

J. BABSON & J. E. MULFORD.

Fire-Shields.

No. 158,455.

Patented Jan. 5, 1875.

FIG. 1.

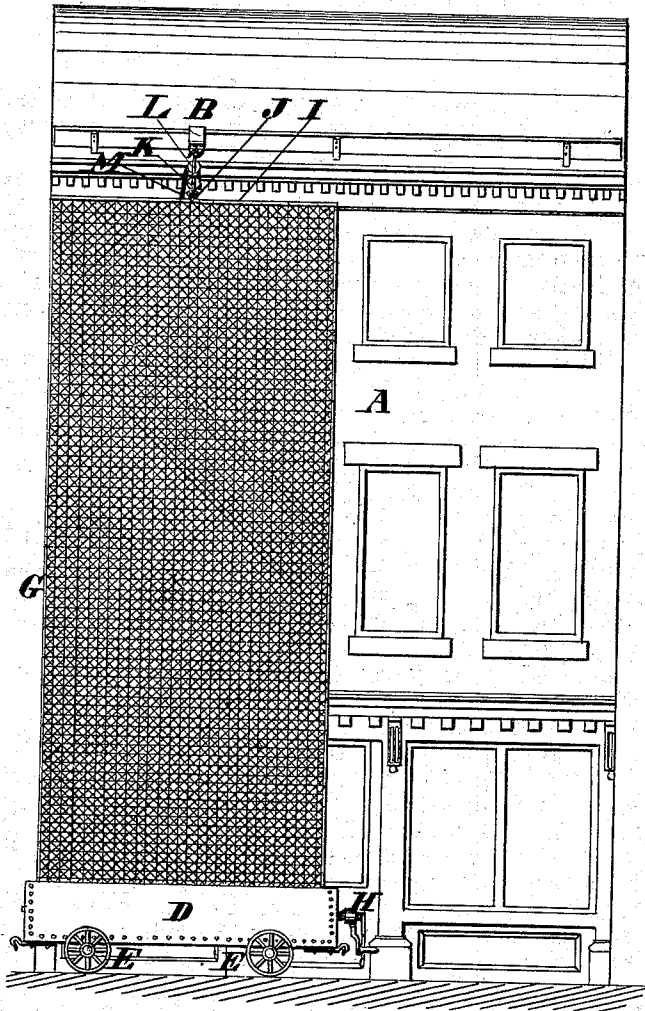
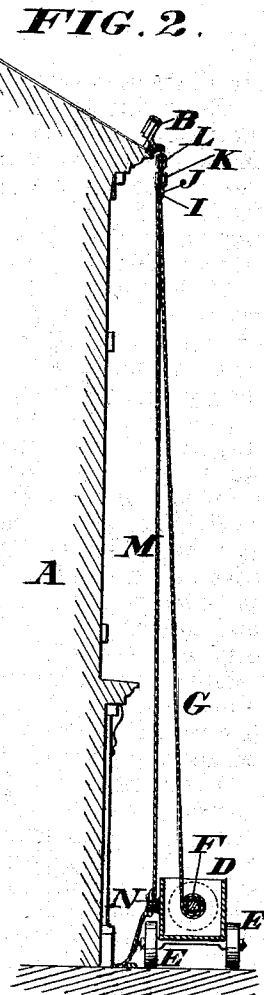


FIG. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN BABSON, OF BOSTON, MASSACHUSETTS, AND JOHN E. MULFORD, OF
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IMPROVEMENT IN FIRE-SHIELDS.

Specification forming part of Letters Patent No. **158,455**, dated January 5, 1875; application filed
October 3, 1874.

To all whom it may concern:

Be it known that we, JOHN BABSON, of Boston, in the county of Suffolk and State of Massachusetts, and JOHN E. MULFORD, of the city, county, and State of New York, have invented a new and improved mode of protecting buildings and other structures from fire, of which the following is a specification:

My invention has for its principal object the prevention of the spread of conflagrations. It consists in the employment of shields or screens made of incombustible material, which we apply at the front or side of or over buildings or other structures, or merchandise, or any property to be protected, in such a manner as to prevent the communication of fire.

In carrying out our invention we employ flexible screens of cloth made wholly or in part of asbestos, which screens are wound upon reels carried on suitable trucks, and provided with appliances for elevating them and applying them to the buildings or property to be protected, as hereinafter described.

In the accompanying drawing, Figure 1 is an elevation of the front of a building with one of our screens applied. Fig. 2 is a vertical section of the same.

A represents a building provided, for the purposes of our invention, with any necessary number of hook-bolts, as shown at B. The said bolts are preferably applied to the most salient part of the cornice C, or they may be applied in any other prominent place which the construction of the building may render most convenient. D is a truck, supported on wheels E, and containing a reel, F, upon which is wound an apron, G, of asbestos-cloth. H is a crank for winding the apron upon the reel. The extremity of the apron is stiffened by means of the bar or rod I, in the center of which is applied an eye, J, adapted to receive the hook of a pulley-block, K. L is a second pulley-block. Through both these pulleys the lifting-rope M is passed. The upper block, L, is hooked into the eye B. N rep-

resents a belaying-pin, secured to the side or other convenient part of the truck D for the fastening of the rope M.

The operation is as follows: The trucks D are to be run to the scene of the conflagration, the upper pulleys, L, being carried up by means of ladders, or on the inside of the house, as may be the most convenient, and hooked into the eyebolts B on the cornice of the building to be protected. The lower blocks K are then hooked into the eyes J, and, by drawing on the rope M, the aprons or screens G are run up, so as to completely mask and protect the front of the building. Each screen, as it is run up, is secured in position by belaying the rope M upon the pin N. The apparatus remains thus in position until the danger of communication of fire is over, when the rope M is released, so as to gradually lower the screens, which are wound upon their reels by means of the crank H.

In cases where buildings are not made with fire-proof roofs, the invention may be arranged and adapted to protect the roofs, also.

Our invention may also be applied to the protection of shipping, or of goods, merchandise, and property of any description, by the provision of any suitable structure to afford the necessary attachment and support for the upper pulley-block, this supporting apparatus being carried by the trucks D, or in the same manner as the ladders which form an essential part of the apparatus for the extinction and prevention of fires in large cities.

The invention is not limited to any specific means for attaching the upper end of the hoisting-rope.

The upper pulleys, L, may be attached directly to the eaves and roofs, or other projecting parts of buildings not provided with the special appliance for the purpose, which we have here illustrated; or they may in like manner be hooked or otherwise attached to the top of lofty piles or stacks of merchandise or

property of any description; or other ways will readily suggest themselves of improvising such means of attachment as the special emergency may require.

Our invention may also be applied by simply spreading a screen or covering of incombustible asbestos-cloth over buildings or other property to protect them from fire, or in front of the windows or other vulnerable part of a building.

The following is claimed as new:

A screen or apron, G, of asbestos-cloth, employed as a protection of buildings or other

property from fire, in manner substantially as herein set forth.

JOHN BABSON.

JNO. E. MULFORD.

Witnesses to the signature of JOHN BABSON:

FRANK P. EWING,

JOHN M. STIMSON.

Witnesses to the signature of JOHN E. MULFORD:

A. G. MILLS,

E. H. MULFORD.