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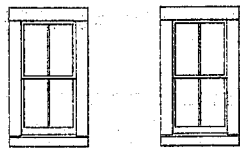
WILLIAM D. BAKER.

Improvement in Protecting Buildings from Fire.

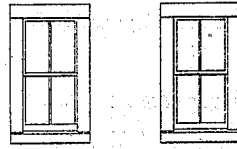
No. 122,350.

Fig. 1.

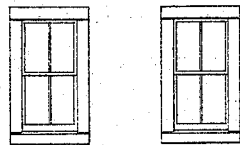
Patented Jan. 2, 1872.



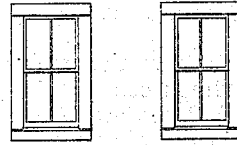
B



C



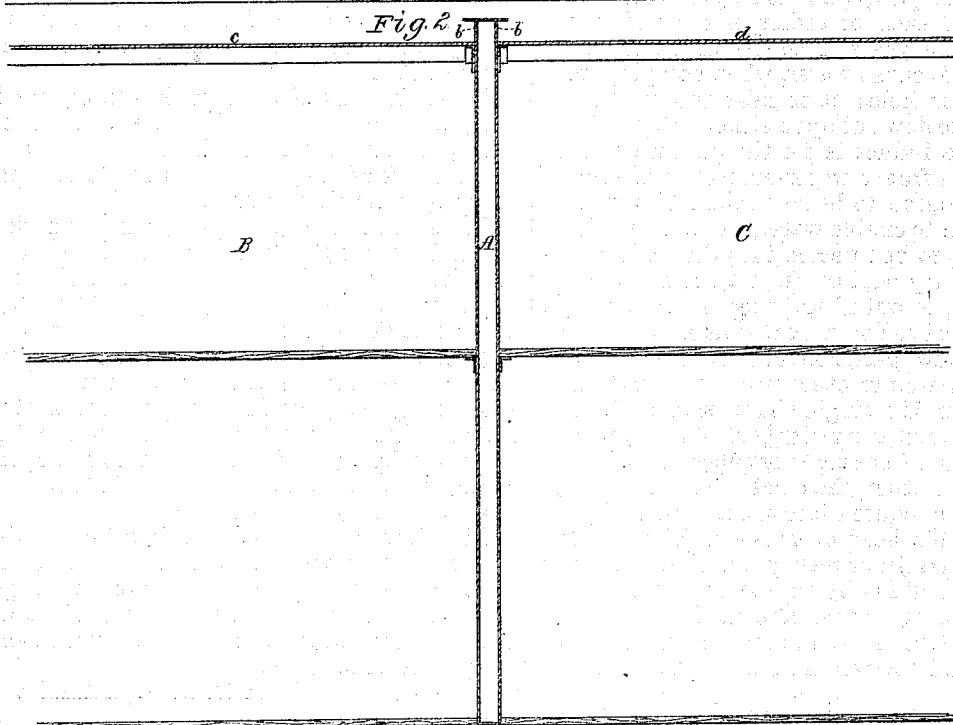
B



C

a

Fig. 2



Witnesses

L. R. Piper

L. W. Goller

Wm. D. Baker.

by his attorney.

R. M. Eddy

UNITED STATES PATENT OFFICE.

WILLIAM D. BAKER, OF EAST ABINGTON, MASSACHUSETTS.

IMPROVEMENT IN PROTECTING BUILDINGS FROM FIRE.

Specification forming part of Letters Patent No. 122,350, dated January 2, 1872.

To all persons to whom these presents may come:

Be it known that I, WILLIAM D. BAKER, of East Abington, of the county of Plymouth and State of Massachusetts, have made a new and useful invention for the Protection of Buildings from Fire; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 denotes a front elevation, and Fig. 2 a section of two buildings connected by a party-wall provided with my improvement.

The nature or principle of my invention consists in providing the party-wall or partition between the two houses or buildings with a thin or narrow chamber or chambers, to extend from the bottom to or nearly to the top of such wall or partition, and providing such chamber, at its lower part, with an induct, and at its upper part, when it may project above the roof of each or either of the buildings, with one or a series of educts or holes, so arranged as to cause water, when escaping from such hole or holes at or near the top of the partition, to flow out upon either or both of the roofs. The induct is for the purpose of enabling a hose from a water-main or from a force pump or engine to be so applied to a wall or partition as to enable water through such hose and induct to be injected into the hollow partition or party wall so as to fill it and flow or be discharged out of the opening or openings at the top of the said partition or wall.

The hollow partition or wall may be constructed of iron or other proper material, and may have in it a single chamber or a series of them communicating with each other by means of one or more passages or pipes to lead from one into the other, the same being so that water on being poured into the induct shall, under a suitable head or pressure, be caused to flow into and fill or nearly fill the chamber or chambers and finally escape or be driven out of the opening or openings at the upper part of such partition so as to fall and run down or spread upon and wet the next adjacent roof or roofs.

When two buildings are thus provided with a water-tight hollow partition arranged between them and provided with an induct and educt or educts disposed as described, it will

be evident that so long as the space or spaces in the partition may be filled with water no fire, while in one building, can pass through the partition to the other, and that by forcing water into the partition at its lower part and discharging it at its top upon either or each roof, such roof may be protected from any fire that may fall or strike upon the upper surface of the roof.

In cities or towns provided with water-works for distribution of water under pressure through pipes laid in the streets my invention will be of much value, as with it when either of the buildings provided with it may be on fire the other can readily be rendered fire-proof or be protected from fire passing into it through the party wall or partition by simply connecting the partition at its induct with one of the mains of the water-works and suffering the water therefrom to pass under head or pressure into the partition and fill it, or fill it and flow or be discharged out of it at top, as set forth.

In the drawing, A denotes the hollow partition; B C, the two buildings between which such partition is situated; *a*, the induct; and *b*, the educt of the partition; and *c* and *d* are the roofs of such buildings.

In constructing buildings with my invention I would remark that their front and rear walls may be made hollow or be provided with chambers to hold water in emergency; but this I do not deem necessary as with the partition walls made hollow and with inducts and educts, arranged as set forth, there will be little if any danger of fire being communicated from one building to the next, or of the roof of the latter being set fire to by sparks or cinders falling upon it from the building on fire.

I claim as my invention—

The arrangement and combination of the water-space chamber or chambers and the induct and educt thereof with two buildings, and either or both the roofs of the same, all being substantially as and for the purpose, and to operate as specified.

WILLIAM D. BAKER.

Witnesses:

R. H. EDDY,
J. R. SNOW.

(4)