June 24, 1924.

1,498,668

A. MEADOWS

STOVE DOOR LATCH

Filed July 15, 1922

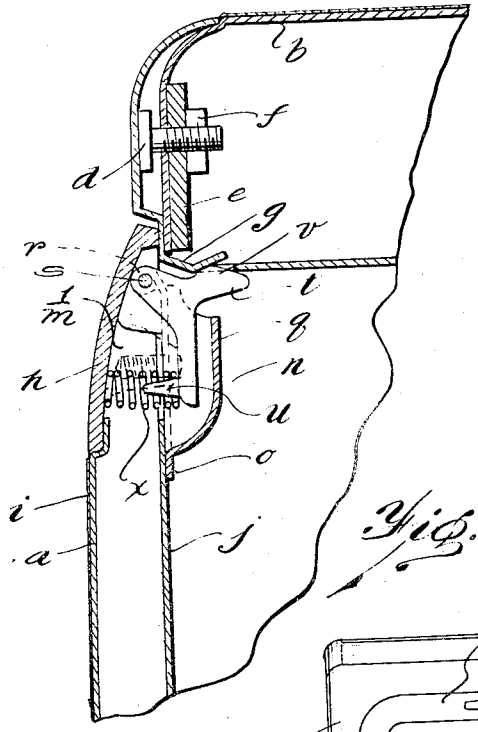


Fig. 3

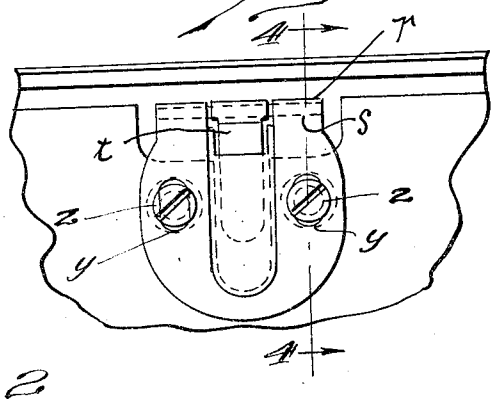
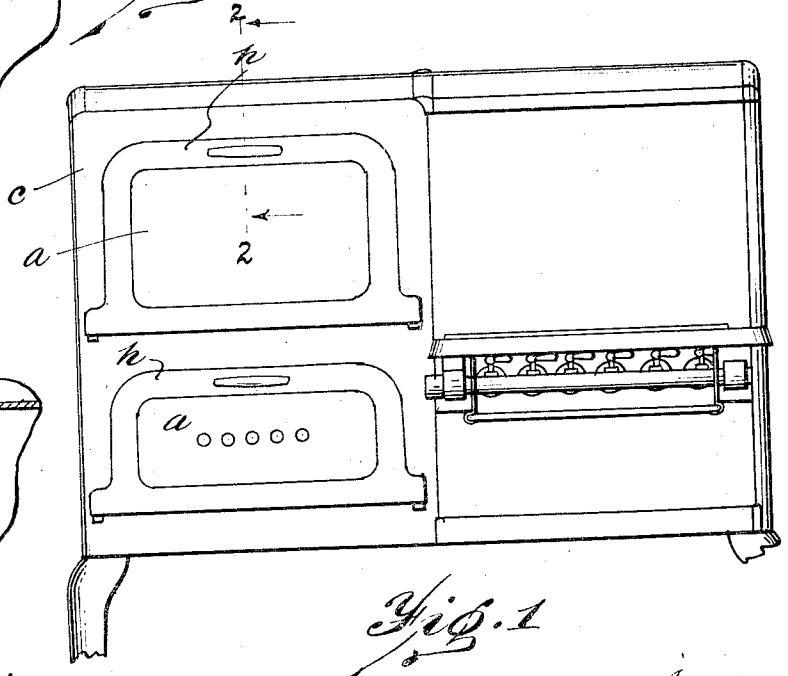


Fig. 2



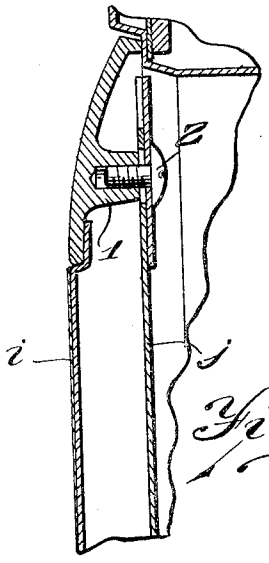


Fig. 4

Fig. 1

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UNITED STATES PATENT OFFICE.

ALBERT MEADOWS, OF DETROIT, MICHIGAN, ASSIGNOR TO DETROIT VAPOR STOVE COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

STOVE-DOOR LATCH.

Application filed July 15, 1922. Serial No. 575,347.

To all whom it may concern:

Be it known that I, ALBERT MEADOWS, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Stove-Door Latches, of which the following is a specification.

This invention relates to stove door latches. It is the object of the present invention to provide a latch which is cheap to construct, efficient and which may be easily adjusted on the stove door to meet varying conditions.

In the drawings,—

Fig. 1 is a front elevation of a gas stove.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is an elevation of the latch and fragmentary portion of the oven door, looking at same from the inside.

Fig. 4 is a section on the line 4—4 of Fig. 3.

The door is designated *a*, the top of the stove *b*. The front is made of a pressed steel frame *c* which has the bolts welded to the inside of the frame as at *d* so that these may be fastened to the turned down top portion in a way to completely conceal the presence of the bolts. A reinforcing strip *e* is secured on the inside of the turned down portion of the top and nuts *f* are run on to the bolts.

The latch strike is designated *g* and is preferably a shallow V-like continuation of the front frame *c*, although of course, it could be a separate member. The door is made up of a single border frame casting *h* in which is secured, the outside panel *i* and inside sheet panel *j*. The inside panel is recessed as at *m* to receive the latch *n*. This latch comprises simply a housing formed by a stamping *o*. This stamping is bossed to form a vertical groove *q* and has its upper edges turned over to form a knuckle eye *r*. The knuckle eyes hold the pin *s*.

The swinging latch member is a casting *t*, roughly the shape of an inverted boot or in the form of a bell-crank lever. This latch member is provided with a knuckle eye arranged to swing on the pin *s* and a beveled striking head *v* for striking the striker *g*. The lower end of the swinging latch is provided with a teat *u* adapted to center the coil spring *x* which has its outer end bearing against the inside of the door frame.

The sides of the latch housing or case are slotted as at *y* and adapted to receive the screws *z* that screw into suitably tapped bosses 1 on the inside of the channelled door or frame. By simply loosening these screws, the housing may be moved or tapped up and down to get more or less projection with respect to the striker, consequently nicely adjusting it to its most effective position. If the latch is not properly adjusted when it reaches the user it is very simple for the user to accomplish this adjustment himself.

The boss *q* acts as an effective stop to limit the outward movement of the latch when not engaging the striker. It holds the latch in the requisite position to cause the toe of the latch to properly engage the striker as the door closes.

What I claim is:

1. In a stove door latch, the combination of a stove frame provided with a striker having a shallow V conformation, a boot-like swinging latch having the toe portion of the boot acting as a striking head for engaging one face of the V-like striker to swing the latch and drop it behind the other face of the striker to engage the latch, a pivot for pivotally supporting the heel portion of the boot-like latch and connecting the same with the door, and a spring for engaging the limb end of the boot-like latch.

2. In a stove door latch, the combination of a stove frame provided with a striker, a door supported to swing on the frame, a housing secured to the door and comprising a central boss, a bell-crank form of latch pivotally supported in the housing with one end of the bell-crank supported and limited in its movement in the boss and the other end acting as a striking head, and a spring engaging the first mentioned end of the bell-crank for tending to project the striking head portion of the bell-crank.

3. In a stove door latch, the combination of a stove frame provided with a striker, a door supported by said frame, a housing secured to the door, a bell-crank type of latch member pivoted to the housing, one end of which forms a striking head, and a spring engaging against the other end and the door and tending to project the striking portion of the bell-crank into the striker.

4. In a stove door latch, the combination of a stove frame provided with a striker, a door supported to swing on the frame, a housing removably secured to the door, a latch member in the form of a bell-crank pivotally supported in the housing at the meeting point of the two arms of the bell-crank, one of the arms forming a striking head and the other arm of the bell-crank having a teat and a coil spring engaging around the teat and having the one end engaging the frame and the other end tending to project the striking head portion of the bell-crank into the striker.

5. In a stove door latch, the combination of a housing in the form of a stamping with a central boss and slots on each side of the central boss, a pivoted bell-crank latch member pivoted to the housing at the joining point of the two arms, having one arm swingingly supported in the boss of the housing and the other arm forming a striking head, a spring for bearing against the end of the arm that swings in the boss, a stove door, and screws passing through the slots in the housing and into the door, whereby the screws may be loosened to move the housing with respect to the door for adjustment.

6. In a stove door latch, the combination with a stove frame having a V-like turned in portion forming the top of the door opening, a stove door hinged to the frame, a latch housing secured to the top of the door, a spring pressed bell-crank latch member pivoted in the housing and having its upper arm arranged to strike the V-like turned in portion which acts as a striker.

In testimony whereof I affix my signature.

ALBERT MEADOWS.