A. B. BELL.

PILOT BURNER FOR GAS RANGES.

APPLICATION FILED APR. 2, 1915.

1,161,438. Patented Nov. 23, 1915.

Fig. 1,

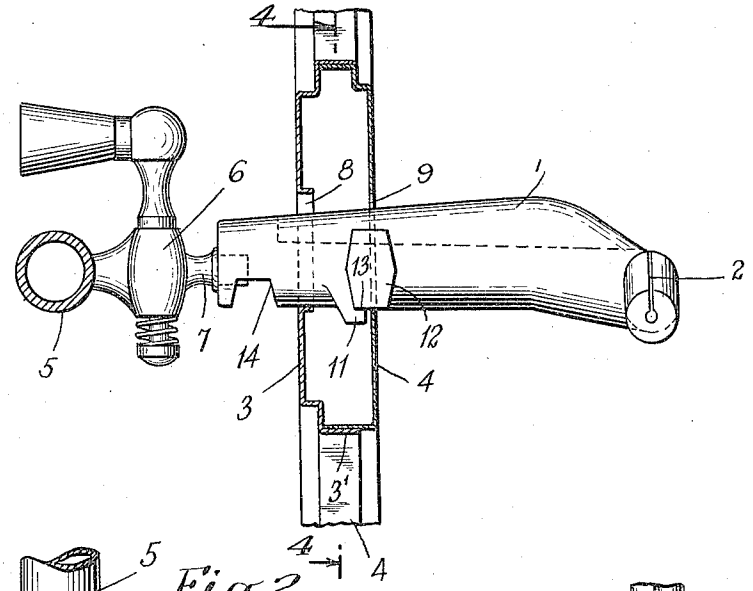


Fig. 2,

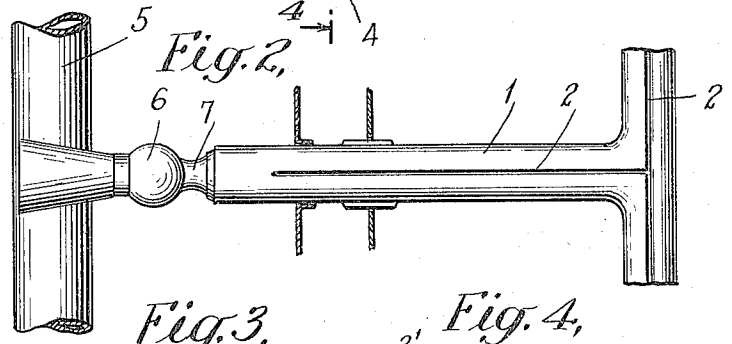


Fig. 3,

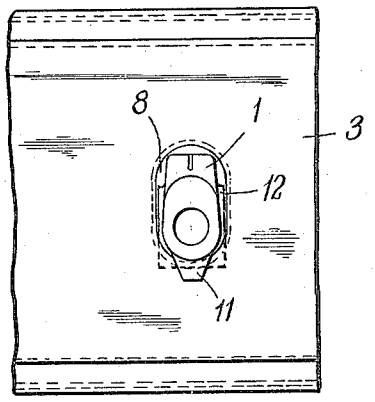
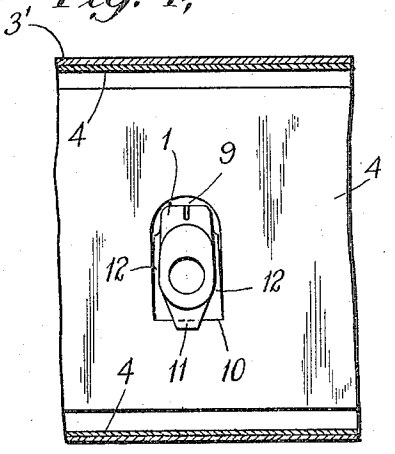


Fig. 4,



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PILOT-BURNER FOR GAS-RANGES.

1,161,438. Specification of Letters Patent. Patented Nov. 23, 1915.

Application filed April 2, 1915. Serial No. 18,673.

To all whom it may concern:

Be it known that I, ALFRED B. BELL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pilot-Burners for Gas-Ranges, of which the following is a specification.

My invention relates to the construction of detachable pilot burners for gas ranges and to the construction of the supports for the same embodied in the frame of a range, coacting with a burner of my improved construction.

My object is to provide simple and inexpensive pilot burners of a character adapted to be detachably mounted in a positive and rigid manner in an opening or openings in the front of the range, the latter being adapted to coact with the burner to seat the same in the manner desired.

My invention consists in a pilot burner formed in the usual manner as a cored T-shaped casting having openings along the upright and cross-bar of the T, the casting having a pair of alined lugs on the two sides thereof and a lug preferably extending downwardly slightly forward of the side lugs. The side lugs have horizontal bottom surfaces which rest upon a horizontal shelf comprising a lower edge of an opening cut through the front or side wall of the range, or an adjacent vertical wall of the range, the forward end of the burner being slipped over the nozzle extending horizontally from the manifold. The forward lug referred to contacts the forward or outer surface of the vertical wall of the range to one side of the opening therein through which the burner extends, whereby the burner is positioned longitudinally and is prevented from slipping off the manifold nozzle. Preferably I provide the range with a pair of parallel vertical front walls or members through alined openings in which the pilot burner extends, the plane lower surfaces of the side lugs of the burner resting on the horizontal edge of the opening in the inner of the two frame members, and the downwardly extending lug contacting the outer side of the same member, while the burner may be additionally supported by having its lower surface rest on the edge of the opening in the outer frame member.

In order that a clearer understanding of my invention may be had, attention is hereby directed to the accompanying drawings forming part of this application and illustrating certain embodiments of my invention. In the drawings, Figure 1 represents a side elevation of my improved pilot burner, mounted in position in the range front, the latter and also the manifold being shown in section, Fig. 2 is a plan view of the same, the supporting members of the range being shown in section, Fig. 3 is a front elevation of the burner, together with a portion of the oven front, and Fig. 4 is a vertical section on line 4—4 of Fig. 1, the burner being shown in full.

Referring to the drawings, the burner 1 consists as stated of a simple cored T-shaped casting with openings 2—2 along the upright and cross-bar of the T. The oven front through which the pilot burner extends when mounted in position may comprise the oven front 3 and the heat deflector 4, as shown in the drawings, this construction being described in application of Robert B. Caverly and myself, Serial No. 874,961, filed December 1, 1914, gas range. As there described, the deflector plate 4 is formed of pressed metal in the shape of a pan, the flanges of which are secured to the rearwardly extending flanges 3′ of the oven front. The manifold 5 is supported in any suitable manner in front of the range, and is provided with the usual cock 6 and the horizontal inwardly directed nozzle 7.

The oven front 3 and deflector 4 are provided with alined openings 8 and 9 therethrough, the opening 9 in deflector 4 having a horizontal lower edge 10. The pilot burner is provided with a downwardly projecting lug 11 and a pair of side lugs 12, 12 having plane horizontal lower surfaces 13. The burner is of curved section, as is usual, and lugs 12 provide a horizontal supporting surface of sufficient width to give a stable support. When the burner is put in place, it is extended through openings 8 and 9 with its forward end slidably mounted upon the nozzle 7. When so mounted, the bottom surfaces 13 of side lugs 12 are seated upon the horizontal lower edge of opening 9, with lug 11 between oven front 3 and deflector 4, in position to contact the forward surface of plate 4 below opening 9. The

burner also preferably rests on the lower edge of opening 8 as shown. Air is admitted into the burner through opening 14.

It is obvious that the burner described is mounted positively and rigidly, in such a manner that the same cannot get out of position or rock, while at the same time the burner is mounted and removed by a simple manipulation. This is an improvement over previous types of pilot burner with which I am familiar, most of which are bolted in place with the disadvantage that the bolts rust so that the same cannot be removed, while removable pilot burners with which I am familiar all have cumbersome lugs or extensions bolted to them.

Having now particularly described my invention, what I claim and desire to protect by Letters Patent is as follows:

1. In a gas range the combination of a frame having parallel vertical walls spaced apart, said walls having alined openings, a gas pipe positioned in front of the same having a nozzle directed horizontally toward the opening in the front wall, and a pilot burner having a forward end adapted to slip over said nozzle, said burner extending through the said openings and being seated on the lower edges thereof, and having a lug on its lower surface detachably seated between said parallel vertical walls, said burner being of curved section, with a plane lower surface formed at a suitable point to rest on the lower edge of one of said openings, substantially as set forth.

2. In a gas range, the combination of a frame having a vertical wall with an opening therethrough, having a horizontal lower edge, a gas pipe in front of the same, having a nozzle directed toward said opening, and a pilot burner comprising a cored casting of curved section, having a front end adapted to slip over said nozzle, and having lugs on the sides thereof having horizontal bottom surfaces adapted to rest on the horizontal surface comprising the lower edge of said opening, said burner having means thereon adapted to coact with said frame to position said burner longitudinally, substantially as set forth.

3. In a gas range, the combination of a frame having a vertical wall with an opening therethrough, having a horizontal lower edge, a gas pipe in front of the same, having a nozzle directed toward said opening, and a pilot burner comprising a cored casting of curved section, having a front end adapted to slip over said nozzle, and having lugs on the sides thereof having horizontal bottom surfaces adapted to rest on the horizontal surface comprising the lower edge of said opening, and having a downwardly extending lug forward of said side lugs, adapted to contact the forward side of said wall below said opening, substantially as set forth.

4. In a gas range, the combination of a frame having parallel vertical walls spaced apart, having alined openings therethrough, one of which has a horizontal lower edge, and a pilot burner comprising a cored casting of curved section, detachably seated in said openings, said casting having a lug adapted to contact the front of one of said walls, adjacent to the opening therein, and side lugs having horizontal bottom surfaces adapted to rest on the said horizontal lower edge of one of said openings, substantially as set forth.

5. In a gas range, a pilot burner comprising a cored casting of curved section, having side lugs thereon having horizontal lower surfaces adapted to form a support for the burner, and a lug forward of said side lugs, adapted to contact a fixed vertical surface to position said burner longitudinally, substantially as set forth.

This specification signed and witnessed this 26th day of March, 1915.

ALFRED B. BELL.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."