

P. ORANGE.
BURGLAR ALARM SCREEN.
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943,368.

Patented Dec. 14, 1909.

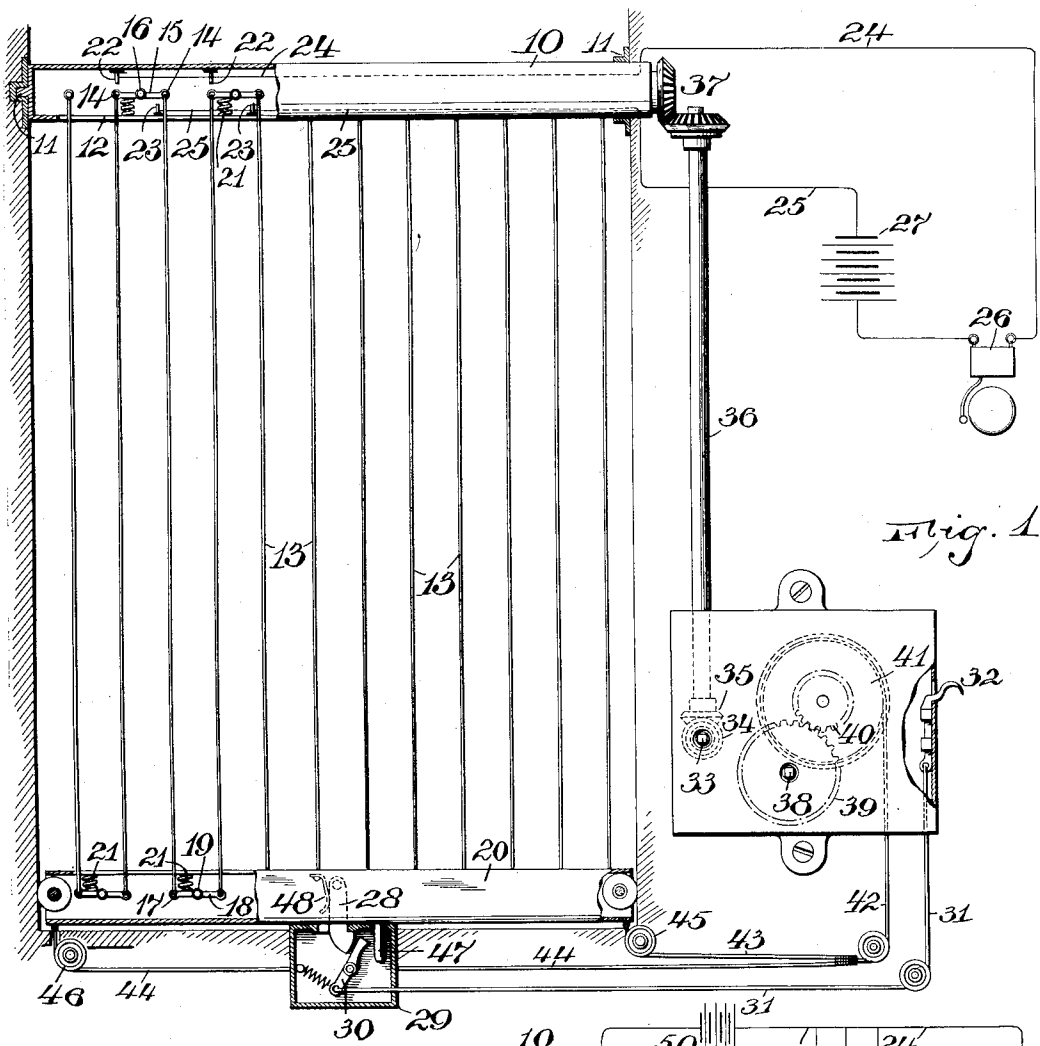
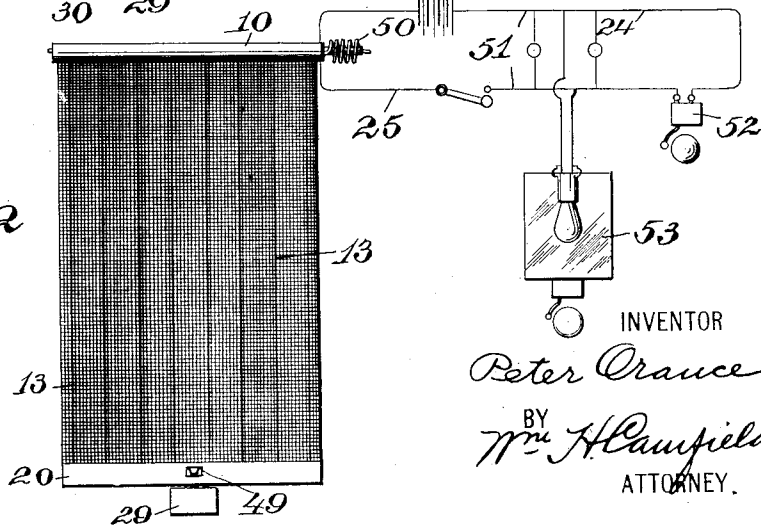


Fig. 2

WITNESSES:
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BURGLAR-ALARM SCREEN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PETER ORANCE, a subject of the Czar of Russia, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Burglar-Alarm Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to a screen or shade that combines, with its screening or shading properties, a system for detecting an entrance or attempted entrance through the screen, thereby serving as a burglar alarm.

The device is intended to be used in windows, doors and similar openings, and to be preferably rolled on one end so as to take it out of the way when not needed, the screen or shade, when in its extended position, being locked and being so constructed that the severing of wires within the screen will cause the closing of an electric circuit which can be used to give either an audible or a visual signal.

This screen permits a covering for windows which obviates the necessity of placing the windows in place during the night, which is particularly desirable in stores, such as butcher shops, delicatessen stores, restaurants and so forth. The screen permits a circulation of air, and at the same time acts as a burglar alarm when tampered with.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a diagrammatic view with the screen portion of the device removed, and Fig. 2 is a view of a modification, but showing the screen in full.

I preferably secure the screen into a roller or a tube 10 suitably placed at or near the top of a window or door-frame and rotatable in bearings such as 11 in Fig. 1, and being provided with a slot 12 through which extend the parallel wires 13. Each wire is secured to an end 14 of levers 15 pivotally mounted as at 16 in the roller 10. The other ends of the wires 13 are secured to the ends 17 of the levers 18 pivoted, as at 19, to a strip 20 forming the bottom edge of the screen or curtain. Springs 21, underneath

the levers 18 and the levers 15, tend to hold the wires 13 taut, and the wires are cut of a length so as to hold the levers 18 and the levers 15 substantially parallel with each other and also with the axis of the roller 10. When for any reason, through accident or design, any of the wires 13 are cut or broken, the lever 15 to which they are attached is released and the spring 21 acts to throw the lever 15 with one end in contact with a post 22, and its other end in contact with a post 23, a pair of these posts being supplied for each lever, and since the posts 22 are connected with a wire 24 and the posts 23 are connected to a wire 25, the circuit is closed passing through these wires 24 and 25, thereby operating a signal such as a bell or other audible signal 26, placed in a circuit with a battery or other source of power 27. The roller 10 can be spring actuated so as to have a tendency to roll up and thus hold the wires taut.

The strip 20, at the bottom of the screen, is held down by having the spring latch 28 engage the casing 29 of the lock, and when it is desired to raise the screen, the arm 30 is operated by means of the cord 31 and the finger-piece 32 so as to throw the latch 28 back and permit the raising of the roller by means of a suitable handle or key placed on the shaft 33 of a gear 34, which gear in turn operates a gear 35 on the shaft 36, and this in turn transmits the motion to the gears 37, thus acting to roll up the roller 10. When it is desired to pull down the blind or screen, a key or handle is inserted on the shaft 38 and the gear wheels 39 and 40 act to roll up a reel 41 which in turn pulls the rope 42 and the cords 43 and 44 which pass over the pulleys 45 and 46, respectively, pulling down on the strip 20 on each end so that it rides easily down through the door or window-frame and becomes locked. To prevent undue side strain on the strip 20, when the latch 28 enters the opening in the casing 29, a pin 47 enters a perforation in the casing 29 before the latch 28 engages the casing, and thus holds the strip and the casing in their proper relation and causes a positive swinging back of the latch 28 against its spring 48.

I may use, if desired, the alternate construction shown in Fig. 2, in which the strip 20 is operated by a handle 49 for lowering the same, and the roller 10 is operated by any usual form of spring 50, as is customary

in shade or similar rollers as at present constructed. The wires 13 are concealed in the screen itself, if desired. I illustrate in Fig. 2 the circuit wires 24 and 25 which are connected inside the roller 10 the same as illustrated in Fig. 1, but instead of having a simple connection with an audible signal, such as a bell, I may place the lighting circuit 51 so that it is closed when the wires 13 are severed, and thus illuminate a place of business in case of attempted entrance, and in addition thereto a suitable audible signal and visual signal 53 can be placed outside a place of business so as to warn the police or any other observers of the attempted entrance to a place of business.

This system will not necessitate the burning of a light constantly in a place of business to prevent burglary, since an attempted entrance by severing the wires 13 will cause an illumination of the store or building, and thus defeat the purposes of the attempted entrance.

I have illustrated a screen as being used in a structure, but it will be understood that I may employ shades or curtains or similar structures to cover the wires 13, or the wires can be used alone.

Having thus described my invention, what I claim is:—

1. An alarm screen comprising a roll or the like having levers therein, wires having their ends secured to the ends of the levers, a strip having means therein for securing the other ends of the wires, an electric circuit having a signal therein, contacts in the circuit adapted to make the circuit by means of the levers when a wire is broken, and means connected with the levers for main-

taining them in normal position to cause the wires to be under a constant tension.

2. An alarm screen comprising a roll having a series of levers therein, electrical contacts opposite the ends of the levers means for tilting the levers, an electric circuit connecting the contacts with a signal, the levers when tilted causing a closing of the circuit between the contacts, a series of wires having their ends connected to the ends of the levers to keep the levers from the contacts, a movable strip to which the free ends of the wires are connected, means for rotating the roll, and means for locking the strip in its extended position when the wires are taut.

3. An alarm screen comprising a roll having a series of levers therein means for tilting the levers, electrical contacts opposite the ends of the levers, an electric circuit connecting the contacts with a signal, the levers when tilted causing a closing of the circuit between the contacts, a series of wires having their ends connected to the ends of the levers to keep the levers from the contacts, a movable strip to which the free ends of the wires are connected, means for rotating the roll, means for locking the strip in its extended position when the wires are taut, and means for releasing the latch to allow the strip to move toward the roll when the roll is rotated.

In testimony, that I claim the foregoing, I have hereunto set my hand this 9th day of July 1908.

PETER ORANCE.

Witnesses.

WM. H. CAMFIELD,
E. A. PELL.