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*Fig. II.*



# UNITED STATES PATENT OFFICE.

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## STOVE.

SPECIFICATION forming part of Letters Patent No. 384,517, dated June 12, 1888.

Application filed February 7, 1888. Serial No. 263,238. (No model.)

*To all whom it may concern:*

Be it known that I, MARY S. GAGE, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This improvement consists in the combination, in the wall or door of a stove, of a mica sheet upon the inside and glass upon the outside and a cool-air chamber between them.

The invention also consists in certain details, which will be set forth in the claims.

Figure I is a front view of a door to the combustion-chamber of a stove, so that the light from the fire will shine through the mica and glass. Fig. II is a vertical transverse section at II II, Fig. I. Fig. III is a transverse section, showing a form of the device.

1 is part of the wall of the stove.

2 2 are ears on the wall or plate, forming members of the hinge, of which the other member, 3, is upon the rim of an inner door, 4, in which the mica plates 5 are fixed in any suitable or usual manner. The door 4 has upon it ears 6, forming members of a hinge, of which another member, 7, is upon the outer door, 8.

9 is a latch, by which the free edge of the outer door is connected to the stove or to the inner door.

10 are glass bull's-eyes, with the outer convex face formed with facets. Between the mica and the glass is a chamber, 11, through which air passes to moderate the temperature of the glass and to prevent injury from too high a temperature.

In Fig. III the air is shown entering at orifices 12 upon all sides of the air-chamber 11 and escaping from the chamber through perforations at 13 in the mica, while in Fig. II the air is shown entering the chamber through orifices 12 in its lower side and escaping

through orifices 12 in the upper side. The course of the air is indicated by arrows in both Figs. II and III.

There may be additional holes, 12, for the entrance of air made through the front plate, 14, of the door, as indicated in Fig. I.

If the glass were placed in direct contact with the mica, or if a closed air-chamber were between the glass and the mica, the heat would splinter the glass; but by the passage of air between them the heat is kept down to a safe point.

I do not confine myself to any particular means for supporting the mica or the glass, but prefer to support them on separate doors or frames, so that access may be had to the inside faces to give means for cleaning, and also for the easy insertion of the disks. The disks are shown as held between an outer plate, 14, and an inner removable plate, 15.

16 is a gauze sheet placed between the fire and the mica. No novelty is claimed, however, in this sheet so placed.

I claim as my invention—

1. The combination, in a stove, of the mica plate 5, glass 10, and an air-chamber, 11, between, having orifices 12 for the passage of air, substantially as and for the purpose set forth.

2. The combination of the mica, the glass bull's-eyes having facets, and the air-chamber between them, with provision for the passage of air through the chamber, for the purpose set forth.

3. The combination, in a stove, of the two doors carrying, respectively, the mica 5 and glass 10, and an air-chamber between them, with orifices in the edges or walls of the chamber for the passage of air, substantially as and for the purpose set forth.

MARY S. GAGE.

In presence of—

JOS. WAHLE,  
SAML. KNIGHT.