

1,292,009.

Fig. 1.

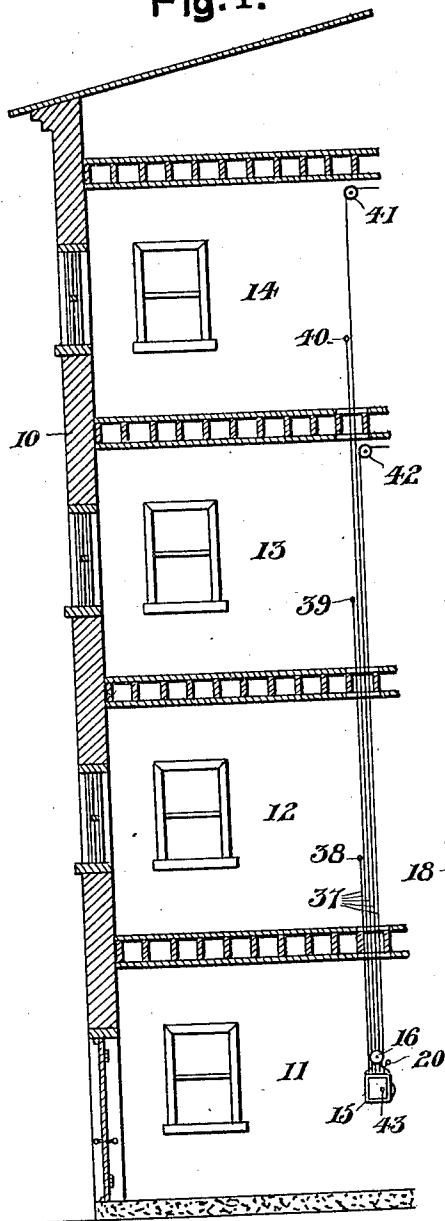
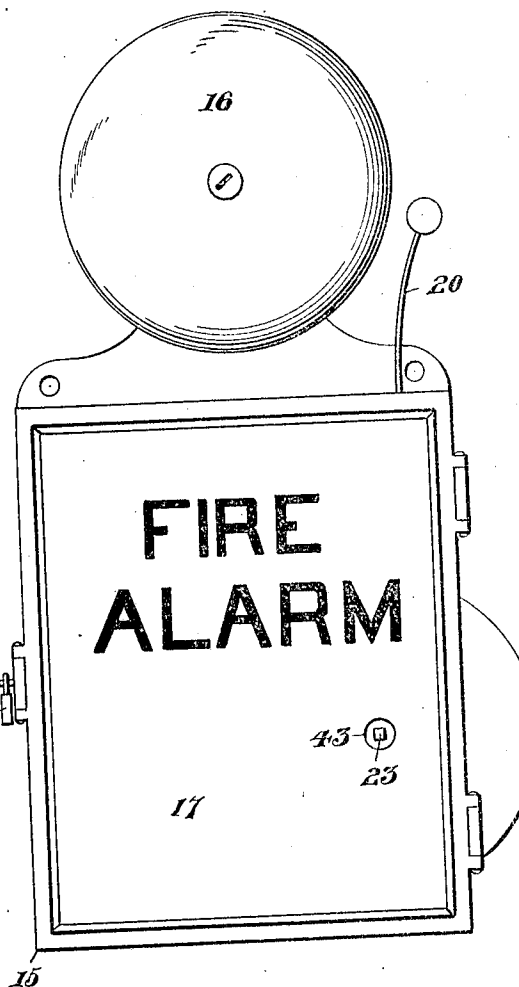


Fig. 2.



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Fig. 3.

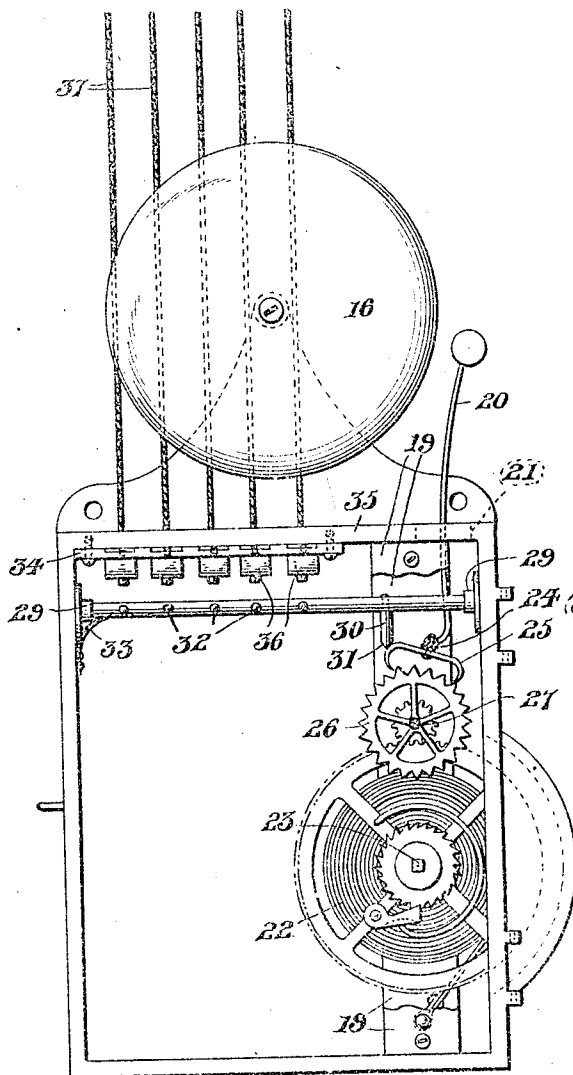


Fig. 4.

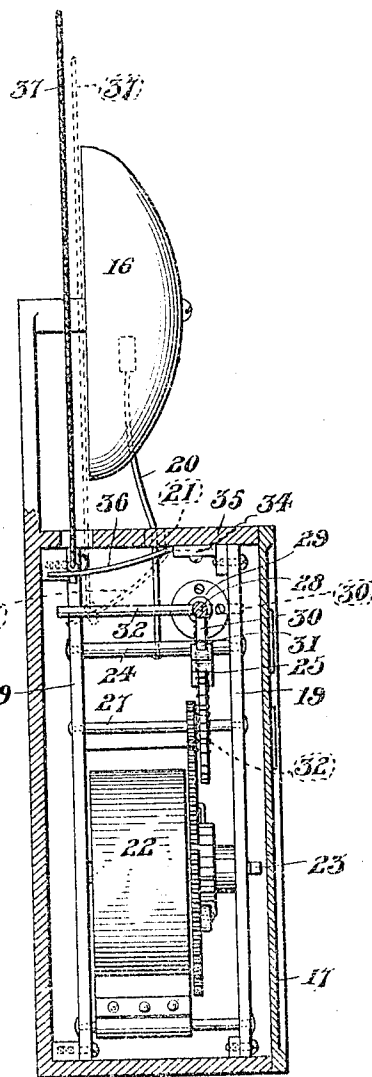
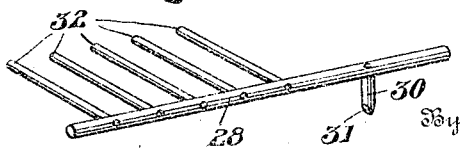


Fig. 5.



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UNITED STATES PATENT OFFICE.

EDWARD MOLENCKI, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO WLADYSLAW WASOWSKI, OF DETROIT, MICHIGAN.

FIRE-ALARM.

1,292,009.

Specification of Letters Patent.

Patented Jan. 21, 1919.

Application filed February 19, 1916. Serial No. 79,347.

To all whom it may concern:

Be it known that I, EDWARD MOLENCKI, subject of the Czar of Russia, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Fire-Alarms, of which the following is a specification.

This invention relates to certain new and useful improvements in fire alarms.

10 The primary object of this invention is the provision of an audible alarm member located at some convenient point and adapted to be tripped for actuation from different distant points whenever desired, such as in the event of a fire or when the janitor or a policeman are wanted.

15 A further object of the device is the provision of an alarm gong in the basement or janitor's quarters of a building, the gong being automatically set in motion by the release of any one of a plurality of cord members leading from the gong to different points of access throughout the building.

20 With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the appended claim.

25 In the drawings forming a part of this application and in which like-designating characters refer to corresponding parts throughout the several views:—

30 Figure 1 is a vertical sectional view through a portion of a building provided with the present device.

35 Fig. 2 is a front plan view of the alarm box and gong.

40 Fig. 3 is a view similar to Fig. 2, but with the door of the box removed and the connecting cords shown in their retracted normal positions, and parts being broken away.

45 Fig. 4 is a longitudinal sectional view taken of Fig. 3 of the drawing, the box door being closed, and

50 Fig. 5 is a perspective view of the taper releasing member.

It being understood that the present invention consists of an alarm gong which is set in operation from a distance, the device is herein illustrated in connection with a building 10 having a janitor's quarters or

basement 11, and with the first, second and third stories of the building positioned thereabove and herein designated 12, 13 and 14 respectively.

60 An alarm box 15 is arranged at any convenient point in the basement 11 and has a gong 16 mounted thereon, while a hinged front door 17 is provided for the box being retained in closed position when desired by means of a suitable lock 18.

65 Any well-known form of spring actuated sounding means is provided for the gong 16 and is herein illustrated as carried by opposite plates 19 within the box 15 and comprising a tapper 20 for the gong which extends through a top slot 21 of the box 15 and is actuated by means of a coil spring 22 adapted to be wound up or placed under tension by means of a key (not shown) readily applied to the squared pintle 23 of the spring, it being noted that the tapper 20 is mounted upon a shaft 24 journaled in the said plates 19 to which shaft an escapement 25 is attached in operative engagement with a toothed wheel 26 of the driving shaft 27 of the operating spring 22. It will thus be evident that when the spring 22 is under tension, the tapper 22 will vibrate against the gong 16 thereby sounding the same. The escapement member may at any time be restrained from oscillating for holding the tapper inoperative.

70 A restraining and releasing member of the form illustrated in Fig. 5 of the drawings is arranged for the escapement member 25, being in the form of a bar 28 journaled in bearings 29 at opposite sides of the box 15 and having a bearing finger 30, with a tapered free end 31 adapted to restrainingly engage the escapement member 25 when the arms 32 which are carried by the bar 28 are in their substantially horizontal position as normally maintained by a leaf spring 33 secured to the box 15 and bearing against the adjacent one of said arms 32.

75 A block 34 is secured to the top 35 of the box 15 and a plurality of actuating springs 36 have their corresponding ends rigidly secured thereto, the said springs 36 being of the same number as the arms 32 and have paths of movement in the planes of movement of said arms when the latter are normally horizontally positioned.

80 Separate restraining cords 37 are provided for the springs 36, the same being at

tached at their lower ends to the springs 36 and thence passing upwardly through the top 35 of the box 15 to convenient points in each story of the building such as 38, 39 and 40 in the separate floors 12, 13 and 14 respectively, while two of the cords 37 are passed laterally over pulleys 41 and 42 and thence to different parts of the building 10.

From this detailed description of the invention, it will be seen that all of the cords 37 are normally held retracted with their free ends secured at different convenient points in the building 10 and thus maintaining all of the springs 36 in their normally tensioned elevated positions as shown in Figs. 3 and 4 of the drawings. In the event of the occurrence of a fire in the building 10 or the desire of an occupant thereof to sound the gong 16, it is only necessary for such person to detach the free end of any conveniently positioned one of said cords 37 or to sever such cord, whereupon the spring 36 attached thereto will be released and will move to the position shown in dotted lines in Fig. 4 of the drawings, and coming in contact with the adjacent arm 32 of the releasing member will impart a partial rotation to the arm 28 releasing the finger 30 from the escapement member 25. The said member being thus released will allow the spring 22 to oscillate the tapper 20 and the gong 16 will be sounded continuously until the spring 22 is entirely unwound or the finger 30 is again positioned within the path of travel of the escapement member 25 which may be readily effected by exerting a pull upon the releasing cord 37 and then retaining such cord retracted.

It will thus be seen that the cords 37 may be provided of any desirable lengths and extended to different points throughout the building and while being designed to be manually released, it will be understood that a burning of one of the cords resulting in a releasing thereof would automatically set the gong 16 in operation. It will be also understood that the spring 33 returns the arms 32 to their normal horizontal positions and with the finger 30 in restraining engagement with the escapement member 25 when all of the springs 36 are retracted, it thus being unnecessary to open the door 17 of the box 15 under ordinary circumstances

for the resetting of the alarm, it being apparent that the spring 22 may be rewound whenever desired by inserting the operating key through the hole 43 in the door 17 and engaging the same with the aforementioned winding pintle 23.

While the form of the invention herein shown and described is what is believed to be the preferred embodiment thereof, it is nevertheless to be understood that minor changes may be made without departing from the spirit and scope of the invention as claimed.

What I claim as new is:—

An alarm of the character described including a housing, a gong secured upon the outside of said housing above the top wall thereof, an alarm mechanism secured within said housing adjacent one end thereof and adapted to operate a gong tapper, an escapement lever in said alarm mechanism having a gong tapper rigidly attached thereto which extends upwardly through the top of the housing to a point adjacent said gong, a straight horizontal shaft within said housing, bearings secured to the end walls of the housing above the alarm mechanism and having the ends of said shaft rotatably journaled therein, said shaft having a laterally extending relatively short straight finger rigidly secured thereto adjacent one end portion thereof, said finger projecting downwardly with its free end normally directly bearing against said escapement lever to lock the same against movement, a plurality of spaced parallel laterally and rearwardly extending straight fingers rigidly secured to said shaft adjacent its other end portion and at right angles to the first named short finger, a plurality of spaced parallel actuating members carried by said housing and normally tending to move downwardly therein toward said last named fingers to depress the same and thereby rotate said shaft to forwardly swing said locking finger from said escapement lever, each of said last named fingers being arranged in the path of movement of one of said actuating members, and a plurality of releasable means for holding said actuating members away from the last named fingers.

In testimony whereof I affix my signature.

EDWARD MOLENCKI.