

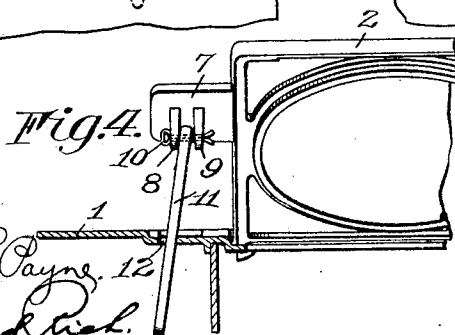
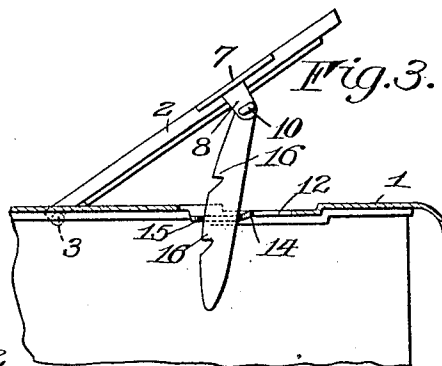
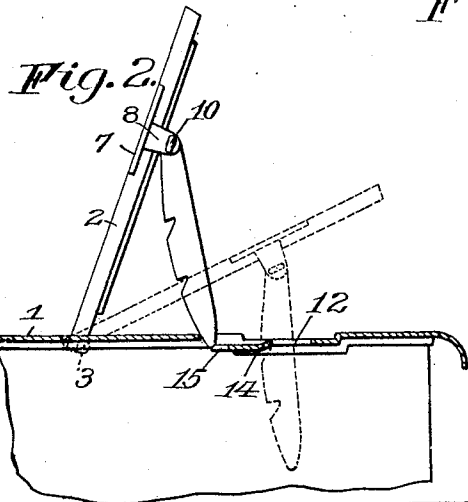
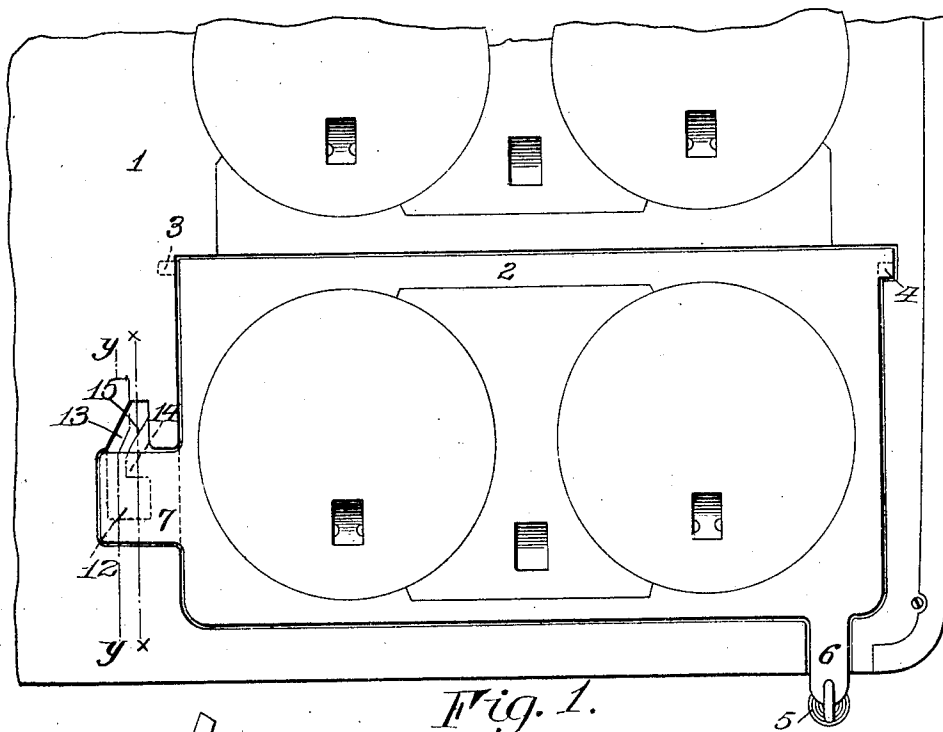
No. 878,252.

PATENTED FEB. 4, 1908.

W. A. STOWE.

ADJUSTABLE TOP FOR COOKING STOVES.

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ADJUSTABLE TOP FOR COOKING-STOVES.

No. 878,252.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed October 31, 1904. Serial No. 230,726.

To all whom it may concern:

Be it known that I, WILLIAM A. STOWE, of the city of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Tops for Cooking-Stoves; and I do hereby declare the following to be a clear, full, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention relates to stoves of a type in which a portion of the top or cooking surface thereof, embracing one or more of the lids, is embodied in a frame capable of being raised to expose the coal-bed and beneath which a broiler, or other utensil which it is desired to place in close proximity to the fire, is adapted to be inserted; and it has for its object to provide an improved form of latch as a means for supporting such movable portion at different elevations as occasion may require, and it has for its further object to provide a latch of simple construction that may be automatically released from engagement by manipulation of the member which it supports.

To these and other ends the invention consists of certain improvements in construction and operation that will be hereinafter more fully described and the novel features pointed out in the claims at the end of this specification.

In the accompanying drawings: Figure 1 is a fragmentary top plan view of a stove having a movable portion embodying my invention. Fig. 2 is a vertical section on the line $x-x$ of Fig. 1 showing in dotted lines the latch in supporting position and in full lines, at the point of release. Fig. 3 is a similar view on the line $y-y$ of Fig. 1 showing the path of the latch when assuming its normal position, and Fig. 4 is a front view partly in section, of the device while in the position shown in Fig. 3.

Similar reference numerals in the several figures indicate similar parts.

Referring to the drawings, 1 indicates the top plate of a stove or range in which rests a frame 2 hinged at the rear by means of pivotal projections 3 and 4 journaled in suitable recesses in the top plate and which serve as a bearing for the frame when raised by means of a knob or handle 5 upon a forwardly ex-

tending projection 6, thereof. The frame lies flush with the top of the stove in order that the regularity of the cooking surface may not be disturbed, and may embrace one or more of the lids, as desired.

7 is a lateral extension on the frame having upon its underside lugs 8 and 9 carrying a pin 10 from which is suspended a pendulous latch member 11 operating through an aperture 12 in the stove top. Leading from this aperture at an angle to the plane of movement of the latch is a slot 13 leaving the projection 14 with a cam surface 15 at its rear, and a forward edge adapted to cooperate with a plurality of teeth or notches 16 upon the proximate side of the latch member. As the normal tendency of the latch is to assume a substantially vertical position, it will be seen that when the frame or cover is raised for the purposes heretofore mentioned, it will ride against the forward face of the projection 14 during the upward movement by reason of the fact that its point of suspension is constantly moving rearwardly and each tooth or notch will engage successively therewith until the proper elevation is acquired.

When it is desired to return the cover to its normal position, its upward movement is continued until the extremity of the latch clears the projection 14 and drops into the slot 13 at the rear thereof. The cover, being unsupported, then lowers and the latch rides forward against the cam surface 15 as the lugs from which it is supported approach the aperture 12 into which latter it ultimately drops in its original position opposite to the latch-engaging portion of the projection 14. As this movement necessitates considerable lateral deflection of the latch, the lugs 8 and 9 are spaced a sufficient distance apart to permit ample play longitudinally of the pin 10, as shown in Fig. 4.

A device constructed in this manner is particularly adapted for the purpose as it is constructed entirely of cast parts which cheapens and simplifies its manufacture and furthermore, no spring or other members enter into its structure which would be affected by the heat to which it must obviously be subjected.

I claim as my invention—

1. The combination with a stove and a cover arranged in pivotal relation therewith, of a latch pivoted on one of the parts, a pro-

jection arranged on the other part at a point between the latch and the pivot of the cover with which projection the said latch is adapted to cooperate to hold the cover in open position when the latter is raised, means for disengaging the latch from the projection by a further upward movement of the cover and means for automatically returning the latch to an operative position relatively to the projection when the cover is lowered.

2. The combination with a stove top, a cover supporting projection thereon, and a cover pivotally mounted on the stove top, of a latch freely suspended on the cover at a point arranged to move over the said projection and toward the pivot of the cover during opening movement of the latter to carry the latch into cooperative relation with said projection and retain the cover in open position, and means for swinging the latch clear of the said projection during lowering movement of the cover.

3. The combination with a stove top, and a cover pivotally mounted thereon, of a latch suspended to swing freely in opposite directions from one of the parts, a projection arranged on the other part at a point between the pivot of the cover and the point of suspension of the latch and disengaged from the latter when the cover is lowered, the latch being carried into engagement with the projection on a relative swinging movement of the latch in one direction during opening movement of the cover about its pivot, and means for swinging said latch in another direction to clear said projection and permit lowering movement of the cover.

4. The combination with the stove top, and a cover in pivotal relation therewith, of a toothed latch pivotally suspended on one of the parts, a projection normally disengaged from the latch and arranged on the other part at a point between the latch and

the center of relative movement of the parts, the latch being arranged to engage the projection by a relative movement of the parts about their pivot, a cam being formed on one of the parts adjacent to said projection for guiding the latch into a position to engage the projection.

5. The combination with the stove, and a cover mounted in pivotal relation therewith, of a projection on one of the parts having a latch-engaging portion at its forward edge, and a cam on its rear and side edges, of a toothed latch on the other part pivoted to swing in the plane of relative movement of the parts and cooperate with the forward edge of said projection, and arranged to override the projection by a continued movement of the parts, return movement of the parts causing the latch to traverse the cam at the rear and side of the projection and return to normal position opposite to the forward edge of said projection.

6. The combination with a stove top, and a cover mounted in pivotal relation therewith, of a latch pivoted on the cover and arranged to swing in the plane of movement thereof, and a projection formed on the stove top at a point between the latch and the pivot of the cover when the latter is in normal position, said projection having an aperture at its forward side to contain the latch while the latter is in cooperative relation with the projection, and a slot inclined relatively to the plane of movement of the cover providing a cam at the rear and one side of the projection for guiding the latch laterally of the projection and returning it into operative position in front of the projection.

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