

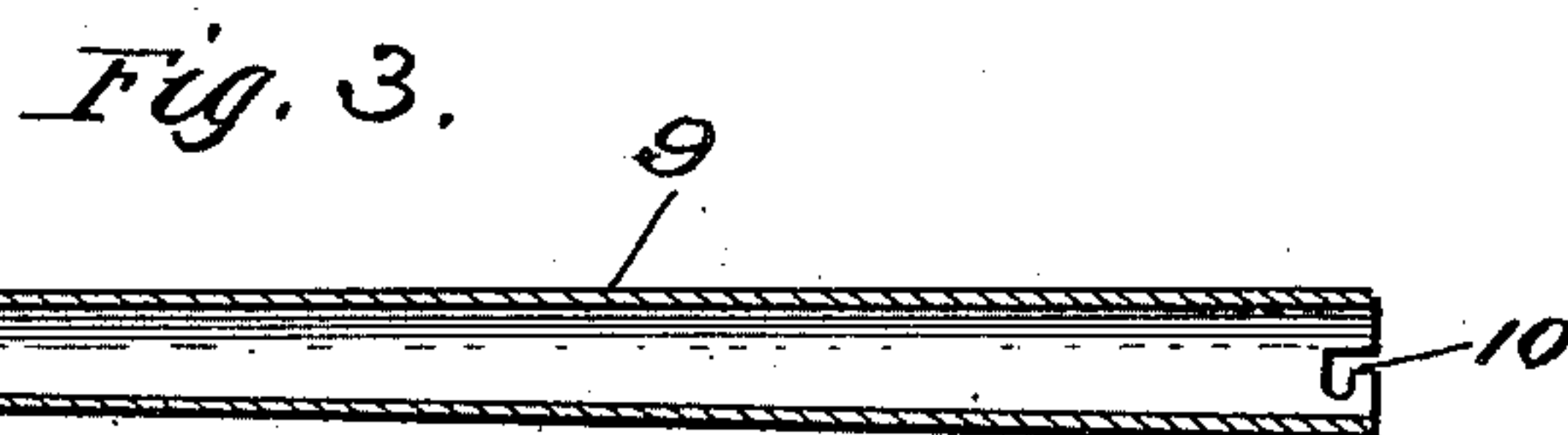
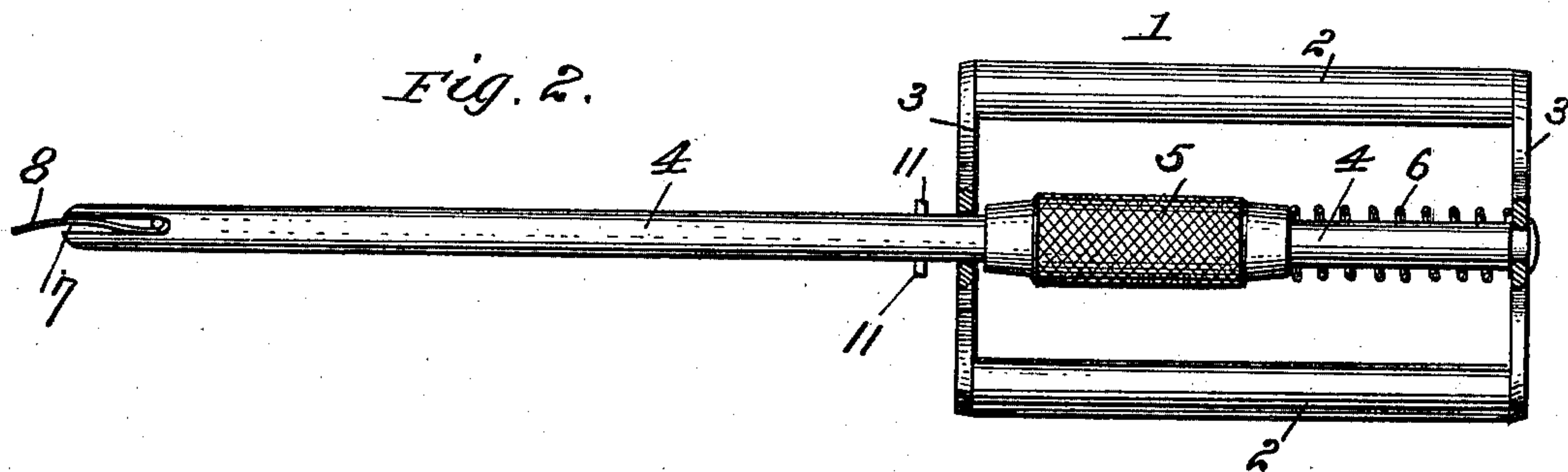
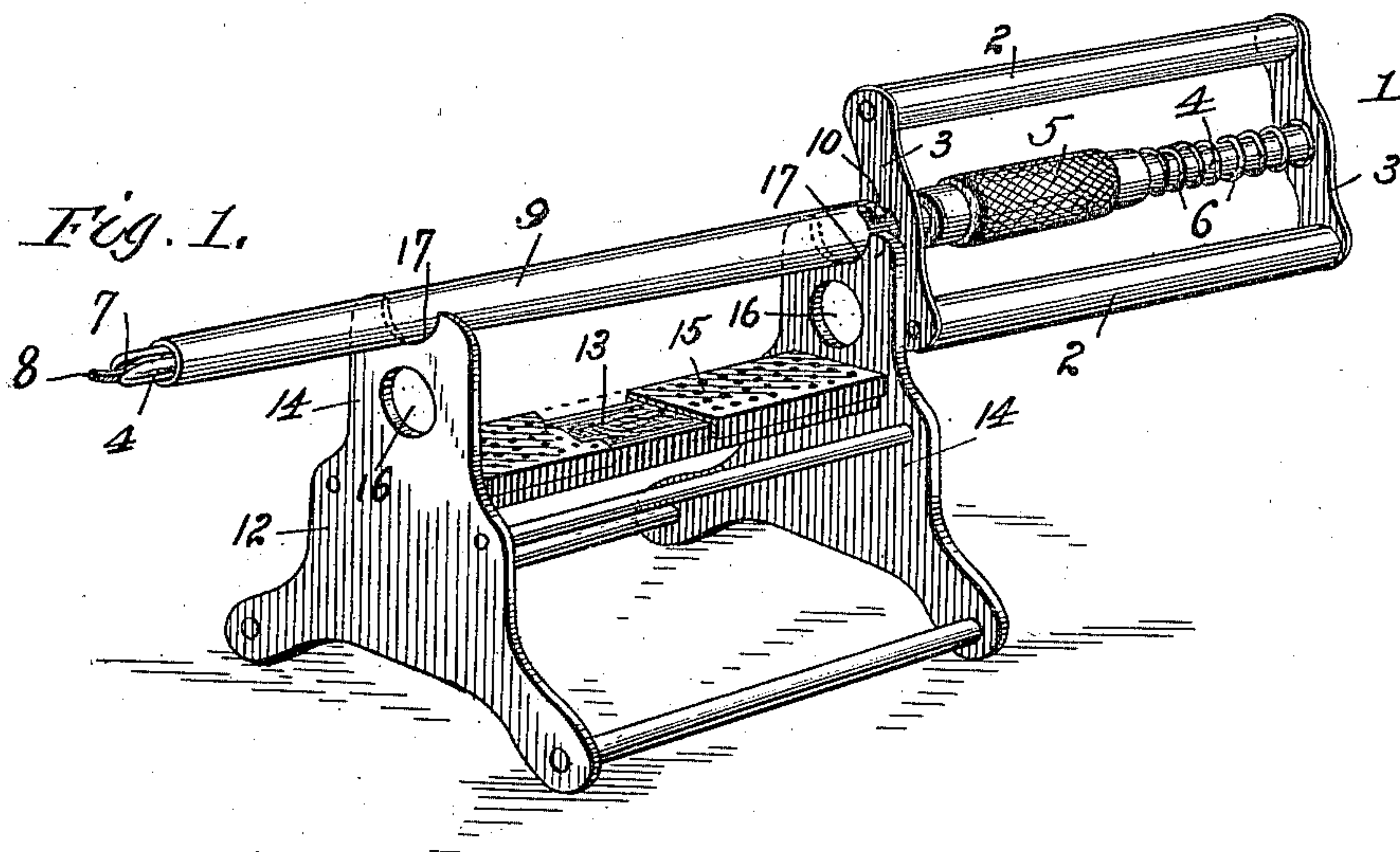
No. 687,819.

Patented Dec. 3, 1901.

J. A. CRANDALL.
HAIR CURLER.

(Application filed July 23, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

JESSE A. CRANDALL, OF BROOKLYN, NEW YORK, ASSIGNOR TO STEPHEN V. WHITE, OF BROOKLYN, NEW YORK.

HAIR-CURLER.

SPECIFICATION forming part of Letters Patent No. 687,819, dated December 3, 1901.

Application filed July 23, 1901. Serial No. 69,436. (No model.)

To all whom it may concern:

Be it known that I, JESSE A. CRANDALL, a citizen of the United States, and a resident of the borough of Brooklyn, county of Kings, city and State of New York, have invented new and useful Improvements in Hair-Curling Irons, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a perspective of the improved curling-iron and its heating-lamp. Fig. 2 is side elevation of the curling-iron, part of the handle thereof being shown in section; and Fig. 3, a longitudinal sectional view of the heating-shield.

One object of the invention is to provide a hair-curling iron in which the handle may be held stationarily in the hand and the curling-rod rotated without rotating the handle.

Another object of the invention is to provide a shield to protect the curling-rod during the heating thereof, said shield being also adapted to remain on the curling-rod when desired to form curls larger in diameter than the curling-rod.

Referring to the parts as illustrated in the drawings, 1 designates the handle, which consists of the two parallel longitudinal bars 2, which are spaced a suitable distance apart and whose corresponding ends are connected by transverse end bars 3. Extending through the centers of the end bars 3, midway between the side bars 2 and parallel therewith, is a curling device or rod 4. This curling-rod is rotatable in the end bars 3, but is held against longitudinal movement therethrough by any suitable means. As it is shown in the drawings the rear end of the rod is reduced where it passes through the rear cross-bar to form a shoulder which is adapted to bear against the inner side of the rear cross-bar, the end of this reduced portion being headed outside of the said cross-bar to retain the curling-rod in position in the handle. On the curling-rod, near the forward cross-bar, is rigidly secured a cylindrical thumb-piece 5, and between the rear end of this thumb-piece and the rear cross-bar 3 of the handle is confined a coil-spring 6, which presses the curling-rod forward and causes the head on the rear end of the curling-rod to bind on the rear cross-

bar of the handle, thereby forming a frictional retarding device which prevents a too free rotation of the curling device or rod. It is obvious that other forms of devices may be employed to prevent a too free rotation of the curling device.

The curling-rod 4 is extended a considerable distance in front of the forward cross-bar of the handle, and its forward end is slotted longitudinally, as at 7, the forward end of the slot opening at the forward end of the rod, as shown. Secured at its rear end within said slot is a flat spring 8, which is longitudinally disposed in said slot and is curved to adapt it to secure the end of the tress of hair which it is desired to curl, the wall of the slot and the flat spring forming a hair-engaging device. The forward end of this spring extends beyond the end of the curling-rod and forms a guide to direct the hair into the hair-engaging device. It is of course obvious that any suitable form of hair-engaging device may be employed.

Adapted to receive the curling-rod and to shield it from the heating-flame is a substantially cylindrical tube 9, its exterior being slightly tapered from its rear to its forward end. This shield is readily removable from the curling-rod, and to enable it to be secured detachably thereto it is formed at its rear end with bayonet-slots 10, in which are adapted to engage radial pins 11, secured in the curling-rod near the outer side of the forward cross-bar 3. The shield is shorter than the projecting end of the curling-rod, so that when the shield is secured to the said rod the hair-engaging end thereof projects forward beyond the end of the shield sufficiently to permit the end of the tress it is desired to curl to be engaged therein. The object of this construction is that when it is desired to form curls larger in diameter than the curling-rod the shield may be temporarily attached to the curling-rod and the hair curled around it. It is obvious that other means may be employed, if desired, for detachably securing the shield to the curling-rod. When the tube is used merely as a shield, it protects the curling-rod from the heating-flame and avoids the necessity of cleaning the rod after each heating.

As a convenient means of supporting and

heating the shield and the curling-iron therein a lamp 12 is provided, which consists of a long narrow fuel-tray 13, which is supported between two standards 14 and is provided with a detachable perforated burner-top 15. These standards extend above the tray, and just above the tray they are provided with the openings 16, through which the shield is passed when it is desired to place it near the burner-top. The tops of these standards are provided with recesses 17, in which the shield is adapted to rest when it is desired to place it at some distance above the burner-top. When the curling-rod is used alone, the shield remains on the lamp-standards and practically forms a part thereof.

The operation of the device is readily understood from the foregoing. The handle is held in one hand and the end of the tress of hair it is desired to curl is grasped in the other hand and by it placed in the hair-engaging device. The thumb-piece is then engaged by the thumb of the hand grasping the handle or between the thumb and the first finger and rotated to wind the tress on the curling-iron. The tension device acting on the curling-rod prevents a too free rotation of the said rod, so that it will not be rotated to unwind the hair. By the use of the shield the curling-rod is protected from the heating-flame, and the necessity of cleaning it after each heating is avoided.

Having thus fully described my invention, what I desire to secure by Letters Patent is—

1. The combination, of a handle, a curling-rod projecting therefrom and provided with a hair-engaging device at its outer end, a tubular heating-shield adapted to fit on the curling-rod and made shorter than said rod and extending from the handle to a point short of the hair-engaging device so that the same will project beyond the outer end of said shield, and means at the inner end of said shield to detachably secure said shield to the rod, whereby it may be employed to form curls larger in diameter than the curling-rod.

2. In a curling-iron, the combination of a handle consisting of a pair of cross-bars and a pair of longitudinal bars connecting the ends of said cross-bars, a rotatable curling-rod journaled in said cross-bars and lying parallel with the connecting-rods and extending endwise beyond the front cross-bar, said curling-iron being held against endwise movement by connection with the rear cross-bar, a cylindrical thumb-piece attached to the curling-iron at a point between said cross-bars, and for the purposes set forth.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 17th day of July, 1901.

JESSE A. CRANDALL.

Witnesses:

PERCY G. B. GILKES,
R. MCH. RANDALL.