

(No Model.)

H. G. GUILD.  
HAIR CRIMPER.

No. 364,170.

Patented May 31, 1887.

Fig. 1.

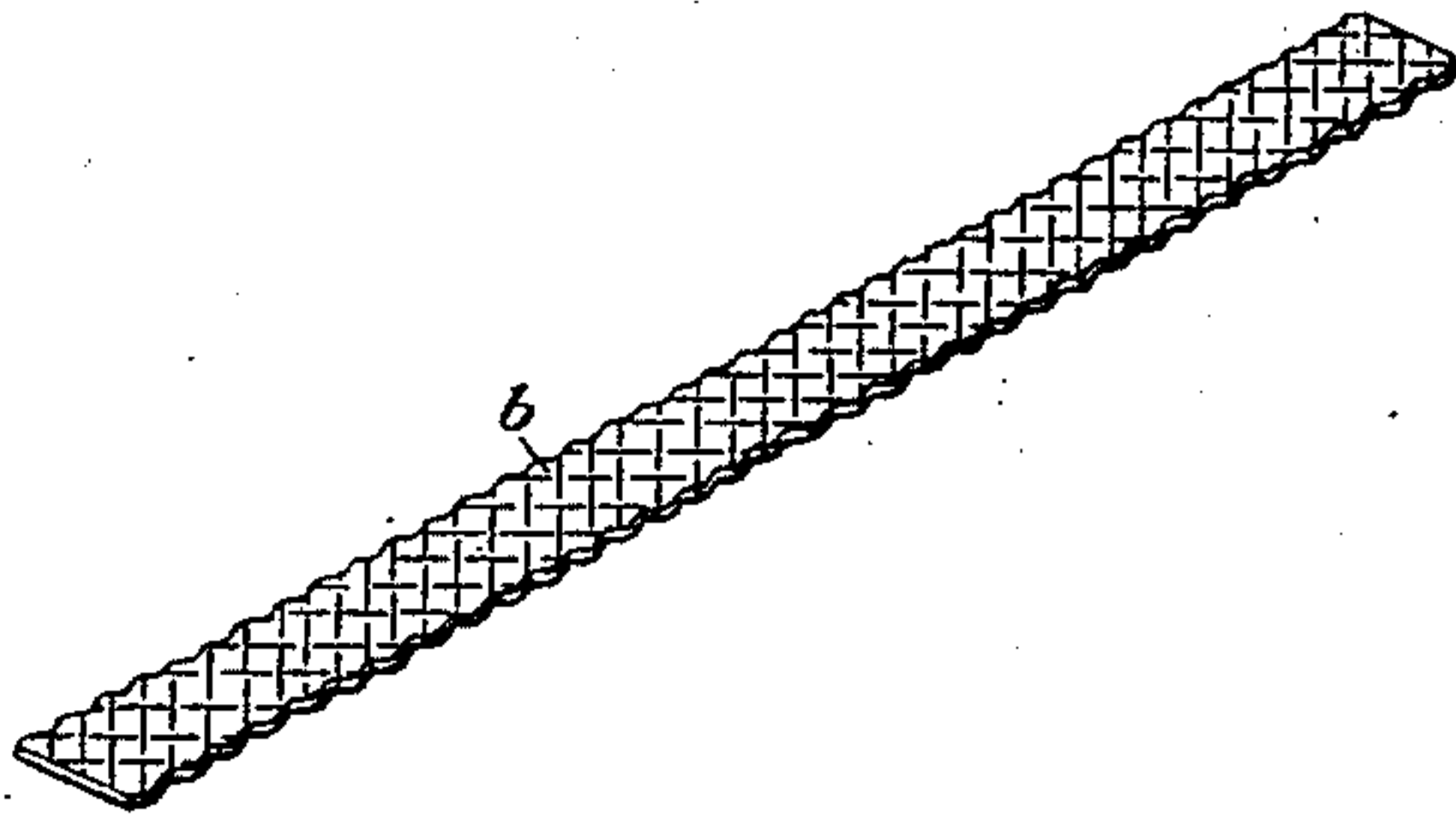


Fig. 2.

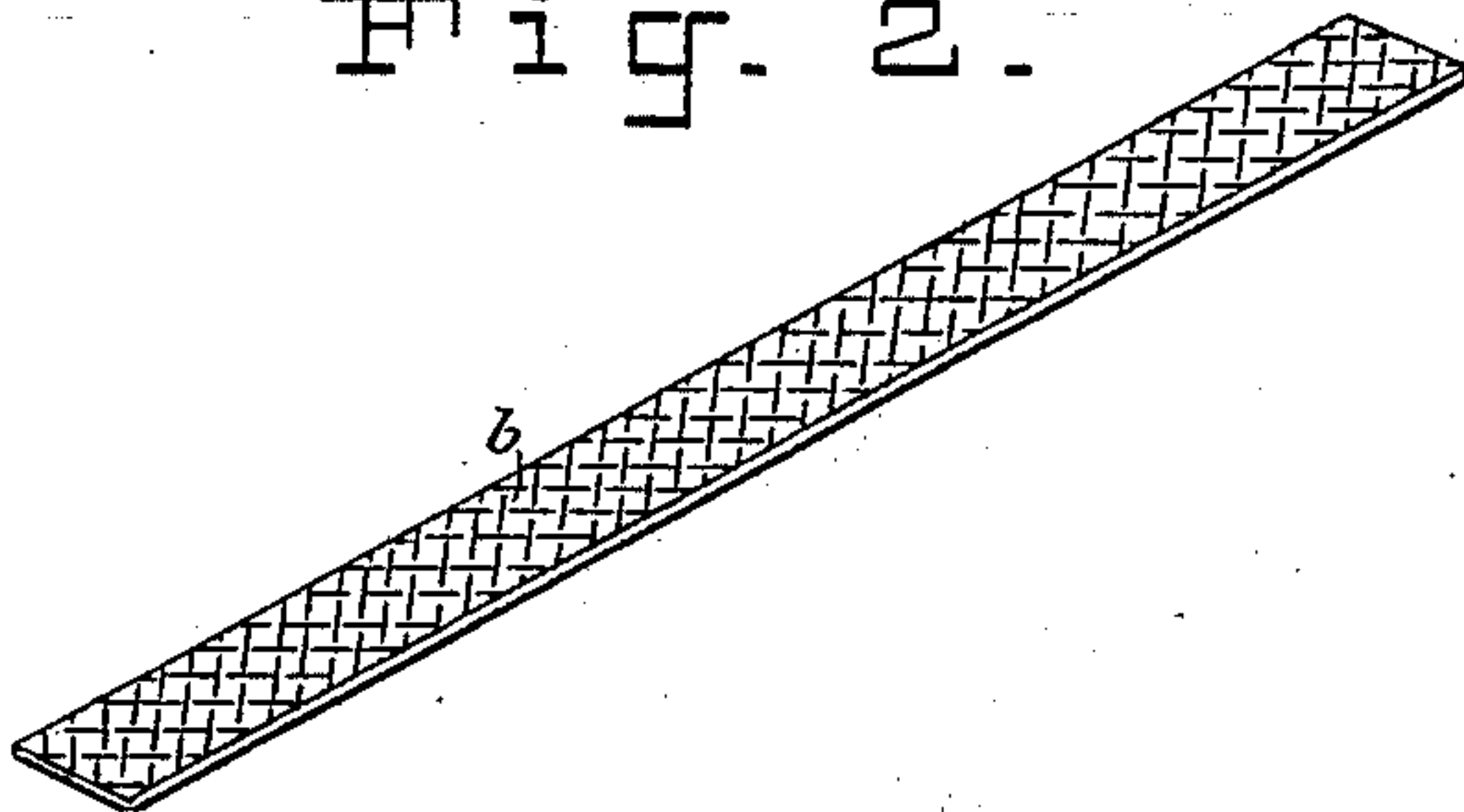


Fig. 3.

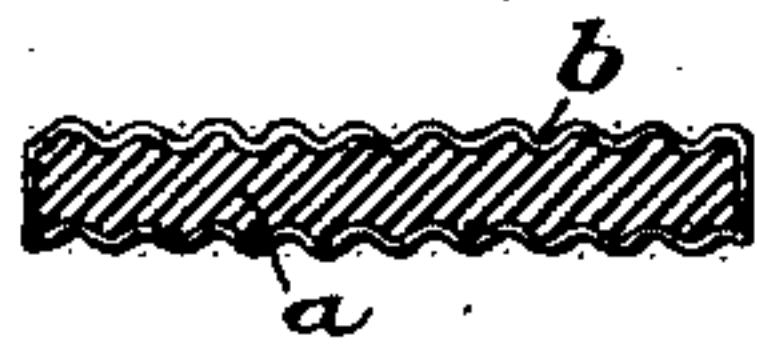


Fig. 4.

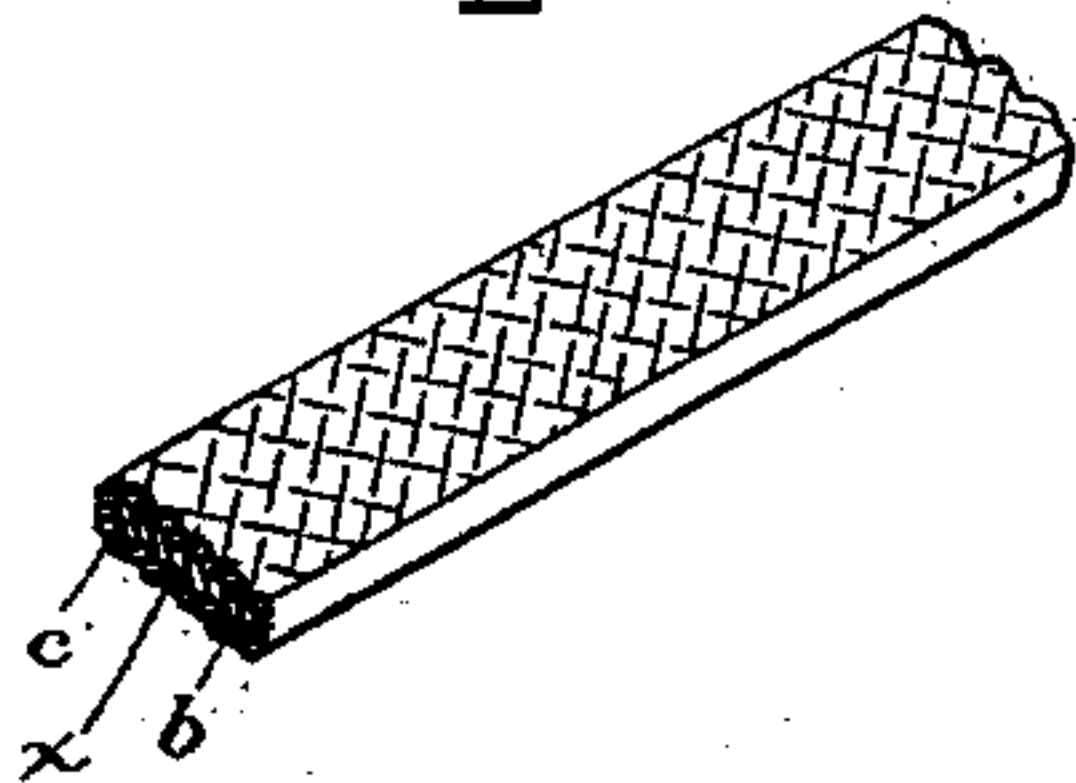


Fig. 5.



WITNESSES:

*E. B. Bolton*  
*W. B. Chapin*

INVENTOR:

*Henry G. Guild*  
By *Henry Combs*  
Attorney.

# UNITED STATES PATENT OFFICE.

HENRY G. GUILD, OF NEW YORK, N. Y.

## HAIR-CRIMPER.

SPECIFICATION forming part of Letters Patent No. 364,170, dated May 31, 1887.

Application filed February 15, 1887. Serial No. 227,694. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY G. GUILD, a citizen of the United States, and a resident of the city, county, and State of New York, have  
5 invented certain Improvements in Hair-Crimpers, of which the following is a specification.

My invention relates to that class of hair-crimpers which are constructed of soft inelastic metal, usually lead, or an alloy containing  
10 lead as its principal ingredient. To perform its functions properly, such a crimper must be capable of being easily bent, and when bent it must be so inelastic as to remain in shape as bent. It should also have a roughened or anti-  
15 frictional surface, so as not to slip in the hair or in the hands while being applied; and to be salable the soft metal must be so covered that it will not discolor nor leave its odor on the fingers of the person using the crimper.  
20 Heretofore such crimpers have been made from soft metal and covered with fabrics, usually braided fabrics. The purpose of this textile covering is, in part, to impart a rough-  
25 ened surface to the crimper, in part to give "body" to the crimper, and in part to protect the fingers from the metal of the crimper, which would discolor them and impart a disagreeable odor thereto. All the soft metals—  
30 as lead, brass, and copper—capable of being used in a crimper will impart a disagreeable odor and discolor the fingers.

The purpose of my invention is to construct a crimper that will have all of the advantages of the fabric-covered crimper, and that will be  
35 cheaper and more cleanly. Crimpers covered with fabrics of a fibrous or textile character become foul from the absorption by said covering of the oil of the hair after one use of them, and the covering of each crimper with  
40 such material considerably enhances the cost of manufacture.

My invention consists, essentially, in a hair-crimper constructed of a flat elongated piece of some soft metal embossed on its faces, usu-  
45 ally in imitation of a braided fabric, and covered with an impervious coating to protect the fingers against contact with the metal from which the crimper is made. This coating or covering may be of paint, shellac, lacquer, or  
50 varnish, preferably of different colors on different crimpers to match the various colors of hair, or it may be a thin covering of some

metal—like nickel—applied by the electroplating process, and left "dead" or unpolished. Nickel will not soil the hands nor leave an  
55 offensive odor thereon; or a thin coating of nickel may be applied to the crimper, and then a coat of bronze or brown varnish, lacquer, or paint may be applied over the nickel, mainly to give the crimper the proper color. 60

In carrying out my invention I usually proceed as follows: I first prepare a sheet of the metal—lead or lead alloy—of the proper thickness for the crimpers, and from this sheet I cut  
65 strips of the proper width for the crimper. These strips I pass between embossing-rollers, in order to impart thereto the proper embossed surfaces. These strips are then dipped into the paint or varnish designed to form the protecting-coating and hung up to dry. After the  
70 coating is thoroughly dry the strips are cut into the proper lengths to form the crimpers and then boxed for sale. If the crimpers are to be plated, the strips are cleaned after embossing and then plated in the usual way. If  
75 the crimpers are to have plain smooth edges, I usually pass the strips on their way to the embossing-rolls through a suitable die or aperture in a metal plate, which rounds and smooths the edges of the strips; but in order  
80 that the crimper may have a better retaining hold in the hair, I prefer to form scallops or notches in their edges, and this may be effected in cutting the strips from the sheet of metal by means of a properly-shaped cutter. The  
85 soft metal may be in the shape of wire, and be flattened by rolls, instead of being cut from sheets.

In the drawings which serve to illustrate my invention, Figure 1 is a perspective view of  
90 my improved crimper provided with an embossed surface and scalloped or indented edges, and Fig. 2 is a similar view representing the crimper with straight and rounded edges. Fig. 3 is an enlarged transverse sectional view of  
95 the crimper, showing the embossing on the surfaces and the protecting-coating. Fig. 4 is a perspective view of a crimper embodying my invention constructed with a core of fibrous material to give body or thickness thereto, and  
100 Fig. 5 is an enlarged transverse sectional view of such a crimper.

In Fig. 3, *a* represents the body of the crimper, composed of soft non-elastic metal, and *b* rep-



resents the exterior protecting covering or coating of non-fibrous impervious material. By "impervious" I mean a coating that is non-absorbent and capable of resisting the effects of perspiration, water, and the oil of the hair for a considerable time. A lacquer or oil paint or varnish or shellac will serve the purpose. The coating should be tough enough and thin enough to withstand the flexure of the crimper without cracking and scaling off.

The all-metal crimper above described will necessarily be somewhat slender, and if it be desired to give the crimper more body or thickness without employing more metal I follow the construction illustrated in Figs. 4 and 5, the former of which represents one-half of a crimper cut transversely to show the core. In constructing this form of crimper I take a strip or sheet, *a*, of the soft metal of the proper thickness, thinner usually than that used in the all-metal crimper seen in Figs. 1 and 2, and fold it around a strip, *c*, of paper, felt, or other fibrous material, arranging the edges of the folded metal to meet along one face of the crimper, as seen at *x*. This crimper I run through the embossing rollers or stamps in order to emboss the soft metal, as described, and I then apply to it an impervious coating, *b*, as before described. This method or construction produces a crimper which has about the same weight as the all-metal crimper, and which is thicker, by reason of the core *c*. It has also the advantages claimed for the all-

metal crimper, that it will not soil the fingers nor leave an unpleasant odor thereon.

I am fully aware that it is not new to cover crimpers made from soft metal with fibrous or textile material secured to the metal crimper by adhesive substances and by clamping the edges of said fibrous coverings with folds of the metal. These I do not claim; but

What I do claim is—

1. As an improved article of manufacture, a hair-crimper made from soft inelastic metal, embossed on its faces, and having an impervious non-fibrous covering, substantially as described, to protect the fingers against contamination by the soft metal of the crimper.

2. As an improved article of manufacture, a hair-crimper made from soft inelastic metal—as lead or lead alloy—embossed on its faces, and having a covering of paint or varnish, substantially as and for the purposes set forth.

3. As an improved article of manufacture, a hair-crimper made from soft metal—as lead or lead alloy—embossed on its faces, and covered with an impervious non-fibrous coating of paint or like material, said crimper having a core of fibrous material, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY G. GUILD.

Witnesses:

HENRY CONNETT,  
T. D. COPLINGER.