

E. M. Noyes,
Comb.

No. 28,008.

Patented April 24, 1860

Fig. 1.

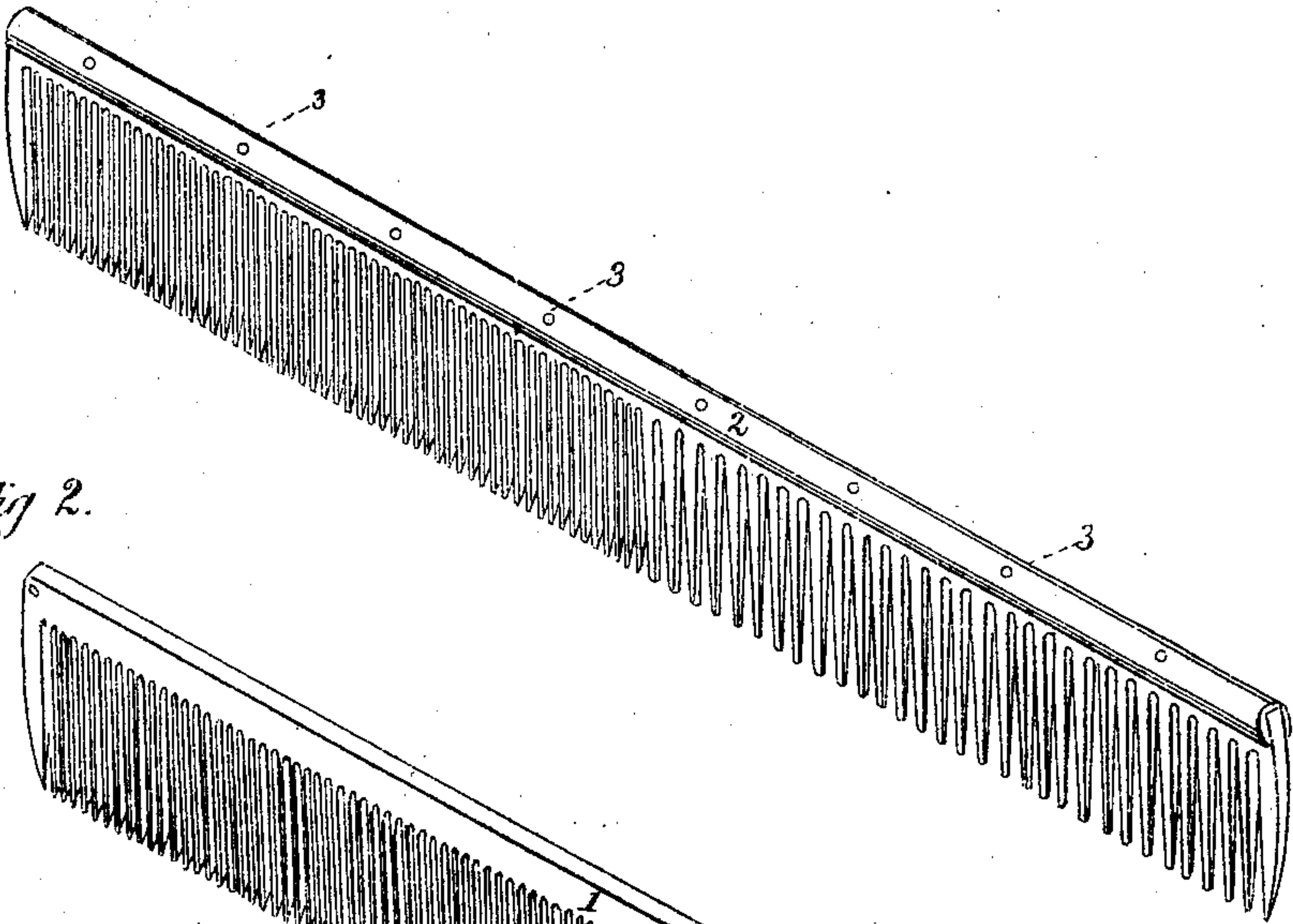


Fig. 2.

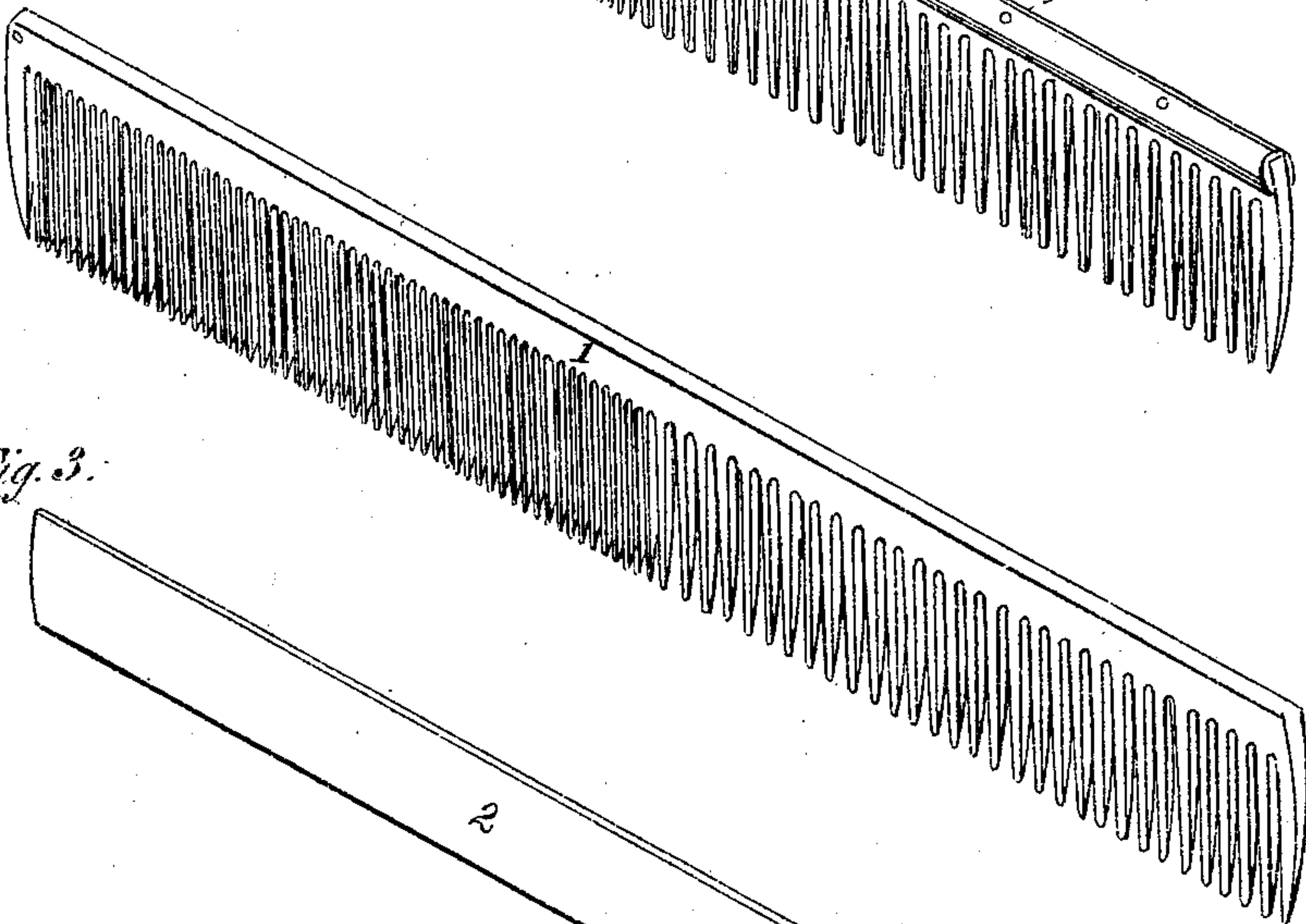
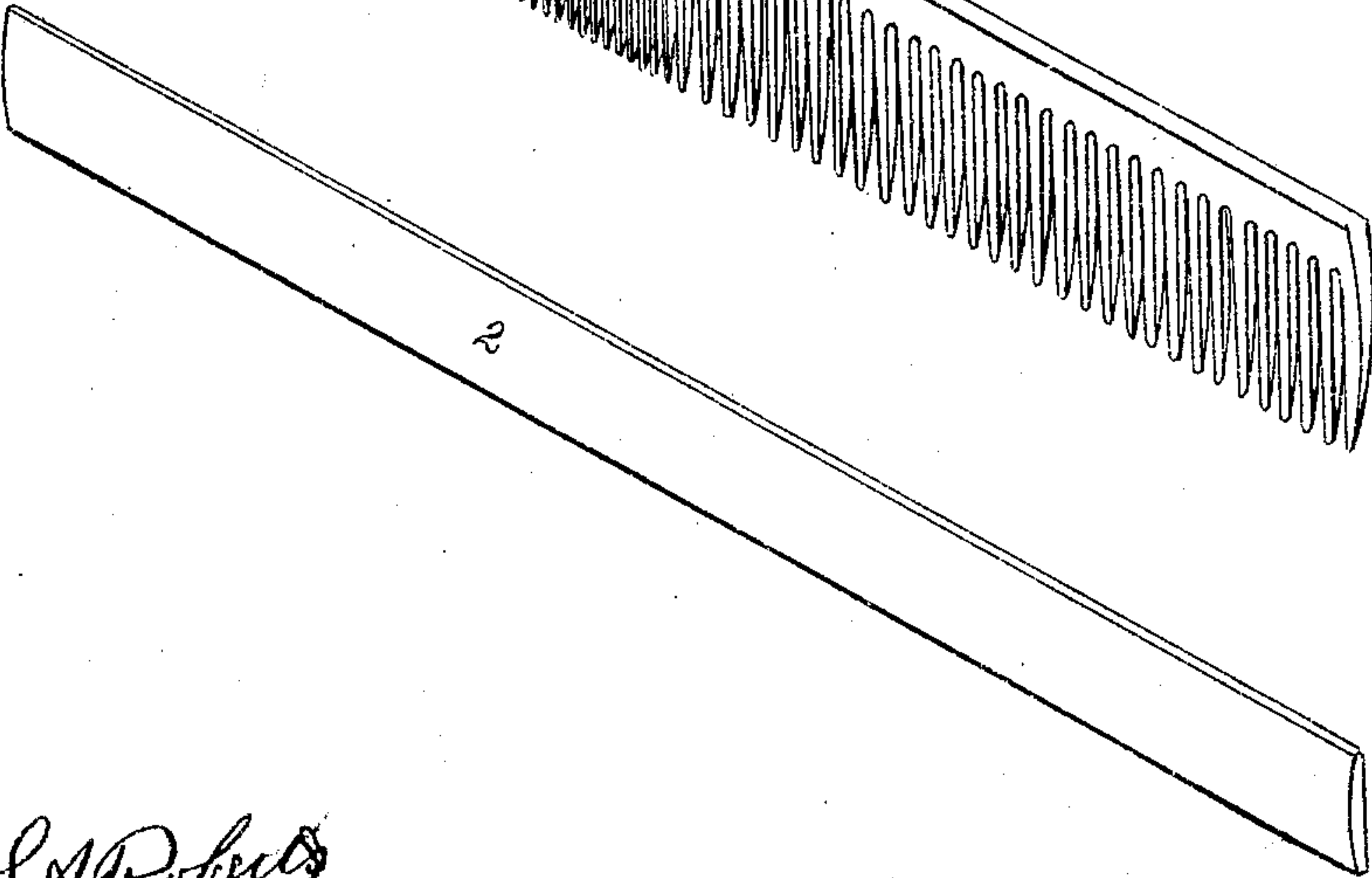


Fig. 3.



Witness { *L. A. Roberts*
John Cumby

E. James M. Noyes

UNITED STATES PATENT OFFICE.

ELFAMEO M. NOYES, OF NEWARK, NEW JERSEY.

COMB.

Specification of Letters Patent No. 28,008, dated April 24, 1860.

To all whom it may concern:

Be it known that I, ELFAMEO M. NOYES, of Newark, in the county of Essex and State of New Jersey, have invented a certain Improvement in Combs, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

It is often very desirable that the back of a comb should, in order to secure strength and stiffness be very considerably thicker than it is convenient or necessary to make the teeth; but to secure this additional thickness without the attachment of an additional piece, it is necessary to use a heavier piece of stock than in the usual construction, and work it down to form the teeth. The attachment of a thin slab of horn upon the side would hardly give the necessary strength, and it would besides be liable to derangement by warping up over the ends of the rivets, or otherwise getting loose.

My said invention consists in forming an additional back to a comb and attaching it thereto, by first bending a piece of horn across the grain, as described and represented, in such a manner as to make it fit the back of a comb made in any of the usual modes, and securing it upon the comb by rivets, the grain of the horn extending across the back of the comb as before intimated, and giving thereby strength to resist the bending process and to bind the back of the comb, as hereinafter more fully set forth.

In the accompanying drawings: Figure 1 is an isometrical view of a comb, with my improved attachment complete. Fig. 2 is an isometrical view of a comb before the application of my improvement. Fig. 3 is a like view of a piece of horn cut out in proper shape to form the stiffening piece or back, but not yet bent into form for that purpose.

1, is an ordinary dressing comb, made of horn in the usual manner.

2 is the back piece, which is made of horn.

It will be observed by an inspection of the

drawings that the grain of the horn runs crosswise of this piece when in its plain shape before it is bent, in such a manner that it will extend across and over the back of the comb when it is bent into shape and fitted to the back of the comb. The grain may, however, run in a slightly angular direction, and if this angle is not too great may be stronger than if it ran directly across the back. This angle should not however exceed 45 degrees from the line passing directly across, else the strength of the piece will be impaired. The bending process is performed with the aid of heat, and when so bent, the horn will retain the form given it with very great tenacity. On being bent and otherwise properly fitted, the back piece is attached with rivets 3, 3, as shown in Fig. 1, the rivets clenched, and the ends having been properly trimmed, the comb is complete.

It will be obvious from a careful inspection of the parts, and a consideration of the ordinary construction of a comb, that this arrangement makes a good and serviceable comb at less expense than one of equal value and utility can be produced by the ordinary means of manufacture.

In making projections heretofore upon the sides of the back, beyond the plane of the cheeks of the teeth, they have been either got out in strips, and pinned on the sides, or else worked out of the solid stock by using a stock sufficiently thick to form them in one piece with the back, and then working down the sides of the comb below the back to give the proper thickness, or rather width, to the teeth. This does not give the advantages of my invention. The strips of horn put upon one or each side of the comb are liable to warp off over the clench of the rivets, and are besides deficient in strength when compared with my improvement. If projections are formed of the same piece of which the rest of the comb is constructed, much labor is involved in working down the sides to form the teeth, thereby very much increasing the expense of the comb, which when it is completed lacks the strength which in my improvement is imparted by bending the fibers of the horn across the back of the comb, which gives very great

strength of construction, not otherwise as well or as cheaply realized.

Having thus fully described my said invention, I claim—

- 5 As an improved article of manufacture, a comb, which is provided with a back piece 2, in the manner described, the said back piece being made of a single piece of horn

bent across the grain, so that the grain of the horn shall cross the back of the comb, 10 substantially as set forth.

ELFAMEO M. NOYES.

Witnesses:

L. A. ROBERTS,
JOHN CRUMLY.