Nov. 2, 1926. 1,605,089

W. C. BICKLE ET AL

CLOTHES DRIER

Filed Oct. 6, 1923

Fig. 1.

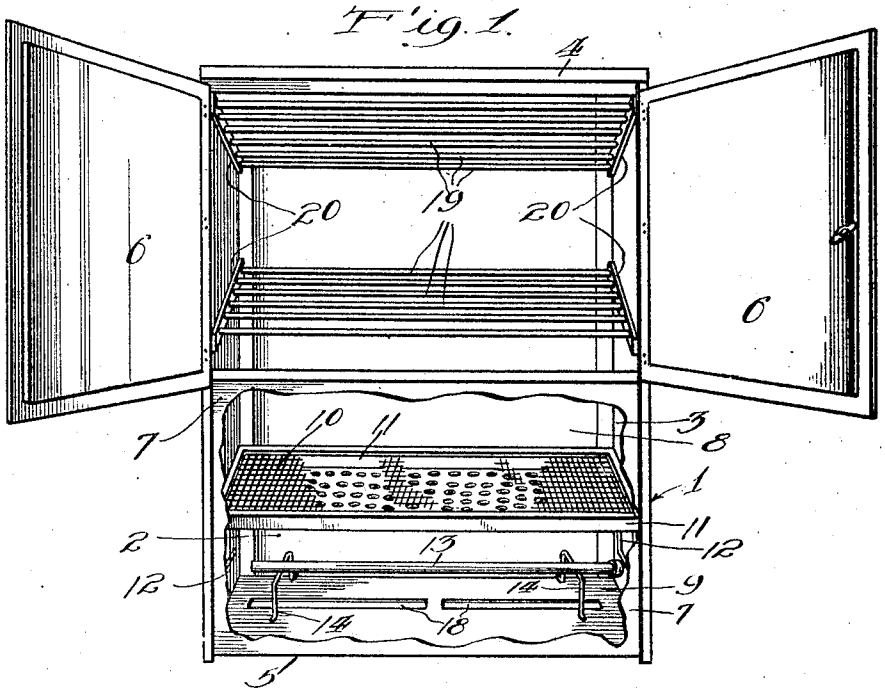



Fig. 2.

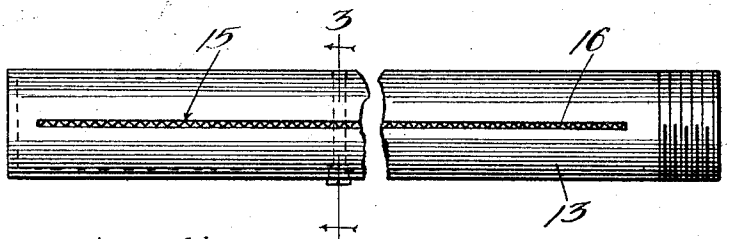
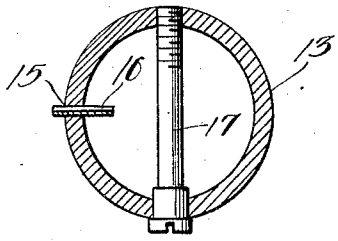
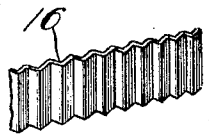



Fig. 3.

Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## CLOTHES DRIER.

Application filed October 6, 1923. Serial No. 666,835.

This invention relates to improvements in clothes driers, and refers more particularly to a clothes drier which maintains an even distribution of heat in the drying chamber.

Among the objects of the invention, are to provide a clothes drier consisting of an upright chamber having upper and lower sections, separated by a screen and a perforated pan arrangement extending across the interior of the drier; to provide a specially constructed burner extending substantially across the lower interior of the drying chamber, consisting of a conduit slotted longitudinally on its upper surface, and having supported in said slot a vertical apron or corrugated baffle which allows the flame to find outlet between the corrugations; to provide a burner which will not pop or allow an explosion to take place; to provide adjustable hangers in the upper section upon which the clothes can be hung; to provide a clothes drier in which a uniform heat is maintained throughout the interior, thus drying clothes in a minimum time without any waste of heat units; to provide a drier in which, by means of the burner described, the gas completely burned resulting in economical consumption of gas, and eliminating unburned gas in the drier, and in general to provide a drier of the character referred to.

Fig. 1 is a front elevational view of the drier with parts broken away for clearness. Fig. 2 is a top plan view of the burner. Fig. 3 is a cross section of burner pipe taken on lines 3—3 of Fig. 2, and Fig. 4 is a perspective of the corrugated member for use with the burner.

Heretofore, driers of this type have been subject to the objection that they have not been equipped with a burner by which a uniform heat could be maintained. In other words, the gas will not travel the length of the burner when the burner extends substantially across the combustion chamber.

Various burners have been utilized and various mechanical expedients resorted to for the purpose of attempting to evenly distribute the heat. Our improvement is particularly directed to a specially constructed burner which consumes every particle of gas and which burns with a uniform flame throughout its length, thus providing an even heat from all points on the burner.

Referring to the drawing, 1 designates as a whole the drying chamber, having a rear wall 2, side walls 3, top 4, bottom 5, front doors 6 and front closure portion 7. The interior of the chamber may be divided into upper and lower compartments 8 and 9 by the screen 10 and pan 11. The pan may be perforated as shown for allowing the heated gas to uniformly permeate the interior of the chamber. The arrangement is such that the pan is supported on brackets 12, and the screen 10 is adapted to rest on the pan 11.

Referring now to one of the features of the invention, in the lower compartment 9 is supported a burner pipe 13 extending horizontally for a substantial distance of the length of the lower compartment. This burner pipe 13 is supported on the standards 14 and prevented from movement by bolts, clamps or other suitable securing means. The burner pipe is slotted longitudinally as shown at 15, the ends of the slot terminating short of the end of the pipe. In this slotted portion is positioned a vertically disposed corrugated apron or baffle 16 of steel or other suitable metal. This apron is held in position by being clamped between the meeting edges of the burner conduit and these meeting edges are tightened by means of screws 17 extending through the burner at suitable points.

Returning to the lower compartment of the drier, the base 5 is slotted as shown at 18 for the ingress of air. A vent is positioned at any convenient place in the extreme upper position of the drier for the egress of damp air. It will be seen that there is a constant circulation of air in the chamber. Cross rods 19 are positioned in the upper compartment 8 upon which the clothes are to be hung. These cross rods are adjustably mounted in the supports 20 attached to the side walls, which supports are grooved to receive the rods.

The drier may be constructed of a variety of metals, such as sheet steel, tin, galvanized iron, etc. From the foregoing description, it will be immediately apparent that by the use of this type of burner in connection with a clothes drier, an even and uniform heat may be maintained at all times, which results in economical consumption of gas and more rapid and thorough drying.

We claim as our invention:

1. In a clothes drier, the combination with a chamber, of a screen and perforated pan extending across the exterior of said chamber dividing same into upper and lower com-

partments, cross bars positioned in the upper compartment upon which clothes to be dried are hung, and means for distributing heat uniformly throughout the chamber including an open burner below the pan extending substantially across the lower compartment of the chamber, said burner co-operatively functioning with said perforated pan to secure uniform distribution of heat throughout the entire chamber.

2. In a clothes drier, the combination with a chamber, of a screen extending across the interior of said chamber dividing same into upper and lower compartments, a pan perforated throughout substantially its entire surface area positioned below the screen and similarly extending across the interior of said chamber, cross bars positioned in the upper compartment upon which clothes to be dried are hung, and an open burner below the perforated pan extending substantially across the lower compartment of the chamber and co-operatively functioning with the perforated pan to distribute heat uniformly throughout the entire chamber.

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