## W. UPTON.

COMBINED EGG TESTER AND COOKER. (Application filed May 17, 1899.) (No Model.) Fig. 4. Fig. 3. B Attest: M.L. Winston. P. Hoskick Inventor: W. Upton, By & B. Whitmore, Atty.

## United States Patent Office.

WILLARD UPTON, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF TO JAMES H. DOTY, OF SAME PLACE.

## COMBINED EGG-TESTER AND COOKER.

SPECIFICATION forming part of Letters Patent No. 644,342, dated February 27, 1900.

Application filed May 17, 1899. Serial No. 717, 197. (No model.)

To all whom it may concern:

Be it known that I, WILLARD UPTON, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in a Combined Egg-Tester and Cooker, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

ing or candling eggs and cooking small dishes of food, toasting bread, heating liquids, flatirons, &c., the object of the invention being to produce a compact and convenient device for use in the private family, the sick-room, in

The invention is hereinafter fully described, and more particularly pointed out in the claims.

shown in Figs. 5 and 6, which when the tubes are put upon the cylinder are bent in a manner to bear upon its outer and inner faces.

By forming the tubes separate from the cylinder.

Referring to the drawings, Figure 1 is a side elevation of the device. Fig. 2 is a side elevation, parts being in vertical axial section, on the dotted line 22 in Fig. 3. Fig. 3 is a plan of the device. Fig. 4 shows the cylinder detached and inverted. Fig. 5 shows a blank sheet for forming a tube. Fig. 6 is a tube formed detached.

A is a lamp, the body of which is preferably of sheet metal and formed with an up-30 wardly-projecting ring or band  $\alpha$ . The lamp is provided with a suitable burner of some common construction, one producing a considerable amount of heat being employed where the device is to be used for cooking and 35 heating. Upon the lamp is placed in vertical position a sheet-metal cylinder B, open at its ends, one end resting directly upon the body of the lamp and fitting snugly the band or ring a, which holds the cylinder securely 40 to place. Upon the upper end of the cylinder is mounted an open wire frame C for receiving and holding cooking utensils or other vessels or bodies to be heated, the length of the cylinder being such that the upper part 45 of the wire frame is just above the upper end of the chimney D of the lamp. The body or reservoir of the lamp is constructed purposely to adapt it to receive and hold the cylinder, as above set forth, the latter and the lamp be-50 ing formed especially for each other. The cylinder B is provided with short lat-

eral radial tubes E, openings c being made through the cylinder at the inner ends of the tubes. These tubes are placed upon the cylinder in a horizontal plane coinciding sub- 55 stantially with that of the flame of the lamp, so that the light from the flame will be projected outward through them. The tubes are of sheet metal, like the cylinder, and for the purpose of convenience and economy in 60 packing and shipping the tubes are formed separate from the cylinder, as shown in Fig. 6, and attached to or put in place upon the cylinder when the device is put in order for sale or use. The tubes are preferably formed 65 at one end with projecting parts or lips b, as shown in Figs. 5 and 6, which when the tubes are put upon the cylinder are bent in a man-By forming the tubes separate from the cyl- 70 inders they may be placed inside of the latter when packing for storage or transportation. The eggs to be tested are held against the outer ends of the tubes, the large ends of the eggs being inserted therein. Eggs thus 75 held against the tubes are internally illuminated, rendering their condition readily visible.

The wire frame C is removable from the cylinder, and it consists of an upper ring d 80 and a lower ring e of about equal diameter, both being larger in diameter than the cylinder. These rings are rigidly connected by vertical standards f outside of the cylinder, the lower ring being below and the upper ring 85 above the upper end of the cylinder, as shown in Figs. 1 and 2. These standards, preferably four in number, are bent or looped at h over the upper end of the cylinder and turned vertically downward therein, being joined in 90 pairs by horizontal tie-sections or connectors g, preferably slightly below the plane of the lower ring e. These connectors g are made to press firmly outward against the inner surface of the cylinder, as appears in Fig. 3, which 95 serves to hold the frame firmly in place upon the cylinder, and when the frame is put to place and pressed downward, so that the loops h bear against the ends of the cylinder, the frame is secure in place and adapted to sup- 100 port the weight of any body that may be placed upon it for the purpose of heating or cooking.

Horizontal cross-wires ii' and kk' are secured to the upper ring, which cross-wires and the ring constitute a platform for receiving upon it bodies to be heated or cooked. For the 5 purpose of strength the cross-wires are woven together—that is to say, are put together so that the wire i passes under the wire k and over the wire k', while the wire i' is under the wire k' and over the wire k. This arrange-10 ment of the wires enables them to support each other and render the platform as a whole stiff and unyielding against downward pres-The cross-wires are secured to the ring by having their ends bent downward around 15 the latter and firmly pinched or pressed thereagainst to hold without the use of solder or other agencies. The lower ring e may be secured to the standards f by any simple means, as fine binding-wire l, Fig. 1, wound around

20 the contiguous parts.

The tubes E are not placed at the middle of the length of the cylinder, the distances from the plane of the tubes to the two ends of the cylinder being proportioned especially 25 with reference to the use of the device as an egg-tester. The tubes are so located upon the cylinder as to be opposite the flame of the lamp; but if for the purpose of testing eggs only a common candle, for example, be used 30 instead of the lamp the cylinder will be inverted, as shown in Fig. 4, if the candle be new and long, thus bringing the tubes approximately on a level with the flame. When the candle burns low, by again inverting the 35 cylinder the tubes will be brought lower and more nearly opposite the flame of the shortened candle. When thus using a candle, (or, it may be, some small lamp,) the cylinder is placed directly upon the table upon which the 40 candle or lamp rests.

Draft-openings n and o are formed through the sides of the cylinder near its respective ends to facilitate in supplying air to the inclosed flame should it at any time not be fully

45 supplied through the tubes E.

This device has been designed especially for ready and quick use and great convenience. Small vessels of water or other liquid may be

quickly heated, food cooked, bread toasted, &c., and when the cylinder is removed from 50 the lamp and the wire frame detached the cylinder may be quickly arranged for testing eggs by simply placing it upon a table to inclose a lighted candle or lamp or other convenient source of light.

What I claim as my invention is—

1. The combination with a cylinder, of a frame comprising an open-work platform, standards depending therefrom and having reverse bends and loops to support the plat- 60 form above a chimney the lower loop being outside the cylinder, a lower ring supported in the lowermost of said loops, and horizontal connectors joining said standards in pairs below the plane of the lower ring and curved 65 and adapted to press firmly against the inner wall of the cylinder with their terminals at diametrically-opposite sides of the platform, substantially as specified.

2. A reversible egg-tester comprising a cyl- 70 inder, provided with draft-openings adjacent to each end and testing-tubes projecting diametrically from the cylinder approximately

adjacent to one end.

3. The combination with a support provided 75 with a vertical annular flange, of a reversible cylinder fitting within the flange and provided with draft-openings at its opposite ends and with testing-tubes projecting diametrically therefrom, approximately adjacent to one 80 end of the cylinder.

4. The combination of a lamp, a cylinder and an open frame, the latter having two similar and parallel rings connected by standards engaging the cylinder, one ring being 85 below and the other above the end of the cylinder, the standards projecting downward within the cylinder and connected therein, substantially as shown and described.

In witness whereof I have hereunto set my 90 hand, this 15th day of May, 1899, in the pres-

WILLARD UPTON.

ence of two subscribing witnesses.

Witnesses:

ENOS B. WHITMORE, M. L. WINSTON.