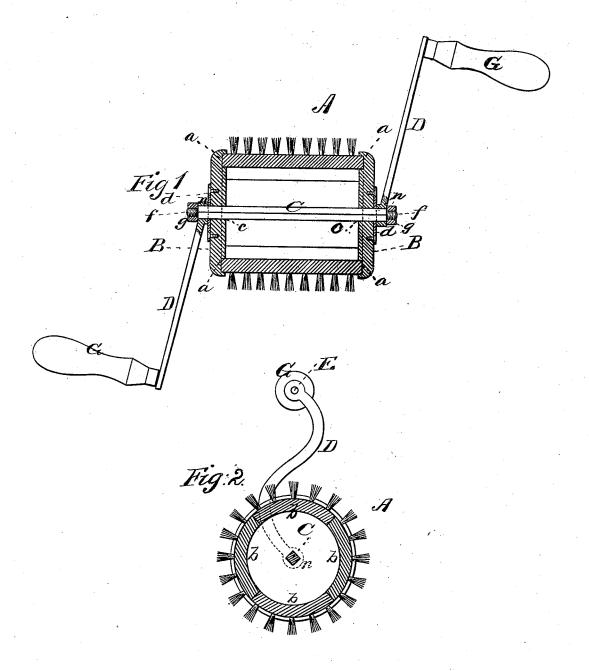
## J. KISTLER.

## CYLINDRICAL-BRUSH.

No. 193,519.

Patented July 24, 1877.



witnesses M. G. Vitler A. J. Chasi

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## UNITED STATES PATENT OFFICE.

JOHN KISTLER, OF CELINA, OHIO.

## IMPROVEMENT IN CYLINDRICAL BRUSHES.

Specification forming part of Letters Patent No. 193,519, dated July 24, 1877; application filed May 26, 1877.

To all whom it may concern:

Be it known that I, JOHN KISTLER, of Celina, in the county of Mercer and State of Ohio, have invented a new and valuable Improvement in Barbers' Brushes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal central section of my improved brush, and Fig. 2 a vertical cross-sec-

tion thereof.

This invention has relation to improvements in brushes for the use of barbers and others; and it consists in the construction and novel arrangement, in connection with a cylindrical brush, of crank-arms removably secured to the ends of a shaft passing through said cylinder, and are, upon their outer handle ends, provided with sleeves, whereby said arms are rotated, as will be more fully described.

The object of this invention is to provide a brush which will effectually remove dandruff from the hair during the operation of sham-

pooing.

In the accompanying drawings, the letter A designates my improved brush, and b one of the sections thereof. These sections are curved, and adapted to have their ends seated in annular grooves a, made on the inner faces of circular heads B, thus forming, when said sections are put together, a cylindrical brush,

as shown in Fig. 2 of the drawings.

Ends B are perforated centrally, as shown at c, and are provided on their outer sides with metallic plates d, having rectangular perforations, registering with the perforations of the ends, for the purpose of receiving and preventing from turning therein the ends of a correspondingly-shaped metallic shaft, C. This latter has screw-threaded ends f projecting beyond the ends of the brush, for the purpose of allowing crank-arms D, having rectangular eyes.n, to be secured thereon at each end by means of nuts g, or other substitute therefor.

Thus the said handles are prevented from turning or being displaced, and the sections are held rigidly in their places. These arms extend obliquely outward from the heads, and are, upon their outer handle ends E, provided with preferably wooden sleeves G. Handle ends E are oblique to the axis of the brush, for the purpose of giving it, when rotated in the hands of the operator, a rocking movement, which causes the said brush to rub the head in different places. By placing the arms above described obliquely to the brush the hands of the operator will clear the head of the person being shampooed.

In practice, my improved sectional brush will be found of great use. In the event of any of said sections being broken by the falling of the brush to the ground, or of the hairs of the same becoming worn, said section can be readily removed and another section sub-

stituted in its place.

What I claim as new, and desire to secure

by Letters Patent, is-

1. The combination, with the curved sections of a cylindrical brush, of the heads B, annularly grooved to receive the said sections, an axial bolt extending through the said heads, and suitable clamp-nuts applied upon the said bolt, substantially as specified.

2. The combination, with a cylindrical brush having plates d upon its ends, with rectangular openings therein, and the prismatic axial shaft extending through said plates and provided with screw-threaded ends, of the crankarms D, applied on said shaft, and the nuts g,

substantially as specified.

3. The combination, with the cylindrical brush A, of the crank-arms D, having the inner wing n oblique to the brush ends, and the handle oblique to the axis of the brush, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

JOHN KISTLER.

Witnesses:

T. J. GODFREY,

J. C. PORTERFIELD.