

No. 780,074.

PATENTED JAN. 17, 1905.

C. A. TEAL.
AUTOMATIC FIRE SHIELD.
APPLICATION FILED AUG. 18, 1903.

FIG 1.

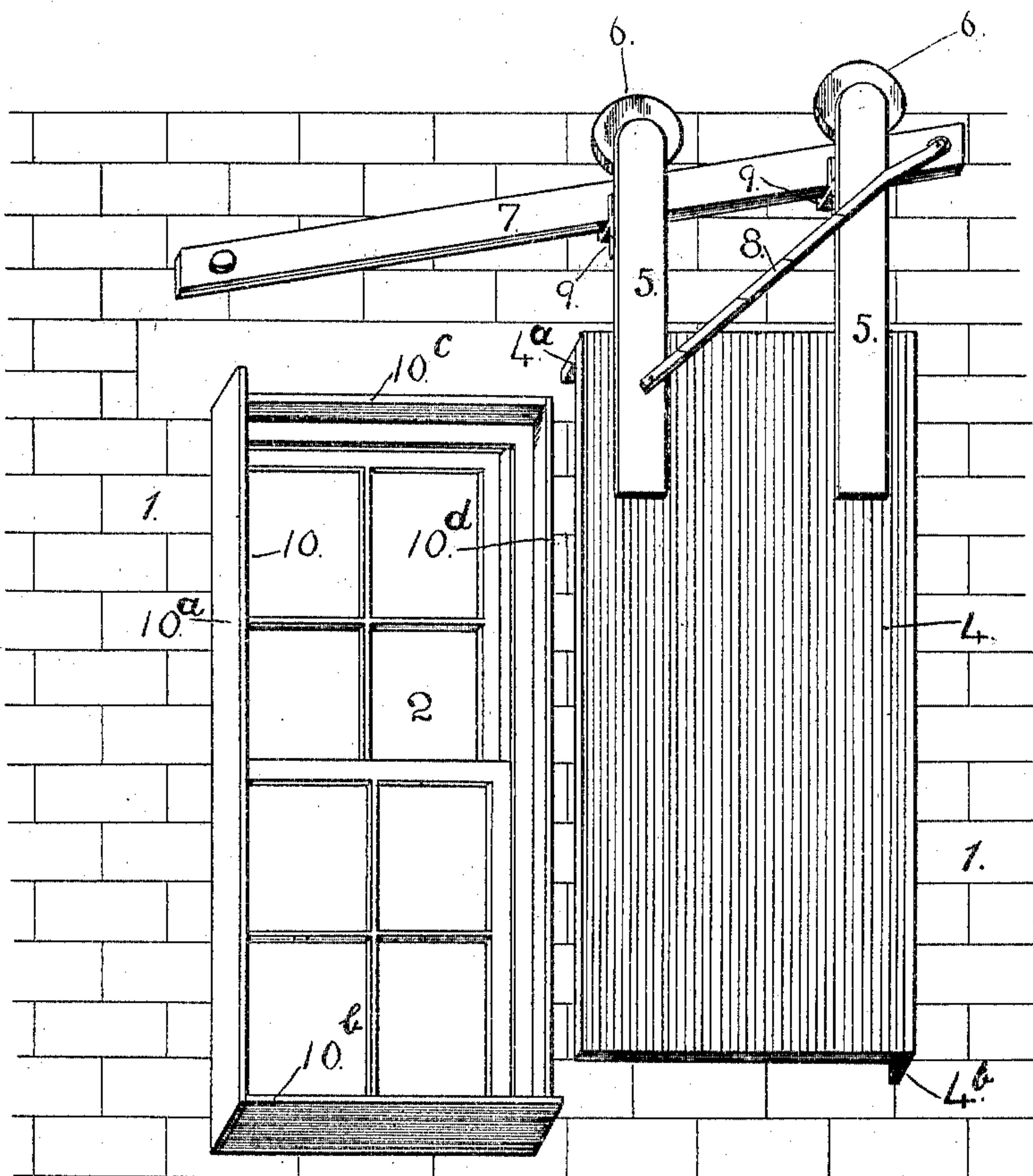
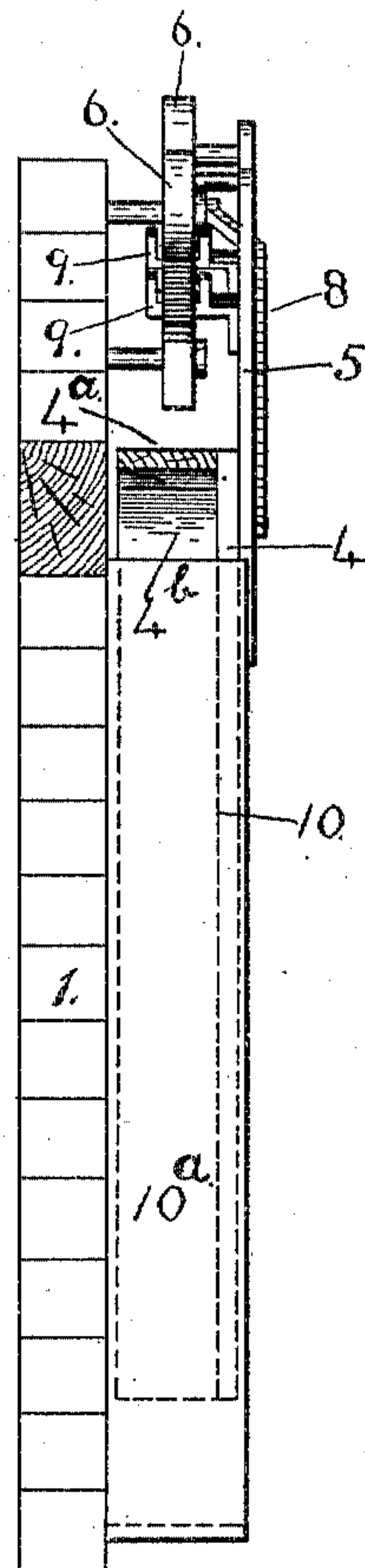


FIG 2.



WITNESSES:

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AUTOMATIC FIRE-SHIELD.

SPECIFICATION forming part of Letters Patent No. 780,074, dated January 17, 1905.

Application filed August 18, 1903. Serial No. 169,877.

To all whom it may concern:

Be it known that I, CHARLES A. TEAL, a citizen of the United States, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Automatic Fire-Shields, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is a side elevation. Fig. 2 is an end view of Fig. 1.

The object of this invention is to provide a protective shield or shutter for covering windows which is adapted to close automatically from the heat of a fire exterior to the building.

The invention consists of such a shield that is adapted to roll or slide by gravity upon a suitable inclined support secured to the wall of the building and which is maintained in the open position by a fusible connection outside the building, the severance of which by the heat of a fire occurring adjacent to the building releases the shield and permits the latter to slide or move into position to cover the window, as hereinafter particularly described, reference being had to the drawings which illustrate the preferred form of the invention.

1 is the wall of the building; 2, the window thereof.

4 is a shield of suitable metal, or it may be wood covered with sheet metal, whose length and width are equal to or somewhat greater than that of the window. Projecting from the top part of the shield are vertical bars 5, at the free ends of which are rollers 6, that rest upon an inclined piece or rail 7, that is fixed to the wall of the building. The said shield is maintained normally in the elevated or non-covering position, shown by means of a fusible connection 8, one end of which is fastened to the wall 1 or in this instance to the rail 7 and the other end to the shield, as shown. Guide-brackets 9, projecting from bar 5 and extending up on each side of the rail, serve to prevent the rollers from running off the latter. The shield being in the

open position illustrated, should a fire occur and the heat be sufficient to fuse or destroy the connection 8 the shield will by its gravity roll down the incline or rail 7 and close over the window 2, its motion being arrested at the proper point by a suitable stop.

In order to secure a close joint between the window and shield, I provide around the window-casing a projecting frame 10 of suitable material, the side 10^a of which farthest from the shield and the bottom 10^b project farther beyond the wall than the top 10^c and opposite side 10^d, and I also provide the top and outer margin of the shield with wings or projections 4^a 4^b, whereby when the shield descends to the closed position the top wing 4^a of the shield will pass over and upon or close to the top 10^c of said frame. The edge of the shield will stop against the side 10^a of said frame. The lower edge of the shield will pass over the bottom 10^b of the frame and the side wing 4^b of the shield against the side 10^d of the frame, thus forming a close joint between the latter and the shield.

It will be of course understood that all parts of the device (except the fusible connection 8) are made of fireproof material.

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

In a building having a window therein, the combination of the inclined rail, the exterior shield adapted to cover said window when in the closed position, and slidably mounted on said rail, the fire-destructible connection for retaining said shield normally in the open elevated position, together with the frame projecting from said window and the wings on said shield, substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature this 11th day of August, A. D. 1903.

CHARLES A. TEAL.

Witnesses:

WILLIAM E. CHAPMAN,
WALTER C. PUSEY.