Dec. 12, 1933. A. C. SLADKY ET AL 1,939,284

MECHANICAL MOVEMENT

Filed Aug. 25, 1930 2 Sheets-Sheet 1

Fig. 1.

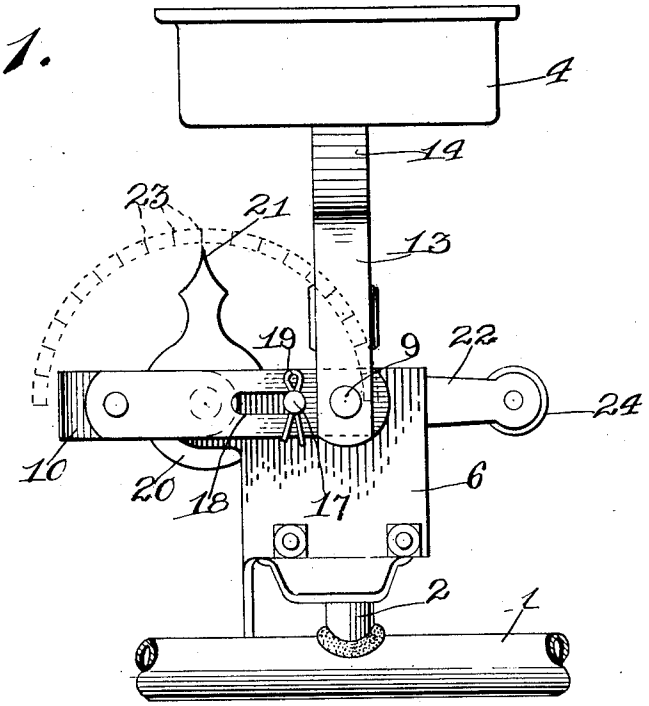
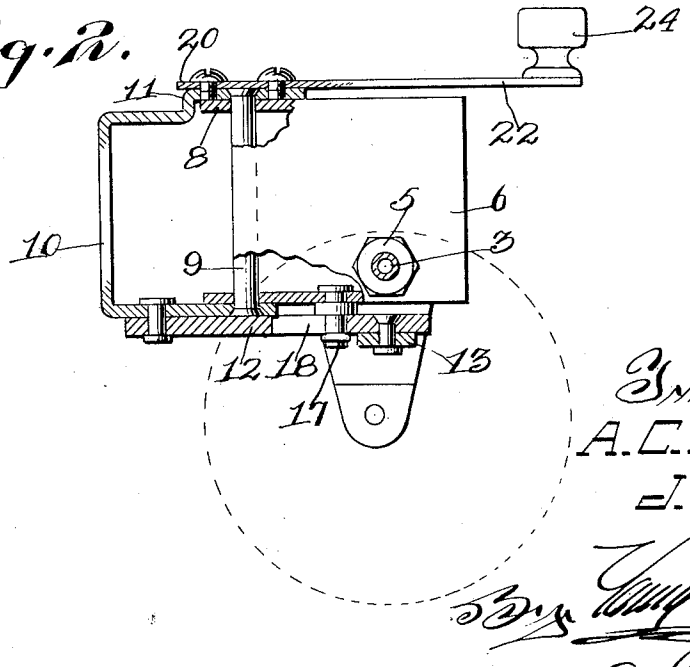


Fig. 2.



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Fig. 3.

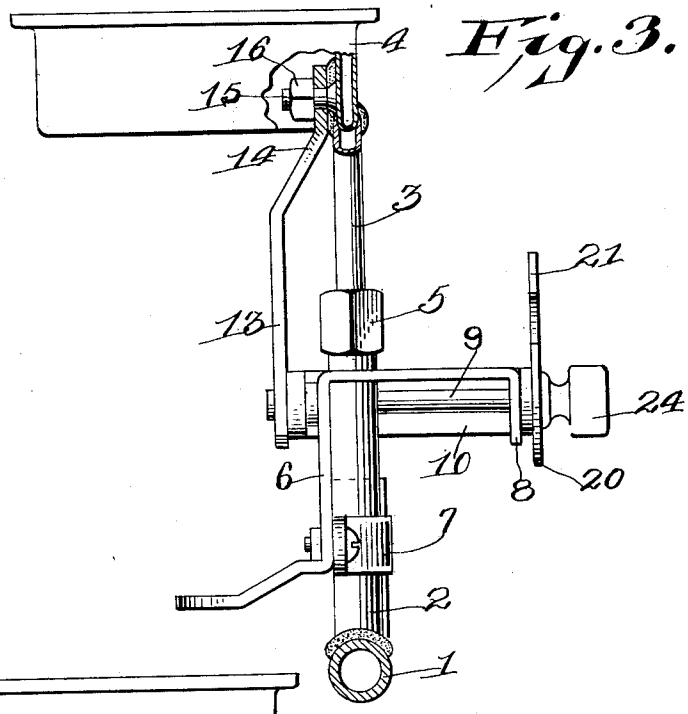
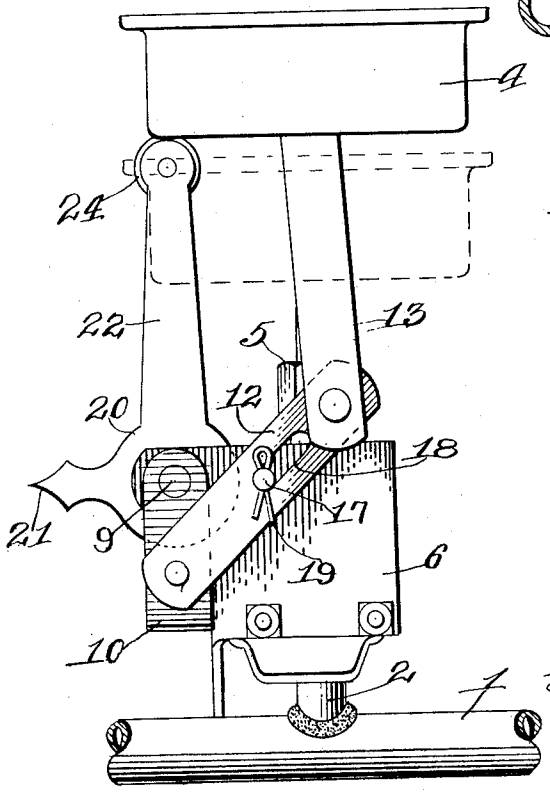


Fig. 4.



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UNITED STATES PATENT OFFICE

1,939,284

MECHANICAL MOVEMENT

Alexander C. Sladky and Joseph Sladky, Milwaukee, Wis.

Application August 25, 1930. Serial No. 477,742

1 Claim. (Cl. 74—14)

This invention relates to improvements in a mechanical movement, and more particularly to a mechanical movement which is applicable to the adjustable mounting of burners.

One of the objects of the present invention is the provision of an improved mechanical movement, particularly adapted for use in connection with adjustable burners of the liquid fuel type for providing means whereby a comparatively small amount of adjustment can be obtained in the movement of the burner with respect to a comparatively great amount of movement of the usual indicator, so that the indicator may be adjusted several degrees for imparting a minute adjustment to the burner when in its burning position.

A further object of the invention is the provision of a device of the above character wherein the mounting of an adjustable fuel burner is so arranged and connected with the usual indicator that the burner when in burning position can be finely adjusted with a comparatively coarse movement on the part of the indicator, whereby it will not be necessary to provide comparatively fine indications for the adjustment of the burner, thus increasing the usefulness of the indicator to the operator, as the indicator will be moved over a number of graduations for a very slight adjustment of the burner when in its burning position.

With the above and other objects in view, the invention consists in the novel features of construction, the combination and arrangement of parts hereinafter more fully set forth, pointed out in the claim and shown in the accompanying drawings.

Figure 1 is a side elevation illustrating the application of the improved mechanical movement with respect to a liquid fuel burner;

Figure 2 is a top plan view with parts thereof broken away and illustrated in cross section;

Figure 3 is an elevation at right angles to Figure 1 with parts broken away and illustrated in cross section; and,

Figure 4 is a view similar to Figure 1, showing the burner in raised position.

Referring more particularly to the drawings, 1 indicates a fuel supply pipe having the upstanding pipe 2 engaged therewith and slidably mounted in pipe 2 is a tubular member 3 which leads up and into the burner 4 for supplying fuel thereto. The tubular member 3 is slidably mounted within a suitable packing box 5, at the upper end of pipe 2 to prevent leakage of the fuel around the connection between pipe 2 and tubular member 3.

Supported upon pipe 2 is a bracket 6 attached to pipe 2 by means of the clamp 7 and the bracket is provided with a downwardly depending flange 8 supporting one end of a transverse shaft 9, the other end of the shaft being rotatably mounted in the body of the bracket.

A yoke 10 has its ends connected with shaft 9 as clearly illustrated in Figure 2, one arm of the yoke having its end offset as shown at 11 for embracing the depending flange 8 of the bracket 6.

Pivotally connected to one side of the yoke adjacent the intermediate portion thereof is a movable arm 12, the inner end of which is pivotally connected to a second arm 13 which extends upwardly and is provided with an offset portion 14 to position the upper end of the arm upon the interior of the burner 4 where it is connected to the burner 4 by means of the bolt 15, having nut 16 adjustable thereon for securely connecting the upper end of arm 13 to the burner.

A stop pin 17 is attached to the bracket 6, as shown in Figure 2, and projects laterally into a slot 18 in the arm 12. The arm 12 is retained in position on pin 17 through the medium of a cotter pin 19, although other suitable fastening means may be provided.

Securely attached to the offset end 11 of yoke 10 is an indicator body 20 having an indicating point 21 and a laterally disposed arm 22. The indicating point 21 is adapted to cooperate with graduations 23 for indicating the adjustment of the burner. Arm 22 is provided with a finger piece 24 adapted to be grasped for imparting adjustment to the indicator.

It will be apparent from the foregoing that as the indicator body 20 is directly connected through the medium of the connection heretofore mentioned, with burner 4, the burner 4 can be readily adjusted and the amount of adjustment indicated on the graduations 23.

In Figure 1, the burner is illustrated in what is known as burning position, the fuel therein having been lighted and the burner is in position for receiving a continuous supply of fuel.

However, should it be desired to adjust the flame, the burner is adjusted for regulating the supply of fuel thereto, to increase or decrease the height of the flame and this is carried out by actuating the arm 22 which in turn will rock yoke 10 about shaft 9, and cause the arm 12 to rock upon pin 17 as a pivot point, imparting a slight upward or downward movement to arm 13 for raising or lowering the burner. It will be noted, however, that due to the mounting of arm 12 and its connection with arm 13, there is considerable amount of movement on the part of the indicator body for the amount of movement of the burner. Therefore, the indicator has a comparatively wide range of movement with respect to the adjustment of the burner, so that there will be no necessity for a very fine adjustment of the indicator in order to obtain a fine adjustment of the burner, and this is one of the essential features of the invention due to the fact that ordinarily the in-

dicator and burner are adjusted simultaneously, and as the operator has a tendency to impart considerable movement to the indicator, it will necessarily adjust the burner likewise. Therefore, it is believed that by having a comparatively wide range of movement of the indicator with a narrow range of movement on the part of the burner, a finer adjustment can be obtained than with the well known mounting in use at the present time.

In Figure 4, the burner is illustrated in its raised position for extinguishing the flame, due to the fact that when the burner is in this position, there will be no fuel supplied to the same.

It is believed that with the use of this particular type of mechanical movement for connecting up the indicator and the burner, a much finer adjustment can be obtained with this particular connection than with any other connection known at the present time, and it is believed that the same will prove a great advantage as the graduations for the indicator can be made on a comparatively large scale, so that the burner can be finely adjusted through the movement of the indicator over these graduations. The device is comparatively simple and it is believed that it can be manufactured and applied to various types of fuel burners on the market at the present time.

While we have shown and described the preferred embodiment of our invention, it will be apparent that slight changes may be made in the construction when putting the invention into practice without departing from the spirit of the same or the scope of the appended claim.

We claim:

A mechanical movement comprising a stationary suport, a shaft rotatably mounted on the support, an operating crank secured to the shaft, an indicator pointer on the crank arm for direct movement therewith, a U-shaped yoke having its ends rigidly connected with the shaft, an actuator link movable in a vertical plane, a connecting link having its opposite ends pivotally connected respectively to the lower end of the actuator link and to the yoke, said connecting link having a slot disposed therein intermediate its ends, and a pivot pin rigidly connected with the support and received in the slot.

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