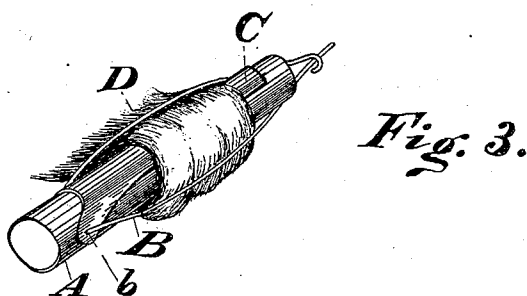
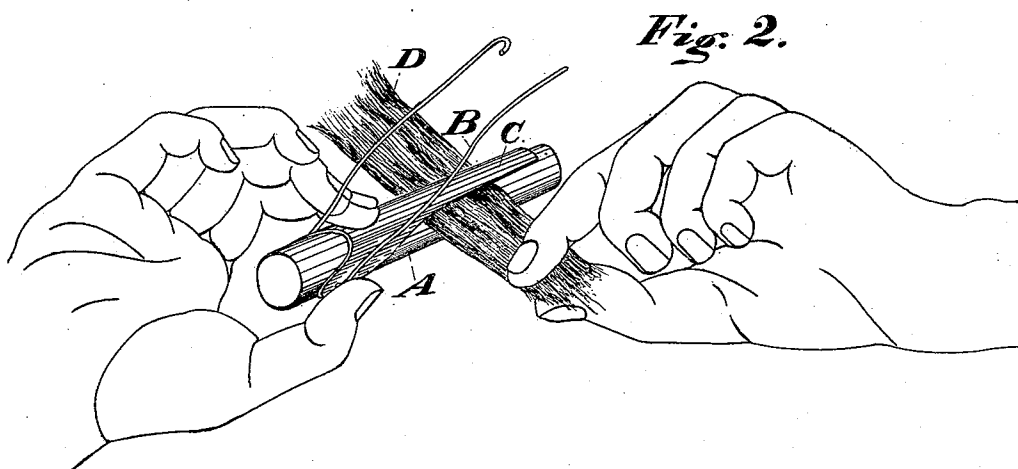
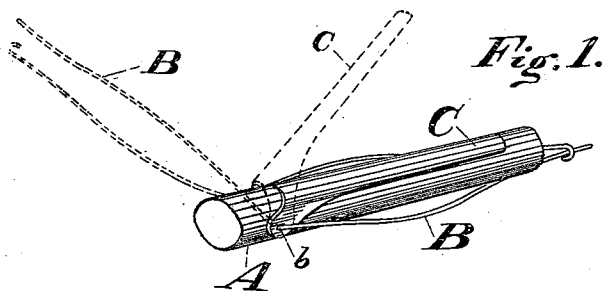


(No Model.)

J. S. WERTSBAUGHER.
HAIR CURLER.

No. 473,101.

Patented Apr. 19, 1892.



Witnesses

R. S. Robertson
J. M. Hayden

Judson S. Wertsbaugher Inventor

By his Attorneys *Chapin & Denny*

UNITED STATES PATENT OFFICE.

JUDSON S. WERTSBAUGHER, OF FORT WAYNE, INDIANA, ASSIGNOR OF ONE-HALF TO WILLIAM L. LOGAN, OF SAME PLACE.

HAIR-CURLER.

SPECIFICATION forming part of Letters Patent No. 473,101, dated April 19, 1892.

Application filed November 30, 1891. Serial No. 413,474. (No model.)

To all whom it may concern:

Be it known that I, JUDSON S. WERTSBAUGHER, a citizen of the United States, residing at Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Hair-Curlers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in hair-curlers specially designed for ladies' use.

The objects of my improvement are, first, to provide a device for curling the hair which will avoid the injurious effects produced by the use of hot irons upon the hair, and also to avoid the breaking and cutting of the hair caused by the use of devices having sharp edges or which injure the hair by clamping and retaining it in position around sharp angles; second, to provide a hair-curler so constructed and arranged that it can be used with equal facility for producing long curls or for frizzing the hair without injury and which may be readily and conveniently removed without unwrapping or disarranging the curl or friz, thus leaving the hair in perfect and uniform waves or curls. These objects are accomplished by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view of my improvement in the position which its parts assume when in use. Fig. 2 is a view of the same in perspective showing the beginning of the process of curling the hair by its use. Fig. 3 shows my device as it appears when in position upon the head, with a lock of hair properly adjusted thereon.

In Fig. 1 the cylinder A may be either solid or hollow and may be constructed of any proper material, though it is preferably made of sheet metal with a perfectly-smooth surface, that it may be readily withdrawn from the lock of hair without disarranging the curl. The perforation *b* passes through the cylinder A and also through the base of clip C.

In this perforation *b* the brass-wire clamp B is adjusted, forming a fulcrum for the clip C. The clip C is so constructed that it may be elevated to nearly a right angle, while the clamp B may be freely turned, as convenience may require.

In Fig. 2 the lock of hair D is secured between the cylinder A and the clip C at the beginning of the process of adjusting the hair upon my improved device, the clamp B being elevated and out of the way until the operation is complete.

In Fig. 3 the lock of hair D is curled around the cylinder A and the clip C, and securely held in position by the clamp B, which is fulcrumed at *b*, and is so bent at its extremities as to permit one part to suitably engage the other. The clamp B is also properly curved in both of its parts to permit of its ready adjustment in its required position.

The manner of operating my improved hair-curler thus described is as follows: The operator elevates both the clamp B and the clip C, places a lock of hair at its extremity between the cylinder A and the clip C, and secures it in this position by a firm momentary pressure on clip C, when a revolution or two of my device in the process of winding the hair around clip C and cylinder A will so firmly maintain the lock of hair in position that the process may be continued without further pressure upon clip C. When the lock of hair D has been properly adjusted upon my device, it is firmly secured thereon by bringing the extremities of the clamp B beneath the cylinder A or between the head and the cylinder A and hooking or engaging them in that position in any proper manner. The lock of hair D when thus secured may be retained in that position any desired length of time without injury, and when it is desirable to remove my device from the hair it is readily and conveniently done by simply disengaging the extremities of clamp B and withdrawing the device, which can be done without unwrapping the lock or in any manner disturbing the curl, thus leaving the hair in uniform waves or curls.

I am aware that a great variety of hair-curlers are in use; but no device for curling

and frizzing the hair has ever been invented of which I am aware consisting of a cylinder provided with a clip and a clamp, constructed and arranged as hereinbefore described.

5 What I claim, therefore, and desire to secure by Letters Patent, is—

1. A hair-curler consisting of a tube or cylinder A, having a perforation *b*, a wire-clamp B, pivoted in said perforation and so constructed that the hooked end of one extremity will securely clasp the other extremity, and a clip or retarding device C, fulcrumed on clamp B at the perforation *b*, all substantially as hereinbefore set forth and described.

15 2. In a hair-curler, the combination of a

tube or cylinder A, having a perforation *b* at or near one extremity thereof, and a wire rod or clamp B, pivoted in said perforation and having a hook on one extremity for clasping the other extremity, with a clip or retaining device C fulcrumed on rod or clamp B at the perforation *b*, all substantially as set forth and described. 20

Signed by me this 27th day of November, 1891.

JUDSON S. WERTSBAUGHER.

Witnesses:

R. S. ROBERTSON,
C. M. COMPARET.