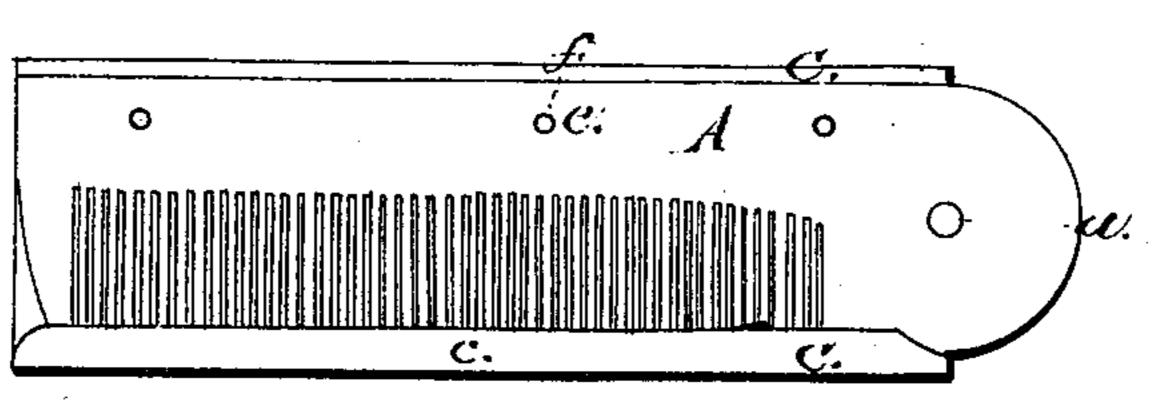
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Patentel Jun. 1,1869.

Fig.1



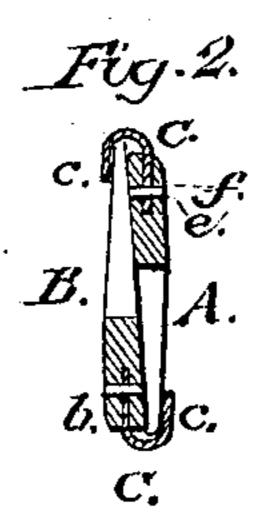
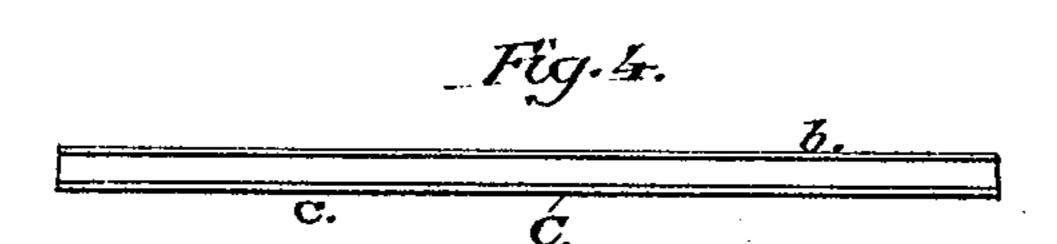


Fig.3.

g.7.



rig.s.

MITNESSES: S.N. Piper J. Resmont INVENTORS:

H.Brown.and

S.N.Noyes,

per M.M.Rdul

Attorney.

## Anited States Patent Office.

HAYDN BROWN AND SOMERBY N. NOYES, OF WEST NEWBURY, MASSACHUSETTS, ASSIGNORS TO S. C. NOYES AND COMPANY, OF SAME PLACE.

Letters Patent No. 90,816, dated June 1, 1869.

## IMPROVEMENT IN COMBS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that we, HAYDN BROWN and SOM-ERBY N. NOYES, of West Newbury, in the county of Essex, and State of Massachusetts, have made a new and useful invention having reference to Combs; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which-

Figure 1 is a side view,

Figure 2, a transverse section, and

Figure 3, a longitudinal section of what are termed "twin combs," provided with our invention.

Figure 4 is an inner side view, and

Figure 5, a transverse section of the metallic back

or brace, to be hereinafter described.

Our invention specially refers to such combs as have their bodies made from horn, tortoise-shell, ivory, or what is termed "hard rubber," and, although somewhat analogous to the invention of Picot, described in the United States patent, No. 59,645, dated November 13, A. D. 1866, yet there are important differences between that and our said invention.

The twin combs, pivoted together, require their metallic backs to have guard-flanges to receive and close over the points of the teeth when the two combs are

closed together.

The comb of Picot, recessed at its edge to receive the tenon or rib of the metallic brace, had such brace, formed either with or without flanges, to lap on the

sides of the comb, and fit closely thereto.

Now, although we adopt Picot's method of fixing the brace to the comb-body, that is, by means of a tongue to enter a mortise or groove formed in the comb-body, and to receive rivets going through both the body and the tongue, we have made the brace so as to answer the purpose of a guard to the teeth of the fellow-comb when the two combs are closed.

We have also formed in the tongue of the brace a single round hole, at its middle, and, instead of other round holes for reception of the rivets, we have made slots in the tongue, and arranged longitudinally therein the rivets, except the middle one, going through such slots, which are for the purpose of allowing the comb-body to either contract or expand without hin-

drance from the rivets.

It is well known that when a metallic back is riveted to a comb-body, by rivets going through round holes and filling them entirely, the body, when either contracting or expanding, is liable to become either split or broken at the rivet-holes, or warped or twisted out of its normal shape. With our improvement the expansion or contraction of the body can take place without injury.

In the drawings—

The twin comb-bodies are shown at A and B, one being lapped on the other at their ends, and the two being connected by means of a centre-pin or rivet, a.

The metallic backs, or braces, of such combs are exhibited at CC, each being formed as represented in figs. 4 and 5, the part b being the tongue, and the part c being the guard of each brace, they being so

formed that when the tongue is inserted in the recess or groove of the comb-back, the guard shall projectover one side of the body, and with a sufficient space, d, between the two to receive the points of the teeth of the fellow-body when the combs are closed together.

The single round hole for the central rivet e is shown at f, the slots for the remaining rivets g g being shown at h h.

We make no claim to the invention of Picot. Nor do we claim a comb in which the body and the teethguard are in one piece of horn or other piece of material, our invention having reference only to such combs as have their bodies provided with a separate brace, fastened to it by rivets.

We are aware of the United States patent, No. 55,349, granted to Joseph P. Noyes, June 5, 1866. Our invention differs materially from that described in the specification of such patent, as our said invention requires the metallic back to each comb to be made with a tongue or tenon, and the body of the comb to be formed with a guide or recess to receive each flange or tenon, which is to be held in place by rivets; and, furthermore, the metallic back of each of our combs forms the recess for the reception of the teeth of the twin comb.

This is not the case with the metallic back of the combs of the said J. P. Noyes, as they simply embrace the bodies of the combs, each body being bent so as to make a guard for the teeth of the turncomb.

Our improved metallic back, and mode of applying it, enable the comb to be made cheaper, lighter, and better in most respects.

What we do claim as our invention is as follows:

We claim the new manufacture of comb-back, made as described, viz, with the fastening-flange, or tenon, and the tooth-guard, arranged together as set forth.

Also, the improved manufacture or comb, in the back of the body of which a brace of metal, for strengthening the same, is fitted and fastened, and so lapped down on one side of the body as to form, between the brace and the body, a recess, or space for the reception of the teeth, or points of the teeth, of another comb-body, when pivoted to and closed with the first body, in manner as hereinbefore mentioned.

We also claim, when a metallic brace is applied to an ivory, horn, shell, or hard-rubber comb-body, as described, the formation of all the rivet-holes but one of such brace, as slots, arranged so as to allow of the expansion and contraction of the body, lengthwise thereof, without hindrance from the rivets going through such slots, the same being to prevent breakage or warping of the body.

HAYDN BROWN. SOMERBY N. NOYES.

Witnesses:

S. O. FOLLANSBEE, JOHN C. CARR.