F. R. HENRY.

WATER TANK ATTACHMENT FOR RANGES OR STOVES.

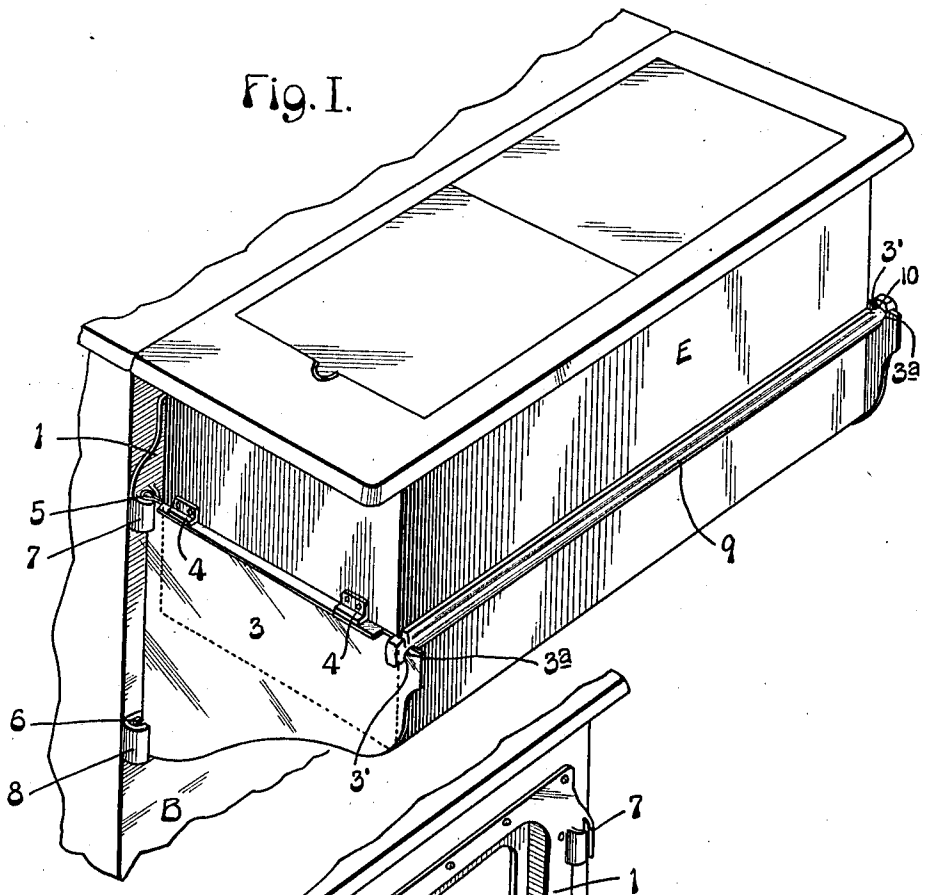
APPLICATION FILED JAN. 15, 1912.

1,031,263.

Patented July 2, 1912.

2 SHEETS—SHEET 1.

Fig. I.



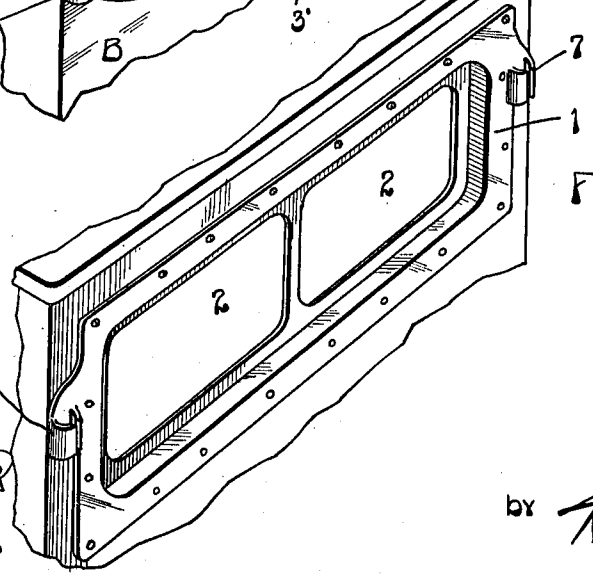


Fig. II.

Attest

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Fig. III.

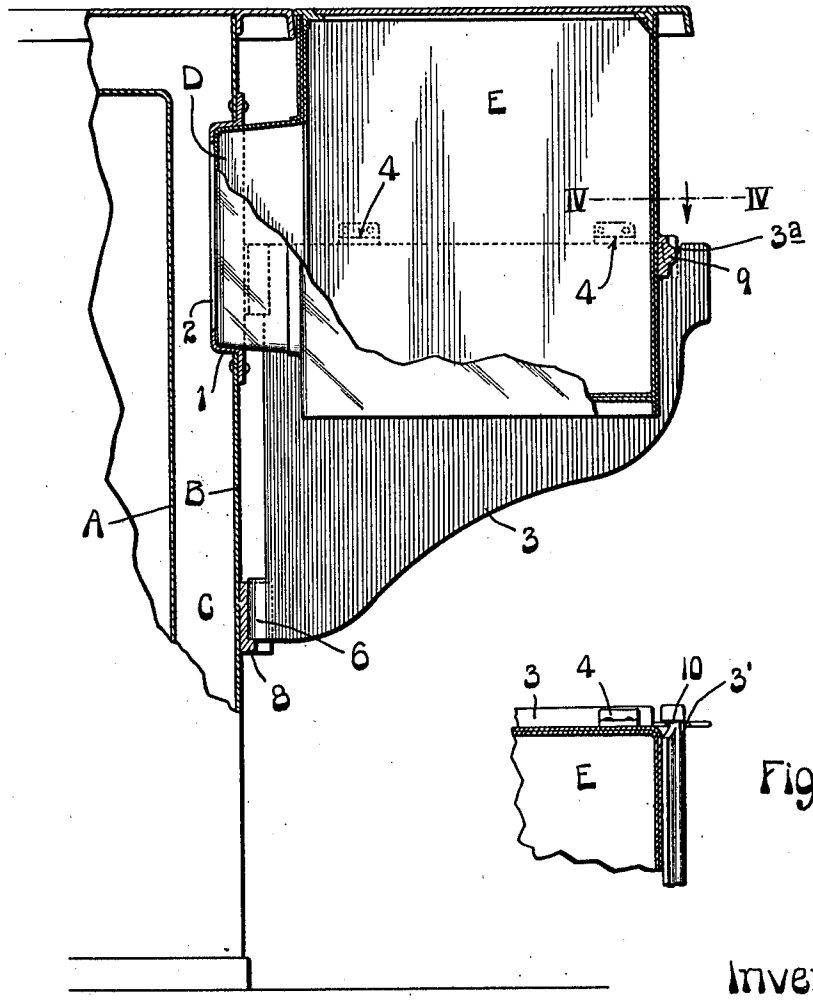

Fig. IV

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UNITED STATES PATENT OFFICE.

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WATER-TANK ATTACHMENT FOR RANGES OR STOVES.

1,031,263. Specification of Letters Patent. Patented July 2, 1912.

Application filed January 15, 1912. Serial No. 671,182.

To all whom it may concern:

Be it known that I, FRANK R. HENRY, a citizen of the United States of America, and a resident of the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Water-Tank Attachments for Ranges or Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to a water tank attachment for ranges or cooking stoves of a construction suitable for use in such position as to receive heat from the oven flues.

Attempts have heretofore been made to locate water heating tanks against the walls of cooking stoves and ranges so that the water therein would be heated by the hot air passing through the oven flues, but it has been found difficult to obtain sufficient heat to supply the requirements of a water tank so located. In such attempts, recessed seat plates for the water tanks have been applied to the outer filler walls of the ranges or stoves, in order that the heated air passing through the flue might be transmitted to the best advantage to the water tanks; but where these seat plates have been imperforate, there has been insufficient heat through the tanks; and where they have been perforate, there has been such leakage of heated air from the oven flues through the seat plates and between them and the tanks as to materially detract from the efficiency of the draft through the oven flue, without increasing the heating efficiency of the water tank.

The object of my invention is to provide in connection with the supports furnished for a water tank means whereby the tank may be firmly held in contact with the perforated seat plate that extends into the oven flue of a range or cooking stove, thus making it possible for the heated air passing through said flue to circulate in direct contact with the water tank for the greatest water heating efficiency, and at the same time preventing loss of heated air from the flue through the joint between the tank and the seat plate.

Figure I is a perspective view of my water tank attachment. Fig. II is a perspective view of the perforated seat plate attached to the oven flue wall of a range. Fig. III is in part an elevation and in part a vertical transverse section of the side portion of the range containing an oven flue and my attachment. Fig. IV is a horizontal section taken on line IV—IV, Fig. III.

In the drawings: A and B designate, respectively, the inner and outer walls of a cooking range between which is the oven flue C. The outer flue wall B has mounted therein a recessed seat plate 1, that is perforated at 2, in order that the heated air passing through the oven flue may gain access through said plate to the extension D of a water tank B that fits snugly in the recess of the seat plate.

The water tank E is supported by a pair of shelf brackets 3 that receive lugs 4 secured to the end walls of the tank and adapted to rest upon the top edges of the brackets. The brackets 3 are preferably detachably secured to the range by upper and lower vertical socket pieces 5 and 6 at the rear edges of the brackets that enter into upper and lower sockets 7 and 8. The sockets 7 may be, and preferably are, formed integral with the seat plate 1, while the sockets 8 are secured to the outer flue wall B beneath said seat plate.

In order that the water tank extension D may be positively and firmly held in the seat plate 1, I provide a presser bar 9 which extends across the front of the water tank and is wedged and seated in notches 3′ in the outer ends of the tank supporting brackets 3. The front walls 3ª of said notches are inclined downwardly and rearwardly and, consequently, when said presser bar is placed in the notches and depressed therein, it is caused to ride rearwardly toward the seat plate 1 at the back of the water tank, thereby forcing the water tank extension against the seat plate 1 and holding it securely thereagainst.

The presser bar 9 has a function aside from that involving its use as a presser bar in that it serves to connect the shelf brackets 3 to prevent their outward movement away from the ends of the water tank, a movement that would cause the brackets to fail to perform their office of supporting the water tank. In order that the presser bar may serve the function last referred to, said bar is provided with notches 10 adjacent to each of its ends that interlock with the bar receiving notches in the shelf brackets, as seen most clearly in Fig. IV.

I claim:—

1. The combination with a range or cooking stove having an outer oven flue wall, of a water tank seat plate secured to said wall, a water tank resting against said seat plate, a support for said water tank, and a presser bar firmly wedged between the front of the water tank and the outer ends of the support whereby said water tank is pressed against said seat plate.

2. The combination with a range or cooking stove having an outer oven flue wall, of a perforated water tank seat plate secured to said wall, a water tank resting against said seat plate, a support for said water tank, and a presser bar firmly wedged between the front of the water tank and the outer ends of the support whereby said water tank is pressed against said seat plate.

3. The combination with a range or cooking stove having an outer oven flue wall and a water tank seat plate secured to said wall, of shelf brackets secured to said wall, a water tank supported by said shelf brackets, and a presser bar mounted in said shelf brackets and wedged between the front of the water tank and the outer ends of the shelf brackets for firmly holding said water tank against said seat plate.

4. The combination with a range or cooking stove having an outer oven flue wall and a water tank seat plate secured to said wall, of shelf brackets secured to said wall, a water tank supported by said shelf brackets, said shelf brackets being provided with notches having outer inclined walls, and a presser bar seated in said notches and adjusted rearwardly therein by said inclined walls to hold said water tank in contact with said seat plate.

5. The combination with a range or cooking stove having an outer oven flue wall and a water tank seat plate secured to said wall, of shelf brackets secured to said wall, a water tank supported by said shelf brackets, said shelf brackets being provided with notches, and a bar extending across the outer wall of said water tank and resting in the notches in said shelf brackets to hold them from outward movement relative to each other.

6. The combination with a range or cooking stove having an outer oven flue wall and a water tank seat plate secured to said wall, of shelf brackets secured to said wall, a water tank supported by said shelf brackets, said shelf brackets being provided with notches, and a bracket connecting bar extending across the outer wall of said water tank and having notches therein engaging the notches in the shelf brackets.

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In the presence of—
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E. B. Linn.