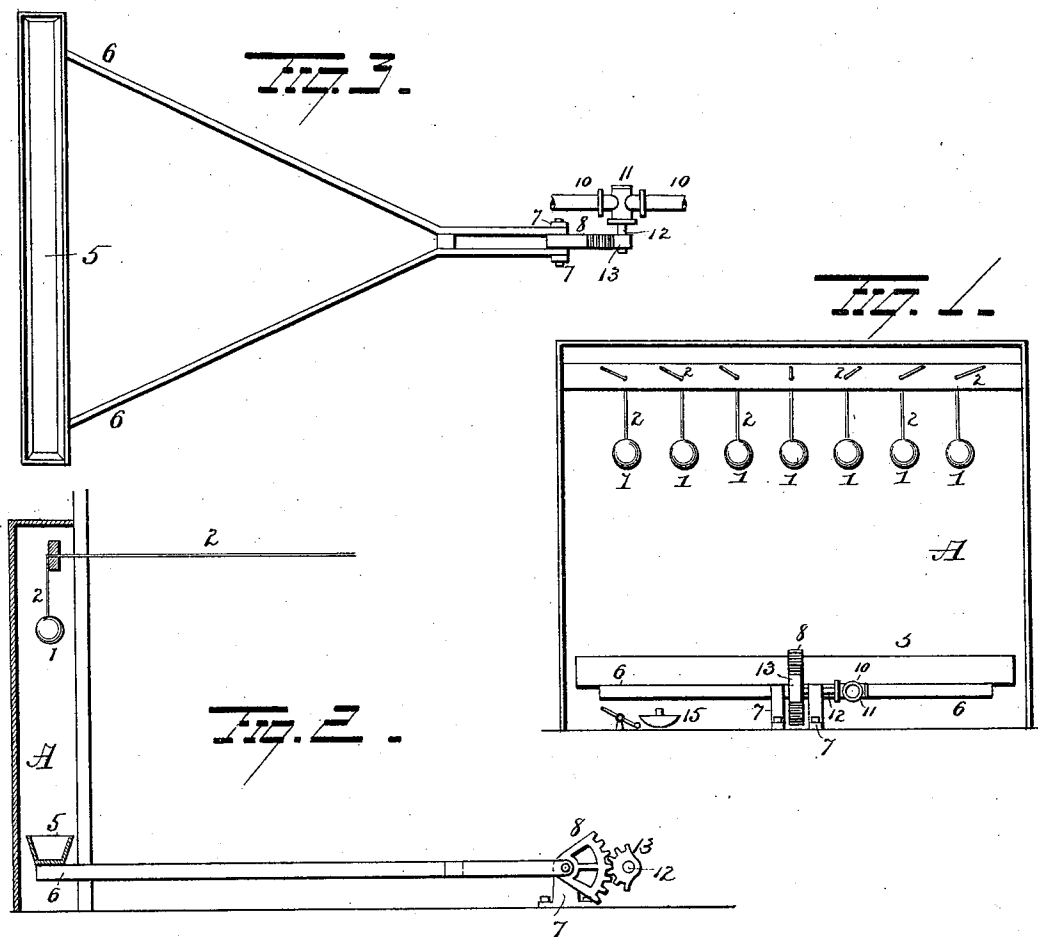


(No Model.)

W. GRAHAM.
FIRE EXTINGUISHER.

No. 579,868.

Patented Mar. 30, 1897.



Witnesses
E. J. Nottingham
G. F. Downing.

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UNITED STATES PATENT OFFICE.

WILLIE GRAHAM, OF MERIDIAN, MISSISSIPPI.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 579,868, dated March 30, 1897.

Application filed July 27, 1895. Serial No. 557,357. (No model.)

To all whom it may concern:

Be it known that I, WILLIE GRAHAM, a resident of Meridian, in the county of Lauderdale and State of Mississippi, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in fire-extinguishers for dry-kilns or other buildings, the object being to provide means for automatically causing the discharge of water, steam, or other fire-quenching substance in a kiln or building, whereby to extinguish any flame which may start therein, after the temperature has reached a certain point.

With this object in view my invention consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is an interior view of a building, showing my improved apparatus therein. Fig. 2 is a view in side elevation. Fig. 3 is a plan view of the fire-extinguishing apparatus.

A represents a box of any kind in which my improved extinguishing apparatus is placed. Suspended near the top of the box are the balls 1 1. There are quite a number of these balls, the supply varying in proportion to the size of the box, and they are for convenience located at the edges of the box, as shown. These balls are attached to fusible wires or devices 2 2, distributed all over the building in zigzag or other convenient arrangement, so that the greatest sensitiveness is attained. By this provision it will be observed that no matter where the fusible connections 2 2 are melted the ball attached thereto will fall in a certain predetermined vertical plane where it happens to be suspended. Beneath these balls is arranged a trough or platform 5. This trough or platform is attached to the outer ends of arms 6 6, and these arms are pivotally supported in bearing-blocks 7 7. Continuing on from this point the arms terminate in a toothed segment 8, which in reality forms the short arm of the lever of which arms 6 6 constitute the long arm.

A water or steam pipe 10 is provided for distributing water throughout the interior of

the building. This pipe or pipes may be branched out indefinitely or carried to any point, and for the discharge of the water or steam it is provided with perforations or nozzles, as found most convenient. The supply comes from any convenient source. Connected with these pipes is a valve 11. The stem 12 of this valve extends out, and a small toothed segment 13 thereon meshes with the segment 8, whereby it is operated, so that the valve is automatically opened by the dropping of a ball and the falling of the latter upon the trough or platform 5, arranged to catch it, and when thus opened the water or steam, as the case may be, discharges profusely everywhere throughout the interior that the distribution-pipes lead.

In addition to the parts described a gong 15 is provided, and a hammer is arranged to strike this gong, the hammer being placed at some convenient point to be struck by the trough or platform as it is depressed. In this manner an alarm is automatically sounded at the same time the valve is opened and the water or steam turned on.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but, Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination with a series of easily-fusible connections extending throughout a building, and a weight suspended from each one of said connections, of a trough located beneath and adapted to receive any one or all of the separate weights, a lever upon one end of which such trough is supported, pipes for conveying steam or water to extinguish a fire, a valve for governing the flow of water or steam in said pipes, and means connecting said lever with said valve whereby on the falling of any one of the weights, the trough will be depressed and the valve opened, substantially as set forth.

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

WILLIE GRAHAM.

Witnesses:

CHAS. M. SPINKS,
H. A. SMITH.