No. 798,638. PATENTED SEPT. 5, 1905.

J. SWAN.

DOOR ALARM.

APPLICATION FILED JAN. 9, 1905.

Fig. 1.

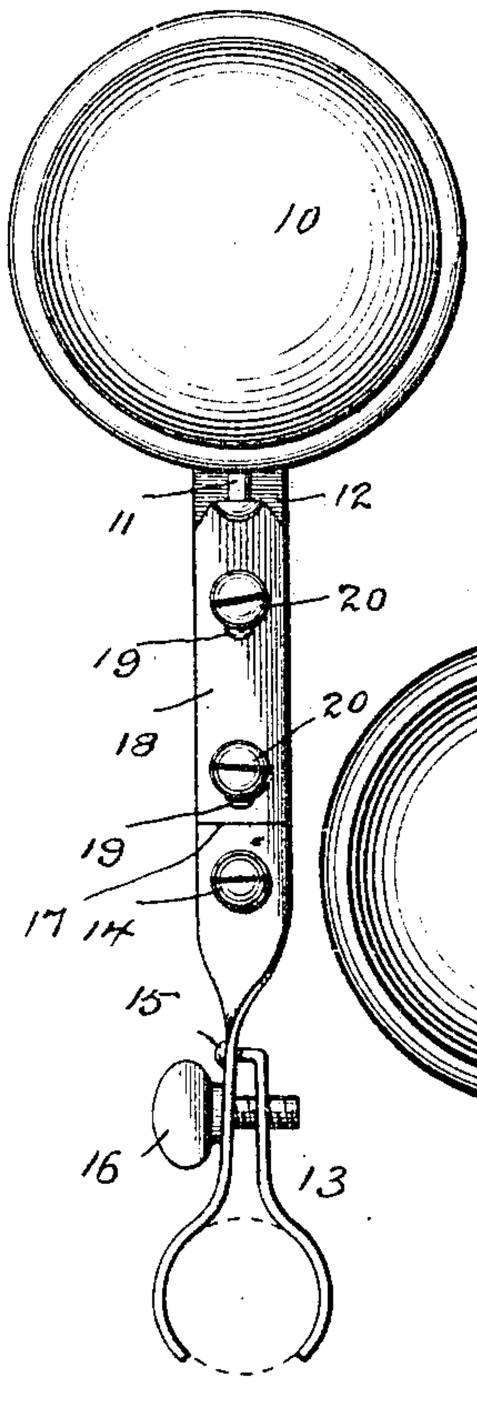


Fig. 2.

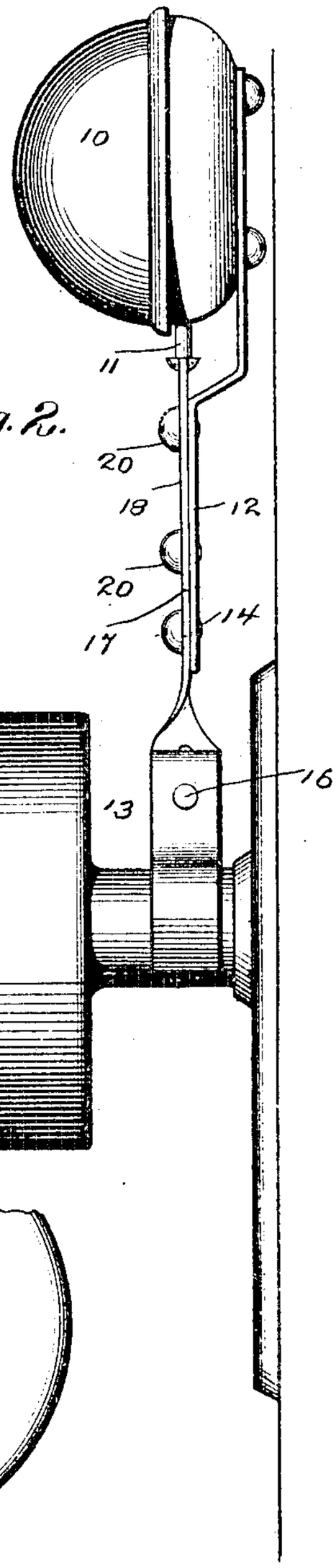
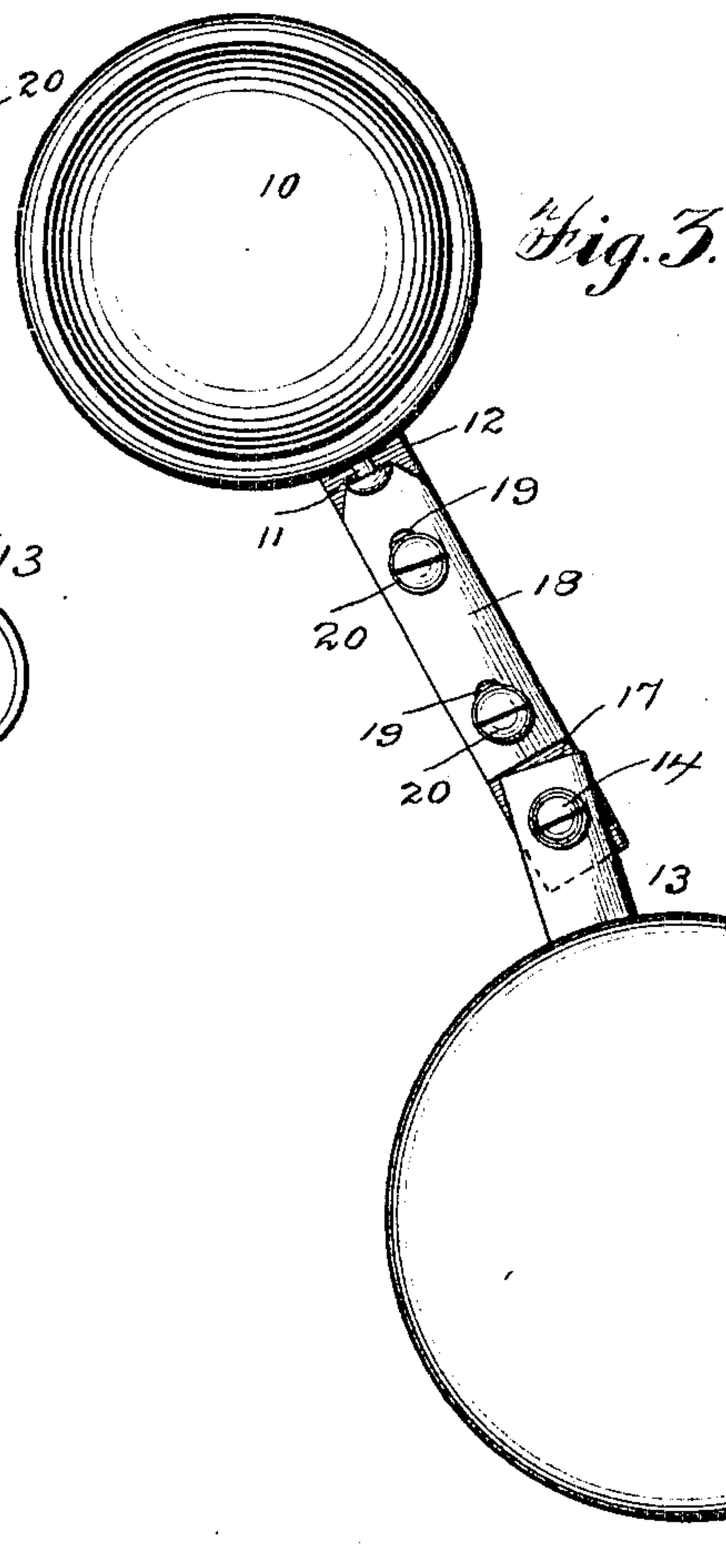


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES SWAN, OF SEYMOUR, CONNECTICUT.

DOOR-ALARM.

No. 798,638 Specification of Letters Patent. Patented Sept. 5, 1905.

Application filed January 9, 1905. Serial No. 240,195.

To all whom it may concern:

Be it known that I, JAMES SWAN, a citizen of the United States, residing at Seymour, county of New Haven, State of Connecticut, have invented a new and useful Door-Alarm, of which the following is a specification.

My invention has for its object to provide a simple and inexpensive portable bell-alarm adapted for temporary or permanent use that can be conveniently carried in a traveling-bag and may be attached in an instant's time to the shank of any door-knob in a vertically-upright or dependent position, the parts being so combined and arranged that oscillation of the knob-shank in either direction will cause the bell to ring. It is of course well understood that a device of this character in order to meet the requirements of general use must be simple and inexpensive to make, durable, easily attached and detached, and practically impossible to get out of repair.

With these ends in view I have devised the simple and novel portable door-alarm which I will now describe and in which the only important item of cost is the bell itself.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of my novel alarm detached; Fig. 2, a side elevation showing the alarm attached to a knob-shank in a vertically-upright position and ready for use, and Fig. 3 is a front elevation illustrating the operation of ringing the bell by oscillation of the knob.

My novel alarm comprises three essential elements only—to wit, a bell, means for attaching the bell to a knob-shank, and means for causing the bell to ring when the shank is oscillated.

10 denotes a bell which may be an ordinary bicycle or call bell of any of the types in ordinary use and which is provided with an operating member—in the present instance a push-pin, (indicated by 11.) As it is simply required for the purposes of my invention that the bell be provided with an operating member for ringing it, I have omitted all illustration of the mechanism of the bell. In practice I have used and have found admirably adapted for the present use a bell in which the ringing operation is performed by a spring normally locked against action and released to ring the bell by movement of the operating member. Any other style of bell, however, may be substituted, if preferred. The bell is carried by a standard 12, which may be simply a strip of metal, as shown in the drawings, or may be made as ornate as may suit the taste of the manufacturer or the requirements of the trade. 13 denotes a clamp which is pivoted to the standard, as at 14. The special construction of the clamp is of course immaterial so far as the principle of the invention is concerned. In the present instance I have shown one member as loosely riveted to the other, as at 15, and the two members as curved to adapt them to clasp a knob-shank and as drawn together to clamp a knob-shank or loosened to release it by means of a thumb-screw 16. The upper end of the clamp is provided with an angular face 17, which is adapted to engage a corresponding face upon a slide 18, which is secured to the standard, so as to move longitudinally thereon. In the present instance I have shown the slide as provided with slots 19 and as secured to the standard by means of screws 20 passing through the slots. The slide is made just long enough so that one end closely engages the operating member—in the present instance the head of the push-pin—and the angular face at the other end closely engages angular face 17 at the upper end of the clamp.

The operation is as follows: The device is placed upon a knob-shank and locked there by tightening the set-screw of the clamp, the standard being either in a vertically-upright position, as shown in the drawings, or a vertically-dependent position, as preferred. As soon as the knob-shank is oscillated in either direction the weight of the bell will cause it to swing the standard as far as it can go in that direction, the standard of course swinging freely on pivot 14. The oscillation of the standard through the engagement of the angular face at the lower end of the slide with angular face 17 at the upper end of the clamp will move the slide toward the bell, which movement of the slide will actuate the operating member and cause the bell to ring. If a spring-bell is used, the bell will of course continue to ring until the spring runs down or until the knob returns to its normal position, which will place the standard in a vertical position again, either upright or dependent, and the outward movement of the operating member when the pressure is relieved will move the slide backward to its normal position—that is, from the position shown in Fig. 3 to the position shown in Fig. 1.

It should be noted that the slide is free to move longitudinally on the standard and that the operating member of the bell is spring-

actuated. When the slide is moved inward by the swinging of the standard in either direction from a vertical position, the movement is against the spring-actuated operating member. As soon as the pressure upon the slide is relieved the operating member of course returns to its normal position and stops the ringing and in doing so returns the slide to its normal position, as there is no opposing pressure on the slide.

Having thus described my invention, I claim—

1. A door-alarm comprising a bell having an operating member, a standard by which it is carried, a clamp to which the standard is pivoted and which is adapted for attachment to a knob-shank, a slide upon the standard which engages the operating member and the clamp, and corresponding angular engaging faces on the contiguous ends of the clamp and the slide, substantially as described.

2. In a door-alarm the combination with a bell having an operating member and a standard by which it is carried, of a clamp to which the standard is pivoted and which is adapted to engage a knob-shank and a slide upon the standard engaging the operating member and the clamp, so that when the standard is swung in either direction from a vertical position, the weight of the bell will carry the standard out of alinement with the clamp and the slide will be caused to actuate the operating member.

3. In a door-alarm the combination with a bell having an operating member and a standard by which it is carried, of a clamp to which the operating member is pivoted, said clamp comprising two members adapted to clasp a knob-shank, and a thumb-screw by which they are locked thereto, and a slide upon the standard engaging the operating member and having an angular face at its lower end adapted to engage a corresponding face on the clamp, substantially as described, for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES SWAN.

Witnesses:
R. R. HEALEY,
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