

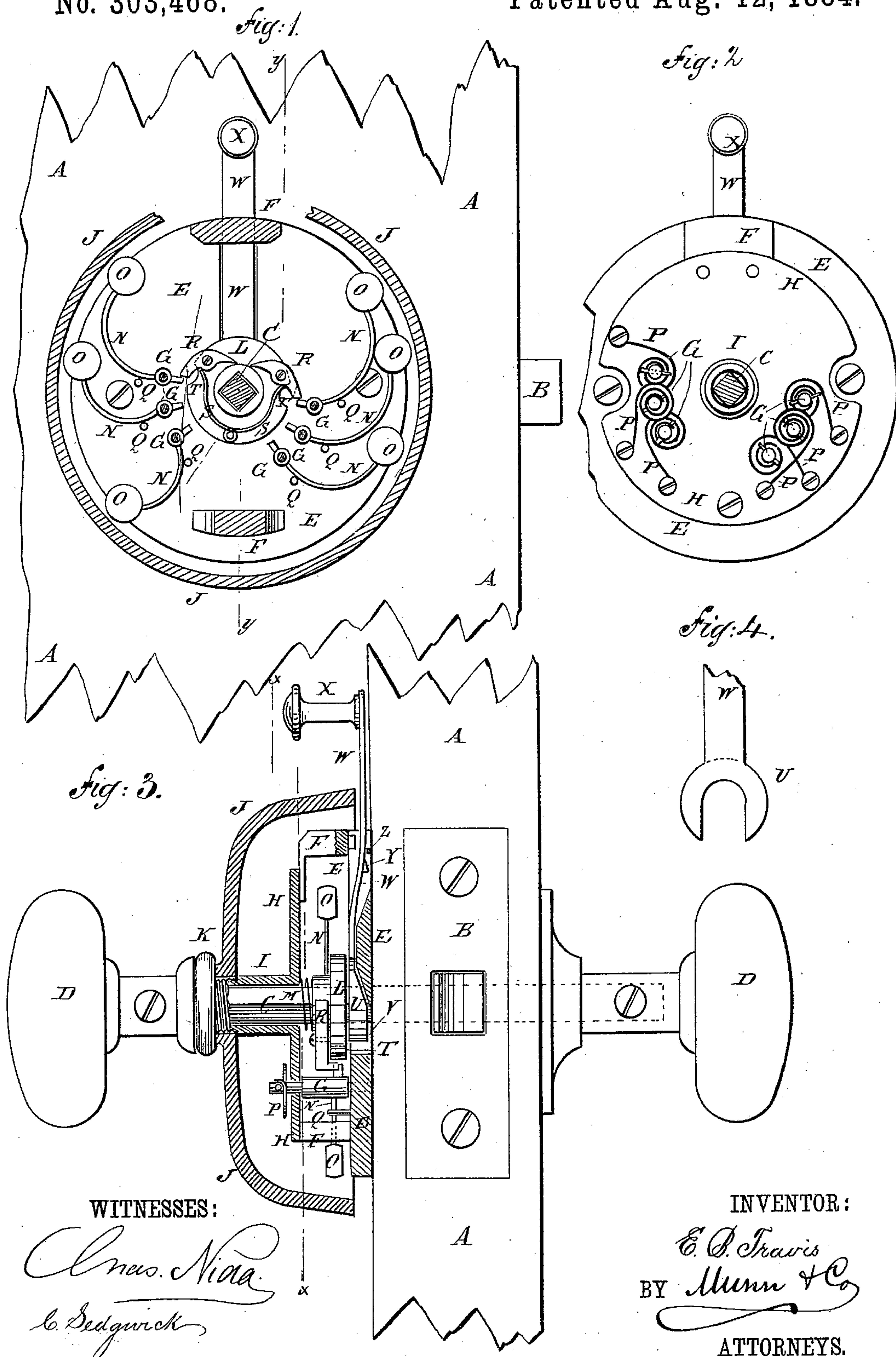
(Model.)

E. B. TRAVIS.

COMBINED BURGLAR ALARM AND DOOR BELL.

No. 303,468.

Patented Aug. 12, 1884.



UNITED STATES PATENT OFFICE.

EUGENE B. TRAVIS, OF PEEKSKILL, NEW YORK.

COMBINED BURGLAR-ALARM AND DOOR-BELL.

SPECIFICATION forming part of Letters Patent No. 303,468, dated August 12, 1884.

Application filed November 28, 1883. (Model.)

To all whom it may concern:

Be it known that I, EUGENE B. TRAVIS, of Peekskill, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Door-Bells and Burglar-Alarms, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional plan view of my improvement, taken through the line *xx*, Fig. 3. Fig. 2 is a plan view of the same, the bell being removed and the knob-spindle being shown in section. Fig. 3 is a sectional side elevation of the same, taken through the broken line *y y*, Fig. 1. Fig. 4 is a plan view of the inner part of the wedge-fork.

The object of this invention is to provide a mechanism for sounding an alarm when the knob is turned, whether the door be fastened or not, and whether attached to a door or anything else.

The invention consists in a bell, two parallel plates provided with lever-hammers and their springs and stops, and a collar placed upon a knob-spindle and provided with spring-pressed pawls. In the inner plate is formed a recess having an inclined side, within which and below the collar upon the knob-spindle is placed a wedge-fork having a stem extending out beneath the rim of the bell, whereby the alarm mechanism can be readily thrown into and out of gear, as will be hereinafter fully described.

A represents a door or other appendage, B is a spring-catch, C is the knob-spindle, and D are the knobs, all of which parts are made in the ordinary manner to receive my improvement.

E is a circular plate, through the center of which the spindle C passes, and which is secured to the door or other appendage, A, by screws or other suitable means.

With the plate E is connected, by posts F, studs G, or other suitable means, a smaller plate, H, through the center of which and a sleeve, I, attached to the said center, passes the spindle C. The end of the sleeve I is reduced in size to form a shoulder to receive the bell J, and has a screw-thread formed upon

the said reduced end to receive the nut K, that fastens the said bell in place.

Upon the spindle C, between the plates E H, is placed a collar, L, which has a square bore to fit upon the spindle C, so that the said collar will be turned by and with the said spindle. The collar L is held down against the plate E by a spiral spring, M, placed upon the spindle C, with its inner end resting against the said collar and its outer end resting against the plate H.

To the studs G are attached spring-levers N, to the outer ends of which are attached the hammers O.

To the upper ends of the studs G are attached the ends of coiled springs P, the other ends of which are attached to the plate H, so that the said springs will hold the hammer-levers N pressed outward against pins Q, attached to the plate E at a little distance from the studs G. The levers N are curved to the rearward, so that the hammers O, when the said levers N are resting against the pins Q, will be at a little distance from the bell J. The inner ends of the levers N project into such a position as to be struck by the outer end of the lever-pawl R, pivoted to the collar L, and held in place with their inner ends resting against the hub of the said collar, and their outer ends projecting, as shown in Fig. 1, by a spring, S, attached to the said collar.

In the drawings six hammers are represented, arranged three upon each side of the spindle, and two pawls, one upon each side of the said spindle; but more or less hammers may be used, and one or more pawls, as may be desired.

With the arrangement shown in the drawings three hammers will be operated successively when the knob-spindle is turned in one direction, and the other three will be operated when the spindle is turned in the other direction.

The pawls R are made with a downwardly-projecting toe on their outer ends, to engage with the inner ends of the hammer-levers N, and turn the said hammers away from the pins Q when the spindle C is turned in one direction. As the levers N escape from the pawls R, they are thrown back against the pins Q, and the elasticity of the said levers allows the hammers O to be thrown by their momentum into contact with the bell J to sound an alarm. As the knob-spindle C is turned back, the toes of the

pawls R are forced into recesses T in the collar L by the resistance of the ends of the hammer-levers N, so that the said pawls can pass the said levers.

5 Beneath the collar L is placed a beveled or wedge fork, U, which rests in a recess, V, in the plate E, which recess is made with an inclined side, so that by drawing the incline of the wedge-fork U against the inclined side of the
10 recess V the collar L will be forced upward, raising the pawls R above the levers N, so that the knob-spindle can be turned without operating the bell-hammer levers. The wedge-fork U is provided with a stem, W, which passes
15 out beneath the edge of the bell J, and has a knob or handle, X, formed upon its outer end, for convenience in adjusting the said wedge-fork to throw the alarm into and out of gear with the knob-spindle.

20 Upon the lower side of the stem W is formed a shoulder, Y, which, when the alarm is out of gear, engages with a shoulder on another stop, Z, formed upon or attached to the plate E, to prevent the said wedge U from being jarred
25 out of place by operating the knob-spindle.

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

1. A door-bell and burglar-alarm constructed to be operated by a knob-spindle, substantially as herein shown and described, and consisting of a bell, J, two parallel plates, E H, provided with lever-hammers and their stops and springs, and the collar L, provided with spring-pressed pawls, as set forth. 30

2. The combination, with the knob-spindle C, of the bell J, the parallel plates E H, the lever-hammers N O, one or more, and their springs P and stops Q, and the collar L, provided with spring-pressed pawls R S, substantially as herein shown and described, whereby an alarm will be sounded by turning the said knob-spindle, as set forth. 35

3. In a door-bell and burglar-alarm, the combination, with the collar L, carrying the pawls R, and the plate E, having a recess, V, provided with an inclined side, of the wedge-fork U, provided with a stem, W, substantially as herein shown and described, whereby the alarm can be readily thrown out of and
50 into gear, as set forth.

EUGENE B. TRAVIS.

Witnesses:

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