Nov. 30, 1926. 1,609,214

L. M. SNOW

HEATER FOR HOVERS OR BROODERS

Filed April 30, 1925 2 Sheets-Sheet 1

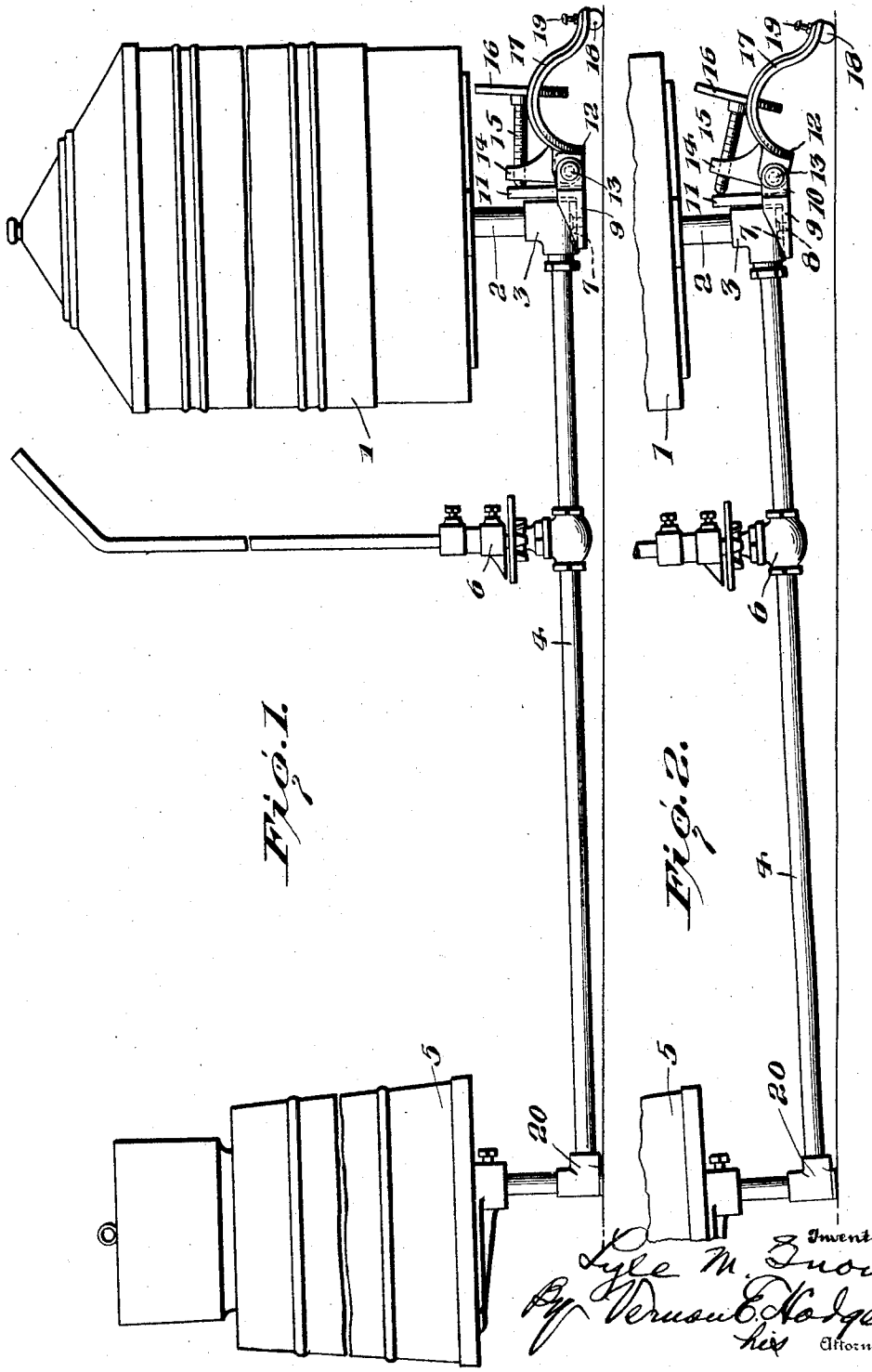


Fig. 1.

Fig. 2.

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Fig. 4.

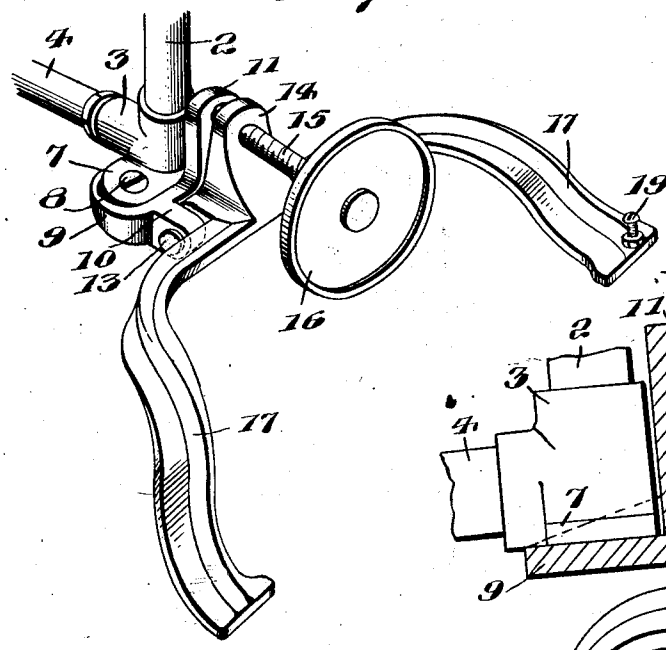


Fig. 6.

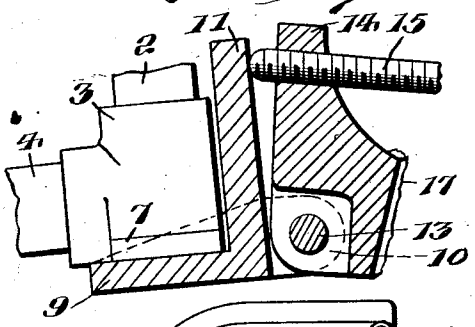




Fig. 3.

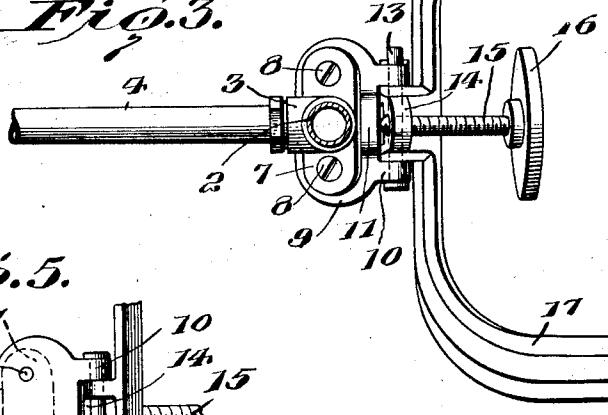
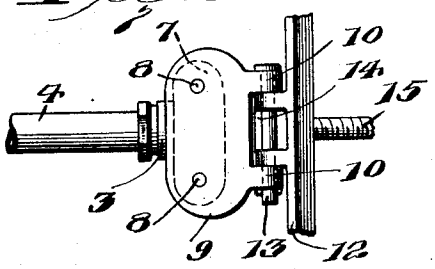


Fig. 5.



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UNITED STATES PATENT OFFICE.

LYLE M. SNOW, OF QUINCY, ILLINOIS, ASSIGNOR TO H. M. SHEER COMPANY, OF QUINCY, ILLINOIS, A CORPORATION OF ILLINOIS.

HEATER FOR HOVERS OR BROODERS.

Application filed April 30, 1925. Serial No. 26,382.

This invention relates to an improvement in "heaters for hovers or brooders".

The object of my invention is to provide an improved heater in which the oil supply may be regulated at will to compensate for any variations in the slope of the floor.

A further object of my invention is to provide a simple and efficient device for instantly adjusting the oil level at the burner well opening so as to keep the height of oil in the oil tank at a point to insure a perfect gravity feed therefrom to the burner. This is accomplished by adjusting the supply tank vertically so as to raise or lower the level of oil in the tank relative to the burner. The former method for doing this was to screw the oil tank up or down in the base casting but in this former method, the nipple attached to the bottom of the oil tank, on being screwed into the base casting, would act as a plunger and displace the oil which was in the base casting forcing it up into the floor chamber and also into the oil well. Thus, this displacement of the oil prevented the operator from maintaining an absolute control over the oil level so as to regulate it properly relative to the burner.

My invention entirely obviates these objections by providing a means pivoted to the base of the oil tank so as to move the oil tank bodily in the upward or lower direction, and this arrangement accomplishes the most instantaneous adjustment of the height of the oil level.

In the accompanying drawings:

Figure 1 is a side elevation showing the complete heater;

Figure 2 is a similar view with parts broken away showing the oil container in its elevated position;

Figure 3 is a top plan view of the base portion of the oil container, and

Figure 4 is a perspective view of the same.

Fig. 5 is a top plan view of the bracket and a portion of the casing hinged thereto;

Fig. 6 is an enlarged detail sectional view through the bracket and hinged casing.

The numeral 1 indicates the oil container having the pipe 2 leading downwardly therefrom, which is connected by the elbow 3 with the supply pipe 4 leading to the burner 5 for supplying oil from the oil container to the burner. A regulating valve 6 is placed in the supply pipe 4 for controlling the supply of oil to the burner.

The elbow 3 is provided with lateral projections 7 which are secured by screws 8, or any suitable means, to the bracket 9 which is provided with the rearwardly projecting ears 10 and vertical arm 11. As shown in Figures 3 and 4, a casting 12 has its forward end received between the ears 10 and pivoted thereto as at 13. The casting 12 has an upwardly extending arm 14, having a screw-threaded-hole therethrough for receiving the screw 15, which is provided with a hand wheel 16 for turning the same. This screw 15 is adapted to be screwed to the arm 14 to engage the vertical arm 11 of the casting 9. The casting 12 is also provided with two lateral feet 17 which are adapted to rest upon the floor of the building to support the oil container 1 and one end of the delivery pipe 4. One of the feet 17 is provided with a lug 18 and the other has a screw 19 extending therethrough for adjusting the horizontal position of the two feet and of the oil container relative to the burner, and the floor.

As the hand wheel 16 is turned in one direction or the other, the screw 15, engaging the arm 11, will cause the oil container 1 and corresponding end of the supply pipe 4 to be raised or lowered by reason of the pivotal connection between the bracket 9 and casting 12, and further because when the screw 15 is turned to raise the oil container, the arms 11 and 14 will be forced apart, causing the arm 14 and pivotal points 13 to swing upward in an arc, and this upward movement raises the oil container and corresponding end of the supply pipe 4. These also swing upward in an arc with the center at the base of the support 20 for the burner 5, so that, as the oil container is raised, the entire pipe is moved also, but the connections between the pipes 2 and 4 and the oil container 1 and burner 5 are never disturbed, so that the oil level may be raised or lowered at will without causing any displacement of the oil from any point in the pipe line. Thus, the relative distances between the oil container 1 and the burner 5 and the supply pipe 4 are at all times maintained in a constant relation so that the oil level is controlled directly through the hand wheel 16 and screw 15.

The adjusting screw 19 permits of leveling the device relative to the floor to compensate for any horizontal variation in the floor.

This, together with the adjusting screw 15 permits of adjusting the heater in any direction to compensate for any variation in the floor.

This arrangement provides for a relatively inexpensive construction for adjusting the oil level and this adjustment is accomplished almost instantaneously because the oil level is always shown at its true height, which makes it a decided improvement over any heretofore devised.

I claim:

1. The combination of a liquid supply pipe, a bracket connected therewith and having an upwardly extending arm, a casting pivoted to said bracket and having an upwardly extending arm, a screw extending through said arm in the casting and engaging the first mentioned arm for raising and lowering a portion of the supply pipe for regulating the flow of liquid therethrough.

2. The combination with an oil reservoir and supply pipe extending therefrom, of a bracket connected with the supply pipe, said bracket having outwardly projecting ears and having an upwardly extending arm, a casting pivoted between the ears and having supporting feet, an arm extending outwardly from the casting, and a screw extending through said last mentioned arm and engaging the first mentioned arm to raise or lower the supply reservoir, and a portion of the supply pipe relative to the floor.

3. In a device of the character described, a casting and pipe hinged together, said casting provided with legs adapted to hold one end of the pipe from the floor, a tank and burner supported by the pipe and in communication with each other, said burner and pipe adapted to rest upon the floor, and adjusting means for varying the hinged relation between the casting and pipe at the tank side for regulating the height of the tank relative to the burner.

4. The combination of a liquid supply pipe, a bracket connected therewith and having an upwardly extending arm, a casting pivoted to said bracket and having an upwardly extending arm, and means for varying the relation of said upwardly extending arms, for raising and lowering a portion of the supply pipe for regulating the flow of liquid therethrough.

5. The combination with a liquid supply pipe, adapted to rest upon the floor at one end, means for regulating the flow of oil therethrough including a bracket connected with the supply pipe, a casting provided with legs pivoted to the bracket and having an upwardly extending arm and means extending through said arm and engaging the bracket for raising and lowering one end of said supply pipe.

In testimony whereof I affix my signature.

LYLE M. SNOW.