

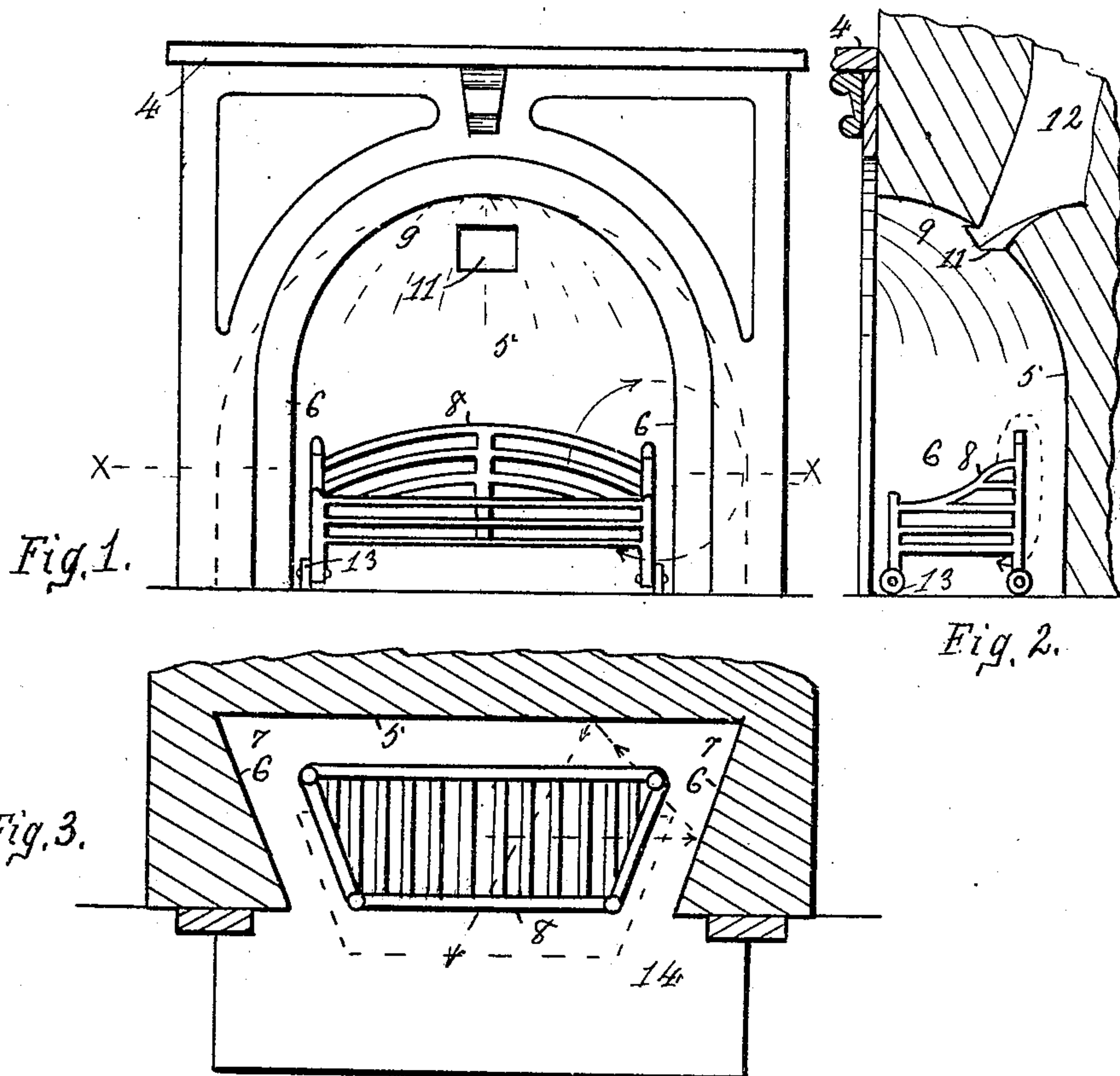
No. 773,863.

PATENTED NOV. 1, 1904.

M. F. FRECHTLING.
FIREPLACE.

APPLICATION FILED JAN. 13, 1904.

NO MODEL.



WITNESSES,
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UNITED STATES PATENT OFFICE.

MARY F. FRECHTLING, OF HAMILTON, OHIO.

FIREPLACE.

SPECIFICATION forming part of Letters Patent No. 773,863, dated November 1, 1904.

Application filed January 13, 1904. Serial No. 188,844. (No model.)

To all whom it may concern:

Be it known that I, MARY F. FRECHTLING, a citizen of the United States, residing at Hamilton, Ohio, have invented a new and useful Improvement in Fireplaces, of which the following is a specification.

My invention relates to fireplaces of the class wherein movable baskets are used; and the objects of my improvement are to form the jambs at acute angles to the back wall, whereby the lateral heat-rays are deflected through the fire and superheated and the smoke is returned through the fire and consumed, and to obtain a more complete consumption of the fuel. These objects are attained in the following-described manner, as illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of a fireplace embodying my improvement; Fig. 2, a longitudinal vertical section thereof, and Fig. 3 a plan in section on the line *xx* of Fig. 1.

In the drawings, 4 represents the mantel-piece, 5 the back wall, and 6 the rearwardly-divergent jambs, which form an acute angle with the back wall to provide spaces or channels 7 on each side of the movable fire-basket 8. The top 9 of the fireplace preferably terminates in the form of a semidome and contains opening 11 to flue 12. The width of said opening does not exceed its length, and it is preferably rectangular in shape.

The fire-basket 8 is preferably mounted on small wheels 13 and is thereby movable on hearth 14 more or less distant from the back wall or entirely from the fireplace. Said basket in shape preferably corresponds with the plan of the fireplace, as shown in Fig. 3.

In operation the greater heat from the middle portion of the fire in the basket tends directly toward the flue-opening, which is intentionally of small dimensions. The smoke arising more slowly from the sides and rear portions of the basket is apt to curl toward the jambs and back wall and form descending eddies outside of the basket, as shown by the ar-

rows in Figs. 1 and 2, to enter the fire from beneath and be consumed. The lateral heat-rays from the fire in the basket are deflected by the jambs toward the back wall and thence forwardly through the fire, as shown by the arrows in Fig. 3, whereby they are superheated.

The heat from a fireplace of this construction is concentrated more directly in front than diffused laterally in the room, and it is efficient in heating a hall or adjoining room having a door leading thereto directly in front of the fireplace, as most frequently occurs in the construction of houses.

While the foregoing description applies to an open fireplace, the same principles of construction may be embodied in closed furnaces, as those used for heating residences or for steam-boilers, by providing a space around the basket or grate for the descent of the smoke that it may enter the fire and be consumed.

Having fully described my improvement, what I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. As a new article of manufacture, a fireplace wherein the jambs diverge rearwardly and join the back wall at acute angles.

2. As a new article of manufacture, a fireplace wherein the jambs diverge rearwardly and join the back wall at acute angles and terminate upwardly together with the back wall forming a semidome which contains a flue-opening whose width does not exceed its length.

3. In a fireplace, the combination with a back wall containing a flue-opening, and rearwardly-divergent jambs joining the back wall at acute angles, of a movable fire-basket corresponding in shape with the plan of the fireplace, for the purpose specified.

MARY F. FRECHTLING.

Witnesses:

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