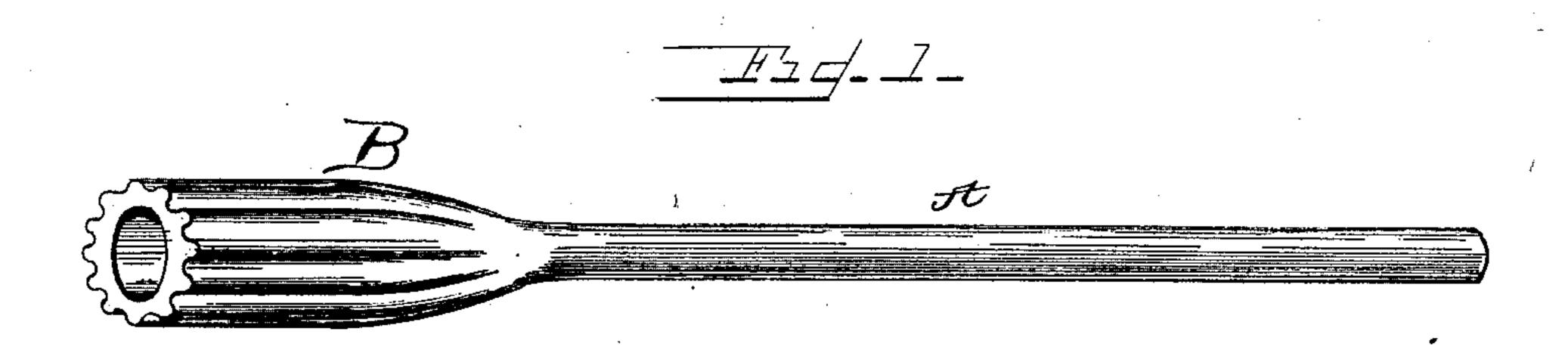
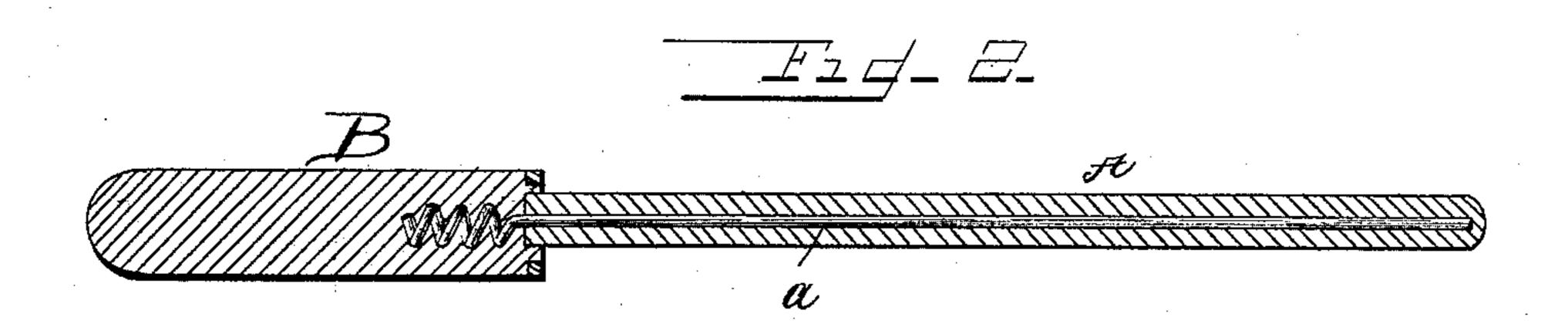
(No Model.)

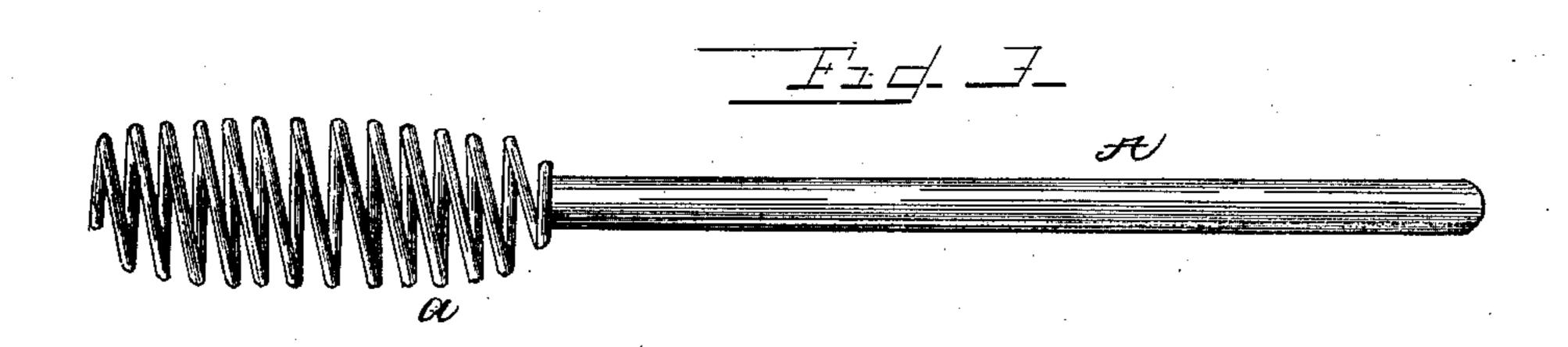
K. A. RYER.
HAIR CURLER.

No. 432,569.

Patented July 22, 1890.







Witnesses

I W. Vauberschmidt J.M. Clance Mathenin A. Ryger By her attorney

M. Tunio

## United States Patent Office.

KATHERINE ANN RYER, OF BROOKLYN, NEW YORK.

## HAIR-CURLER.

SPECIFICATION forming part of Letters Patent No. 432,569, dated July 22, 1890.

Application filed April 24, 1889. Serial No. 308,428. (No model.)

To all whom it may concern:

Beitknown that I, KATHERINE ANN RYER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New | In practice I may use a wire a, running ax-35 5 York, have invented certain new and useful Improvements in Hair-Curlers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to instruments which 15 are designed for curling hair; and it consists in improving such instruments, as will be fully understood from the following description and claims, taken in connection with the annexed drawings, in which-

Figure 1 is a perspective view of one form: of my improved hair-curler, and Figs. 2 and 3 are modifications thereof.

Referring to the annexed drawings, A designates the curling-stem, and B the handle 25 thereof, which are made integral, and preferably of pipe-clay. It will be observed by reference to Fig. 1 that the stem A, which may be made solid or tubular, has a handle which is greatly enlarged and corrugated exteriorly 30 and made hollow. Thus it will be seen that while the curling-stem A may be sufficiently |

heated for curling the hair, the handle can be held and the instrument properly manipulated without detriment to the hand.

ially through the curling-stem A, which wire may terminate at the handle end in a screwthreaded shank, on which a wooden, a glass, or other suitable grasping-piece may be attached.

The gist of my invention therefore consists in a curling-stem made of pipe-clay, whether solid or hollow, having a handle either formed integral with it or a handle formed separate and adapted to be attached to it, as above 45 specified.

I am aware that curling-irons comprising a mandrel and a hollow corrugated handle are old, and I do not lay broad claim thereto.

What I claim as new, and desire to secure 50 by Letters Patent, is—

1. A hair-curler having an integral hollow corrugated handle, as set forth.

2. A hair-curler having an integral corrugated handle, as set forth.

In testimony whereof I affix my signature in presence of two witnesses:

## KATHERINE ANN RYER.

Witnesses:

JOHN R. HEISE, JOHN RYER.