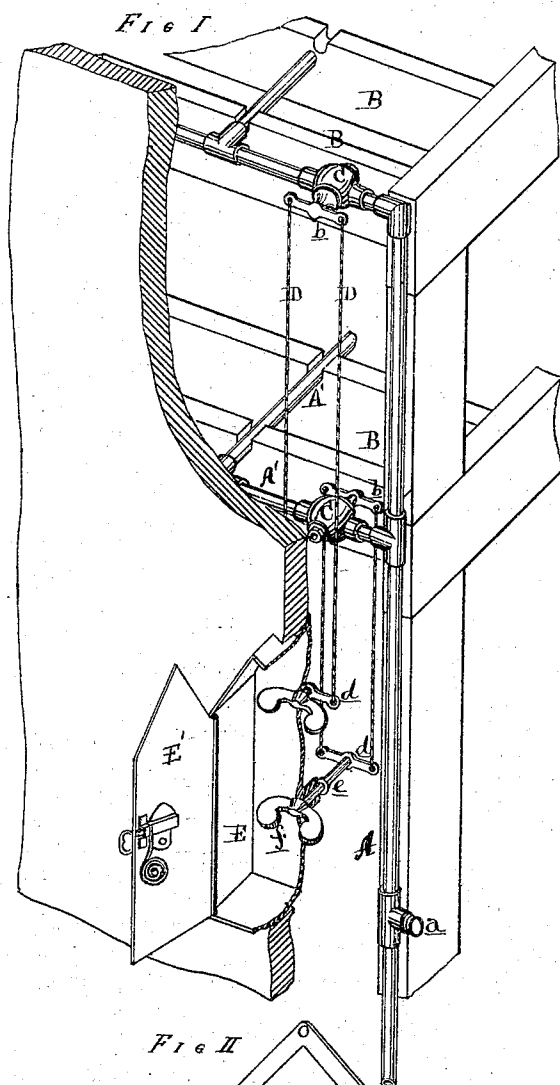


J. D. SUTTER.
Apparatus for Extinguishing Fires in Buildings.
 No. 144,039. Patented Oct. 28, 1873.



Attest
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Per Atty—
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UNITED STATES PATENT OFFICE.

JOHN D. SUTTER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN APPARATUS FOR EXTINGUISHING FIRES IN BUILDINGS.

Specification forming part of Letters Patent No. **144,039**, dated October 23, 1873; application filed February 7, 1873.

To all whom it may concern:

Be it known that I, JOHN D. SUTTER, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in an Apparatus for Extinguishing Fires in Buildings; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of a corner of a building with the floors and most of the walls removed to show the apparatus, and Fig. 2 is a perspective view of the box placed on the outer wall which gives access to the valve-keys.

Like letters refer to like parts in both figures.

This invention consists in the arrangement of perforated branch pipes between the floors and ceilings, in connection with a main vertical supply-pipe, which is supplied with water from the main in the street, or from an engine through a coupling near the ground, each branch pipe being provided with a cock having a lever connected by cords with an operating crank-shaft in a locked closet near the ground, as will be fully described hereinafter.

In the drawing, A represents a stand-pipe carried up through the several stories of a building, with lateral branch pipes A' leaving it at each floor, which branch pipes run across and are let into the tops of the joists B under the floor-boards, and are perforated at their upper sides with minute apertures, through which jets of water may be sprayed onto the joists under the floor-boards and over the ceiling below, which comprise the material most likely to be ignited and to assist in spreading the flames in a structure, and thus arrest the flames at or near their source.

If sufficient pressure can be had I prefer to connect the lower end of the stand-pipe to a street main; but if such a source of supply be not available or uncertain, I put a T in the pipe, at *a*, near the ground, extending through the outer wall of the structure, with a screw-thread at the end, to which may be coupled the hose of a fire-engine.

Each branch pipe is fitted with a cock, C, whose plug is provided with a lever, *b*, secured thereto at the middle of its length, with a cord, D, attached to each arm, led down and secured to the ends of a similar lever, *d*, pivoted at the middle of its length to a shaft, *e*, projecting through the wall into a box, E, secured to the outer side of the wall, where it is provided with a crank, *f*, by partially turning which the cock may be turned on or off. The door E' of the box is provided with a lock, to which the patrolmen and watchmen of the premises have keys, to give them access to the cranks whenever a fire is discovered by either of them in the premises, when the water is let into the branch jet-pipes of that part of the structure which is on fire, and thus extinguishes the fire at the outset.

If desired the box may be arranged to open on the inside of the building, or both on the inside and outside.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of the cocks C, levers *b d*, cords D, shaft *e*, and crank *f*, with relation to the branch pipes A', box E, and stand-pipe A, having a T-coupling, *a*, as and for the purpose set forth.

JOHN D. SUTTER.

Witnesses:

WM. H. LOTZ,
GEO. FERRIS.