

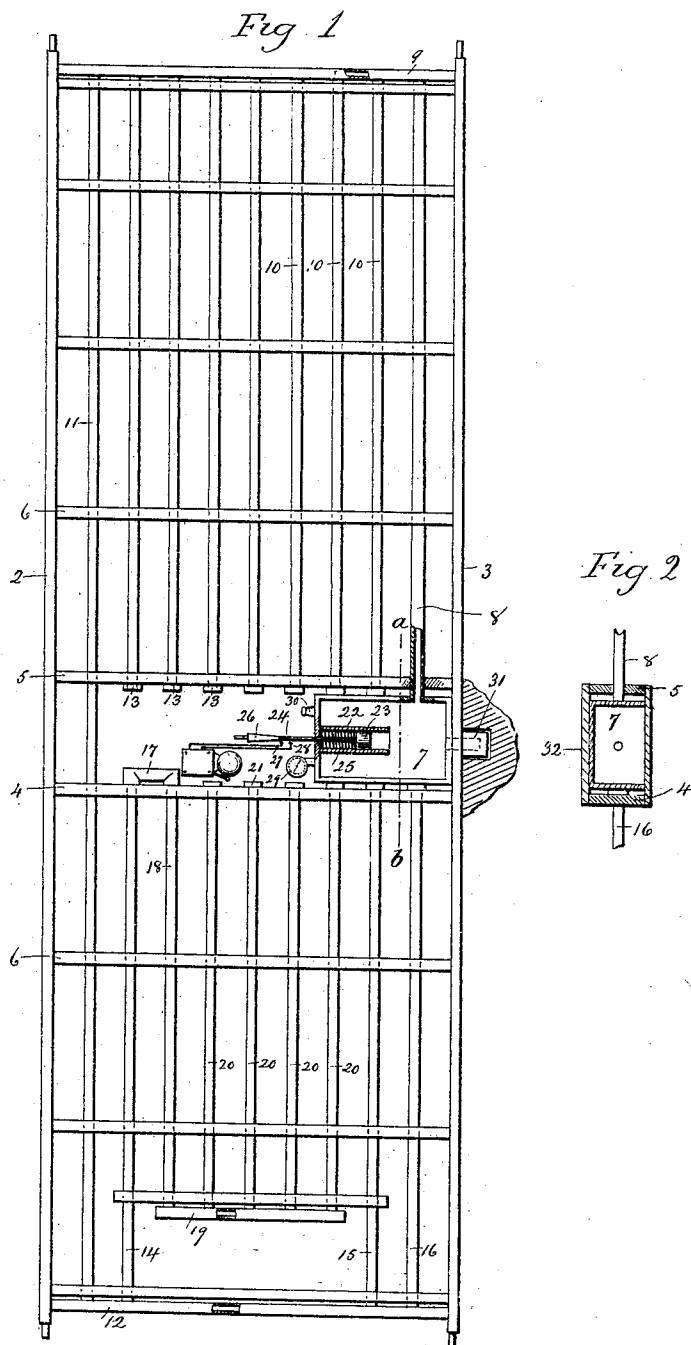
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D. N. GESNER & W. H. LEETE.
CELL DOOR OR WINDOW GUARD.

APPLICATION FILED MAR. 24, 1904.

NO MODEL.



Witnesses,
J. H. Hummery
Clara L. Weed.

Dwight H. Cramer.
 By William H. Lister.
 By atty Seymour & Carr *Inventors*

UNITED STATES PATENT OFFICE.

DWIGHT N. GESNER AND WILLIAM H. LEETE, OF NEW HAVEN,
CONNECTICUT.

CELL DOOR OR WINDOW GUARD.

SPECIFICATION forming part of Letters Patent No. 774,874, dated November 15, 1904.

Application filed March 24, 1904. Serial No. 199,773. (No model.)

To all whom it may concern:

Be it known that we, DWIGHT N. GESNER and WILLIAM H. LEETE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Cell Door or Window Guards; and we do hereby declare the following, when taken in connection with the accompanying drawings and the figures of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a plan view of a door or window guard constructed in accordance with our invention; Fig. 2, a sectional view on the line *a b* of Fig. 1.

This invention relates to an improvement in cell door or window guards, and while particularly adapted for the cell doors or windows of prisons is applicable to guard against forced openings, the object of the invention being to so construct a door or window guard that when any portion of it is cut or tampered with an alarm arranged within the guard will be sounded; and the invention consists in the construction as hereinafter described, and particularly recited in the claim.

In carrying out our invention we have shown a door such as is commonly employed in the cells of prisons; but this illustration will be ample to enable the invention to be applied to guards for window and other openings. As herein shown, the door-frame consists of vertical bars 2 3, connected by transverse bars 4, 5, and 6, more or less in number. These transverse bars have vertical openings through which tubes extend in the same way as do the bars in a door of usual construction. Between the bars 4 5 we introduce a chamber 7, which is connected with one of the tubes 8, extending upward to a header 9, into which also open tubes 10, more or less in number, and a tube 11, extending throughout the length of the frame into a header 12 at the bottom, the tubes 10 being closed at their lower ends by caps 13. Opening upward from the header 12 are tubes

14, 15, and 16, the tube 14 connected at its upper end by a coupler 17 with a vertical tube 18, which through a short header 19 connects with tubes 20, which, like the tubes 16, are closed at their upper ends by caps 21, the space formed below the tubes 18 and 20 forming the usual opening near the bottom of the door. Opening into the air-chamber 7 is a cylinder 22, in which is a plunger 23, having an outwardly-projecting stem 24, around which and in the cylinder is a spiral spring 25, the tendency of which is to force the plunger inward. Upon the stem is a contact 26, adapted when the stem moves forward to engage with contact-points 27 28 of an electric alarm. Also coupled with the chamber 7 is a gage 29 of usual construction, and also opening into the chamber is a valve-nipple 30, through which air may be forced into the chamber. In door-frames of this character it is customary to provide the inner bar 3 with a lug 31, adapted to enter the socket formed in the door-jamb, and this lug may be formed with an interior recess opening into the chamber 7. The air-chamber, gage, and alarm will be protected on the inside by a plate 32, secured to the bars 4 5, this plate also supporting the usual lock mechanism, which is not shown.

It will be seen that the several vertical tubes are all connected, so that air forced into the chamber will fill all of the tubes. This chamber and the tubes may be filled through the valve-tube 30 by an ordinary pneumatic pump, and the compression of air in the chamber will force the plunger 23 outward against the force of its spring and carry the contact-plate 26 out of engagement with the contact-points 27 28. When the desired pressure is secured, as shown by the gage, the valve 30 will be closed. If now any one of the vertical tubes should be cut, the air therein will at once escape, relieving the pressure in the air-chamber and allowing the plunger 23 to move inward, bringing the plate 26 into contact with the contact-points 27 and 28, thus closing the circuit and causing an alarm-bell to sound, and this bell will continue to ring as long as the batteries are in force.

It is apparent that instead of using air to fill the chamber and tubes oil or other liquid may be substituted therefor, the effect being the same in all cases. Instead of arranging
5 an alarm-bell in the door it might be carried to a distant point, suitable electric connection being made with the contact-points. By thus forming a door or window with tubes all connected and filling them with air or liquid and
10 arranging an alarm mechanism to indicate when any of the tubes have been opened we furnish a door which cannot be tampered with without the fact becoming at once known.

If desired, the side and transverse bars may
15 be tubular and connected in the circuit with the vertical tubes.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A door or window guard comprising vertical side bars and transverse bars connected therewith, vertically-arranged tubes coupled together so as to all be in the same circuit a portion of said tubes terminating at adjacent transverse bars, and alarm mechanism arranged between said transverse bars at which
25 a portion of the tubes terminate and adapted to be set in operation at the opening of any one of said tubes, substantially as described.

In testimony whereof we have signed this
specification in the presence of two subscribing witnesses. 30

DWIGHT N. GESNER.
WM. H. LEETE.

Witnesses:

FREDERIC C. EARLE,
CLARA L. WEED.