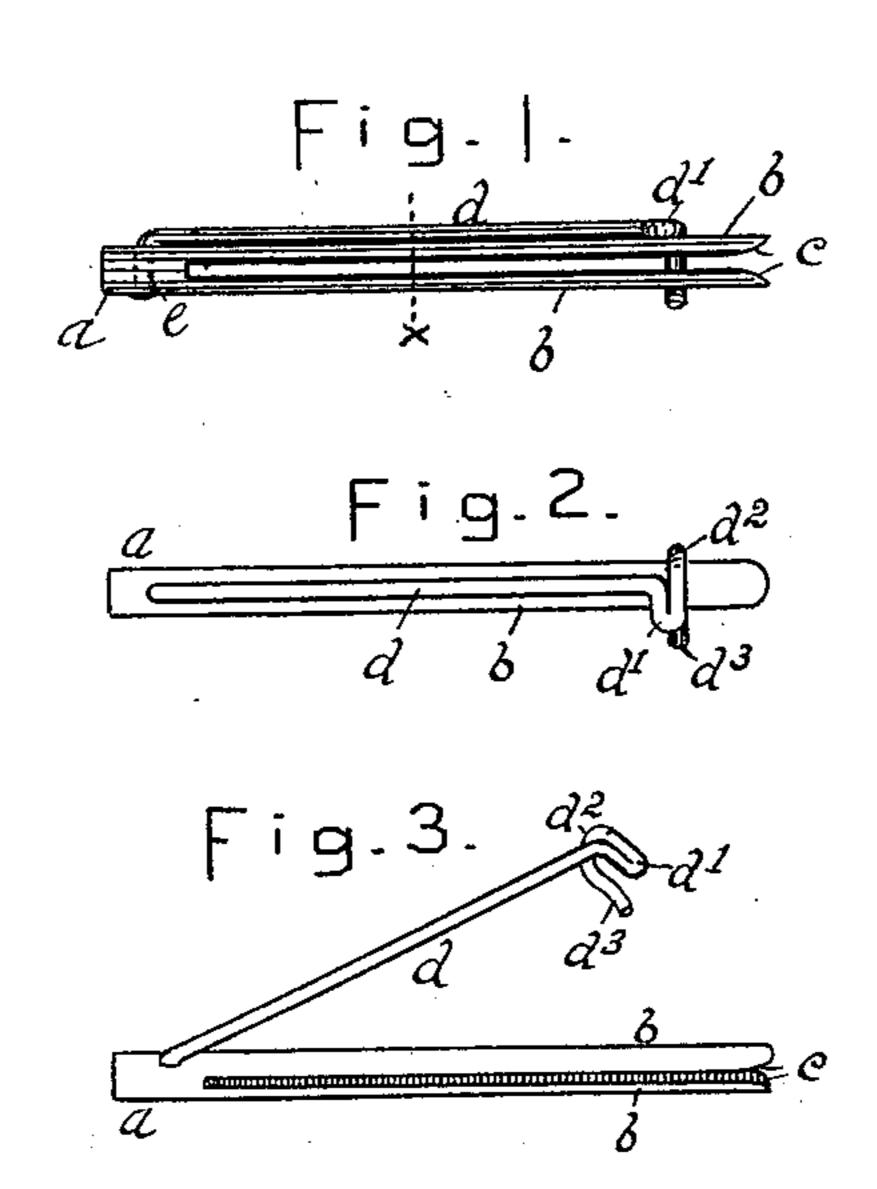
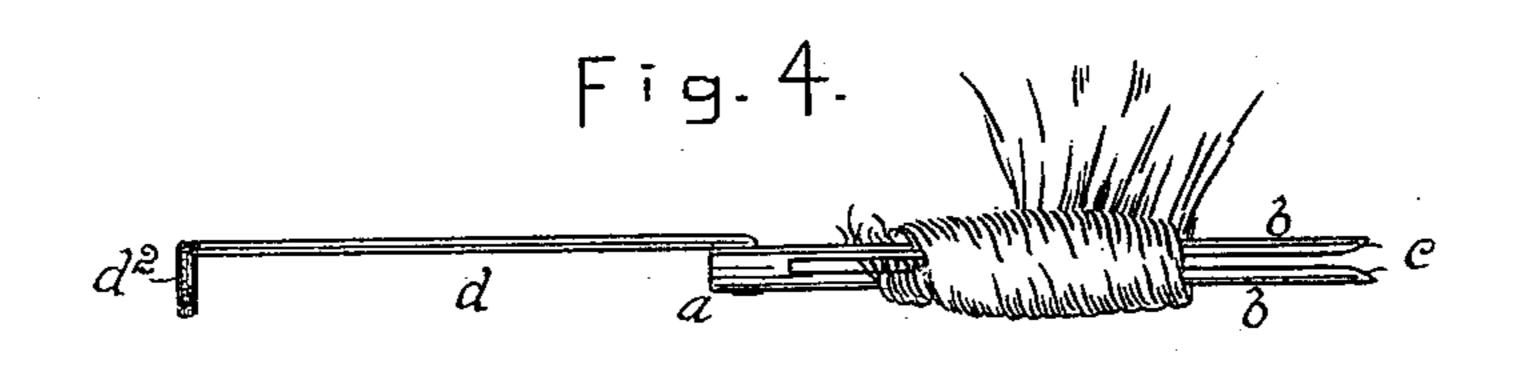
(No Model.)

F. WILSON.
HAIR CURLER.

No. 403,711.

Patented May 21 1889.





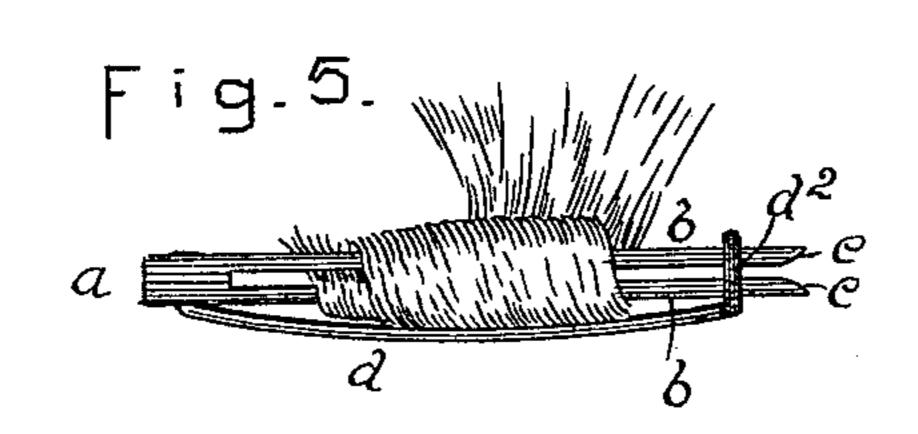


Fig. 6.

ATTEST,

Helen Graham.
W. Graham.

FRED WILSON.
By L. P. Graham.
Atty.

United States Patent Office.

FRED WILSON, OF DECATUR, ILLINOIS.

HAIR-CURLER.

SPECIFICATION forming part of Letters Patent No. 403,711, dated May 21, 1889.

Application filed March 13, 1889. Serial No. 303,169. (No model,)

To all whom it may concern:
Be it known that I, Fred Wilson, of the city of Decatur, county of Macon, and State of Illinois, have invented certain new and 5 useful Improvements in Hair-Curlers, of which the following is a specification.

It is the object of my invention to provide a hair-curler that will not subject the hair to the cutting action of sharp angles, that may 10 be easily applied, that may be readily withdrawn from a coil of hair without unwinding the same, that will not catch the hair in the hinge-joint, and that will combine effectiveness with simplicity and cheapness.

I attain my object in the manner and by the means hereinafter set forth, reference being made to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is an edge view of my device, and Fig. 2 a top view, relatively speaking. Fig. 3 is a perspective view. Fig. 4 shows the device as it appears just previous to with-25 clamping the coil, as the case may be. Fig. | from a coil of hair. 5 shows the curler applied to the hair. Fig. 6 is a cross-section, enlarged, on dotted line xin Fig. 1.

The device comprises a cylindrical coiler-30 rod bifurcated throughout the greater portion of its length, and a cylindrical clamp-rod pivotally connected with the integral portion of the coiling-rod. The integral portion of the coiling-rod is designated in the draw-35 ings by reference-letter a. The forks formed by the bifurcation are designated by the reference-letters b b, and they represent in cross-section segments of circles with the sharp angles rounded off, as shown at b' in Fig. 6. 40 The ends of the forks are beveled or rounded internally, as shown at c in various figures of the drawings. The clamp-rod d has the right-angled bende, (indicated by dotted lines in Fig. 1,) that extends through the integral 45 portion of the coiling-rod and forms a pivotal connection. Its swinging end has the recurved portion d' at right angles to its length, the bent portion d^2 , conforming in internal diameter to the diameter of the coil-50 ing-rod, and the deflected portion d^3 , that enables the bent portion to readily embrace the

coiling-rod. In operation the ends of a lock of hair are

held by the fingers and the forks of the coil-the ing-rod slipped astride the same. The de- 55 vice is then turned on its longitudinal axis until the hair is sufficiently coiled, when the clamp-rod is swung into position and the coil is held, as shown in Fig. 5.

When it is desired to remove the coiler 60 from the hair, the clamp-bar is swung aside and the coiling-bar is drawn lengthwise, while the coil is held by the fingers. Should the coiling-rod not slip readily from the hair, a partial turn in a direction to unwind the 65 coil will loosen the hair sufficiently to enable the rod to be easily withdrawn.

The inclined conformation of the ends of the forks enables the device to be easily applied, the roundness of the parts avoids a 70 tendency to cut the hair and effects more regular and satisfactory curvature in the curls, the location of the hinge with relation to the operative part of the device prevents catching of hair in the joint, and the yield- 75 ing capabilities of the forks are serviceable drawing it from the hair, or just previous to | in enabling the withdrawal of the device

> It will be obvious that the size and proportions of the device may be varied to meet 80 various requirements, and the material used in its construction is to some extent a matter of choice.

I claim as new and desire to secure by Letters Patent—

1. A hair-curler composed of a cylindrical coiling-rod bifurcated throughout the greater portion of its length, and a cylindrical clamprod pivotally connected with the integral portion of the coiling-rod, and having a 90 clamp formation at its swinging end to embrace said coiling-rod, as set forth.

2. A hair-curler composed of a coiling-rod, comprising the integral portion a and forks bb, the latter having the internal bevels, c, and 95 the rounded angles b', and the clamp-rod d, having the right-angled bend e, pivotally connected with part a, and also having the clamp formed of the recurved portion d', the bend d^2 , and the deflection d^3 , as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

FRED WILSON.

Attest:

J. N. BILLS, L. P. Graham.