(No Model.)

I. KITSEE.

FIRE EXTINGUISHER.

No. 265,675. Patented Oct. 10, 1882.

Fig. 1.

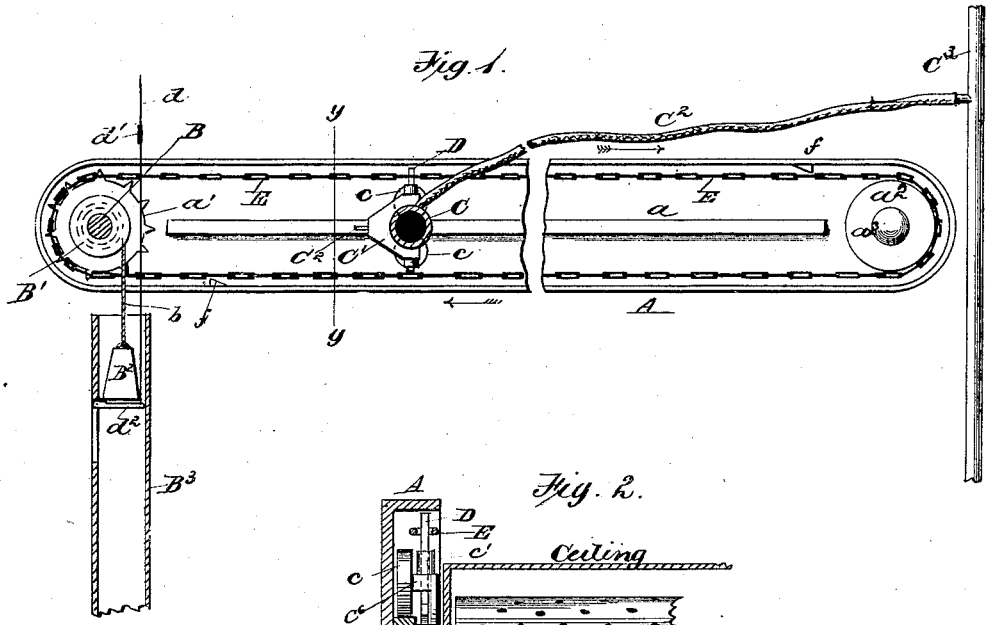


Fig. 2.

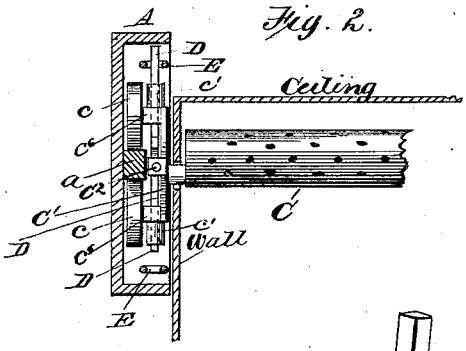


Fig 3.

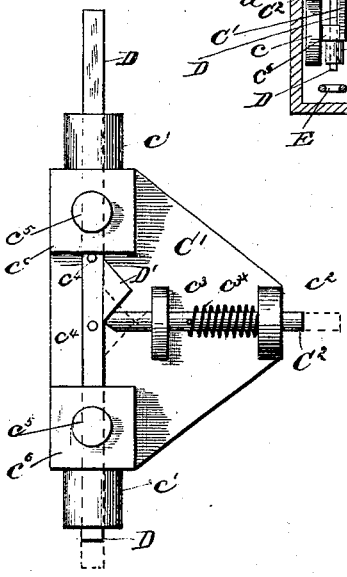
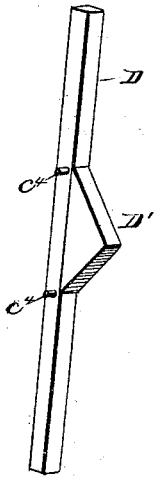


Fig. 4.



Attest,

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UNITED STATES PATENT OFFICE.

ISIDOR KITSEE, OF CINCINNATI, OHIO.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 265,675, dated October 10, 1882.

Application filed January 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, ISIDOR KITSEE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Fire-Extinguishers, of which the following is a specification.

In the drawings, Figure 1 is a side elevation of my improved fire-extinguishing device. Fig. 2 is an enlarged cross-section of the same on line *y y*. Figs. 3 and 4 are detailed views thereof.

A represents a shell or casing, of suitable material, placed within a room preferably near the ceiling, and provided at or about its center with a projecting track, *a*. Upon this track, at the upper and lower side thereof, travel small pulleys or wheels *c c*, pivoted upon bearings c^5, extending outwardly from projections c^6, formed upon or with a casting, C′, to which casting is also connected the ends of a perforated pipe, C, which extends at right angles to the shell or casing A a required distance across a room. The casting C′ is provided at its top and bottom with projections *c′ c′*, said projections being perforated longitudinally to admit a sliding bar, D, in place therein, said bar being provided at its center with a projection having inclined sides, as shown in Figs. 3 and 4 at D′. The casting C′ is also provided upon its rear side with projections or lugs c^2 c^3, which are perforated, and are provided with a bar or bolt, C^2, the end of which nearest the bar D is made wedge-shaped, as clearly shown in Fig. 3. The bar C^2 is kept normally pressed against the bar D by a spring, $c^{3\times}$, for a purpose hereinafter described. The ends of the shell or casing A are preferably rounded, and are provided with chain-wheels *a′* a^2, one of which, *a′*, is mounted upon a shaft, B, that extends from one shell or casing A to an opposite one. The other wheel, a^2, is mounted upon a short stud, a^3. About these wheels, and extending from one to the other thereof, is a sprocket-chain, E, into the links of which the ends of the bar D take, by which the casting C′ is carried forward and backward upon the track *a*.

f f represent two inclined abutments, fixed to the inner side near the ends of the shell A, above and below the sprocket-chain E, against which abutments *f f* the ends of the bar D, as they reach said abutments *f f*, strike, and by which means the direction of the motion of the casting C′ is reversed, as follows:

In Fig. 3 the dotted lines show the bar or bolt C^2 pressed outwardly by the projection D′ upon the bar D. When the apex of the projection D′ comes in juxtaposition with the wedged end of the spring-pressed bolt C^2 the latter operates to force the bar D upward or downward, as the case may be, and into engagement with the sprocket-chain E, the motion of the bar D being limited by the projecting studs c^4 c^4.

It will be seen by the foregoing description that the casting C′ will be caused to travel alternately back and forth upon the rail *a* when the device is in motion. Any mechanical movement may be used to set the parts in motion, provided that their controlling connection is first severed, either by melting of fusible connections or their rupture by electricity. I prefer the device herein shown to put the device in action—viz., to impart motion to the shaft B, with its attached sprocket-wheel *a′*, by the falling of a weight, B^2, which is hung on a rope, *b*, which rope is wound round a drum, B′, on the shaft B. The weight B^2 is confined within a box or chute, B^3, and therein rests upon a hinged shelf or trap, d^2, which is upheld by a wire or cord, *d*, having fusible joints *d′*, which wires or cords *d* extend through one or more rooms of a building. When this cord *d* is ruptured by use of temperature (or it can be broken at any of its parts by manual force with the same result) the trap d^2 falls, causing the weight B^2 to descend within the chute, unwinding on its passage the cord *b* on the drum and operating the driving-wheel *a′*, the spurs of which engaging in the endless sprocket-chain E, which in its movements draws along the casting C′, with its several attachments, carrying the perforated pipe C the full length of the track *a* until the end of the bar D strikes one of the abutments *f*, which causes said bar to slide through the projections c^6, and the projection D′ forces outwardly the spring-pressed bolt C^2, thereupon changing the motion of the perforated pipe from one direction to the other. The perforated pipe C is fed from any suitable supply through a flexible pipe, c^2, (shown in the drawings as being led from a stand-pipe, c^3.)

Having now fully described my invention, what I claim is—

1. In a fire-extinguishing device, a traveling perforated pipe provided with suitable bearings that bear and travel upon and are guided by rails or tracks arranged at the sides of rooms, and means for transmitting motion to said pipe, substantially as described.

2. In a fire-extinguishing device, the combination of the shell or case A, provided at each end with sprocket-wheels a' a^2 and sprocket-chain E, with the perforated pipe C, provided at each end with casting C′, having rollers c c, and bar D, having triangular projections D′, and spring-pressed bolt C^2, and means for transmitting motion thereto, substantially as described.

3. In a traveling fire-extinguishing device, the casting C′, having upper and lower projections, c^6, provided with movable bar D, having central projection, D′, and studs c^4 c^4, said casting further provided with perforated projections c^2 c^2 and spring-pressed bolt C^2, as and for the purpose intended, substantially as described.

4. In a traveling fire-extinguishing device, the combination of the shell A, having track a and sprocket-wheels a' a^2, with the shaft B, drum B′, and cord and weight b B^2, substantially as described, as and for the purpose specified.

ISIDOR KITSEE.

Witnesses:

ALEX. ABRAHAM,

E. S. KAUFMAN.