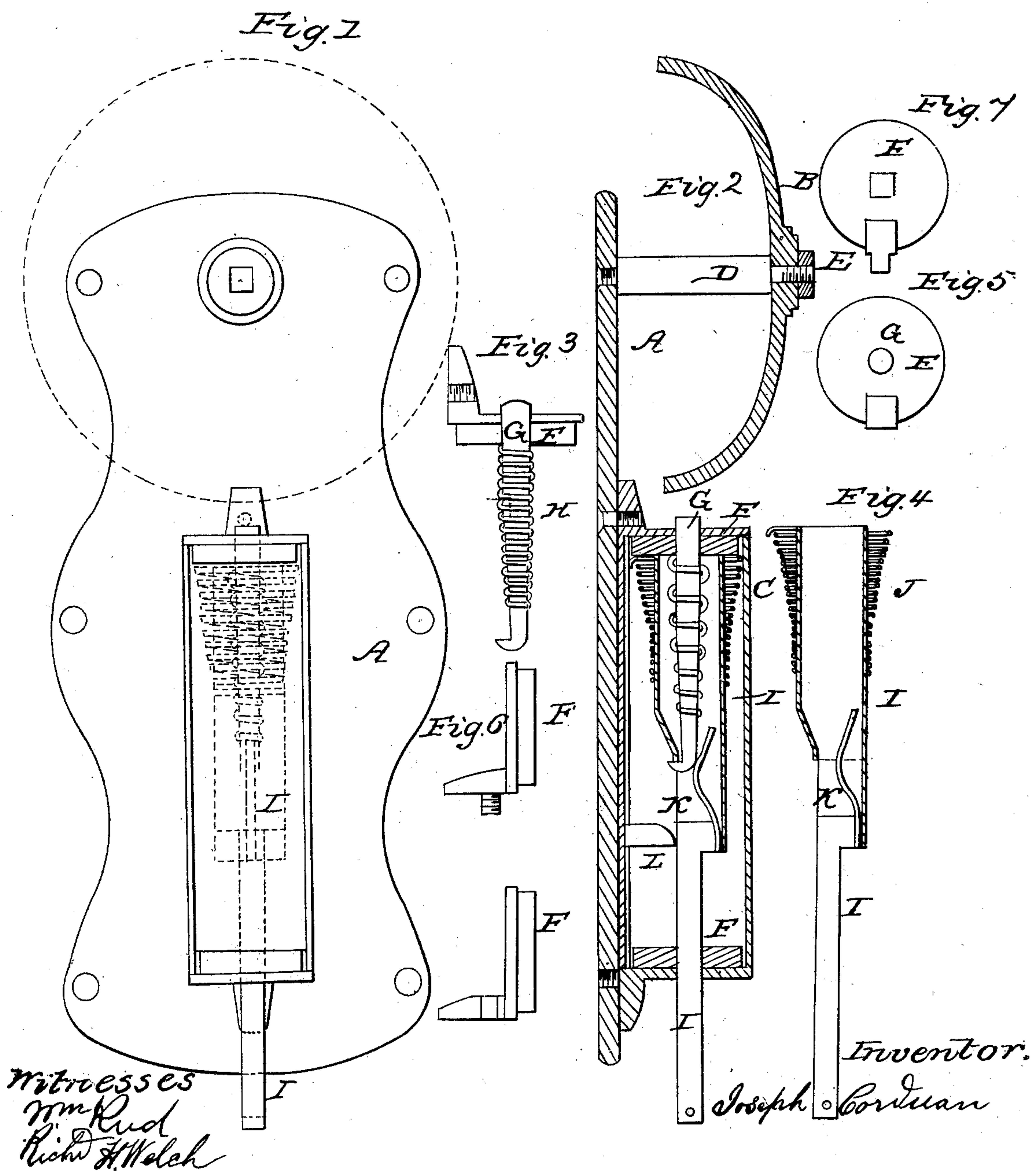


J. CORDUAN.

Apparatus for Sounding House Bells.

No. 23,353.

Patented March 29, 1859.



UNITED STATES PATENT OFFICE.

JOSEPH CORDUAN, OF BROOKLYN, NEW YORK.

APPARATUS FOR SOUNDING HOUSE-BELLS, &c.

Specification of Letters Patent No. 23,353, dated March 29, 1859.

To all whom it may concern:

Be it known that I, JOSEPH CORDUAN, of Brooklyn, county of Kings, and State of New York, have invented a new and Improved Mode of Striking Bells, Gongs, and Triangles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in a combination of springs and an escapement, arranged in such a manner as to produce the effect hereinafter claimed.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

I take a tube of any dimensions, and fit to each end a head (F, F,) one with a round hole to receive the striking bolt, (G) the other with a square hole to receive the pull-shank (I), the heads secured to their bed-piece (A) by screws, or otherwise. I first make my escape bolt (G), as per drawing (G), with one end constructed in such a manner as to facilitate both the lock and escapement as the action on them may admit of; next on escapement end of bolt (G), I solder one end of open spiral spring (H); said spring extending and surrounding bolt to inner face of cylinder head (F), and securely fastened thereto. I then fashion a small tube and square shank as per drawing (I, I,); between the shank and tube I place a small flat curve spring (K), one side of tube cut away for a certain distance on a line with underface of said shank; the end of tube I press down nearly on a line with the part cut away, and thereby, with the aid of curved spring (K), pressing down the bolt (G) perform a perfect lock. Surrounding the tube and shank, I place a conical and contracting spiral spring (J) the smaller end of which is securely fastened to outer surface of tube; the larger end resting upon projections on inner surface near the end of cylinder (C). At a given distance from shank end, I place an upright beveled stud (L). The bolt (G), with spring (H), and head (F) attached, I place in small tube (I) in connection with shank (I): I then place the whole in cylinder (C) and secure the same to bedpiece (A) by screws (or other-

wise) as shown in transverse drawing number 2.

Drawing No. 1 is a concealed front view. No. 2 is a transverse view. No. 3 a sectional view of bolt (G), spiral spring (H), and cylinder head bolt end (F). No. 4 is a sectional view of small tube and shank (I I), curved spring (K), and conical contracting spiral spring (J). No. 5 is an end view of cylinder head F, bolt end. No. 6 is an edge view of cylinder head (F) shank end. No. 7 end view of cylinder head F shank end.

A is a bedpiece, on which is placed the action and gong.

B is the gong. C the cylinder containing the works. D upright support for gong. E the nut for securing the gong in position. F, F, cylinder heads. G escapement bolt. H open spiral spring. I, I, tube and shank combined. J, conical contracting spiral spring. K flat curved spring for pressing down escapement bolt and lock. L, beveled stud to detach escapement bolt.

When the several parts are properly put together and secured upon the bed-piece by a wire or other means fastened to end of shank, I draw back the inner tube in which the escape bolt and spring attached is held, by means of the curved spring pressing down the escape end of bolt, to lock on edge of tube until it comes in contact with stud in bottom of cylinder; thereby extending both the inner and outer springs sufficiently to perform the individual action required of each: at this point the stud detaches the escape bolt with its spring attached, which spring in recovering its relative position gives the bolt a momentum sufficiently great, to carry it past its point of bearing and strike the gong; bell, or triangle, one distinct blow. On letting go the pull the conical spring contracting, carries the combined tube and shank with it, forcing the escape bolt again in lock ready for action.

What I claim as my invention and desire to secure by Letters Patent is—

The arrangement of the three separate springs, in combination with the two tubes and escapement bolt as herein described.

JOSEPH CORDUAN.

Witnesses:

E. G. REYNOLDS,
F. A. BLOSSOM.