

No. 714,995.

Patented Dec. 2, 1902.

T. O. BATEMAN & H. T. WILSON.

CRUDE OIL BURNER.

(Application filed Feb. 4, 1902.)

(No Model.)

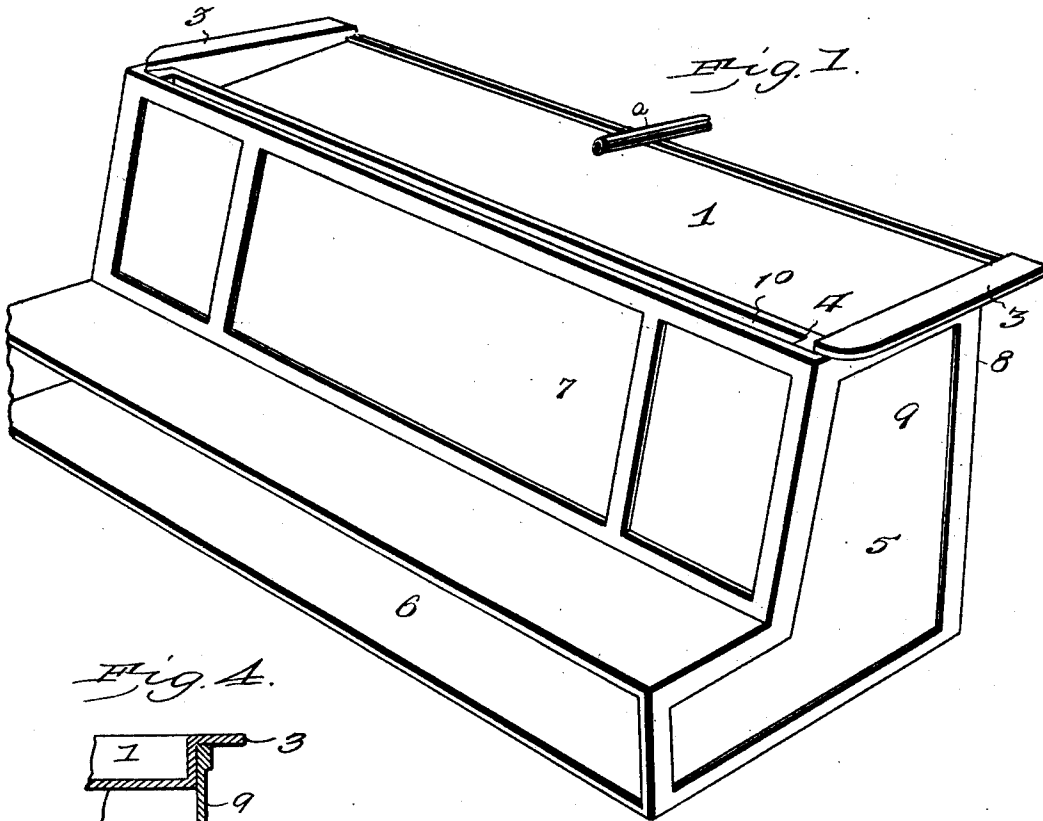


Fig. 1.

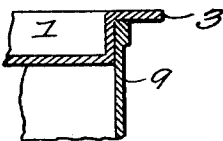


Fig. 4.

Fig. 2.

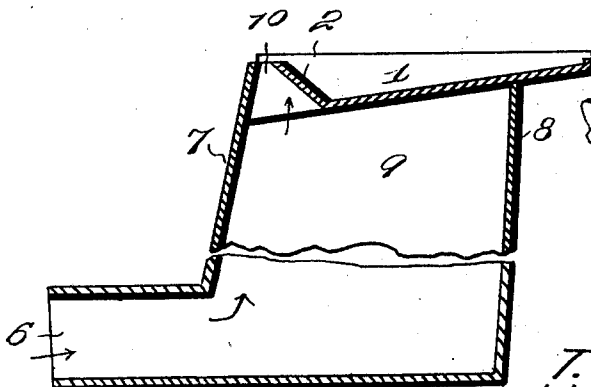
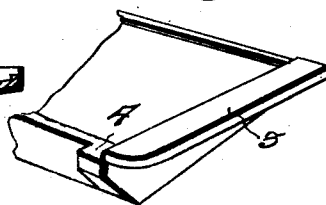


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

TALBOT O. BATEMAN AND HOMER T. WILSON, OF FORT WORTH, TEXAS.

CRUDE-OIL BURNER.

SPECIFICATION forming part of Letters Patent No. 714,995, dated December 2, 1902.

Application filed February 4, 1902. Serial No. 92,555. (No model.)

To all whom it may concern:

Be it known that we, TALBOT O. BATEMAN and HOMER T. WILSON, citizens of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Crude-Oil Burner, of which the following is a specification.

Our invention is an improved crude-oil burner; and it consists in the peculiar construction and combination of devices herein-after fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a crude-oil burner embodying our improvements. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail perspective view of the burner-plate. Fig. 4 is a detail sectional view of one end of the burner-plate and the supporting-box.

In the embodiment of our invention we provide a burner-plate 1, which is inclined laterally toward its front side and is provided with an inclined front wall 2. At the ends of the burner-plate at the upper side thereof are formed outwardly-extending transversely-disposed supporting-flanges 3. At the front side of the burner-plate at the corners thereof are formed projecting shoulders 4, which in practice project a slight distance—about an eighth of an inch—in advance of the front side or inclined wall 2 of the burner-plate. We also provide a supporting-box 5, which is preferably of the form here shown, is closed on its sides, ends, and bottom, is open on its upper side, and is provided on its front side with a laterally-projecting air-intake mouth 6. The front and rear sides 7 8 of the said box converge upwardly. The burner-plate closes the upper side of the box, rests upon the upper edge of the rear wall 8 thereof, projects rearwardly therefrom, and its end flanges 3 bear on the end walls 9 of the said box and support the burner-plate. The shoulders 4 on the front corners of the burner-plate bear against the inner side of the front wall 7 of the supporting-box, and hence a contracted opening 10 is formed between the front side of the supporting-box and the front side of the burner-plate. Owing to the inclined disposition of the front wall 7 of the supporting-box and the front wall 2 of the burner-plate the opening 10, which is practically co-

extensive in length with the burner-plate, widens downwardly to increase the draft of air, which passes upwardly through the box 5 and directly between the front side thereof and the front side of the burner-plate.

In operation the crude oil is dripped from a suitable feed-pipe, such as is shown at *a*, onto the burner-plate. Owing to the lateral inclination of the bottom of the burner-plate the oil which spreads thereon flows to the front of the burner-plate and being ignited burns, the air which is drawn through the narrow slit or opening 10 mingling with the gases and vapors liberated by the burning oil and causing the same to be consumed, the combustion being excellent.

Our improved crude-oil burner is exceedingly simple in construction, is practically indestructible by ordinary use, requires little or no attention, and may be very cheaply manufactured of cast-iron or steel. It will be understood that the same is adapted to be used in the fire-boxes of cooking and heating stoves, furnaces, and ranges and that the same may be also used in fireplaces and otherwise. Having thus described our invention, we claim—

1. In a crude-oil burner, the combination of a box forming a flue, having an air-intake on one side thereof at its lower end, and a burner-plate on which oil is diffused and ignited, said burner-plate being supported by the box and forming the top thereof, an opening being formed between one side of the burner-plate and one side of the box to contract the upper end of the flue and accelerate the draft past the burner-plate, substantially as described.

2. In a crude-oil burner, the combination of a box forming a flue and having an air-intake on one side, the upper end of said box being open, and a laterally-inclined burner-plate supported by said box and located in the open upper end of the same, one side of said burner-plate being spaced from one side of said box to form a contracted air-exit at the upper end of the flue, substantially as described.

3. In a crude-oil burner, the combination of a box forming a flue, having an intake on one side thereof, and an outlet in its upper

side, with a burner-plate having a laterally-
inclined bottom, an inclined wall at the lower
side of said bottom, projections extending out-
wardly from said inclined wall and means to
5 support said burner-plate on the box, said
burner-plate closing the upper side of the box
and said projections in coaction with one side
of the box against which they bear contract-
ing the outlet of the flue at the lower side of
10 the burner-plate, and said inclined wall of
the latter widening said contracted outlet of

the flue downwardly, substantially as de-
scribed.

In testimony that we claim the foregoing as
our own we have hereto affixed our signatures 15
in the presence of two witnesses.

TALBOT O. BATEMAN.
HOMER T. WILSON.

Witnesses:

J. J. QUIRK,
EDWIN B. WILSON.