

E. BARTON.
Alarm Bell for Doors.

No. 36,436.

Patented Sept. 9, 1862.

Fig. 1

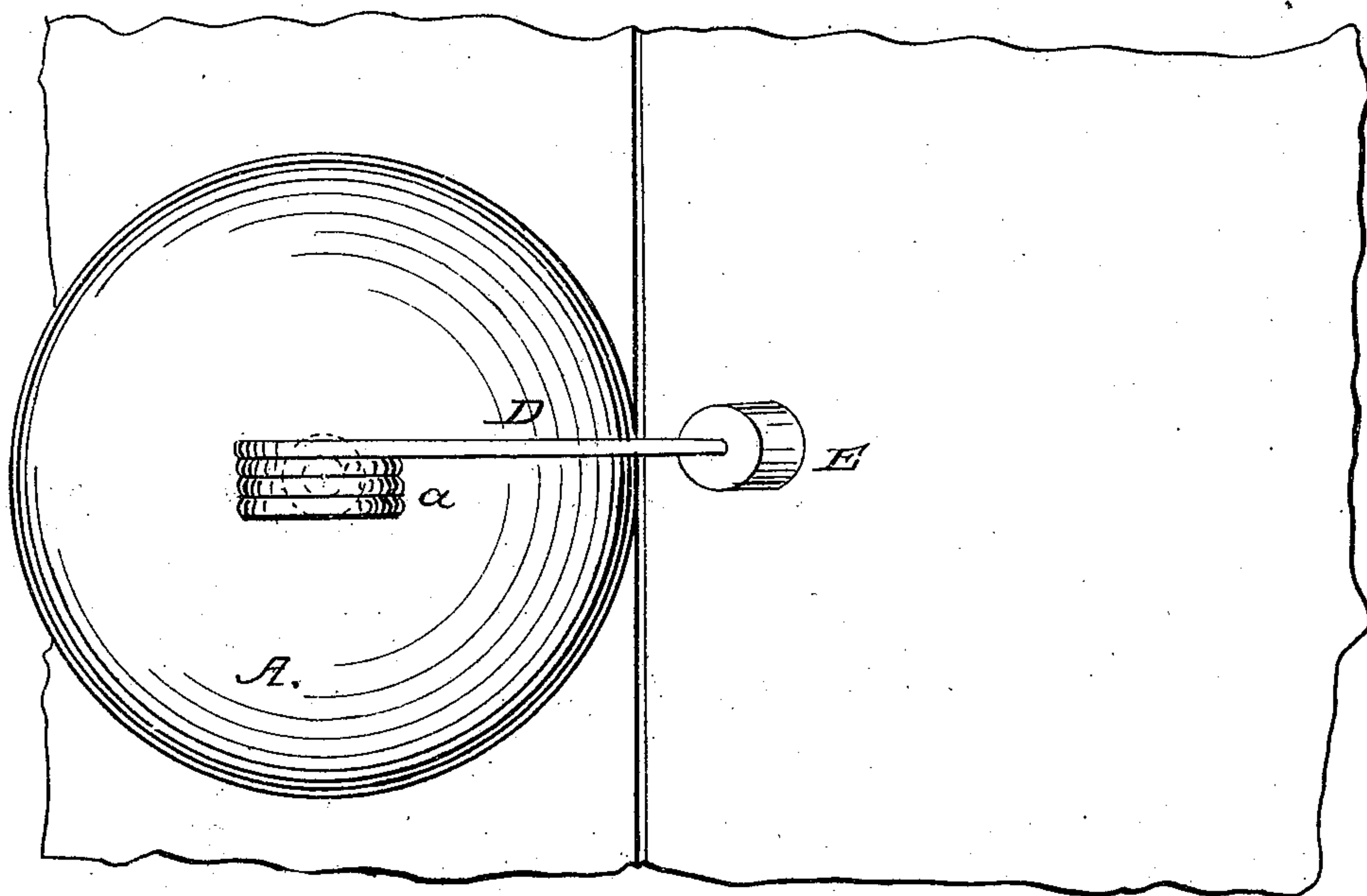
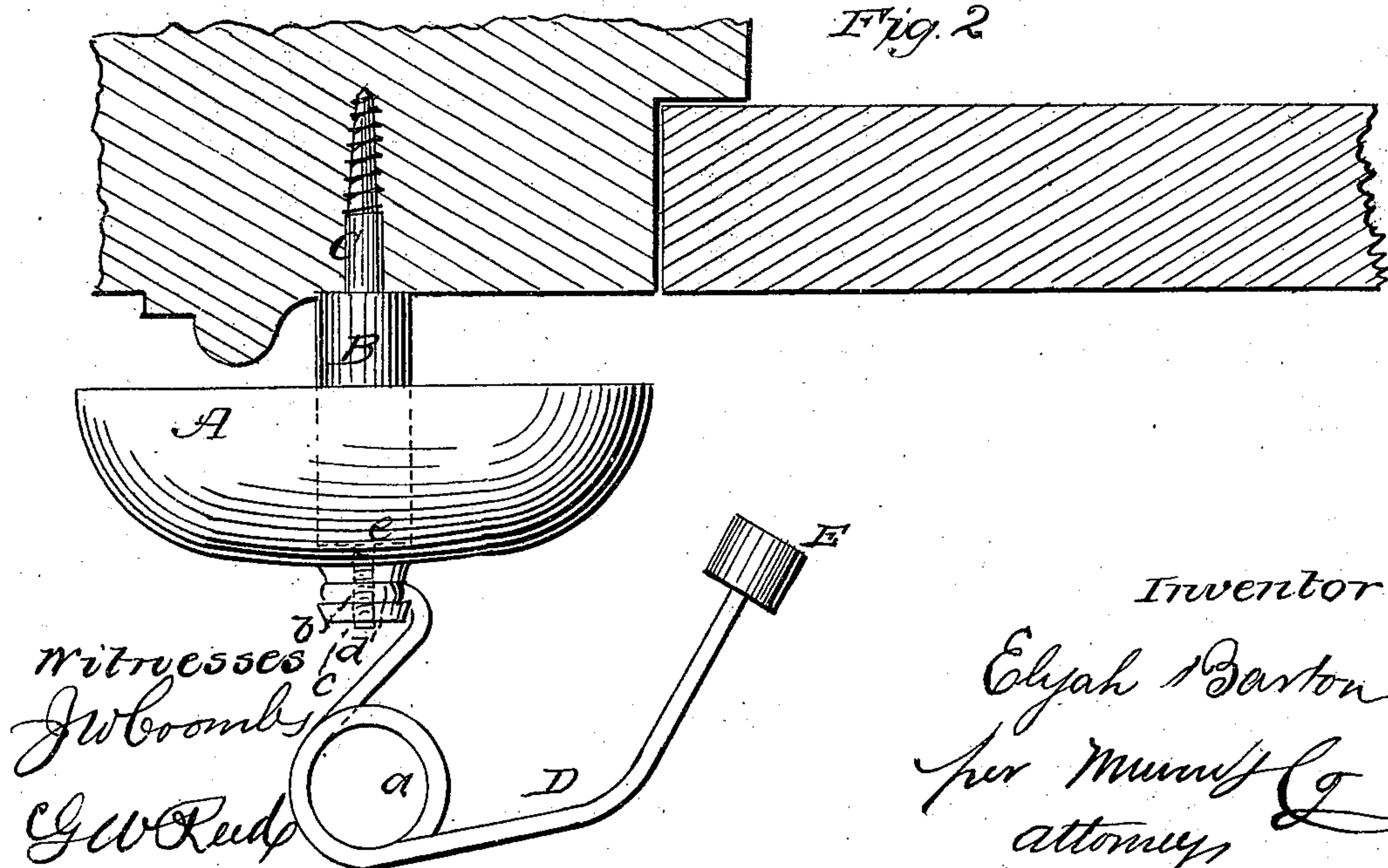


Fig. 2



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UNITED STATES PATENT OFFICE.

ELIJAH BARTON, OF EAST HAMPTON, CONNECTICUT, ASSIGNOR TO A. B. WHITE AND J. W. BARTON, OF SAME PLACE.

IMPROVED ALARM-BELL FOR DOORS.

Specification forming part of Letters Patent No. 36,436, dated September 9, 1862.

To all whom it may concern:

Be it known that I, ELIJAH BARTON, of East Hampton, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Alarm-Bells for Doors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front or face view of my invention; Fig. 2, a top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and useful improvement in alarm-bells for doors; and it consists in a novel way of arranging the hammer and applying the same to the bell, whereby the cost in the manufacture of this class of bells is materially reduced and a much simpler device obtained than those previously constructed, one less liable to get out of repair, and easily put in working order if slightly deranged by use.

The invention consists in attaching the hammer directly to the stock or arm of the bell by means of a spring, the hammer having such a relative position with the door and the bell that it (the hammer) will be directly acted upon by the opening of the door and forced back in contact with the bell to sound the alarm when the door passes it, as herein-after fully shown and described.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a bell, which may be of the usual form or the kind generally used for door-alarms, and B is the arm or support, which is connected centrally to the inner side of the bell and has a screw, C, at its outer end for the purpose of securing the bell to the door-frame, as plainly shown in Fig. 2.

D is a spring, which is formed of a piece of wire of a suitable thickness bent in spiral form at one part with four (more or less) convolutions, as shown at *a*. The inner end of

this spring is bent to form a loop or eye, *b*, through which a screw, *c*, at the outer end of the arm or support B, passes, said screw also passing through the bell A, and having a nut, *d*, on it, by which the spring is secured to said arm or support, the eye *b* bearing against a small hub or projection, *e*, at the outer side of the bell.

The spiral convolutions *a* add to the elasticity of the spring D. In fact, they constitute the chief source of its elasticity, and the rod of the spring is so bent that a hammer, E, which is attached to its outer end, will be opposite the bell in such a position as to strike the same properly to produce the best sound.

The screw C is screwed into the jamb of the door-frame at such a point that the hammer E will be opposite or project over the edge of the door, so that the latter, on being opened, will strike the hammer and force it back or outward from the bell, and the hammer, when the door has passed it, be forced against the bell by the action of the spring D, and the alarm sounded. The jamb and door are shown in red in both figures. By this arrangement it will be seen that all the parts which comprise the invention consist of the bell A and spring D, all levers and supplemental devices hitherto used for actuating the hammer being dispensed with, as well as the parts hitherto used for supporting said levers and supplemental devices.

The device is reduced to the simplest possible form, and may be furnished at an inappreciable advance in cost over that of the bell alone.

Having thus described my invention, I claim as new and desire to secure by Letters Patent as an improved article of manufacture—

An alarm door-bell composed of a bell, A, having a spring, D, with a hammer, E, attached, secured to its arm or support B, substantially as shown and described.

ELIJAH BARTON.

Witnesses:

NATHL. C. SMITH,
EDWARD G. CHILD.