

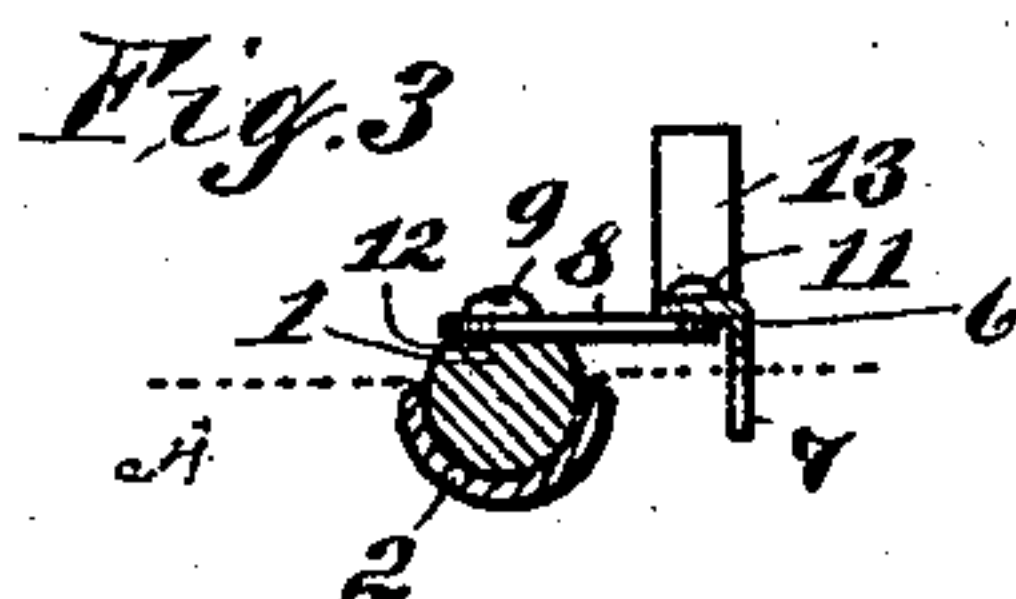
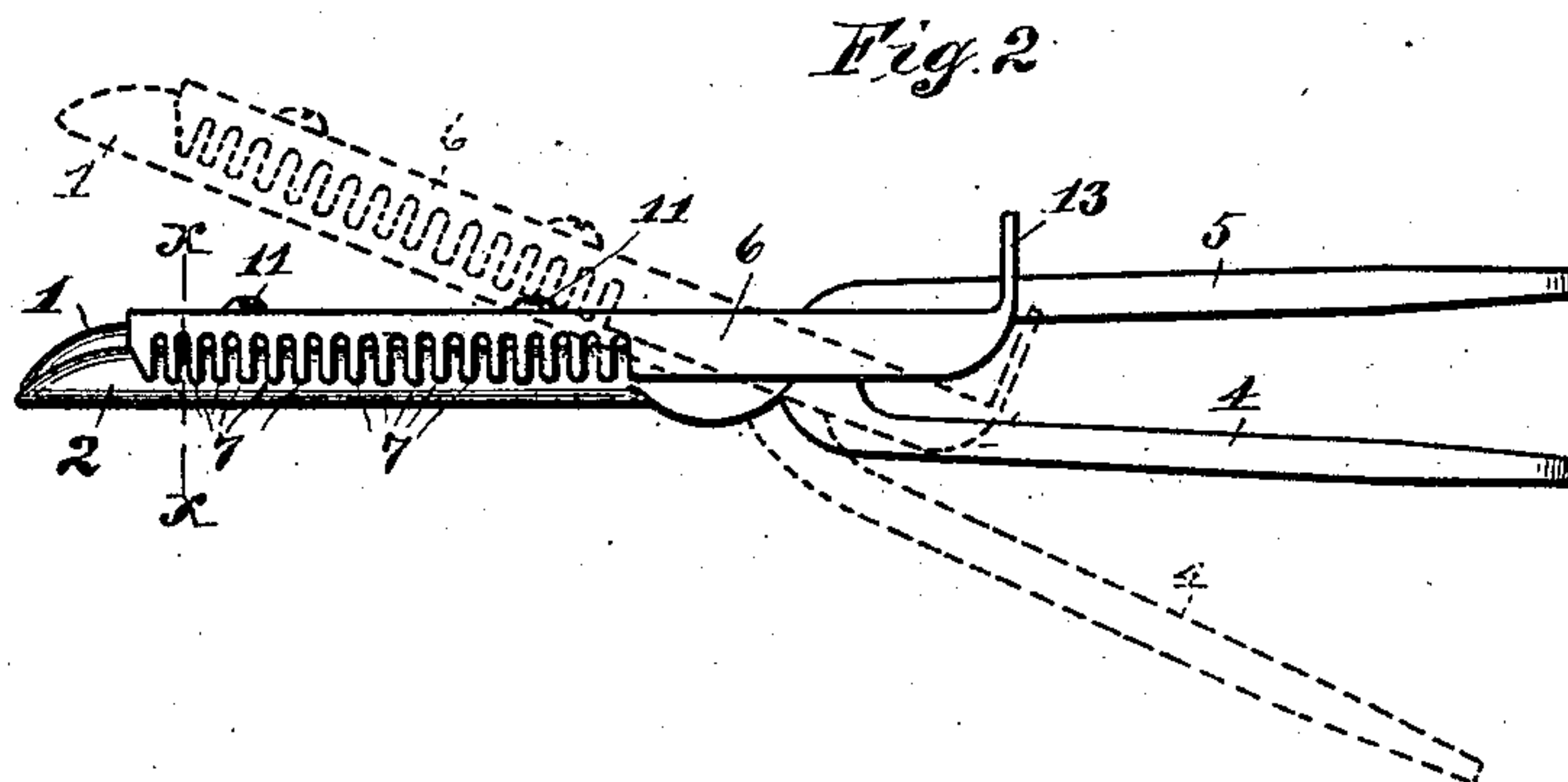
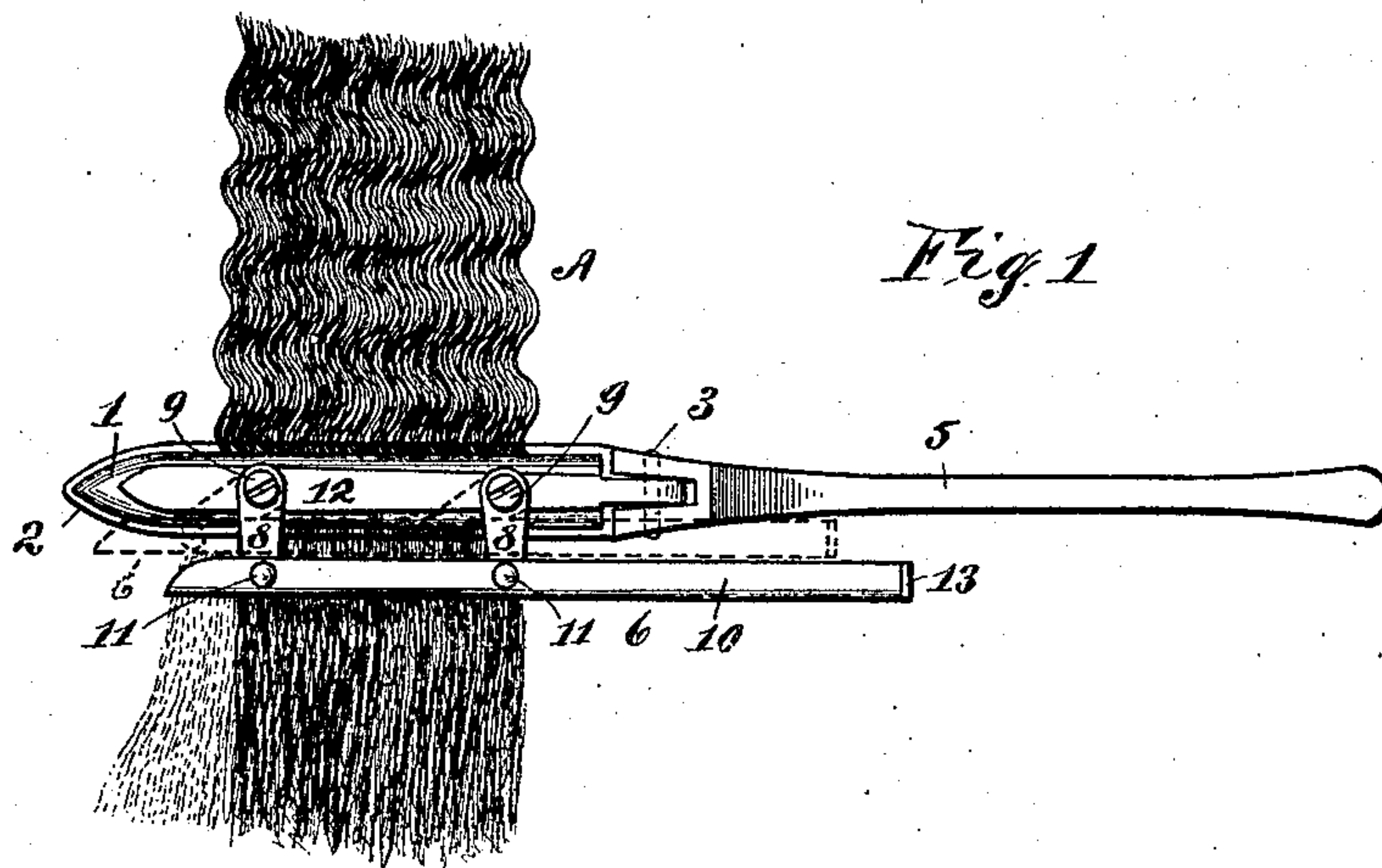
No. 846,813.

PATENTED MAR. 12, 1907.

A. WEILER.

HAIR WAVING ATTACHMENT FOR CURLING IRONS.

APPLICATION FILED MAY 3, 1906.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ANTON WEILER, OF SYRACUSE, NEW YORK.

## HAIR-WAVING ATTACHMENT FOR CURLING-IRONS.

No. 846,813.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed May 3, 1906. Serial No. 314,925.

*To all whom it may concern:*

Be it known that I, ANTON WEILER, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Hair-Waving Attachments for Curling-Irons, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention resides in a hair-waving appliance for curling-irons; and the object is to provide a simple, effectual, and conveniently-operated device for crimping the hair laterally, and thereby produce a so-called "flat wave."

To that end the invention consists in the novel arrangement and construction of the hair-waving device in combination with a suitable curling-iron, as hereinafter fully described, and set forth in the claim.

In the accompanying drawings, Figure 1 is a plan view of a curling-iron represented as grasping a lock of hair partly waved by my attachment. Fig. 2 is a side view of the same; and Fig. 3 is a transverse section taken on the line X X in Fig. 2.

My hair-waving attachment may be used in connection with any suitable style of curling-iron. I prefer, however, to employ the form of curling-iron herein shown and described, and which comprises the usual cylindrical mandrel 1 and clamp 2, which is shaped concavo-convex in cross-section, so as to partly embrace the mandrel, said parts being pivotally connected, as indicated at 3, and provided with handles 4 and 5, respectively, whereby they are adapted to be operated for grasping a lock of hair in the well-known manner, as represented at A.

The hair-waving attachment consists, essentially, of an elongated plate 6, which may be composed of any suitable metal or other material. This plate is disposed at one side of the curling-iron and is mounted detachably on the mandrel 1 and arranged parallel therewith. Said plate is designed to be shifted back and forth lengthwise of the curling-iron and is provided with a series of teeth 7 7, adapted to engage the lock of hair grasped by the mandrel and clamp, whereby the hair is crimped laterally to produce a flat wave, as shown in Fig. 1. To permit this movement of the plate 6, I preferably support the same on the mandrel 1 by arms 8 8, which are pivotally connected at one end to

the top of said mandrel by means of screws 9 9 and pivotally connected at their opposite ends to a flange 10 on the plate, as indicated at 11 11. The top of this mandrel is flattened to afford bearings for the arms 8 8, as shown at 12 in Fig. 3 of the drawings. The said flange 10 is formed at the upper edge portion of the plate and extends toward the mandrel, and the arms 8 8 are preferably connected to the under side of the flange.

The described pivotal connections of the arms with the mandrel and plate allow the latter to be swung lengthwise of the curling-iron to effect the aforesaid waving of the hair, and the arms, being of equal lengths, maintain the plate parallel with the mandrel.

In using the described attachment the lock of hair A is grasped between the heated mandrel 1 and clamp 2, as usual, with the plate 6 placed normally in the position shown by full lines in Fig. 1 of the drawings. The operator then moves the plate forward to the position indicated by dotted lines in said figure, whereby the teeth of said plate cause the hair to be crimped in corresponding direction. Following this operation the handle 5 is actuated to carry the mandrel away from the clamp, as shown in Fig. 2, whereby the lock of hair is released from the grasp of said parts in the well-known manner. The operator then places the plate 6 in the position aforesaid and moves the curling-iron along the lock of hair, so as to grasp the same as before, and then moves the plate rearwardly to impart a reverse crimp to the hair. It will thus be seen that by repeatedly moving the curling-iron along the lock of hair and alternately shifting the toothed plate forwardly and rearwardly from the normal position thereof a so-called "flat wave" is imparted to the hair. To conveniently operate the said plate, I provide the same with a thumb-piece 13, consisting, preferably, of an upturned lip formed at the rear end of the flange 10, as clearly shown in Figs. 2 and 3 of the drawings.

I wish it to be understood that I do not limit myself to the specific construction and arrangement of the wave-forming device herein shown and described, inasmuch as the same may be greatly modified without departing from the spirit of the invention.

What I claim is—

The combination with a curling-iron comprising a mandrel and pivoted clamp adapt-

ed to grasp a lock of hair, of an attachment  
consisting of a toothed plate extending along  
one side of the iron and formed with a longi-  
tudinal flange projecting toward the iron  
5 plate-supporting arms pivotally connected  
at one end to the mandrel and pivotally con-  
nected at the opposite ends to the said flange,  
said arms permitting the plate to be swung  
back and forth lengthwise of the iron to im-  
part a flat wave to the lock of hair, and a 10  
thumb-piece provided on the rear end of the  
plate as and for the purpose set forth.

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Witnesses:

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