

J. C. SPARROW.
VAULT DOOR.
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914,681.

Patented Mar. 9, 1909.

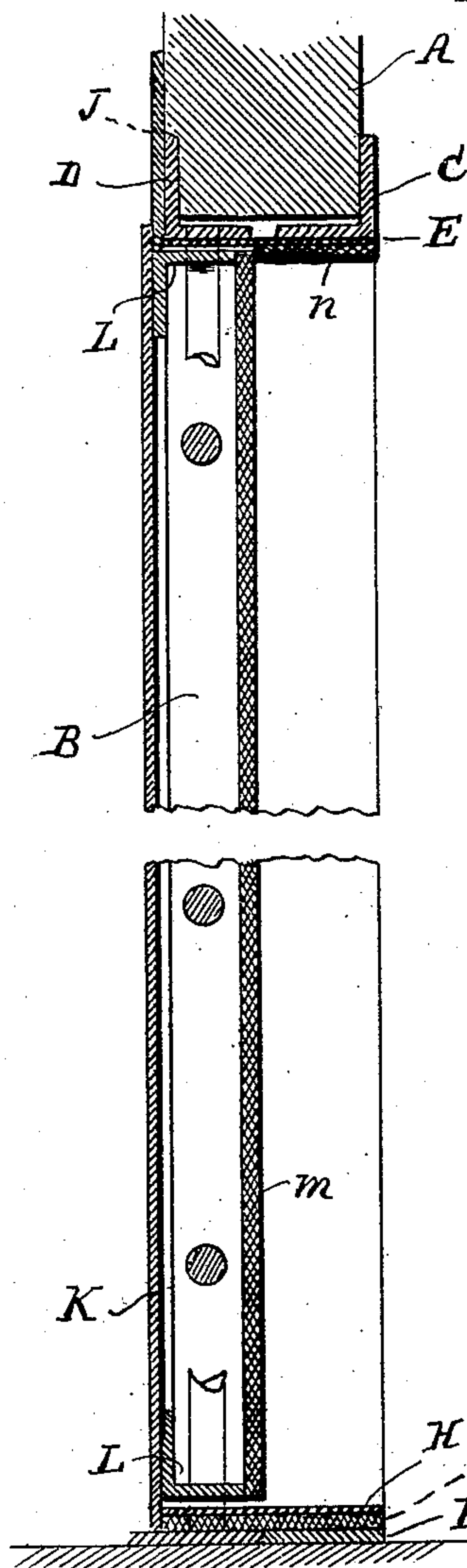


Fig. 1

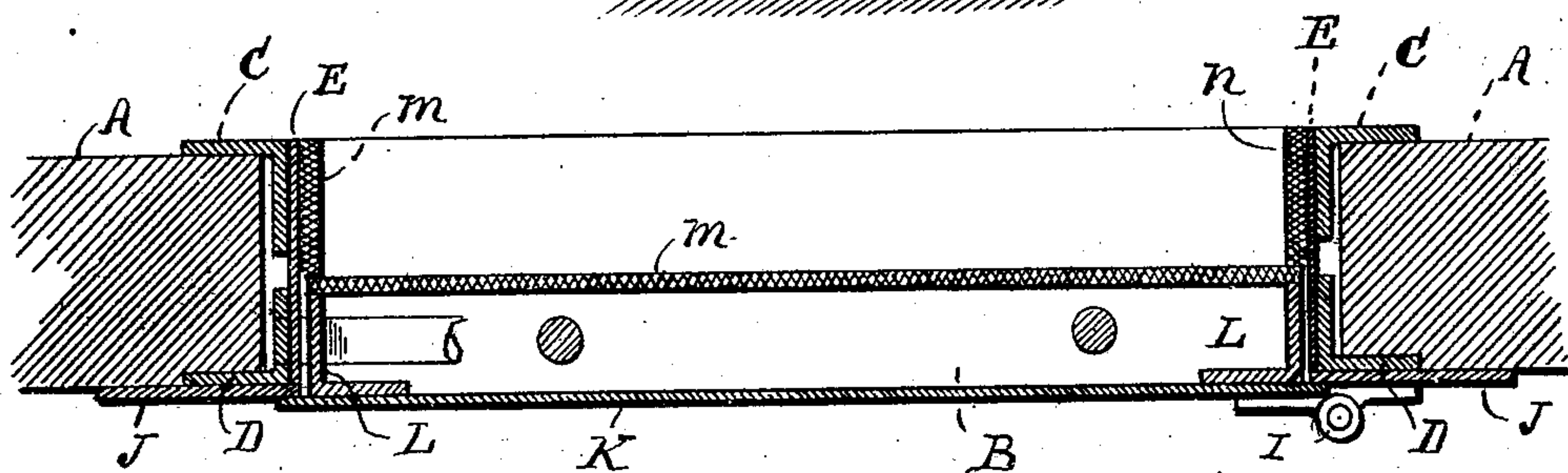


Fig. 2

WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH C. SPARROW, OF CLEVELAND, OHIO.

VAULT-DOOR.

No. 914,681.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed April 2, 1908. Serial No. 424,823.

To all whom it may concern:

Be it known that I, JOSEPH C. SPARROW, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Vault-Doors, of which the following is a specification.

My invention relates to improvements in fire proof vaults and doors, and the object of my invention is to provide a simple and efficient method of constructing a fire proof vault door, and connecting it with the vault so that no opening will remain for the entrance of fire, air or water, and further to provide a simple and inexpensive fireproof door.

My invention is illustrated in the accompanying drawings in which—

Figure 1 is a vertical sectional view of a vault wall and door. Fig. 2 is a horizontal sectional view of the vault and door.

In the drawings A represents the walls of a fire proof vault, having an opening for the vault door, and B represents the vault door. The walls may be made of hollow tile or reinforced concrete or other fireproof material. Fitting into the door opening in the fire proof wall A, is a back door frame C, and a front door frame D. The frames C and D are preferably made of angle iron, the outer sections of the iron engaging the wall to which it is attached and the inner sections inclosing the wall at the door opening.

Attached to the inner face of the frames C and D, are plates E E E which serve to hold the frames C and D in position to the wall and which entirely inclose the wall from view at the opening on the sides and the top of the opening.

At the bottom of the door opening is a plate F, preferably made of metal over which is placed a sheet G, of asbestos or other fire proof material, and over the sheet G, is placed a covering H to protect the asbestos sheet G.

Attached to the front vault opening is a further frame J to which is attached the vault door hinges I. The vault door consists of a front door plate K, preferably made of steel. The door plate at its sides and top laps over the door frame D, and at its bottom it is adapted to fit closely to the top of the plate F, and when the door is closed the plate K rests in contact with the asbestos plate G. Attached to the door plate K is a further angle iron frame L and attached to

the frame L is a plate of asbestos m. The sides and top of the door thus formed when closed, fit closely up to a further asbestos plate n, which is attached to the plate E.

In the manner shown is provided a cheap and simple fire proof door construction. The front door plate overlaps the space between the door and the wall, and engages the asbestos plate G, thus entirely closing the opening in the front and the asbestos plate m further closes the rear of the opening between the door and wall.

In the construction shown the outer door plate K and asbestos plate m, are so located as to form an air space which prevents the heat from penetrating through the door, and thus providing all of the protection afforded by two separate doors. The door is provided with bolts to lock the same but the form or construction of the same is not material to my invention. Other fireproof materials may, if desired, be substituted for the asbestos described.

What I claim as my invention and desire to secure by Letters Patent, is,

1. In combination, a vault door consisting of an outer plate, a frame attached to the same and an inner plate of fire proof material attached to the frame, said plates so located as to form an air space between the same, a frame attached to the vault opening and having a plate of fire proof material attached to the same and adapted to engage the vault door when closed, substantially as shown and described.

2. In combination, a vault door having an outer plate connected by hinges to the side of the vault opening and overlapping the sides and top of the vault opening, an asbestos plate engaging the outer plate at the bottom of the opening, a frame attached to the outer plate, and an inner asbestos plate attached to the frame, said inner and outer plates so located as to form an air space between the same, substantially as shown and described.

3. In combination, a vault door consisting of an outer plate, a frame attached to the same and an inner plate of asbestos attached to the frame, said plates so located as to form an air space between the same, a frame attached to the vault opening and having an asbestos plate attached to the same and adapted to engage the vault door when closed, substantially as shown and described.

4. In a vault, in combination, a vault wall having a door opening, angle iron frames at-

5 tached to the wall at the opening, a connect-
ing plate attached to the frames at the vault
opening, a vault door connected to the wall
and adapted to close said opening and con-
sisting of an outer plate connected to the wall
a frame attached to the plate and a plate of
asbestos attached to the frame, and an as-
bestos plate attached to the connecting plate
and engaging the edge of the door when
10 closed, substantially as shown and described.

5. In a vault, in combination, a vault wall
having a door opening, angle iron frames at-
tached to the wall and a metallic connecting
plate attached to the frames, a vault door
15 suitably connected to the walls by hinges and
adapted to close said opening and consisting

of an outer plate overlapping the opening at
its side and top and engaging an asbestos
plate at the bottom, a frame attached to the
plate and a plate of asbestos attached to the 20
frame and an asbestos plate attached to the
connecting plate and engaging the edge of
the door when closed, substantially as shown
and described.

In testimony whereof I have signed my 25
name to this specification in the presence of
two subscribing witnesses.

JOSEPH C. SPARROW.

Witnesses:

E. E. BROOKS,
N. C. BROOKS.