No. 714,517. Patented Nov. 25, 1902.

W. A. POSEY.

FIREPLACE FIXTURE.

(Application filed Sept. 30, 1901.)

(No Model.) 2 Sheets—Sheet 1.

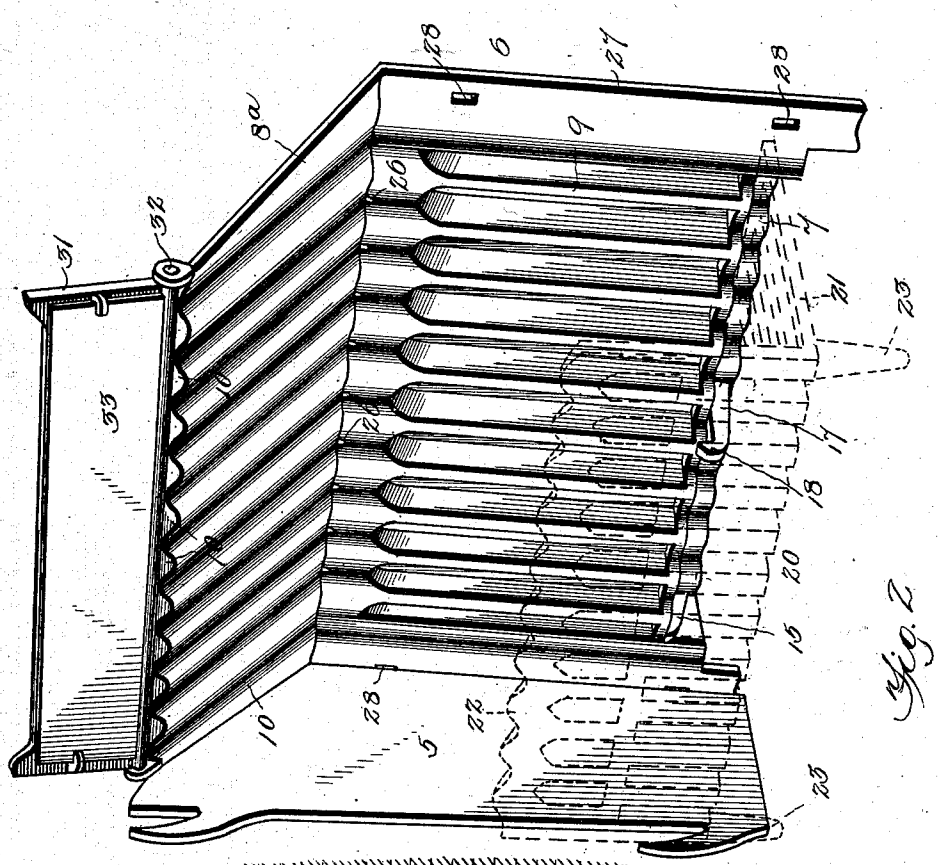


Fig. 2.

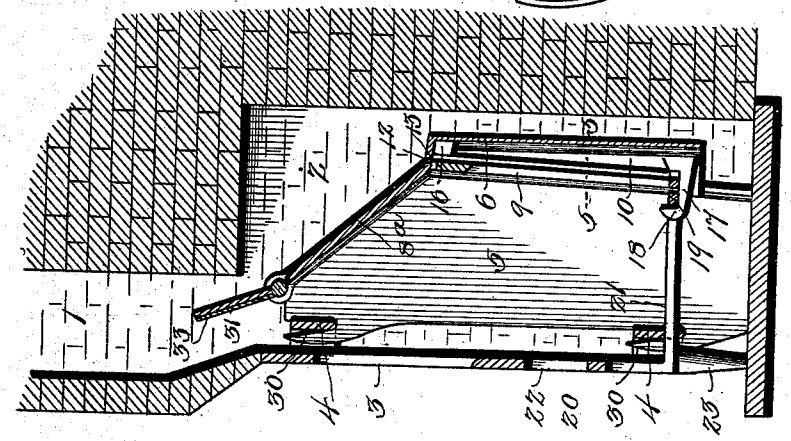


Fig. 1.

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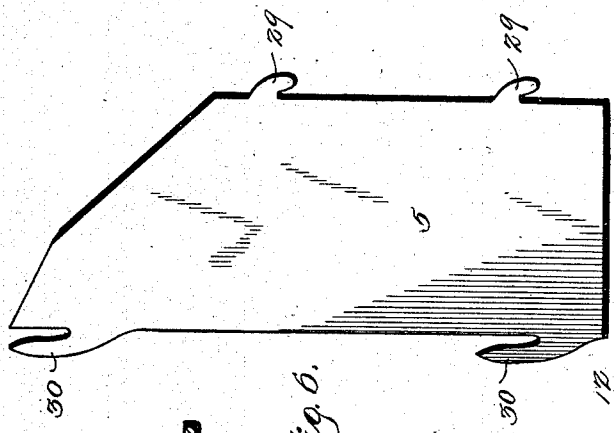


Fig. 6.

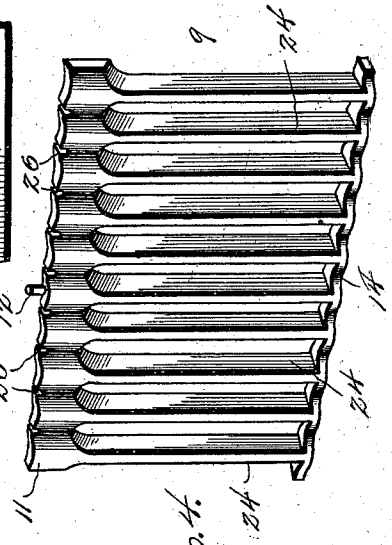


Fig. 4.

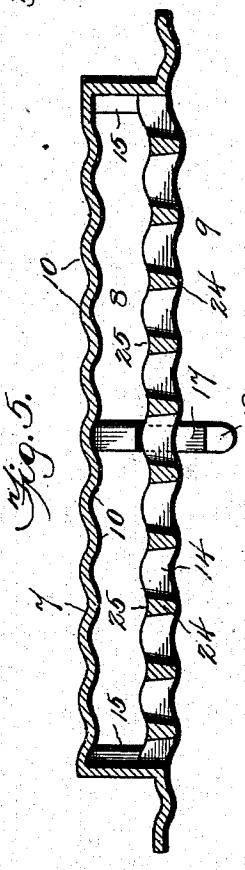


Fig. 5.

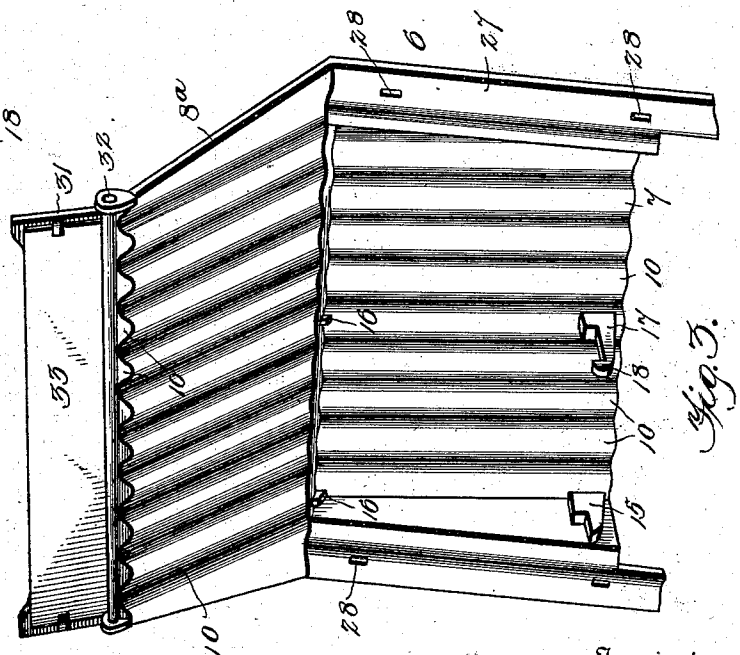


Fig. 7.

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UNITED STATES PATENT OFFICE.

WILLIAM A. POSEY, OF ATLANTA, GEORGIA.

FIREPLACE-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 714,517, dated November 25, 1902.

Application filed September 30, 1901. Serial No. 77,078. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. POSEY, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Fireplace-Fixtures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to open fireplaces for heating dwellings, halls, and other places where the ordinary open fireplace may be conveniently employed; and it has special reference to an improved fireback coöperating with the fuel-grate and so constructed and arranged with reference thereto as to provide an air-circulating space entirely about the fuel grate or basket.

To this end the invention contemplates an improved fireback so constructed as to be effectually protected from the fire to obviate burning out, besides comprising means for causing a distribution of the air-currents around and beneath the fuel grate or basket, thus insuring a well-distributed draft and adapting the fireplace-heater for burning such fuel as coke to advantage.

The further object of the invention is to associate with the improved fireback suitable means for interlocking the same detachably with the main fuel grate or basket, and also with detachable or separate side jambs, whereby the fireplace is equipped with a complete heater or fixture, the several parts of which may be readily set up or taken apart.

With these and many other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

The essential features of the invention are necessarily susceptible to modification without departing from the spirit or scope thereof, but the preferred embodiment of the improvements is shown in the accompanying drawings, in which—

Figure 1 is a sectional view of an open fireplace equipped with a heater or fixture embodying the improvements contemplated by the present invention. Fig. 2 is a perspective view of the fireback removed from the fireplace and illustrating the detachable connection of one of the side jamb-plates with the fireback, also illustrating in dotted lines the attached position of the fuel grate or basket. Fig. 3 is a detail in perspective of the fireback with the false grate removed. Fig. 4 is a detail in perspective of the false back grate. Fig. 5 is a detail cross-sectional view of the fireback and its false grate on the line 5 5 of Fig. 1. Fig. 6 is a detail elevation of one of the side jamb-plates.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

In carrying out the invention no change is required in the original construction of the chimney and the open fireplace, so, for illustrative purposes, there is shown in the drawings a section of an ordinary chimney (designated by the reference-numeral 1) and which is provided with the usual form of open fireplace 2; but for the purpose of securing an interlocking detachable connection between all parts of the fireplace-fixture the usual fireplace-frame 3, surrounding the front of the fireplace, is provided at the inner sides of its stile portions with the loops or keepers 4, coöperating with the side jamb-plates 5 in the manner hereinafter explained.

The most essential feature of the invention resides in the construction and arrangement of the fireback, (designated in its entirety by the reference-numeral 6.) This fireback is preferably made in the form of a single casting, conforming in shape to the back and crown portions of an open fireplace, and constitutes a lining for such portions of the fireplace, while at the same time being so constructed and arranged with reference to the brickwork as to prevent the burning out of the fireback. The said fireback essentially consists of the main upright back portion 7 and the upwardly and forwardly inclined crown portion or plate 8^a, preferably forming an integral part of the main back portion 7 and adapted to partially overhang the fuel grate or basket to deflect the heat out of the fireplace in the usual manner. In the pres-

ent invention the main upright back portion 7 of the metallic fireback 6 is formed at the front side thereof with what might be properly termed an "inset panel," constituting an air-circulating pocket 8, within which is removably arranged the detachable false back grate 9, held spaced from the wall of the panel or pocket 8 in order to provide an air-circulating space for the currents of air, which not only serve to keep the fireback cool, but also provide for admitting air to the fuel from the rear, as well as from the front and bottom.

The main back portion 7 and also the crown portion 8 of the fireback are continuously corrugated by parallel corrugations 10 upon both the inner and outer sides thereof, said corrugations serving not only to strengthen the structure, but in the case of the crown portion 8^a also serving to increase the radiating-surface thereof. The corrugations upon the rear side of the main upright back portion 7 of the fireback provide air-circulating spaces or channels between the fireback and the brickwork, and the same is true of the corrugations upon the rear side of the crown portion 8^a, thus providing for an effectual cooling of the fireback with a consequent prolonging of the life thereof.

The detachable false back grate 9 may be readily removed and replaced whenever this should be necessary without disturbing the remainder of the fireback, and different expedients may necessarily be resorted to for the purpose of detachably supporting the said false back grate in position. The preferable construction, however, is shown in the drawings and consists in providing the upper cross-bar 11 of the upright grate 9 with a holding pin or dowel 12, adapted to be engaged in a socket 13 at the upper side of the pocket 8, while the lower cross-bar 14 of said grate is adapted to have the extremities thereof rest in the notched supporting-lugs 15, preferably located at the bottom corners of the panel 8. The said panel or pocket 8 has projected from the wall thereof, preferably contiguous to its upper end, a series of spacing projections or lugs 16, which serve to hold the upper part of the detachable back grate 9 properly spaced from the upright back portion of the fireback, while the notched lugs 15 serve a similar function at the lower edge of the said grate.

In addition to the means described for removably holding the back grate in position the wall or main back portion 7 of the fireback has projected forwardly therefrom a supporting-bracket 17, adapted to constitute one of the rests for the lower cross-bar of the grate 9 and also provided in front of said grate with an engaging hook 18, with which is detachably engaged or interlocked the rear cross-bar 19 of the main fuel grate or basket 20. This main fuel grate or basket 20 occupies the usual position in a fireplace and simply consists of the grate proper, 21, and the grate-front 22, the same also being provided with depending front legs 23, which serve to support its front portion, while the rear portion thereof is supported by the bracket 17. With the fuel grate or basket 21 engaged with the bracket 17 as described the back grate 9 is necessarily securely locked in place.

Referring more particularly to the construction of the back grate 9, the same essentially consists of the upper and lower cross-bars 11 and 14 and a plurality of regularly-spaced vertical parallel grate-bars 24, which grate-bars are preferably provided at their rear sides with longitudinal grooves 25, lying opposite the ridges of the front corrugations 10 of the fireback-wall 7 to provide well-defined air-circulating spaces, and these grooves 25 are continued across the upper bar 11, as plainly shown in Fig. 4 of the drawings. The said upper cross-bar 11 is also provided in the top edge thereof with a series of notches 26, which when the back grate is in position produce circulating-ports at the top of the pocket 8 for the escape of air at such point beneath the upper crown portion 8^a of the fireback.

The fireback is provided at the side edges thereof with the vertical retaining-flanges 27, adapted to be secured in the brickwork of the chimney for securely holding the fireback in position, and in the present invention the said retaining-flanges 27 are provided with slots or openings 28, with which detachably engage the holding-hooks 29, provided at the rear edge of the side jamb-plates 5, while the said jamb-plates are provided at their front edges with the outturned hooks 30 for engagement by the loops or keepers 4 at the inner sides of the fireplace-frame 3. This construction provides means for removably holding the side jamb-plates in position, while also for holding in place the usual frame 3 without the usual fastenings provided for that purpose.

To provide for properly controlling the draft, there is preferably associated with the fireback a damper 31. This damper 31 is pivotally connected by the pivots 32 with the top edge of the crown 8^a of the fireback and will remain set in any adjusted position. The said damper is preferably provided at its outer or front side with a detachable and renewable facing 33, of sheet-mica or other suitable reflecting non-combustible material. If coal is burned, this damper is thrown back, allowing the draft to carry off the gases, after which the damper should be moved forward, thus allowing only a small draft to go up from the fuel and a very strong draft to pass up through and behind the fireback. This secures the proper burning of the fuel and the throwing of a maximum heat into the room.

From the foregoing it is thought that the construction and many advantages of the herein-described fireplace-fixture will be readily apparent to those familiar with the art without further description, and it will be un-

derstood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A fireplace-fixture comprising a fireback spaced from the back wall of the fireplace-opening and provided with an inset air-circulating pocket whose back portion is corrugated upon the inner and outer sides thereof, said fireback also having an upper inclined crown portion similarly corrugated, a damper hinged to the top edge of the said crown portion, an upright false back grate detachably fitted within said pocket, and a fuel-grate having an interlocking connection with the fireback in a position to provide for locking the back grate in place.

2. A fireplace-fixture comprising a fireback having an inset air-circulating pocket, and an upwardly and forwardly inclined crown portion, and a false back grate detachably fitted within said pocket in spaced relation to its wall, and consisting of upper and lower cross-bars, and a plurality of spaced vertical grate-bars, the upper cross-bar having in its top edge circulating-ports, and the grate-bars having longitudinal grooves at their rear sides.

3. A fireplace-fixture comprising a fireback provided at the sides thereof with offstanding retaining-flanges having slots or openings, the fireplace-frame provided with keepers, and removable side jamb-plates having reversely-disposed front and rear hooks respectively for engagement with the keepers of said frame and the slots or openings of the fireback.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. POSEY.

Witnesses:
O. J. REDD,
JOSEPH H. SMITH.