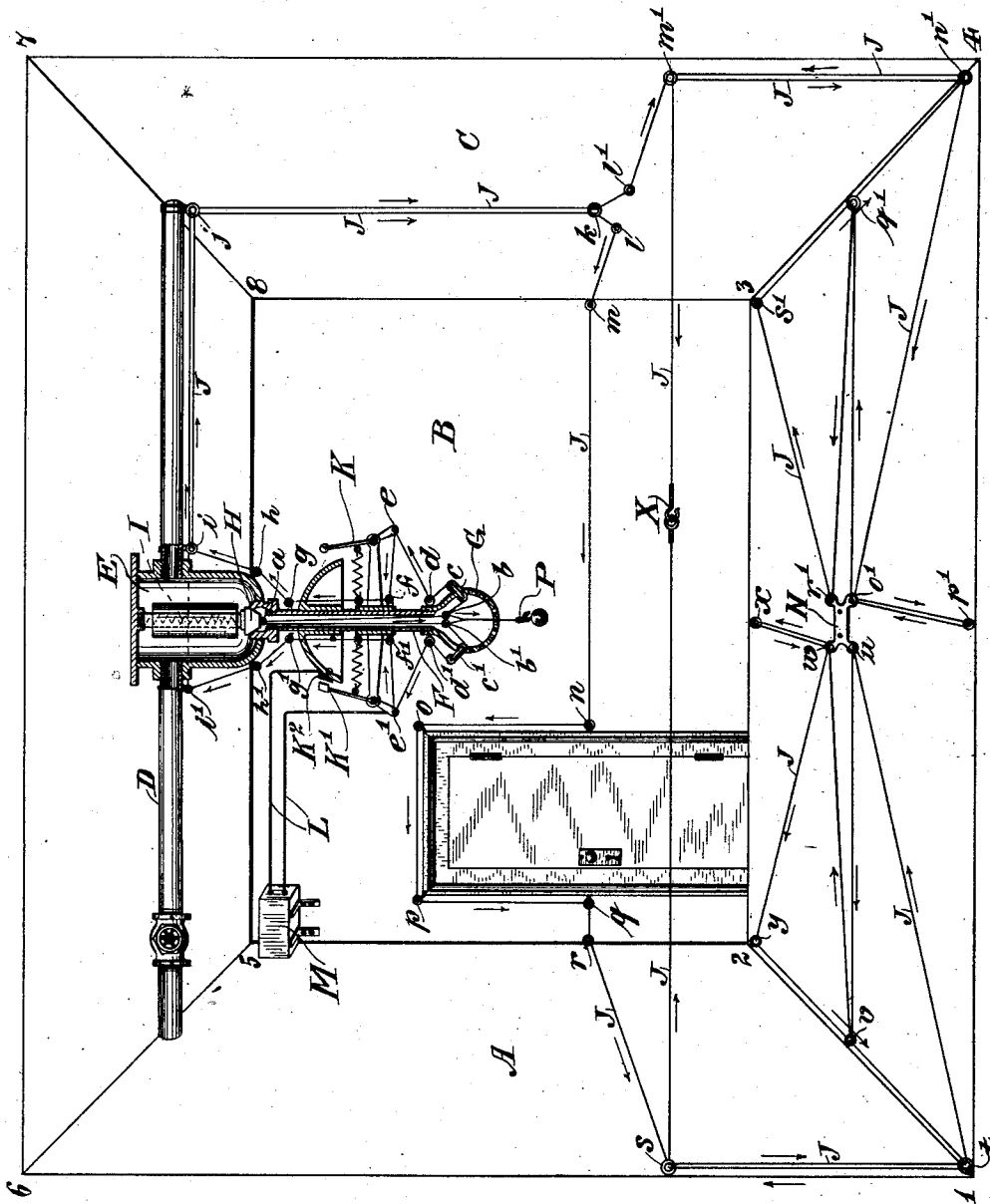


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 AUTOMATIC FIRE ALARM AND FIRE EXTINGUISHER.
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1,010,681.

Patented Dec. 5, 1911.



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GIUSEPPE PALMIERI AND GIOVANNI CIRILLO, OF NEW YORK, N. Y.

AUTOMATIC FIRE-ALARM AND FIRE-EXTINGUISHER.

1,010,681.

Specification of Letters Patent.

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Application filed September 2, 1910. Serial No. 580,197.

To all whom it may concern:

Be it known that we, GIUSEPPE PALMIERI and GIOVANNI CIRILLO, subjects of the King of Italy, and residents of the borough of Manhattan, of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Automatic Fire-Alarms and Fire-Extinguishers, of which the following is a specification.

The invention relates to fire alarm and fire extinguishing apparatus which are applied to the interior of a room.

As showing a specific embodiment of our invention, reference is made to the drawing forming part of the specification and in which drawing the figure illustrates a perspective view of the interior of a room of a building showing the floor, the walls and the ceiling with our fire alarm and fire extinguishing apparatus in position therein.

On the drawing the floor is bounded by lines extending between 1, 2, 3, 4 and 1; the wall A by lines between 1, 2, 5, 6 and 1; the wall B by lines between 2, 5, 8, 3 and 2; the wall C by lines extending between 3, 8, 7, 4 and 3; and the ceiling by lines extending between 5, 6, 7, 8 and 5. The wall which would be bounded by lines between 1, 6, 7, 4 and 1 has been removed in order that the interior of the room may be seen.

The lines designated by J indicate rope which is run around the room and is connected to the fire alarm and fire extinguishing apparatus depending from the ceiling.

D is a water pipe which leads to the chamber E of the fire extinguishing apparatus from which chamber E runs the pipe F to which is attached the nozzle or sprinkler G. The water is restrained from flowing through the pipe E and nozzle G by the stopper H which is secured to a spring I which spring is normally held under tension by means of rope J to be hereinafter described. This tension of the spring is sufficient to withdraw the stopper if for any reason the rope releases the tension, the idea being that in case of fire the rope will be burned, at some point releasing the tension, and the stopper H will be withdrawn by the spring I and permit the water to flow out of the nozzle G. In addition to this when the rope breaks it causes the striker K to strike the gong and give an alarm and at

the same time also causes the spring operated contact K' to swing against the fixed contact K² on the gong and thereby connect the contacts and complete the circuit designated by L which runs to the junction box M whereby the location of the fire can be communicated to other rooms throughout the building or to the main office leading therefrom by suitable indicators.

The manner in which the rope J is strung around the room will now be described.

Using the stopper H as a starting point it will be observed that the rope is strung through the eyelet *a* in the stopper and that one section of the rope passes through the free end of the striker K and from thence over one part of the room while the other section of the rope passes through the free end of the spring operated contact K' and from thence over another part of the room to a point X where the two sections are connected. The section which passes through the striker K runs as follows:—From *a* the rope passes through eyelet *b*, over pulleys *c* through eyelet *d* through the eyelet *e* in the free end of striker K then successively through the eyelets *f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z* and *s* to the point X. The section which passes through the free end of the spring operated contact K' runs as follows:—From *a* the rope passes through eyelet *b'*, over pulleys *c'*, through eyelet *d'*, through eyelet *e'* in the end of the spring operated contact member K' then successively through eyelets *f', g', h', i', j, k, l', m', n', o', p', q', r', s', q', n', m'* to the point X. It should be noted that the eyelets *u, w, r'* and *o'* are in a central member N which is free to move when the rope breaks.

It will thus be apparent that by the breaking or severing of the rope at any point that the striker K, the spring operated contact K' and the stopper can all be moved in the manner above described.

The rope and weight designated by P are utilized for holding the plug in position when the rope is being threaded around the room in the manner indicated and when the rope which extends around the room is under sufficient tension to hold the plug in position and the ends are secured the rope P is severed and the weight removed therefrom.

It is obvious that various modifications may be made without departing from the spirit and scope of our invention.

We claim as our invention:

5 1. A room or chamber having means for use at time of fire applied to one of the flat surfaces of the room, said means comprising in combination a freely movable central member and a rope passing from one quarter of the flat surface to the central member and from thence to a second quarter of the flat surface, the sections of the rope which lie in the two quarters being at an angle to each other, another portion of rope 10 passing from a third quarter of the flat surface to the central member and from thence to a fourth quarter, the sections of the rope which lie in the third and fourth quarters being at angles to each other, said 15 rope being normally under tension and connected with the means for use at time of fire in such manner that when the rope is burned the means will operate.

2. In a room the combination of means 25 for use at times of fire and a rope to normally maintain said means in inoperative position by tension, said rope having two sections passing through a central member, each of which sections lead from said means 30 part way down a wall of the room and part way around the room; one of the sections passing over the floor to the central member

from the central member to a wall of the room, thence back to the central member, from thence to a second wall, then back 35 to the central member and from thence to a point where it is united to the second section; the second section also passing over the floor, thence to the central member, from thence to a third wall of the room, 40 then back to the central member, from thence to a fourth wall of the room, then back to the central member and from thence to a point where it can be united to the first section. 45

3. A device for use at time of fire comprising in combination a supporting portion which carries a downwardly extending water delivering means having a valve therein a gong secured to said means, a 50 striker carried by the water delivering means, the striker held normally from contact with the gong and the valve normally held in closed position by a rope means 55 common to both.

This specification signed and witnessed the 22nd day of August A. D., 1910, in the city of New York in the State of New York.

GIUSEPPE PALMIERI.
GIOVANNI CIRILLO.

Signed in the presence of—
EDWIN A. PACKARD,
KENNETH HARLAN.