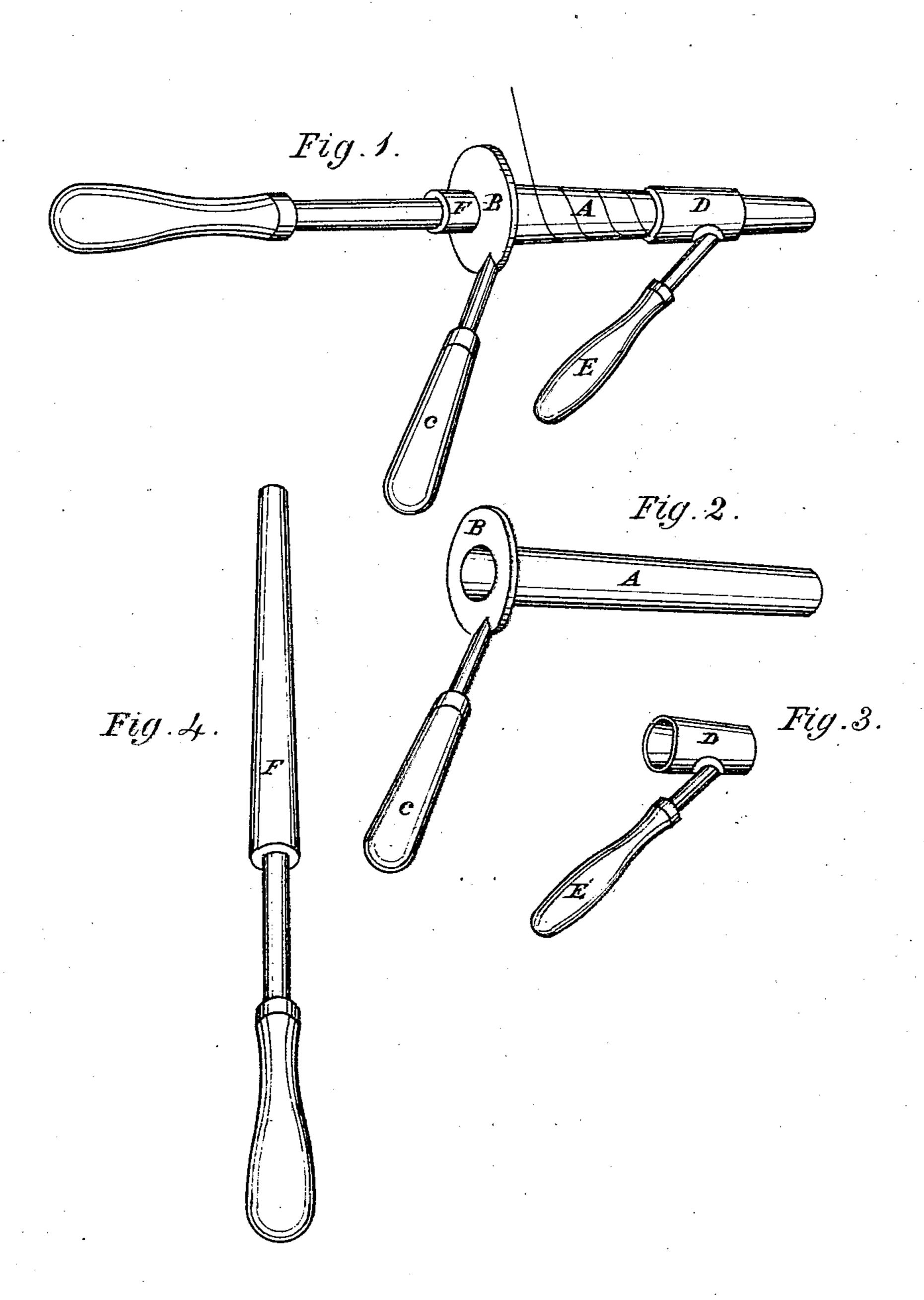
## J. H. CRAWFORD. CURLING IRONS.

No. 181,559.

Patented Aug. 29, 1876.



Witnesses.

Amad Ince

Inventor.

John H- Crawford pur Josiah M- Ells attorney

## United States Patent Office.

JOHN H. CRAWFORD, OF KERR'S STORE, ASSIGNOR OF ONE-HALF HIS RIGHT TO G. W. PAINTER, OF WEST MILLVALE, PENNSYLVANIA.

## IMPROVEMENT IN CURLING-IRONS.

Specification forming part of Letters Patent No. 181,559, dated August 29, 1876; application filed January 26, 1876.

To all whom it may concern:

Be it known that I, John H. Crawford, of Kerr's Store, in the county of Clarion and State of Pennsylvania, have invented a new and useful Implement for Curling Human Hair; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing, making part of this specification, and in which—

Figure 1 is a perspective view of my improved hair-curling device, as seen when all the parts are put together; Fig. 2, a perspective view of a thin tapering metallic tube, open at both ends, and provided with a flange to which is affixed a handle; Fig. 3, a short open tapering tube, used as a clamp, and also provided with a handle; Fig. 4, a tapering

iron rod, provided with a handle.

To construct my improved hair curling device, I first form a long, thin metallic tube, A, open at both ends, and surrounded by a broad flange, B, to which is affixed a handle, C, of wood or some other non-conducting material. This tube, so formed for ordinary purposes, may be about eight inches in length, and varying in diameter from one-fourth of an inch at its point or smallest part to threequarters of an inch at its base, and inside of the surrounding flange. The short clampingtube D is also made of thin metal, open at both ends, and provided with a wooden handle, E, projecting therefrom, as shown in the drawing. It is also so shaped internally as to correspond to the outside taper of the larger tube A, over which it is intended to easily slide.

The lock of hair to be curled is first wetted or dampened, and its extreme end arranged on the large tube at a point most remote from its flange B, and secured in that position by slipping over it the tubular clamp D, so as to bind the hair between the outside surface of the large tube and the inside surface of the surrounding clamp as to hold it until the curling process is completed. The hair is to be wound around the large tube A, and toward its flange B, in the manner illustrated by the spiral lines shown in Fig. 1, when the tapering iron F, which is previously made hot, is to be inserted in the large tube and held therein until the hair is dry, and no longer. The hot tapering iron may then be withdrawn, the clamp D removed, and the hair released from the large tube, when it will be found to hold and maintain the curl given to it by reason of the process to which it has been subjected, and that without any immediate or probable danger of burning or otherwise destroying its natural appearance or flexibility.

I claim—

A device for curling human hair, consisting of the long tapering hollow tube A, provided with a flange, B, and handle C, in combination with the circular hollow clamp D and iron rod F, substantially as and for the purposes set forth.

JOHN H. CRAWFORD.

Witnesses: MARTIN WILLIAMS,