(No Model.) 2 Sheets—Sheet 1.

M. K. PAINE.

ALARM EASEL.

No. 430,084. Patented June 10, 1890.

Fig. 1.

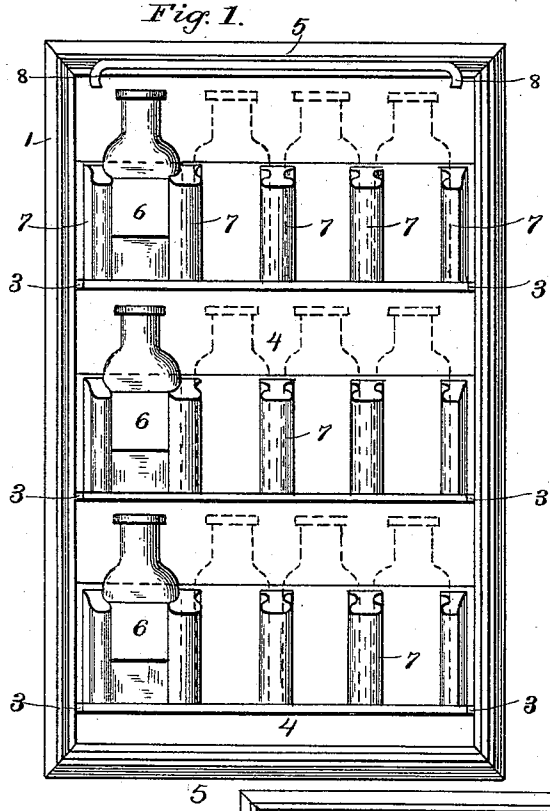


Fig. 2.

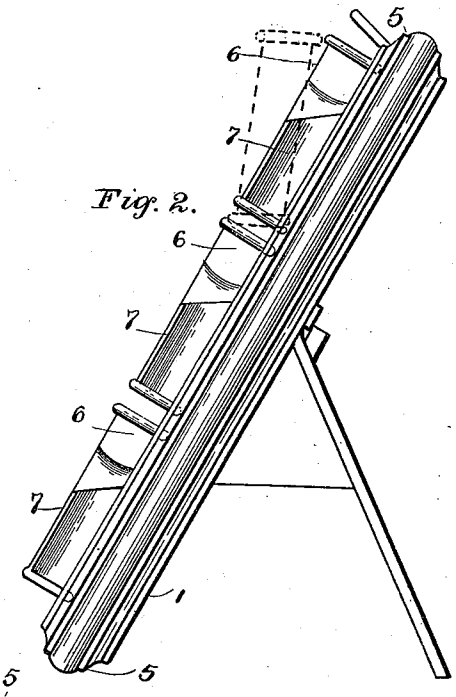
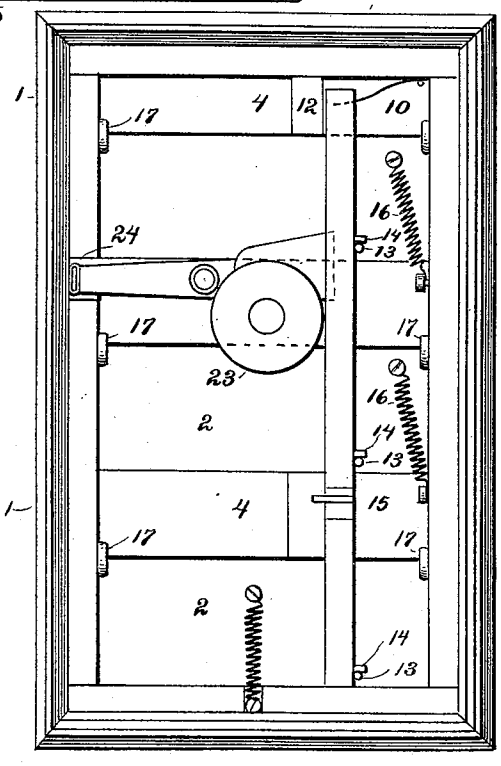


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.)

2 Sheets—Sheet 2.

M. K. PAINE.

ALARM EASEL.

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Fig. 6.

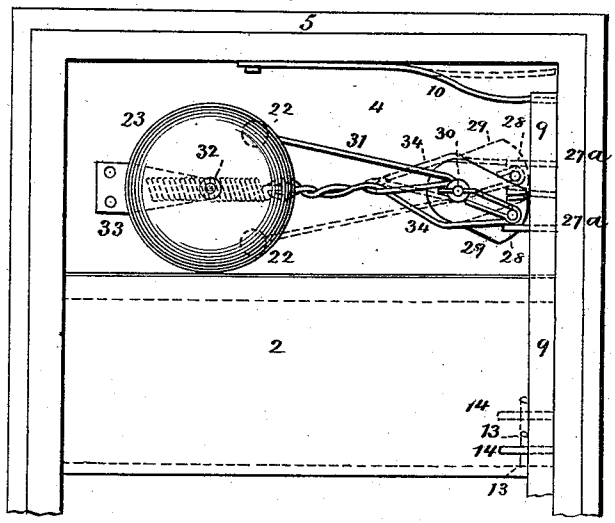


Fig. 4.

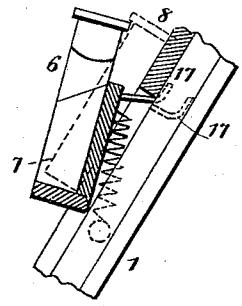


Fig. 7.

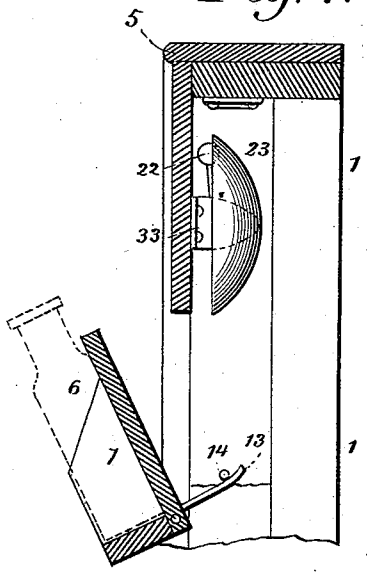
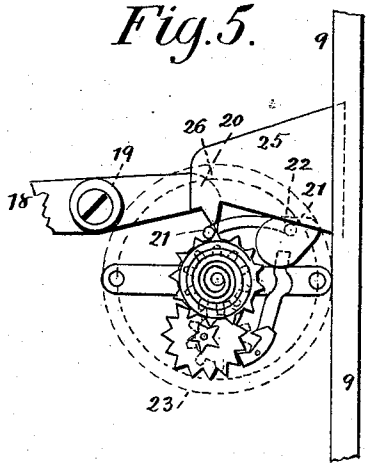


Fig. 5.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MILTON K. PAINE, OF WINDSOR, VERMONT.

ALARM-EASEL.

SPECIFICATION forming part of Letters Patent No. 430,084, dated June 10, 1890.

Application filed December 21, 1889. Serial No. 334,591. (No model.)

To all whom it may concern:

Be it known that I, MILTON K. PAINE, a citizen of the United States, residing at Windsor, in the county of Windsor and State of Vermont, have invented or discovered a certain new and useful Improvement in Alarm-Easels, of which improvement the following is a specification.

In the accompanying drawings, which make part of this specification, Sheet I, Figure 1, shows a front view of the easel; Fig. 2, an edge view showing in dotted outline the top bracket swung out; Fig. 3, a rear view. Fig. 4 is a partial edge view of the easel, showing the top bracket tilted, the right-hand side of the easel-frame being removed to show the spring attached to said bracket and the several stops and pins. Fig. 5 is a rear view of the alarm mechanism with the bell removed. Sheet II, Fig. 6, shows a broken rear view of a modified way of sounding the gong, and Fig. 7 is an edge view of the same.

The purpose of my invention, generally stated, is to devise mechanical means by which an alarm shall be given when an attempt is made to pilfer goods exposed for display in easels or like stands.

Shop-keepers are troubled by frequent and annoying thefts of small articles—such as bottles of perfumery, medicines, fancy goods, &c.—which for purposes of advertisement are necessarily exposed and often unprotected.

In the practice of my invention I employ ordinary easel-frames, such as shown in Figs. 1, 2, and 3 of Sheet I. These easels may be made of papier-maché, metal, wood, &c. Upon the face of the easel are brackets or pockets to hold the goods, said brackets being pivoted to the side pieces 1 1 of the easel-frame. These swinging brackets are made with a back 2 2 and base or shelf 3 3. The cross-strips 4 4 stiffen the easel and are used as a base for several attachments. 5 5 are the top and bottom strips of the easel-frame. Bottles 6 6 are here shown, for purposes of illustration, set between the upright blocks 7 7, which prevent any lateral movement. The wire hoop 8 at the top of the easel prevents the bottles on the upper bracket from being drawn out by an upward pull.

In Fig. 3 the back of the easel has been removed, exposing the contents of the space lying between the front and back plates of the easel.

9 9 is a lever which is a little shorter than the length of the recess in which it moves. It is normally held down by the spring 10, secured to the strip 5 of the easel-frame. Small blocks 11 12 prevent side movement of the bar 10 in one direction, and pins 13 13 13, inserted in brackets 2 2 2, prevent side motion of the lever 10 on the other side. The pins 13 13 13 on their upper side also engage pins 14 14 14, inserted in the lever 9. The pin 15, set in the block 11 and moving in a notch in the bar 9, holds the latter loosely down to the face of the easel. Springs 16 16 16 connect each bracket with the frame of the easel. A pair of hooks 17 17 on each bracket 2 2 are of such length as to permit the bracket to swing out far enough, so that the bottle may be removed before the hooks 17 17 strike the cross-strips 4 4.

18 is an arm pivoted at 19, having point 20 to engage a projecting pin 21 on the hammer 22 of an alarm-bell 23, set on the cross-strip 4. These parts are also shown in Fig. 5.

24 is the finger-push of the arm 18 and extends through a slot cut in the edge of the back of the easel.

25 is a short arm fastened to the lever 9 and having also a point 26 to engage the pin 21. The remaining parts of Fig. 5 are the wheels, escapement, &c., of an ordinary stem-winding alarm, to the construction of which I lay no claim, and which are too well known to require description, being shown simply as they are parts adjacent to my apparatus, and for the releasing of which my alarm apparatus is constructed.

In Figs. 6 and 7, Sheet II, I show a modified or alternative device for setting off the alarm. Two pins 27^a 27^b are set in the bar 9 above and below, respectively, the pin 28, set in the plate 29, pivoted to the strip 4 by pivot 30. Around pivot 30 is loosely coiled one end of the arm 31 of the hammer 22. An extension of the arm 31 is hooked around the pin 28. A spring 32 is hooked at one end to the brace 33 and at the other to a wire 34, whose diamond-shaped extension embraces the pivot 30. The wire 34 also encircles the pin 28. The operation of my devices will now be apparent, describing first the working of the

apparatus found on sheet I. When the easel with its contents is exposed, the point or dog 20 of the arm 18 is raised by pushing down the finger-piece 24. The alarm is wound up and the hammer is kept from acting only by the dog 26. Should a thief attempt to remove any article of merchandise, he can do so only by swinging out one of the brackets 2 2. The pins 13 13 will push against the pins 14 14, raising the lever 9 9 and its connected arm 25, releasing the dog 26 and giving the alarm. The brackets are returned to their proper position by the springs 16 16 and the lever 9 by the spring 10.

Should the owner wish to remove the contents of the easel without sounding the alarm, he will raise the push 24, dropping the dog 20, which will keep the alarm from ringing when the dog 26 is off.

In the apparatus shown in Figs. 6 and 7 the alarm is also sounded by the upward motion of the lever 9, for the pin 27^a pushes against the pin 28, swinging the plate 29 around, and consequently pushing the pin 28 farther from the brace 33 and pulling upon the spring 32. When the plate 29 has moved so far that the pivot 30 is past the center of the diamond made by the wire 34, the pull of the spring will then tend to snap the plate 29 around until the point 30 strikes the opposite V of the diamond from which it started. This will sharply rap the hammer 22 upon the bell 23. The motion of the plate 29 is limited by the pivot 30 striking the V of the diamond of the inclosing-wire 34 and the pin 28 striking the pin 27^b. The parts are returned to their place by the spring 10. The arm 18 can be applied to this modified way of ringing the bell.

The pockets on front of the easel for holding merchandise may have wire or glass fronts, &c., instead of being made as here represented.

A great number of modified ways of connecting the easel with an alarm may be contrived, and I do not confine myself solely to the two ways here shown; but

I claim—

1. The combination of an easel, shelves pivoted in said easel and containing pockets, from which displayed goods can only be removed by swinging said shelves, a bar so connected with said shelves as to be moved by the oscillation of said shelves, and an alarm mounted upon said easel and released by the action of said bar, all substantially as and for the purposes set forth.

2. An easel for displaying goods, having pockets on swinging shelves, from which the goods can only be removed by swinging said shelves, in combination with a lever moved by the swinging of said shelves, said lever and shelves being retracted to their original position by suitable springs, the pins 27^a and 27^b, inserted in said lever, the plate 29, pivoted by the pin 30, and having the pin 28 in its face to engage the pins 27^a and 27^b, the alarm-hammer 22, having arm 31, loosely coiled around the pin 30, with an extension hooked to the pin 28, the spring 32, rigidly secured at one end and fastened to the wire 34 at the other, the wire 34 embracing the pivot 30 and surrounding the pin 28, and a bell, all substantially as shown and described.

3. An easel for displaying goods, having pockets on swinging shelves, from which the goods can only be removed by swinging said shelves, in combination with a lever moved by the swinging of said shelves, said lever and shelves being retracted to their original position by suitable springs, the pins 27^a and 27^b, inserted in said lever, the plate 29, pivoted by the pin 30 and having the pin 28 in its face to engage the pins 27^a and 27^b, the alarm-hammer 22, having arm 31, loosely coiled around the pin 30, with an extension hooked to the pin 28, the spring 32, rigidly secured at one end and fastened to the wire 34 at the other, the wire 34 embracing the pivot 30 and surrounding the pin 28, a bell, and a second dog adapted to hold the alarm when the goods are to be noiselessly removed, all substantially as described and shown.

In testimony whereof I have hereunto set my hand.

MILTON K. PAINE.

Witnesses:

LEAVIT J. HUNT,

GILBERT A. DAVIS.