

(No Model.)

2 Sheets—Sheet 1.

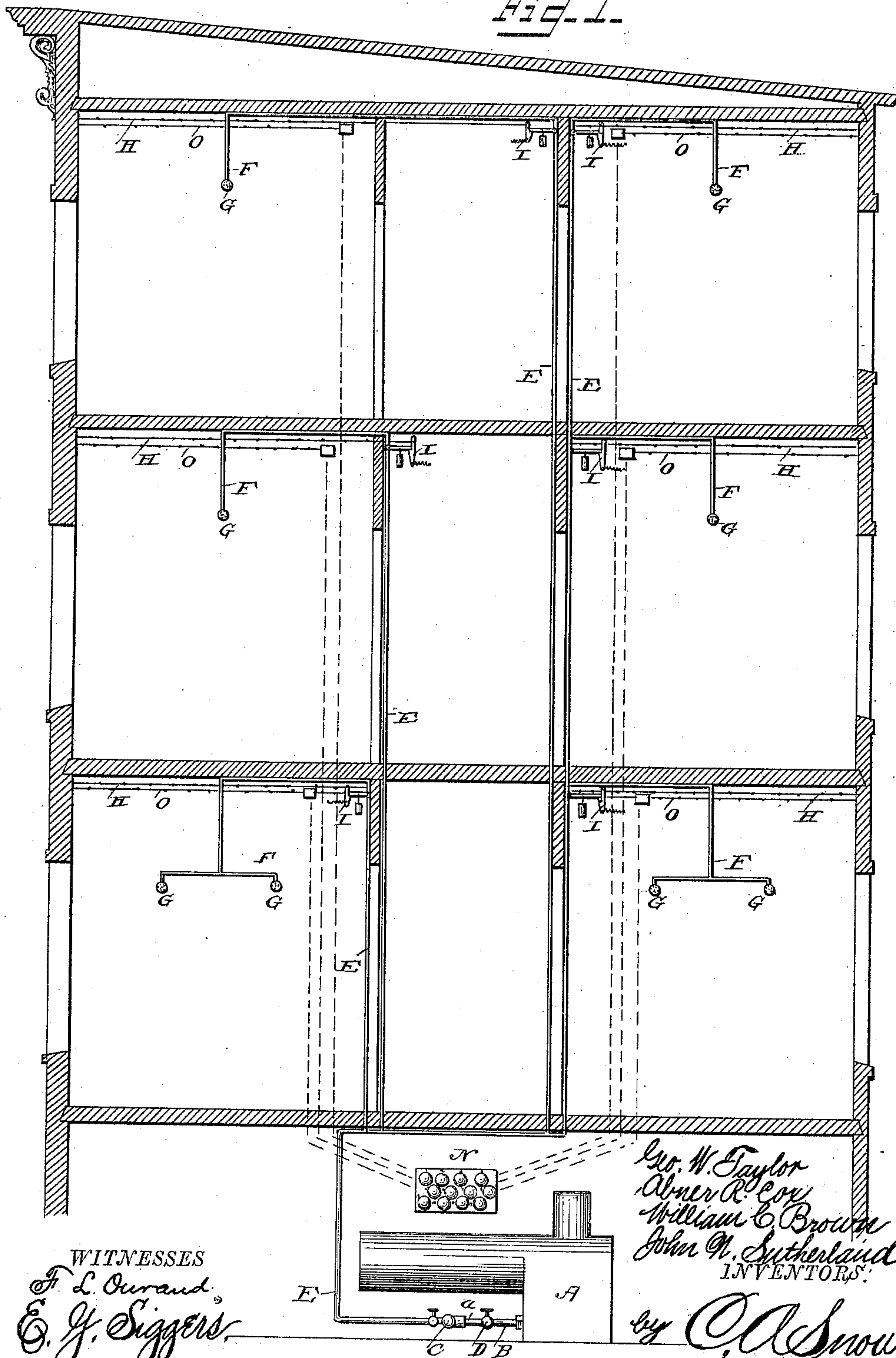
G. W. TAYLOR, A. R. COX, W. C. BROWN  
& J. N. SUTHERLAND.

FIRE EXTINGUISHER.

No. 299,036.

Patented May 20, 1884.

Fig. 1.



(No Model.)

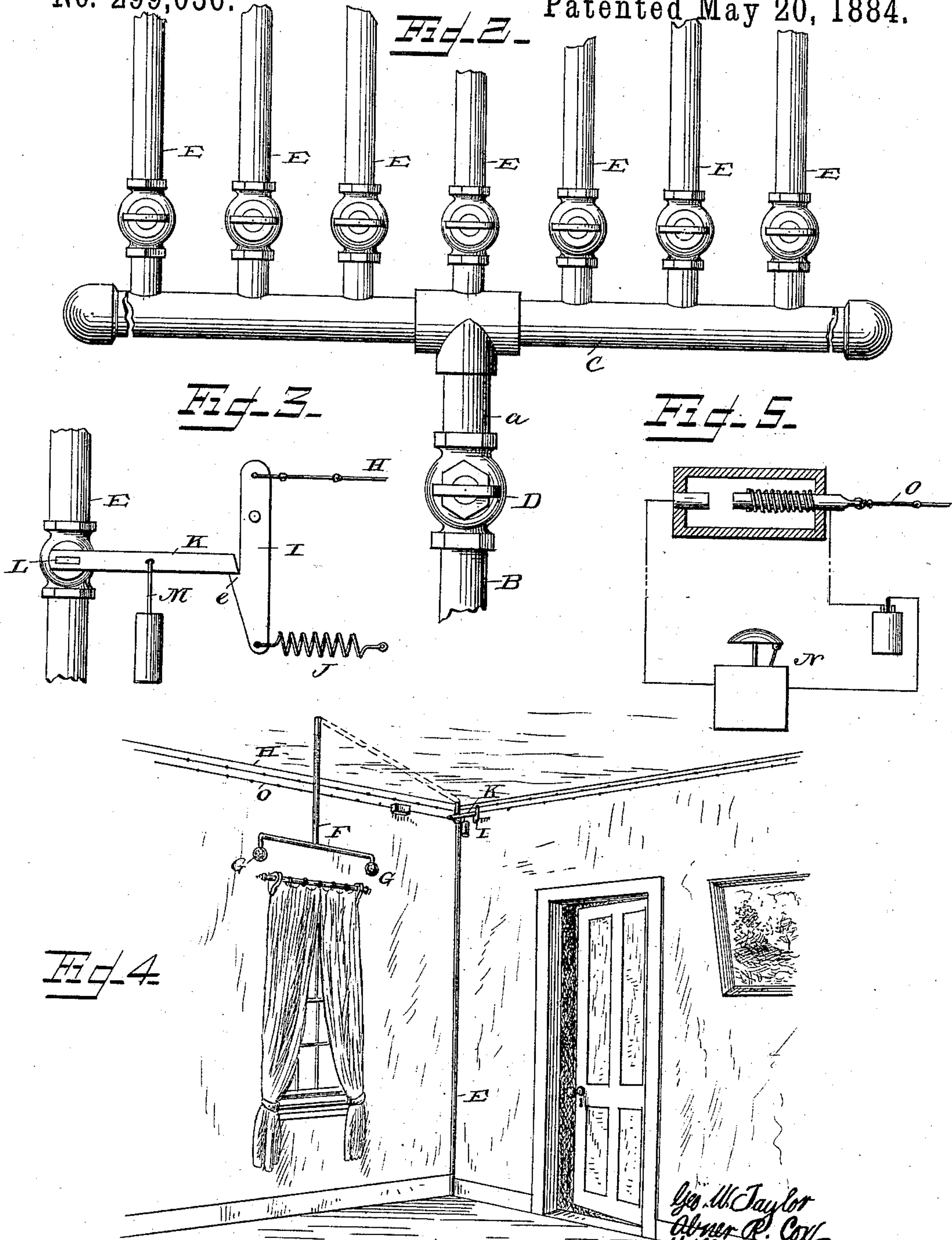
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# UNITED STATES PATENT OFFICE.

GEORGE W. TAYLOR, ABNER R. COX, WILLIAM CARREL BROWN, AND JOHN N. SUTHERLAND, OF BELTON, SOUTH CAROLINA.

## FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 299,036, dated May 20, 1884.

Application filed January 9, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE W. TAYLOR, ABNER R. COX, WILLIAM C. BROWN, and JOHN N. SUTHERLAND, citizens of the United States, residing at Belton, in the county of Anderson and State of South Carolina, have invented a new and useful Fire-Extinguisher, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to fire-extinguishers for hotels, factories, theaters, other public buildings, and steamboats; and it has for its object to provide means whereby the supply of hot water and steam in a boiler may be used to advantage in extinguishing fires, the water being conducted in suitable pipes to every part of the building.

A further object of our invention is to provide means for causing the ringing of electric bells upon the breaking out of a fire, and a still further object provides for automatically turning on the water so as to cause it to be directed into any particular room of the building, all as hereinafter set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 represents a sectional view of a hotel with our improved system applied thereto. Fig. 2 represents the attachment and position of the pipes near the boiler. Fig. 3 represents a detail view of the mechanism for operating the valve in the distributing-pipes. Fig. 4 represents a view of one room of the hotel, enlarged so as to show clearly the arrangement and position of the devices. Fig. 5 represents a view of the electric bells.

Like letters refer to corresponding parts in the several figures.

Referring to the drawings, A designates a steam-boiler situated in the basement or lower story of the hotel or other building, and provided with the usual blow-off cock, B. A supply-pipe, C, connects with the blow-off cock by a branch, *a*, a valve, D, being located in the branch, and a series of distributing-pipes, E, connecting with the supply-pipe, and leading into the different compartments of a building. Each pipe leads into a separate compartment or room, and is supported in place in any

suitable manner, transverse pipes F being secured across the projecting ends of the distributing-pipes E, and provided with perforated balls G. By means of this construction, when the water is turned on, it will flow through the distributing-pipes leading into separate rooms of the building, and then outward in streams or jets through the perforated balls, so as to quickly and thoroughly extinguish the fire.

H designates cords arranged around the rooms of the building, and provided at intervals with resin or other inflammable substance, said cords being stretched tight and extending outward and attached at the upper ends of a lever, I, journaled or pivoted in the distributing-pipes E near the boiler. The lever I is formed with a bulge or swell, as at *e*, and a coiled spring, J, is connected with the lower end of the said lever for the purpose of aiding its return to the normal position. An arm, K, is secured on one end of the pivots or journals of the valve or cut-off L, and is provided with a weighted cord, M, the end of said arm resting on the swell or bulge *e* of the lever.

It will be seen that each of the distributing-pipes is provided with the mechanism above described for operating the same, so that, should a fire break out in any one of the rooms of the building, the inflammable cord in said room will be burned or severed, thereby causing the lever I, to which said cord is attached, to return to its normal position, in which movement it is aided by the tension of the expanded spring J. This movement of the lever I dislodges the weighted arm K of the valve and permits the same to fall by gravity, the valve or cut-off thereby opening, and the water rushing through the pipe in the manner before stated. By this means the water is immediately brought into service to extinguish the fire at the point where it broke out, thus adding to the efficiency of the device.

N designates electric bells, placed near the boiler, and adapted to be operated by the burning of inflammable cords O in the several rooms of the building, the cords, when burned or severed, acting to close an electric circuit to which the bells are connected, thereby causing the ringing of the bells, as will be seen. This



construction permits the person attending the boiler to be immediately informed when a fire has broken out, and, since the bells are numbered, he can also tell in just what part of the building the fire is located, and act accordingly.

From the foregoing description, taken in connection with the annexed drawings, the operation and advantages of our invention will be understood and appreciated.

When a fire breaks out in any one of the rooms of the building, the inflammable cords are burned or severed, so as to cause the ringing of the electric bell and the turning on of the water, the latter rushing through the distributing-pipes and outward through the perforated balls, and thus causing the extinguishment of the fire within a short space of time. The water will at first pass through the pipe leading into the burning room; but should the fire spread into adjoining rooms the valves controlling the pipes leading thereto will be successively operated to cause the flowing of the water through the same.

Our improved fire-extinguisher reaches every portion of the building, and will prove of

great service and advantage in its application to hotels, theaters, factories, gin-houses, other buildings, and steamboats.

Having described our invention, we claim as new—

In a fire-extinguisher, the combination, with the inflammable cords arranged in each room of a building, of the water-distributing pipes communicating with each room, valves arranged in said pipes, weighted arms attached to the valves, levers supporting said arms, springs attached to one end of the levers, and the inflammable cords connecting with the other end, arranged and operating to cause the valve in any one pipe to open when the cords are burned, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

GEORGE W. TAYLOR.

ABNER R. COX.

WILLIAM CARREL BROWN.

JOHN N. SUTHERLAND.

Witnesses:

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