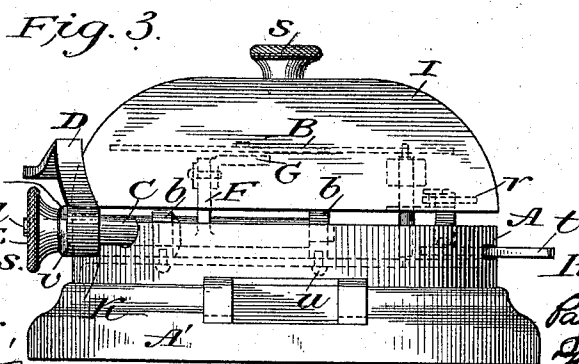
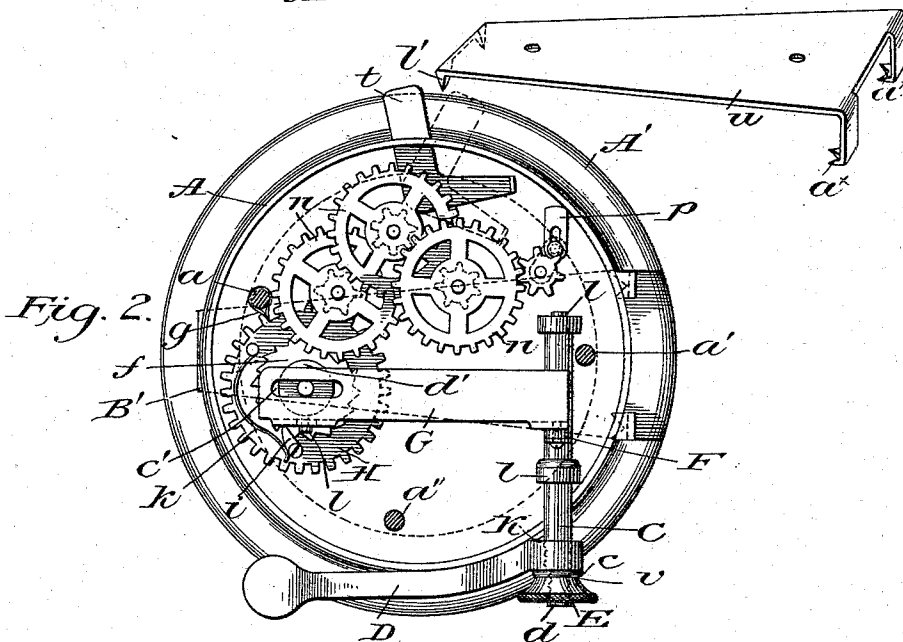
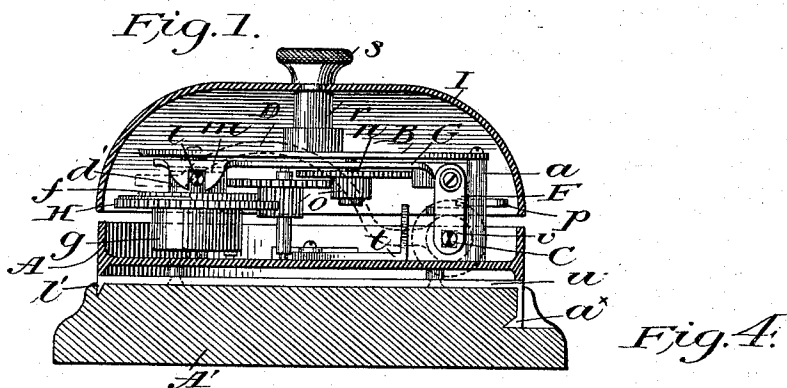


P. DE T. EVANS & H. B. TOMKIN.
CALL BELL.

Patented July 2, 1895.



Witnesses

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UNITED STATES PATENT OFFICE.

PAYN DE T. EVANS AND HENRY B. TOMKIN, OF SAN FRANCISCO,
CALIFORNIA.

CALL-BELL.

SPECIFICATION forming part of Letters Patent No. 541,926, dated July 2, 1895.

Application filed October 18, 1894. Serial No. 526,313. (No model.)

To all whom it may concern:

Be it known that we, PAYN DE T. EVANS and HENRY B. TOMKIN, subjects of the Queen of Great Britain, and residents of the city and county of San Francisco, State of California, have invented a certain new and useful Combined Automatic Burglar-Alarm and Call-Bell, of which the following is a specification.

Our invention relates to a combined automatic burglar alarm and call bell, which may be attached to all kinds of doors, to windows, or transoms, in such way that when closed, upon the first movement in the opening of either, the setting of the spring by the movement of the bent lever pushed downward on closing the door, window or transom, by being crowded against the door jamb or casing, will be released, and its action upon the actuating wheel, and wheel mechanism will cause the bell to ring, and it will continue to ring while the tension of the spring lasts. The same bell with its mechanism may be set upon a rest, or support piece, and used upon a table or desk as a call bell. The bent lever acting upon the coil spring, through intermediate mechanism, winds the spring and allows the spring to act, when the hand pressure on the bent lever is removed. It also may be used as a hall bell by attaching a cord to the end of the bent lever for operating the spring. By adjusting the bent lever to the arm by means of the thumb nut that screws upon the end of the arm, a short or long ring may be had as desired. We attain these objects by the mechanism illustrated in the accompanying drawings.

Figure 1 is a side elevation of bell device partly in action. Fig. 2 is a top plan of same, with bell and top plate of gearing removed. Fig. 3 is a rear elevation of bell device. Fig. 4 is a perspective detail of hooking plate on the back, or under side of bell device.

A represents the back, or base plate, of bell device; B, the upper plate supported by and fitted to posts extending from the base plate into which the opposite ends are set, thus forming a frame in which the wheels and mechanism are set and operate.

a a a are the posts set between the two plates; C, the rocking-arm on the base plate set in two supports, b b, which extend a little

beyond the outer edge of said base plate, upon which arm, just inside the outer support, is a short upright piece, F, to which the end of the horizontal lever, G, is attached, the opposite end of which is somewhat broader, having an elongated slot, c', therein, through which the axle, e, of the actuating toothed wheel, H, passes, said slot being for the purpose of allowing said horizontal lever to slide along on said axle when the bent lever, D, on the rocking arm is pressed downward, causing the horizontal lever to wind the spring, g. v, is a squared part of the rocking arm, upon which the washer, c, is placed fitting against the lower end of bent lever over the squared part made for it. The remaining portion of said arm has a thread, d, cut thereon to receive the thumb nut, E, which screws upon and tightens the lever, D, against the shoulder, K, on the rocking arm. Close to the upper side of the actuating wheel, H, on the same axle with it, the ratchet wheel, f, is fitted, which operates to wind the coil spring, g, attached to the axle of the actuating wheel on its under side, the outer end of said spring being secured to an upright post, a, set between the two plate pieces, a part of the frame work. On the upper side of said actuating wheel a pawl, i, is fastened, which engages said ratchet wheel for holding the spring in coil when wound or tightened by the action of the horizontal lever.

d', is a hub on ratchet wheel having the projecting pin, l, against which the ear projections, m, on the outer or free end of the horizontal lever, act to coil the spring.

n n n, are wheels employed in mechanism geared to actuating wheel, by means of the spur connections, o o o, acting upon gear mechanism for rotating the bellstriker. The bell, I, covers the gearing mechanism, and is supported on the upper plate piece by means of the standard, r, to which it is clamped by the thumb screw, s, thus holding the bell firmly in position for use, the shoulder of said thumb screw bearing down upon the outer surface of the bell. A stop right angle piece, t, is fastened loosely to the lower plate or base piece by a screw, allowing of its easy rotation. The end of the inner arm is bent upward, so that it intercepts the gear mechanism, n, when it is desired to prevent the bell from ringing.

On the back or under side of said base plate, the strap or plate piece, *u*, is fastened by screws, having the large end bent and turned downward and provided with two or more sharp points, *a'*, for pressing into the edge of doors, windows or other places where the bell may be used for an alarm. The opposite end has a sharp point, *b'*, projecting from it for pressing into the woodwork, for holding the bell device more firmly in place.

A', is a rest for bell device when used as a call or table bell.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. A combination automatic burglar alarm and call bell consisting of the plate, *A*, forming the base or back of bell device; the plate, *B*, forming the outer or upper part of said device; the posts, *a a' a''*, inserted between said plates and separating them far enough apart to provide space between them for the spring, wheels, and other mechanism; the rocking arm, *C*, fastened in supports set in the base plates; the supports, *b b*, in which said arm is set; the bent lever, *D*, set upon movable arm for operating the same; the squared part of rocking arm, *v*, upon which a washer slides up against the end of said lever; the washer, *c*, fitting over the squared part of arm against the end of said lever; the screw or threaded end of arm, *d*; the thumb nut, *E*, which screws upon said threaded or screw end of the arm for tightening the end of the bent lever against the shoulder, *K*, on arm against which the lower end of nut is set upon said arm; the upright projection, *F*, on arm to which the end of horizontal lever is attached; the horizontal lever, *G*, connected at one end with upright projection on arm, and at the other end with axle of actuating wheel; the coil spring, *g*, about axle of actuating wheel acting upon wheel mechanism; the axles, *e*; the ratchet wheel, *f*; the hub, *d'*, of said ratchet wheel; the post, *a*, to which the outer end of coil spring is fastened; the pawl, *i*, on actuating wheel, engaging ratchet wheel; the spring, *k*, holding it in place; the

pin, *l*, projecting from the hub of the ratchet wheel; the ear projections, *m*, on the outer end of horizontal lever acting against pin, *l*, to wind the coil the spring; the wheels, *n n n*, forming part of the mechanism; the spur wheels, *o o o*, forming part of the gearing; the revolving hammer, *p*, for striking upon bell; the bell, *I*, covering the mechanism; the bell support, *r*; the thumb screw, *s*; the right angled stop piece, *t*; the strap or plate, *u*, on the back of bell device; the points, *a'*, for fastening into the woodwork, and point, *b'*, on the opposite end of said plate piece—substantially as herein described and set forth.

2. In a combined automatic burglar alarm and call bell, the combination of the rocking arm, *C*; the bent lever, *D*, as attached to said arm; the upright projection, *F*, on said arm; and the horizontal lever, *G*, provided with slot, *c'*; with actuating toothed wheel, *H*; the ratchet wheel, *f*; the coil spring, *g*, operating the mechanism of wheels, *n n n*, and spur wheels, *o o o*, for ringing bell; the hammer, *u*; the right angled stop piece, *t*; the bell, *I*, as fastened to upper plate,—substantially as herein described and set forth.

3. In a combined automatic burglar alarm and call bell, the combination of the spring, *g*; with the ratchet wheel, *f*; the actuating toothed wheel, *H*; the pawl, *i*; the hub, *d'*, on ratchet wheel; the pin, *l*; the ear projections, *m*, on the outer end of horizontal lever, which engage and act against pin, *l*, when bent lever is pressed down causing arm, *C*, to act upon horizontal lever, *G*; the wheels, *n n n*; and spur wheels, *o o o*; the right angled stop piece, *t*; the hammer, *p*, and the bell, *I*, as fastened to upper plate,—substantially as herein described and set forth.

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HENRY B. TOMKIN. [L. S.]

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