly inserted, they

may all be bent into position at one operation by the use of simple appliances.

It is evident that the sheet D may be omitted, leaving the back of the sheet A exposed, as in Fig. 5, and the ends G be covered by any strip or by folding back the edge of the sheet A; but I do not regard this as a desirable modification.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a curry-comb, the combination, with a back of leather or the like, of a working-face composed of wire coils, each having its spirals passed into and out of the back, inclosing small portions thereof within the coils, substantially as set forth.

2. In a curry-comb, the combination, with a flexible sheet of leather or the like, of the wire coils lying principally upon one face thereof, and having their end spirals passed through the sheet and bent bodily down upon the opposite surface without uncoiling, and a second flexible sheet stitched to the first to cover said end spirals and retain them in place, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LEVI M. DEVORE.

Witnesses:

C. W. GRAHAM,

J. A. CRAIN.