H. S. MILKS.

OIL BURNER.

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936,922.

Patented Oct. 12, 1909.

Fig. 3.

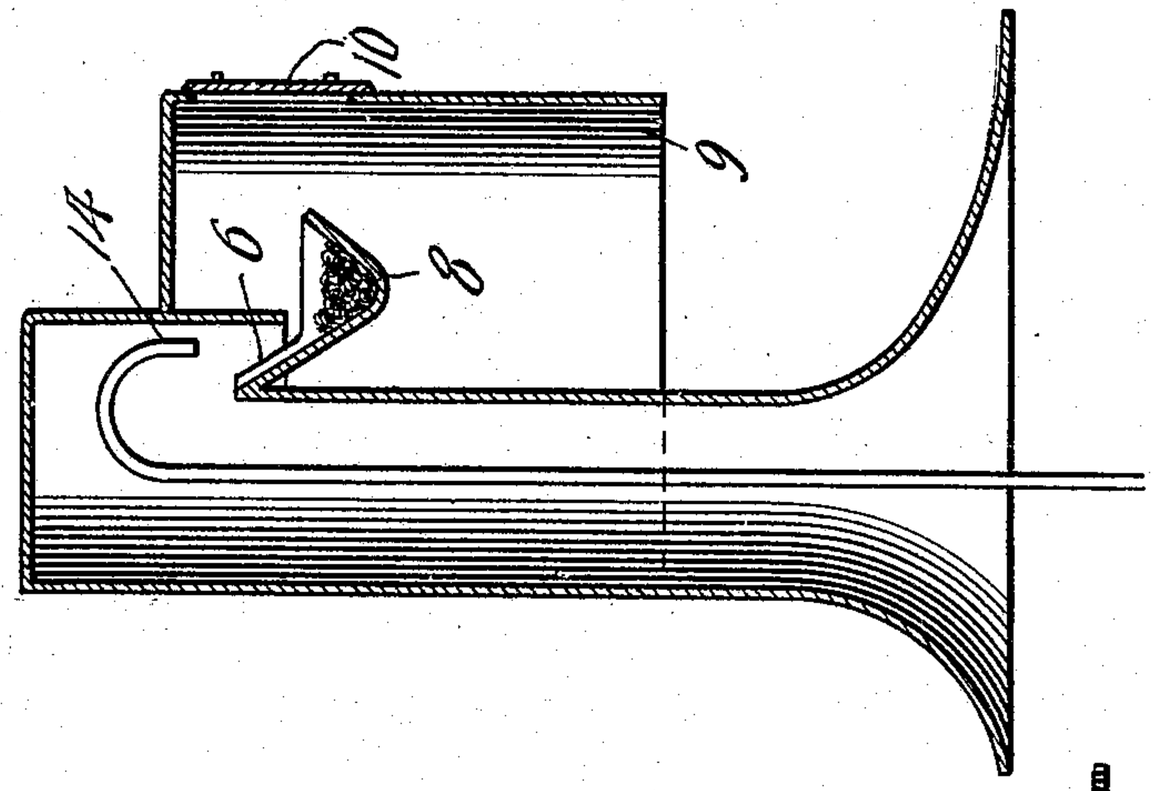

Fig. 2.

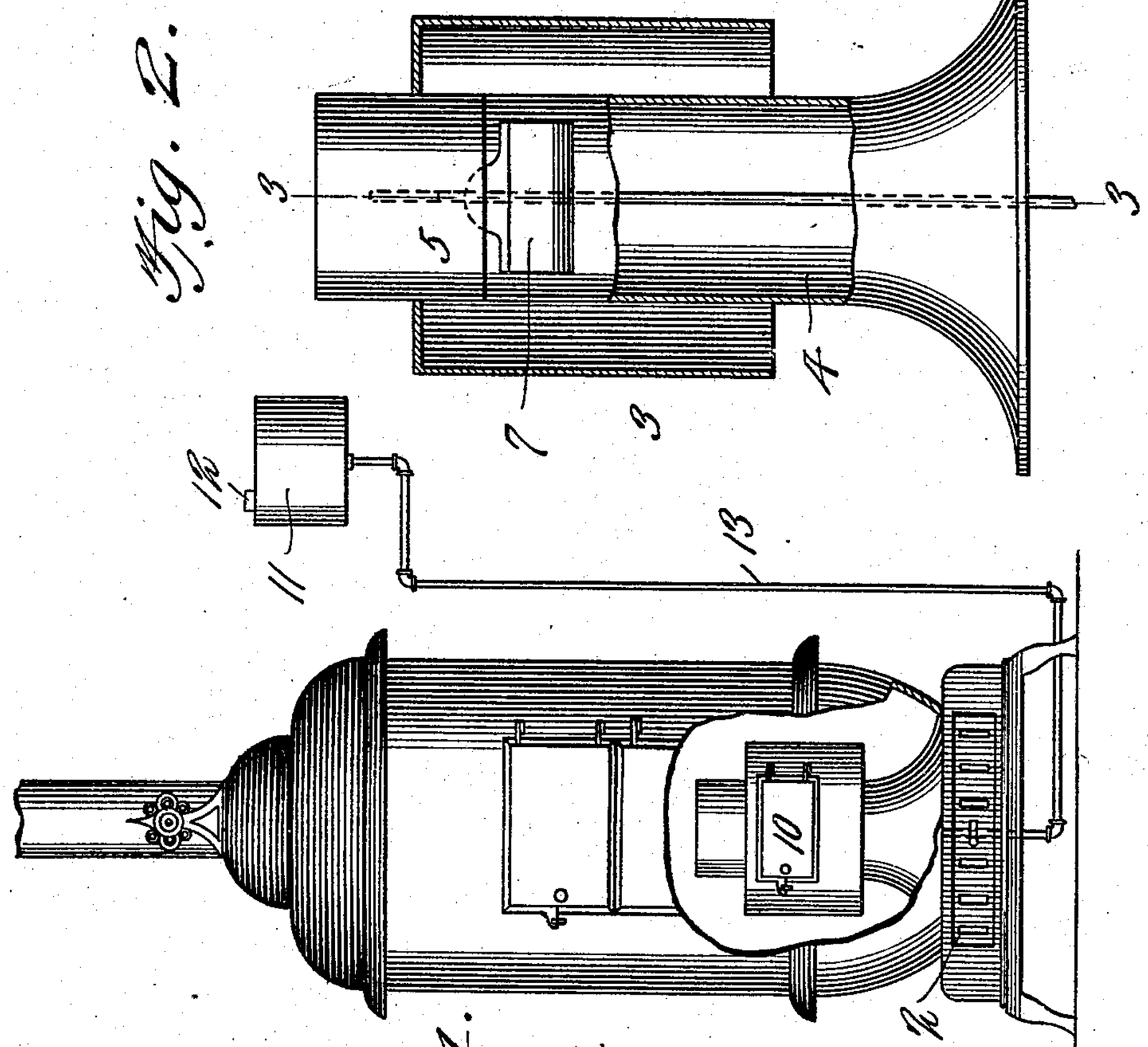

Fig. 1.

Witnesses

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HARRY S. MILKS, OF PARSONS, KANSAS, ASSIGNOR TO THE BEST CRUDE OIL BURNER COMPANY, OF PARSONS, KANSAS, A CORPORATION OF KANSAS.

OIL-BURNER.

936,922. Specification of Letters Patent. Patented Oct. 12, 1909.

Application filed March 23, 1909. Serial No. 485,271.

To all whom it may concern:

Be it known that I, HARRY S. MILKS, a citizen of the United States, residing at Parsons, in the county of Labette and State of Kansas, have invented new and useful Improvements in Oil-Burners, of which the following is a specification.

This invention relates to improved oil burners, and the principal object of the invention is to provide a device of this character which may be readily positioned within an ordinary heating stove and other heating and cooking apparatus, which is extremely simple in structure and which may be constructed at comparatively low cost.

With the above, and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawing there has been illustrated a simple and preferred embodiment of the device, and in which,

Figure 1 is a front elevation of an ordinary heating stove, having parts broken away to illustrate the application of my improvement therein. Fig. 2 is a front elevation with parts shown in section of the improvement. Fig. 3 is a central vertical sectional view upon the line 3—3 of Fig. 2.

In the accompanying drawing the numeral 1 designates a heating stove of any ordinary construction. The stove 1 has its ash pit provided with the usual draft door 2 and the interior of the stove is adapted for the reception of the improved hydrocarbon burner, designated by the numeral 3. This burner or heating apparatus 3 comprises essentially a central tubular member or dome 4 having its top portion closed and its lower portion flared outwardly and opened, as clearly illustrated in Fig. 3 of the drawings. The dome 4 is provided with an enlarged portion 5 adjacent its upper end, and this enlargement extends a suitable distance beyond the front of the said dome 4 so as to provide a mouth or opening 6 adjacent the outer wall of the said dome 4. Positioned directly beneath this mouth 6 and upon the face of the dome 4 is a fuel trough 7. This trough 7 may be integrally formed with or otherwise connected to the dome 4 in any desired manner and the said trough is adapted for the reception of suitable absorbent material designated by the numeral 8. Surrounding the mouth 6 and the trough 7 is a suitable drum 9. This drum may be also integrally formed with the dome 4 and is adapted to be provided with a suitable door 10, whereby access to the interior of the drum 9 as well as the trough 7 may be obtained when desired. The drum 9 is adapted to extend a suitable distance from the sides and front of the dome 4 and is provided with a closed top and an open bottom, thus affording free access to the draft or circulation of air which mixes with the products of combustion within the trough 7, in a manner now to be described.

The numeral 11 designates a suitable crude oil tank having a suitable inlet opening normally closed through the medium of a cap 12 and being provided with an offset pipe 13 extending from its bottom portion and projecting centrally through the dome 4 and having its free end bent to provide an outlet spout 14 positioned directly between the lip 6 and the face of the dome 4. By this arrangement it will be noted that the outlet 14 is in a direct line with the trough 7 secured upon the face of the dome 4 directly below the offset mouth 6.

In operation it is merely necessary to allow a certain amount of oil to flow through the pipe 13 into the trough 7 and upon the absorbent material 8. The door of the stove as well as the door 10 of the drum 9 are both opened and a light is applied to the absorbent material 8 within the trough 7. The draft door 2 of the stove 1 is now regulated so as to allow a sufficient quantity of air to mix with the gases of the oil so as to provide for the perfect combustion of the oil, and it will be noted that as the flame from the trough 7 heats the pipe 13 a constant flow of oil or vapor will be produced as well as the amount of heat readily regulated.

It is to be understood that the dome 4 as well as the trough and drum carried thereby may be provided with a coating of asbestos or other non-conductive material so as to prolong the life of the device, and it is to be further understood that the pipe 13 may be provided with a suitable regulating valve whereby the amount of oil fed within the trough 7 may be determined.

From the above description, taken in connection with the accompanying drawing it will be noted that I have provided a comparatively simple, cheap and inexpensive

crude oil burner for ordinary stoves, one which may be readily positioned within the stove without interfering with the interior mechanism of the stove, one which provides an effective heating drum whereby the products of combustion are forced downwardly beneath the drum and thence caused to rise within the drum of the stove, thus producing a continuous circulation of hot air and effectively heating the room in which the device is positioned.

Having thus fully described the invention what is claimed as new is:

1. A crude oil burner comprising a hollow dome having a closed top and an outwardly flaring open bottom, the dome being also provided with an enlargement providing an opening upon its front face, a trough positioned directly below this opening, a drum surrounding the trough and the opening, said drum being provided with a door way and a door therefor, and means for delivering crude oil through the dome to the trough.

2. The combination with a dome having an enlarged closed top and an enlarged open bottom, the dome being provided with an opening between its enlarged top and its body, a substantially cross sectionally U-shaped trough positioned below the opening provided by the enlarged portion of the dome and the body thereof, a drum having a closed top surrounding the trough and the dome, said drum being provided with an opening and a door therefor, and an oil reservoir being provided with an outlet pipe adapted to project through the drum and to have its end bent so as to provide an outlet mouth positioned directly above the trough and the opening of the drum provided by the enlargement thereof.

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

HARRY S. MILKS.

Witnesses:

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A. L. MILKS.