This invention relates to gas stoves and ranges and more particularly to burner box linings for such stoves and ranges.

The general object of the invention is to provide a stove or range in which the burner box lining is so associated with the top plate that the lining and plate may be simultaneously removed for cleaning or washing purposes, or the lining conveniently disconnected from the top plate and dropped down into or upon the service drawer therebelow, and as conveniently removed therefrom.

A further object of the invention is to provide a burner box lining of economical construction, which may be integrally formed with or securely attached to the top plate of a stove, thus obviating all danger of the lining becoming displaced or damaged during shipment, all as hereinafter more fully described in the following description of an exemplified form of the invention, and as more concisely pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a plan view of a gas stove or range in which the present invention is embodied. Figure 2 is a fragmentary longitudinal vertical section through the range. Figure 3 is a transverse vertical sectional view of the range. Figure 4 is a perspective view of burner box lining detached from the top plate of the range, and Figure 5 is a detail showing the manner in which the burner box lining is connected to the top plate.

Referring more particularly to the drawings, 1 indicates a gas range comprising a burner portion 2 and an oven portion 3. A preferably cast front frame 4 is provided with a drawer opening and a tray opening 6, through which a drawer 7 and tray 8 respectively may be drawn. An ornamental cover plate 9 covers an opening 10 at the top of the frame and conceals the gas manifold 11 and associated burner parts from view. Tray 8 is slidably mounted upon a pair of rods 8', while drawer 7 is similarly mounted upon a pair of rods 12, the latter in turn being supported at their front ends by brackets 13 secured to front frame 4, and at their rear ends are connected to the rear wall 14 of the range. A door 15 normally closes the opening 5. The top of the stove is covered, by a top plate 16, the body of which is recessed or depressed and formed with a large rectangular fire pot or burner opening 17. This opening is bordered by a narrow flange or depressed portion 18 for a purpose hereinafter described.

The burner box lining member 19 is of rectangular cast or sheet metal construction and may be integrally formed with the top plate 16 but is preferably separate therefrom, as illustrated in the drawings. This member 19 comprises side walls 20 and end walls 21, respectively provided with top flanges 22 and 23 and bottom flanges 24 and 25. The top face of flanges 22—23 abuts against the bottom face of the narrow border or flange 18 circumscribing the opening 17 formed in the top plate of the range, readily removable fasteners, such as headed screws 26 being employed to detachably secure these parts together. But two fasteners are employed, one at each end of the burner box lining, which when removed permit of the lining being lowered into or upon the service drawer 7 for removal through opening 5.

The stove is provided with two burner units (but one being shown) each having two burners 27 and 28 of conventional type one front and one rear, each front and rear burner of a unit being mounted upon a common gas and air mixer 29, the front end of which is detachably connected to the nipples 30 of mixing valves 31. The rear burners rest upon and are supported by a substantially U-shaped strap or bracket 32, which depends within the burner box lining and extends from side to side thereof. The angularly bent ends 33 of the strap or bracket 32 extend through cut-away portions or notches 34 formed in the top flanges 22 of the member 19 for this purpose, and are secured to the flange 18 of the top plate by headed bolts or screws 35. It will of course be necessary to disconnect the burners from the mixing valves and lift the former from the strap member 32, before the member 19 can be lowered to service drawer 7, but the strap 32 need not be detached. If desired the top plate 16 and member 19 may be removed as a unit.

Manifold 11 is clamped between and supported by a stepped bracket member 36, which forms the subject matter of a co-pending application Serial No. 585,036 filed January 8, 1932, now Patent No. 1,922,586, patented August 15, 1933, and therefore need not be specifically described herein. Gas is fed to the manifold from any suitable source of supply, not shown, and thence through gas control valves 31 to the respective gas and air mixing chambers 29.

It will be noted that the front or forward bottom corners of the burner box lining are cut away as at 37. The purpose of this construction is to provide clearance between the enlarged forward end of the air and gas mixer 29 and...
the lining member 19, when the manifold has been adjusted to its topmost position in the brackets 36.

What we claim is:

1. In a stove a burner top portion, a service drawer portion below said burner top portion, a top plate for said stove embodying a burner opening for said burner top portion, a readily removable open-ended and flanged burner box lining member seated with its flanges against the bottom face of said top plate in axial alignment with said opening, and readily accessible screw means for drawing said lining member into seat engagement with the bottom face of said top plate and for readily releasing said burner box lining member for permitting the same to be lowered to the service drawer for cleaning purposes, said top plate and said lining also being removable as a unit from said stove, and burners mounted below said lining member and extended therethrough through the open bottom thereof, said burners being readily removable therethrough.

2. In a stove a burner top portion, a service drawer portion below said burner top portion, a recessed top plate for said stove embodying a burner opening for said burner top portion, the recessed portion of said top plate encircling said opening, a flanged open ended burner box lining member detachably seated with its flanges against the bottom of said recessed portion of said top plate in axial alignment with said opening, the said flanges and the side walls of said lining member being notched, a burner readily removable through said lining member, and a substantially U-shaped strap member within said lining member for supporting said burner, said strap member extending at its ends through said notches and seating upon said recessed portion.

3. In a stove, a burner box, a series of burners having downwardly offset and forwardly extending gas and air mixing chambers arranged within said burner box, a top plate including a single opening encircled by a narrow, depressed portion in said plate, a grate seated upon said depressed portion, a readily removable, open ended burner box lining member having flanged portions at its top end engaging the bottom face of the depressed portion and side walls arranged above said gas and air mixing chambers in alignment with the burner portions of said burners and readily accessible fastening means in said depressed portion, said fastening means connecting said lining member with said top plate and being covered by said grate.

4. In a stove according to claim 3, a recessed top plate having a rectangular opening, and a lining member having oppositely arranged converging walls.

5. In a stove a burner box, a series of burners having forwardly extending gas and air mixing chambers arranged within said burner box, a top plate including a depressed portion encircling an opening therein, and a readily removable open ended rectangular burner box lining member secured to the bottom face of the depressed portion of said top plate, said lining member having its front wall and forward portions of the side walls cut away to permit vertical adjustment of the mixing chambers of said burners.

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