Aug. 23, 1949. G. KLEIN 2,479,626

DETACHABLY LATCHED DRAWER

Filed May 22, 1947

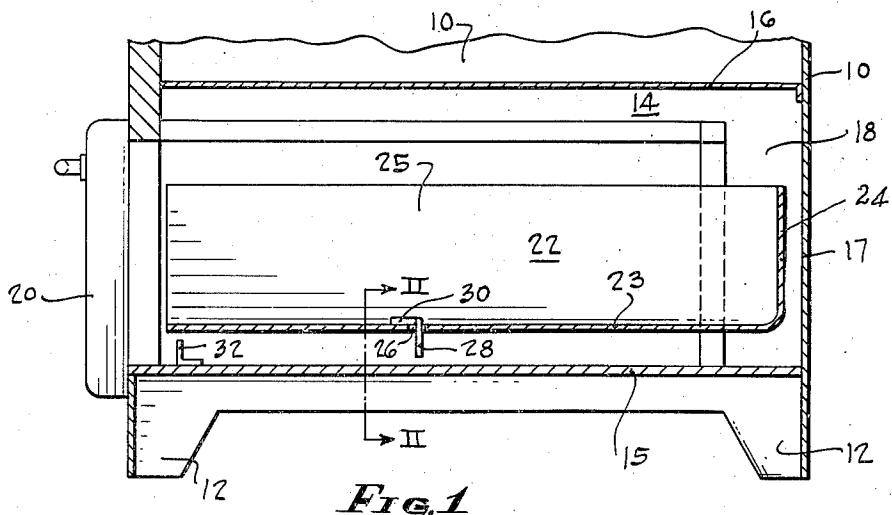


FIG. 1

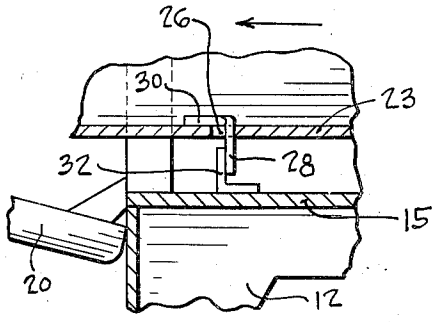


FIG. 3

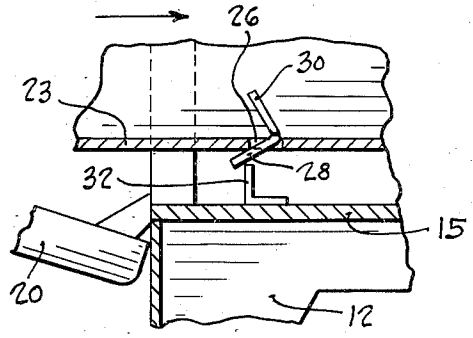


FIG. 5

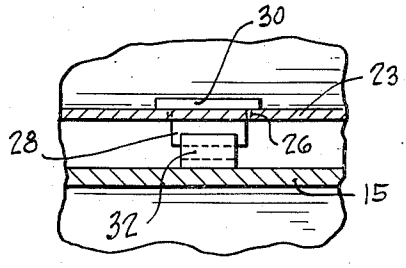


FIG. 2

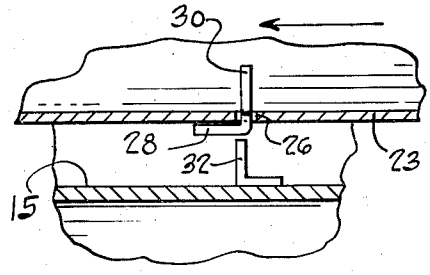


FIG. 4

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DETACHABLY LATCHED DRAWER

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3 Claims. (Cl. 45—7)

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This invention relates to a drawer and more particularly to a sliding broiler drawer of the type which forms part of, or is used in connection with, cooking stoves.

A broiler drawer must be pulled out occasionally during the cooking operation so that the food being cooked may be inspected. In order to prevent complete withdrawal of the drawer and possible spillage of the contents, a stop is usually provided for limiting the extent to which the drawer may be withdrawn from the broiler compartment.

It is desirable also that the broiler drawer be readily detachable so that it may be bodily removed to a sink where it may be thoroughly washed.

It is, therefore, an object of the invention to provide an improved latch construction whereby the broiler drawer cannot accidentally be completely withdrawn from the broiler compartment, and whereby, without any skill or effort, the latch may be rendered inoperative so that the drawer may be completely withdrawn from the broiler compartment and removed to a sink or other location.

A further object of the invention is to provide an improved latch construction which is so simple and inexpensive that it can be incorporated in the usual stove structure without necessitating any perceptible increase in the cost or in the weight of the finished stove.

These and other objects are attained by my invention as set forth in the following specification and the accompanying drawings, in which:

Fig. 1 is a fragmentary view, partly in vertical section and partly in side elevation, showing the application of my invention to a conventional broiler drawer, the same being shown in its innermost position in a broiler compartment.

Fig. 2 is a fragmentary sectional view on line 2—2 on Fig. 1.

Fig. 3 is a view similar to Fig. 1, showing the latch of my invention in its normal position in which it automatically limits the withdrawal of the drawer from the broiler compartment.

Fig. 4 is a view similar to Fig. 3, but showing the position to which the latch is moved when the drawer is to be completely withdrawn from the compartment.

Fig. 5 is similar to Fig. 3, but shows the position which the latch automatically assumes to permit re-insertion of the drawer into the broiler compartment.

In the drawings, 10 designates a cooking stove body, which is supported on legs 12, and the wall

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structure of which defines a broiler compartment 14 having a bottom wall 15, a top wall 16, a rear wall 17 and side walls 18. The front end of the broiler compartment is open and is closed by the usual hinged door 20.

Within the compartment 14 is a broiler drawer 22 formed of a bottom wall 23, a rear wall 24 and side walls 25, the top and front of the drawer being left open. The drawer is slidably mounted by means of any conventional structure so that it may be slid into or out of the broiler compartment at will. As shown in Patent No. 2,070,064, issued to Pasinski on February 9, 1937, and entitled "Cash drawer," the structure for slidably mounting the broiler drawer may include tracks on the side walls 18 of the broiler compartment and rollers or the like on the side walls 25 of the drawer. But, inasmuch as this structure is well known, and since it forms no part of the present invention, it is not shown or described in this application.

According to my invention, the bottom 23 of the drawer is provided with a slot 26 located about centrally thereof for receiving the narrow or reduced pendant portion 28 of a latch, which also includes an upper enlarged portion 30 which is too large to pass through the slot 26, as best shown in Fig. 2. The enlarged portion 30 of the latch is substantially normal to the portion 28 and is weighted so that, normally, it assumes the position of Fig. 1. In this position, the portion 28 of the latch is normal to the bottom wall of the broiler while the portion 30 is parallel to, and substantially contiguous with, the upper side of the bottom of the broiler drawer.

Attached to the front portion of the framework of the stove is a stop 32 which, when the drawer is pulled out, or to the left as viewed in Fig. 1, engages the pendant portion 28 of the latch, as shown in Fig. 3, to limit the extent to which the drawer may be withdrawn from the broiler compartment.

When it is desired to withdraw the drawer completely, the latch is moved to the position of Fig. 4 in which the large upper portion 30 is normal to the bottom of the drawer and the reduced lower portion 28 is parallel to, and substantially contiguous with, the under side of the bottom of the drawer. In this position, the latch clears the upper edge of the stop 32 and the drawer can be completely removed.

When the drawer is to be re-inserted into the compartment, the pendant reduced portion 28 of the latch strikes the stop, as shown in Fig. 5, and it automatically moves to the position of the

stop 32 to permit the drawer to be replaced in the position of Fig. 1.

It will be seen that providing the slot 26 and the punched and bent sheet metal latch does not materially alter any of the other parts of the stove, that neither the cost nor the weight is perceptibly increased and that releasing the latch involves no skill and negligible effort since the operator only need reach in and tilt the latch from the position of Fig. 1 to the position of Fig. 4.

What is claimed is:

1. A wall structure defining a compartment, a drawer slidable into and out of said compartment, a latch including upper and lower angularly related portions, there being a slot in the bottom wall of said drawer through which said lower portion is inserted, the latch being so weighted that, when unrestrained, it assumes a first position in which said upper portion extends toward the front of said drawer and is close, and substantially parallel to the bottom wall of the drawer and said lower portion extends at an angle to the bottom of the drawer, and a stop carried by said wall structure and located to be engaged by said lower portion when said drawer is moved outwardly of said compartment, while said latch is in said first position, to prevent complete withdrawal of said drawer from said compartment, said latch being movable to a second position in which said upper portion extends at an angle to the bottom of the drawer and said lower portion is close, and substantially parallel to the bottom of the drawer so as to clear said stop and permit complete withdrawal of said drawer from said compartment.

2. The structure recited in claim 1 in which, during insertion of the drawer into the compartment, said stop engages said lower portion and moves said latch to said second position.

3. The structure recited in claim 1 in which the upper portion of the latch is too large to pass through said slot.

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The following references are of record in the file of this patent:

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