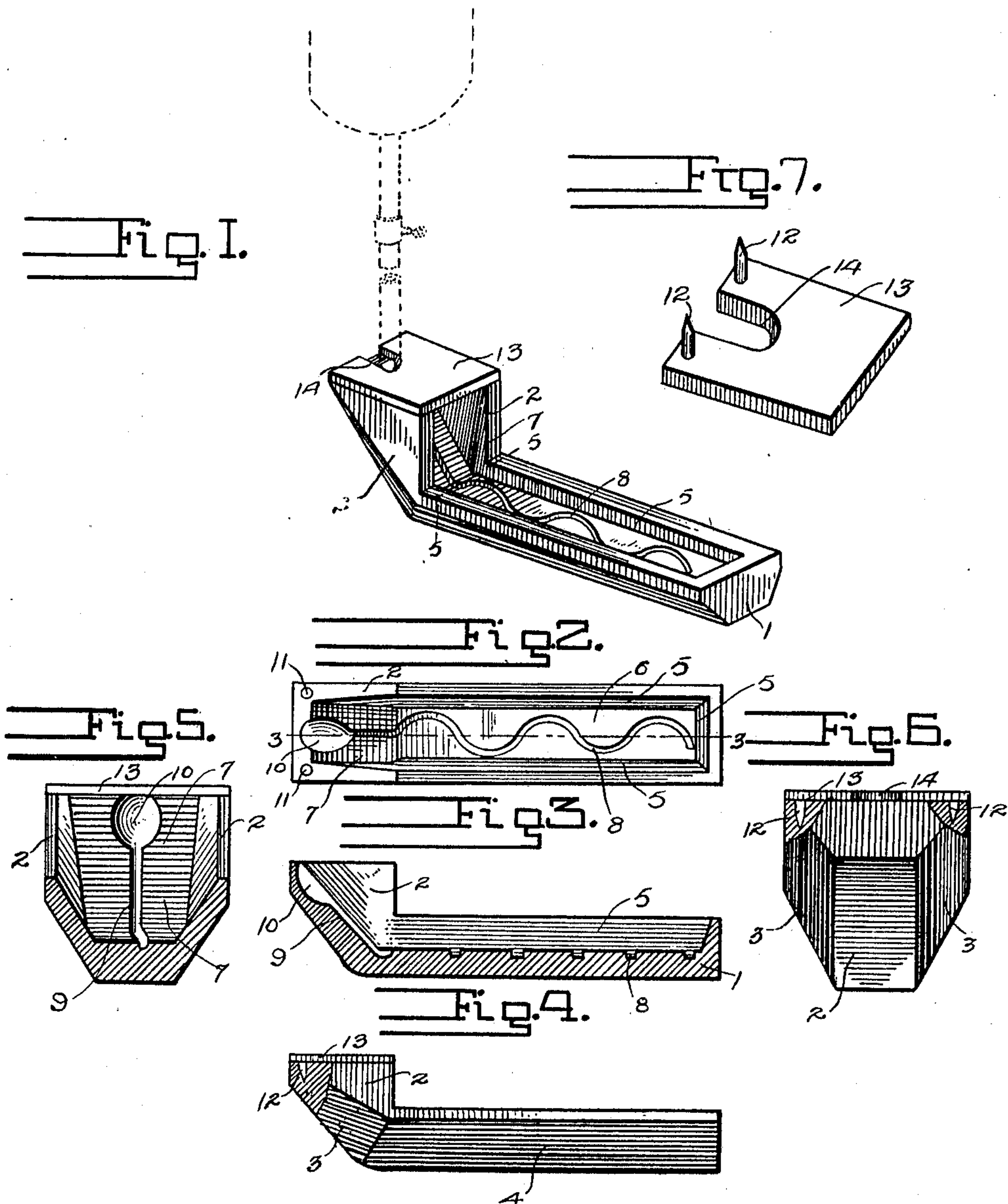


J. M. BELL.
OIL BURNER.
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991,935.

Patented May 9, 1911.



Witnesses
Howard Hostello.
Ross Woodward

Inventor
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UNITED STATES PATENT OFFICE.

JOSEPH M. BELL, OF FRANKFORT, OHIO, ASSIGNOR OF ONE-FOURTH TO FLOYDE E. EICHELBERGER, OF WASHINGTON COURT-HOUSE, OHIO.

OIL-BURNER.

991,935.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH M. BELL, a citizen of the United States, residing at Frankfort, in the county of Ross and State of Ohio, have invented certain new and useful Improvements in Oil-Burners, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to oil burners and the principal object of the same is to provide the bottom of the burner with a track which will lead oil and thus cause the flame to be more evenly distributed.

15 This invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the burner. Fig. 2 is a top plan view of the burner, with the plate removed. Fig. 3 is a longitudinal sectional view along the line 3—3 of Fig. 2. Fig. 4 is a view in side elevation of the improved burner. Fig. 5 is a transverse sectional view along the line 5—5 of Fig. 1. Fig. 6 is an end view of the burner, portions of the burner being broken away to show the manner of holding the cap in place. Fig. 7 is a perspective view of the cap.

20 In the accompanying drawings the numeral 1 indicates the burner pan which is in the shape of a trough having a box 2 at one end. The box and trough have their sides provided with outer beveled faces 3 and 4 which enables the trough to be seated in an ordinary cook stove, so that there will be no danger of the trough getting out of position. The trough has the inner faces of its walls sloping toward the bottom 6, and the box 2 is provided with a sloping front wall 7 which leads to the bottom 6 of the trough. A groove is formed in the bottom of the trough and in the front wall of the box, the portion 8 of the groove in the bottom of the trough being sinuous, as clearly shown in Figs. 1 and 2. The portion 9 of the groove which is formed in the front wall 7 is straight and terminates in an enlarged spoon shaped well 10. The upper edge of the box is provided with sockets 11 in the corners which receive the lugs 12 formed upon the cap 13. The cap covers the box and is pro-

vided with a slot 14 which is positioned above the well 10, when the cap is in place.

In the operation of this improved burner the oil is fed through the slot 14 into the well 10. From there the oil flows into the straight portion 9 of the groove and follows the straight portion of the groove into the curved portion 8 formed in the bottom of the trough. The oil is thus led along the entire length of the trough and as the groove in the trough is sinuous the flame is evenly distributed over the whole width of the trough and a larger heating surface is thus provided.

It will be noted that, if the front wall of the box were flat, oil dripping upon the wall would spread out and when lighted would result in the flame being confined almost entirely to the box. By the present method, however, the oil is burned in the trough and is prevented from spreading out over the front wall.

What I claim is:

1. In an oil burner, a trough, and a box formed at one end of said trough and having a sloping front wall, said trough and box having an oil groove formed in their bottom and front wall.

2. In an oil burner, a trough having a box formed at one end, said box having a sloping front wall, said trough and box having a groove formed in their bottom and front wall, the front wall of said box being further provided with a well communicating with said groove.

3. In an oil burner, a trough having a box formed at one end, the bottom of said trough being provided with a sinuous groove, the front wall of said box being provided with a well having a groove leading therefrom and communicating with the groove formed in the bottom of said trough.

4. In an oil burner, a trough having a box formed at one end, the upper edge of said box being provided with a socket in each front corner, a cap fitting upon the upper edge of said box and provided with a slot leading from its front edge, lugs formed upon said cap and positioned in said sockets, the bottom of said trough and the front wall of said box being provided

with oil guiding means terminating beneath said slot.

5 In an oil burner, a trough having a box formed at one end, the outer faces of said trough and box being beveled, and the bottom of said trough and the front wall of said box being provided with an oil groove.

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

JOSEPH M. BELL.

Witnesses:

ELIAS E. PRICE,
JOHN T. CURRY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
