May 10, 1932. H. C. HOWARD 1,858,088

STOVE LATCH

Filed Nov. 25, 1929

Fig. 1.

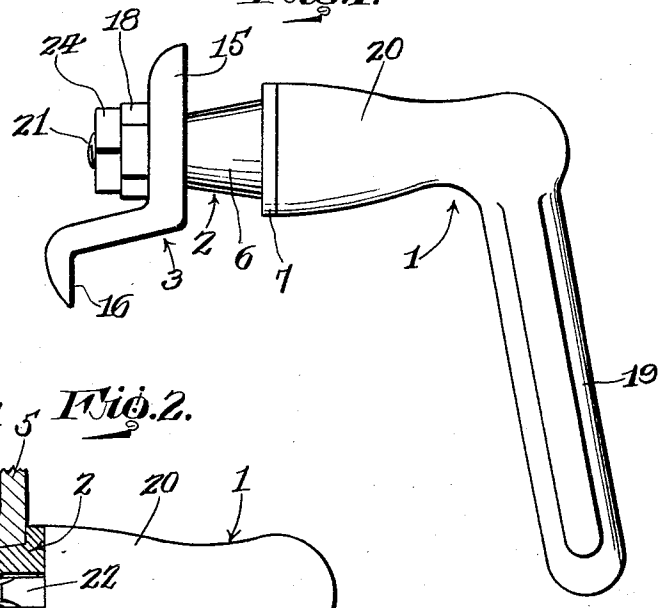
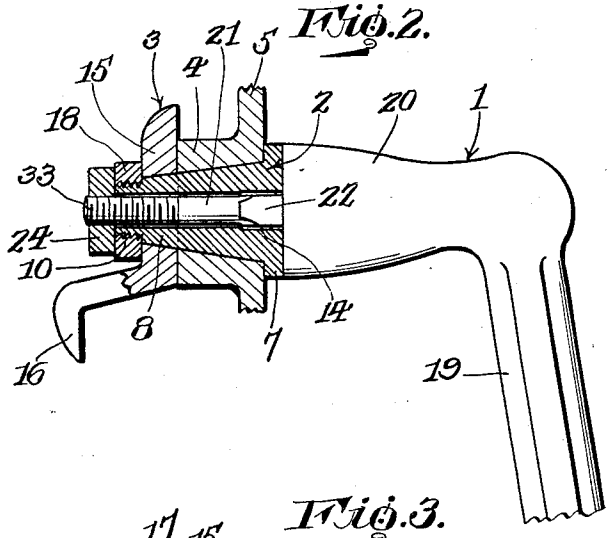


Fig. 2.



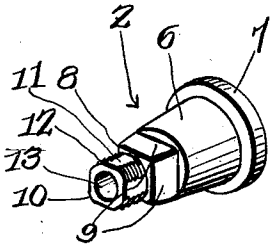
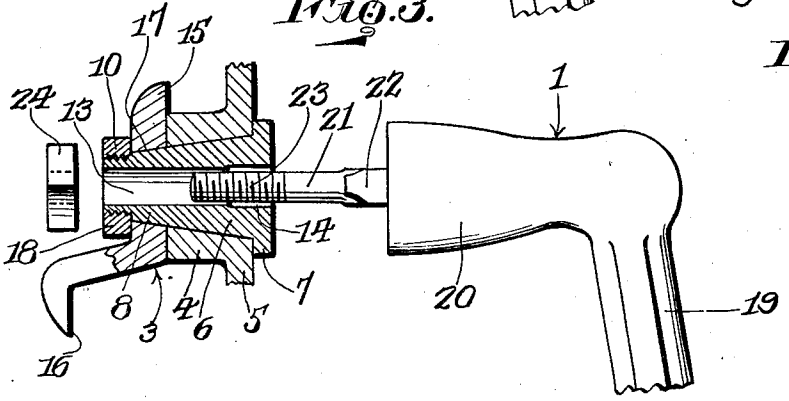


Fig. 4.

Fig. 3.



INVENTOR.
Harry C. Howard,
BY
Geo. P. Kimmel
ATTORNEY.

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UNITED STATES PATENT OFFICE

HARRY C. HOWARD, OF ROCKWOOD, TENNESSEE

STOVE LATCH

Application filed November 25, 1929. Serial No. 409,634.

This invention relates to handles for locking devices particularly adapted for use in connection with cast iron stoves, ranges, heaters and the like.

In the shipment of cast iron stoves, ranges, heaters and the like, with the handles or locking members for the doors thereof in place, considerable difficulty is experienced due to the handle becoming broken off in handling or in transit. If the handle is constructed in the usual manner and detached before shipping to be replaced by the ultimate user of the stove, the result usually is an improper adjustment of the handle owing to the user's lack of familiarity with the art of fitting and adjusting such devices.

The object of the present invention is to overcome the foregoing disadvantages by the provision of a handle or locking device in which the latching portion and anchoring portion may be properly fitted and secured in place before shipping, and the handle proper portion detached and shipped separately to be replaced by the ultimate user. Thus the likelihood of the handle becoming broken off in transit is eliminated, and, since the adjustable portions of the handle are already fitted and secured in position, the likelihood of the handle being improperly fitted also is eliminated, and a tight fit of the door controlled by the handle is assured.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more particularly described, and as illustrated in the accompanying drawings wherein is shown an embodiment of the invention, but it is to be understood that the description and drawings are to be taken as illustrative and that the invention is intended to be limited only by the scope of the claims hereunto appended.

In the accompanying drawings in which like numerals are employed to designate like parts throughout the same:—

Figure 1 is an elevation of a complete handle with the parts thereof assembled.

Figure 2 is a similar view showing in section the manner in which the handle is applied to a stove.

Figure 3 is a view similar to Figure 2, showing the handle proper portion disconnected from the anchoring and latching portions.

Figure 4 is a perspective view of the anchoring portion.

Referring to the drawings in detail, the numerals 1, 2 and 3 respectively designate the handle proper portion, anchoring portion, and latching portion of my improved handle. The anchoring portion 2 is of conical shape for insertion through an apertured boss 4 on a stove or the like, a fragment of which is indicated at 5. The cone 6 tapers in an inward direction and is formed at its outer end with an annular flange 7 for abutment against the outer face of the stove. At the inner end thereof, the cone 6 is formed with a reduced extension 8 which is square in cross section and which tapers away from the inner end of the cone. The sides 9 of the extension 8 form equal chords on the inner face of the cone. Projecting from the inner face of the extension 8 is a reduced extension 10 which is of mixtilinear polygonal contour having four right sides 11 flush with the sides 9 and having curved sides 12 connecting the sides 11, the curved sides 12 being provided with threads.

Extending through the cone 6 and extensions 8 and 10, in concentric relation thereto, is a bore 13. The bore 13 is circular in cross section throughout a major portion of its length, and adjacent the outer end of the cone 6, the bore 13 is provided with a portion which is square in cross section as indicated at 14.

The latching portion 3 consists of a body portion 15 from which extends a suitable latch engaging element 16 for engagement with a suitable latch member, not shown, carried by the stove. The thickness of the body portion 15 is equal to the length of the reduced extension 8 and is provided with an opening 17 extending therethrough, such opening conforming in contour to that of the extension 8 and having the latter extending therethrough. The anchoring portion 2 and latching portion 3 are maintained in position with respect to the boss 4 by

means of a nut 18 which engages the threads in the sides 12 of the reduced extension 10.

The handle proper portion 1 consists of a gripping member 19 having an offset end 20. Projecting from the offset end 20 is a shank 21, a portion 22 of which adjacent the end 20 is square in cross section for extension into the square portion 14 of the bore 13. When the portion 22 of the shank 21 is received within the portion 14 of the bore 13, the shank 21 is extended through the bore and projects from the inner end thereof. An outer end portion of the shank 21 is externally threaded as indicated at 23 for engagement by a nut 24, the inner face of which bears against the nut 18 for maintaining the handle portion 1 in position with respect to the anchoring portion 2 and latching portion 3.

Before shipping a stove equipped with my improved handle, the anchoring portion and latching portion 3 are assembled with respect to the stove and locked in position by means of the nut 18 after the latching portion 3 has been properly adjusted with respect to the coacting latching element carried by the stove. The shank 21 of the handle proper portion 1 is inserted through the bore 13 and the handle 19 is manipulated in order to lock the latch engaging element 16 in engagement with the corresponding element carried by the stove. The handle proper portion 1 is then withdrawn with the latching portion 3 in latched position and the handle proper portion 1 is shipped separately. When the stove and handle proper portion 1 have reached their destination, the shank 21 is again inserted through the bore 13 and the gripping member 19 manipulated to unlatch the latching portion 3. The door with which the anchoring portion 2 and latching portion 3 are connected then may be swung to open position and the nut 24 threaded on the shank 21 to secure the handle proper portion 1 in place.

It is thought that the many advantages of a stove handle in accordance with this invention will be readily apparent, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the size, shape and arrangement of parts may be resorted to, so long as such changes fall within the scope of the invention as defined in the appended claims.

What I claim is:

1. A stove handle comprising, an anchoring portion adapted to be inserted through a door of a stove, a latching portion operable by the anchoring portion, means for securing said portions in position with respect to the stove, and a detachable handle proper portion for actuating the anchoring and latching portions to latch and unlatch the door, said handle proper portion being removable when the door is latched, said anchoring portion being rotatable by manipulation of the handle proper portion, said latching and anchoring portions being interengaged to provide for the unitary rotation thereof.

2. A stove handle comprising, an anchoring portion adapted to be inserted through a door of a stove, a latching portion operable by the anchoring portion upon rotation of the latter to latch and unlatch the door, means for securing said portions in position with respect to the stove, a handle proper portion for rotating the anchoring portion, and means for securing the handle proper portion in position with respect to the anchoring portion, said securing means for the handle proper portion being releasable when the door is unlatched, said handle proper portion being removable when the securing means therefor is released and the door is latched.

3. A stove handle comprising, an anchoring portion adapted to be inserted through a door of a stove, a latching portion having the anchoring portion extending therethrough, said latching portion being operable by the anchoring portion upon the rotation of the latter to latch and unlatch the door, a nut threaded on the anchoring portion for securing the latching and anchoring portions in position with respect to the stove, a handle proper portion having a shank slidably extending through said anchoring portion and being non-rotatable with respect thereto to provide for the rotation of the anchoring portion upon the operation of the handle proper portion, and a nut threaded on said shank for securing the handle proper portion in position with respect to the anchoring portion, said nut threaded on the shank being removable when the door is unlatched, said handle proper portion being removable when the nut threaded on the shank is removed and the door is latched.

In testimony whereof, I affix my signature hereto.

HARRY C. HOWARD.