

No. 680,857.

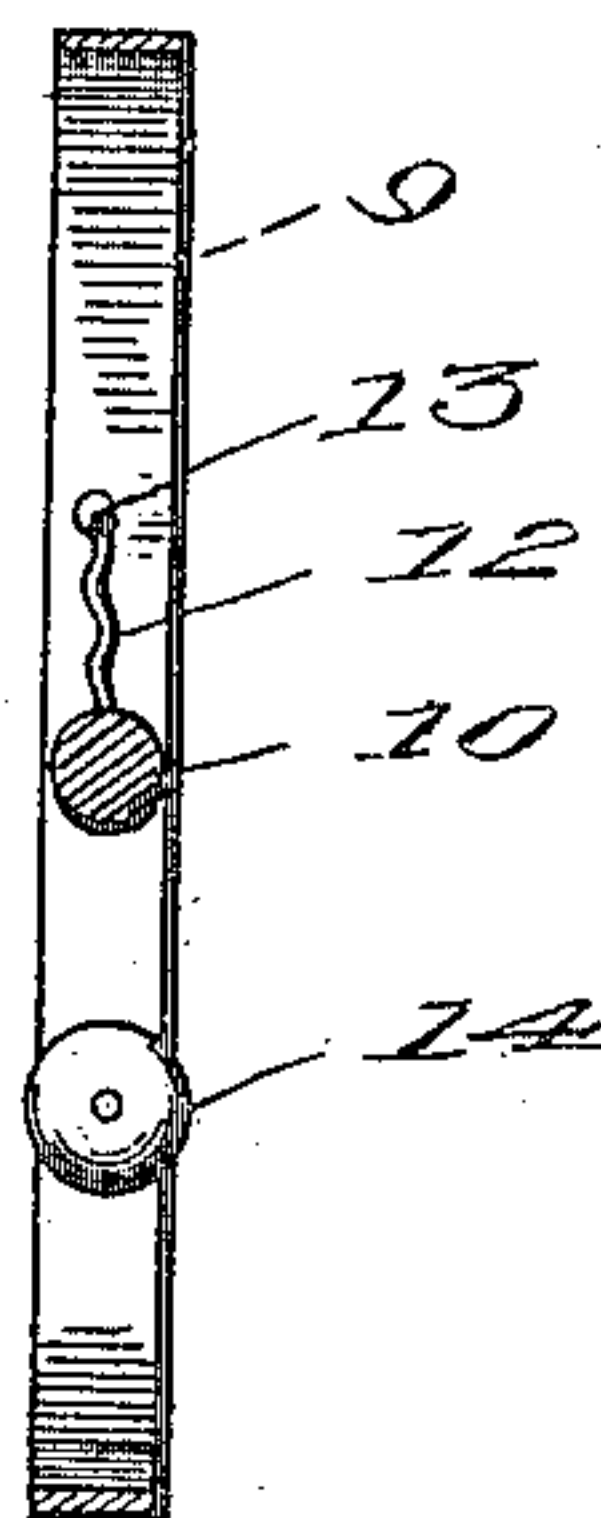
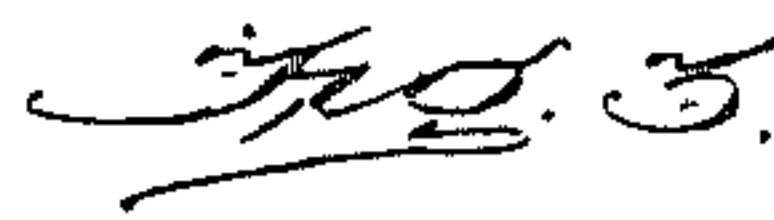
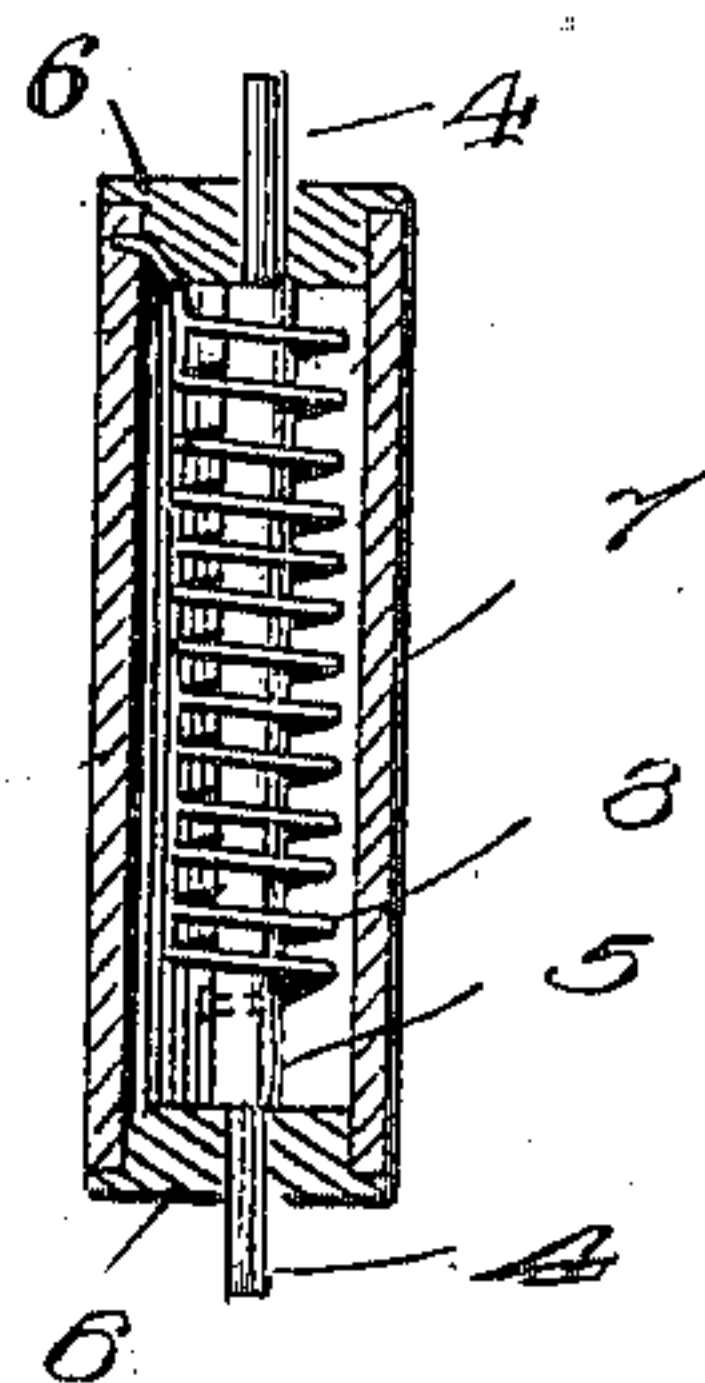
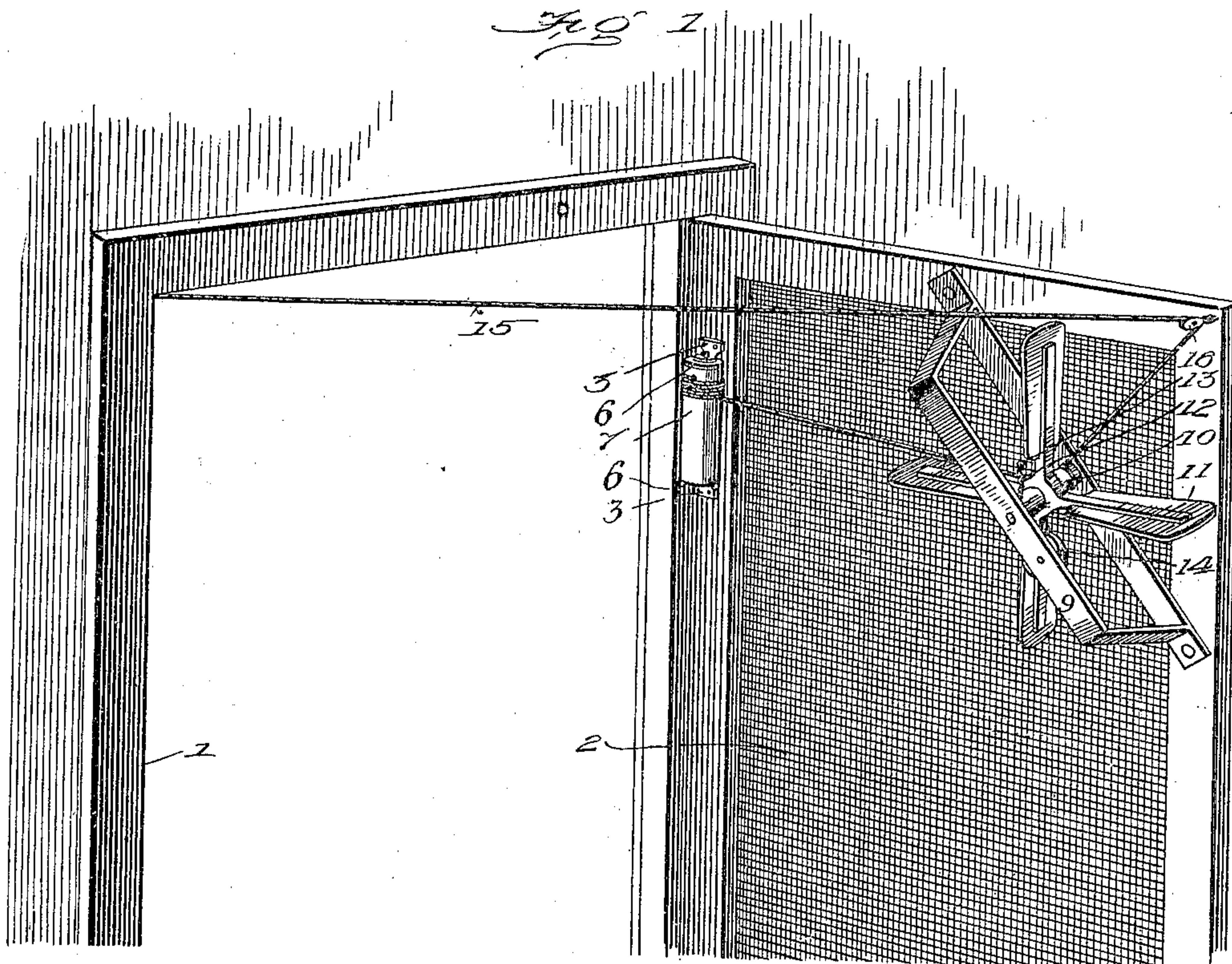
Patented Aug. 20, 1901.

J. E. HADLEY.

COMBINED DOOR CLOSER AND FLY SCARE.

(Application filed Jan. 4, 1901.)

(No Model.)



Witnesses

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JAMES E. HADLEY, OF CEDARBLUFFS, NEBRASKA.

COMBINED DOOR-CLOSER AND FLY-SCARE.

SPECIFICATION forming part of Letters Patent No. 680,857, dated August 20, 1901.

Application filed January 4, 1901. Serial No. 42,070. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. HADLEY, a citizen of the United States, residing at Cedarbluffs, in the county of Saunders and State of Nebraska, have invented new and useful Improvements in a Combined Door-Closer and Fly-Scare, of which the following is a specification.

This invention relates to a new and useful combined door-closer and fly-scare; and its primary object is to provide a fan which will operate automatically when the door is opened and wind a spring which serves to return the door to closed position.

A further object is to employ a compact and simple device of this character which may be readily attached to a door.

With these and other objects in view the invention consists in providing a drum which is revolubly mounted upon a fixed shaft. A coiled spring is mounted upon this shaft, the ends thereof being secured to the drum and shaft, respectively. The shaft is secured to a door, and a bracket of suitable form is also fastened thereto at a different point thereof. Within this bracket is journaled a scare-shaft having fan-blades extending therefrom, and a spring-arm having a clapper at the end thereof is arranged at one end of the scare-shaft. This clapper is adapted to contact with a bell mounted upon the bracket, thereby sounding an alarm. A flexible strip (preferably strong cord) is secured to and normally wound upon the drum, and this cord passes over the scare-shaft and through a suitably-arranged pulley secured to the door, the end of the strip being fastened to the door-casing.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view showing the device in use. Fig. 2 is a vertical section through the drum; and Fig. 3 is a vertical section through the bracket and the scare-shaft, showing the alarm.

Referring to the drawings by numerals of reference, 1 is a door-casing, to which is hinged a door 2 of desired construction. Secured to the door, preferably adjacent to

one hinge thereof, are brackets 3, which receive the squared ends 4 of a drum-shaft 5. These ends also fit within caps 6, which are arranged at each end of a hollow drum 7, serving as bearings therefor. A coil-spring 8 incloses the drum-shaft 5, the ends thereof being secured to the drum and to the drum-shaft, respectively. Secured to the door, preferably adjacent to the outer edge thereof, is a bracket or frame 9, within which is journaled a scare-shaft 10. Fan-blades 11 extend from this scare-shaft, and a striker-arm 12 is also arranged thereon, said striker-arm being provided with a hammer 13, which is adapted to contact with a bell 14, secured to the frame 9. A flexible strip 15, preferably formed of strong cord or a light chain, is secured at one end to and wound upon the drum 7. This strip is also wound upon the scare-shaft 10 and after passing over a small pulley 16, secured to the door, is secured at its remaining end to the door-casing 1. As before stated, the strip 15 is normally wound upon the drum 7. Therefore when the door 2 is swung open the said strip will be unwound from the drum, causing the spring 8 to tension and will also revolve the fan, thereby driving flies and other similar insects outward. As the fan revolves simultaneously therewith the hammer on the striker-arm 13 will strike the bell 14, and thereby give warning that the door is being opened. As soon as the door is released the spring 8 will rewind the strip upon the drum, causing the door to close.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make all such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a door and its casing; of a spring-controlled revoluble drum located at one point on the door, a scare-shaft located at a different point on the door, a flexible strip secured at its ends to the drum and casing respectively and passed around the

scare-shaft, and a scare connected with the scare-shaft.

2. The combination, with a door and its casing; of brackets, located at one point on the door, a fixed drum-shaft secured to the brackets, a drum revoluble about the drum-shaft, a scare-shaft, located at a different point on the door, a flexible strip secured at its ends to the drum and casing respectively and wound upon the scare-shaft, a scare connected with the scare-shaft and means for holding the strip normally wound upon the drum.

3. The combination, with a door and its casing; of brackets, located at one point on the door, a fixed drum-shaft secured between the brackets, caps upon the drum-shaft, a hollow drum revoluble upon the caps, a spring encircling the drum-shaft and secured at its ends respectively to the drum and drum-shaft, a frame located at a different point on the door, a scare-shaft journaled therein, a scare connected with the scare-shaft, and a flexible strip secured at its ends to the drum and casing respectively and wound upon the scare-shaft.

4. The combination, with a door and its casing; of a spring-controlled revoluble drum,

located at one point on the door, a scare-shaft, located at a different point on the door, fan-blades thereto, and a flexible strip secured at its ends to the drum and door-casing, said strip being wound upon the scare-shaft.

5. The combination, with a door and its casing; of brackets, located at one point of the door, a fixed drum-shaft secured to the brackets, caps upon the shaft, a hollow drum revoluble upon the caps, a spring encircling the drum-shaft and secured at its ends respectively to the drum and drum-shaft, a frame located at a different point on the door, a scare-shaft journaled therein, blades extending from the scare-shaft, a striker-arm to the scare-shaft, a hammer thereon, a bell in the path of the hammer, and a flexible strip secured at its ends to the drum and casing respectively and wound upon the scare-shaft, for operating both scare and bell simultaneously.

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

JAMES E. HADLEY.

Witnesses:

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