A. W. HALE.

Call Bell.

No. 21,335. Patented Aug. 31, 1858.

Fig. 2.

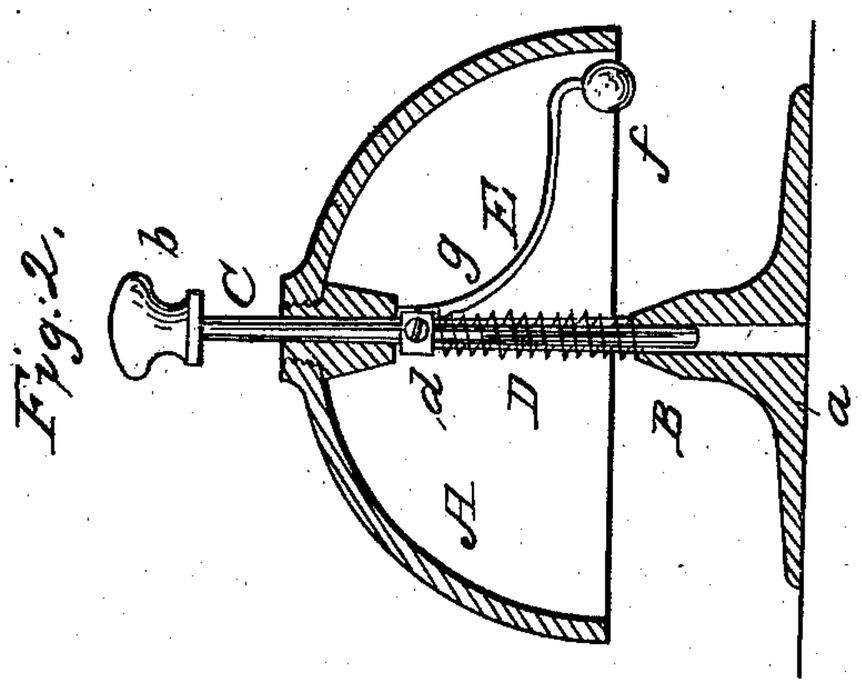
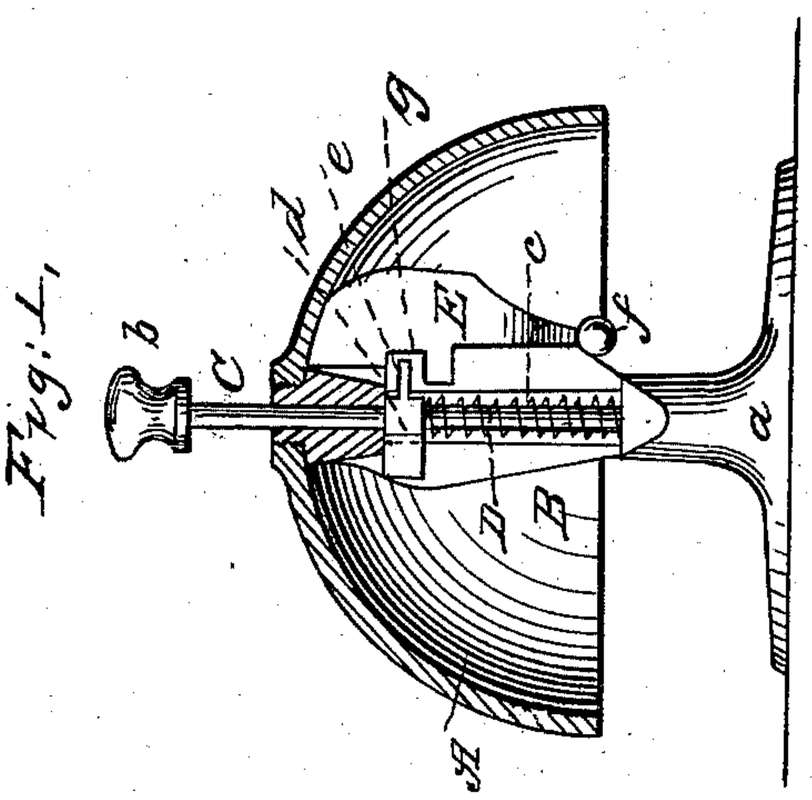


Fig. 1.



UNITED STATES PATENT OFFICE.

ALBERT W. HALE, OF NEW BRITAIN, CONNECTICUT.

PORTABLE HOUSE-BELL.

Specification of Letters Patent No. 21,335, dated August 31, 1858.

To all whom it may concern:

Be it known that I, A. W. HALE, of New Britain, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in House-Bells; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1 and 2 are vertical central sections of my improvement, the two planes of section crossing each other at right angles.

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

This invention consists in the employment or use of a sliding arbor having a pin projecting horizontally from it and also having a spiral spring placed around it, the above parts being used in connection with a spring or elastic tongue provided with a projecting plate, whereby an extremely simple device is obtained for sounding the bell by a simple longitudinal movement of the arbor.

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

A, represents the shell of the bell, which may be of the usual semi-spherical or approximate form. This bell is secured in the upper end of a support B, which is provided with a base *a*, of sufficient diameter to retain the bell in proper position.

C, is an arbor which is fitted in the support B, and is allowed to slide freely therein. This arbor has a knob *b*, on its upper end, and a spiral spring D, is placed around it, a slot *c*, being made in the support to receive the spring.

The upper end of the spring D, is attached to a small boss *a*, which is secured to the arbor C, and has a pin *e*, projecting from it, see Fig. 1.

E, is a tongue, to the lower end of which the hammer *f*, is attached. The tongue E, is elastic and is in fact a spring in itself, said spring being curved and having a tendency to keep the hammer near the edge of the shell at its inner side, as shown clearly in Fig. 2. The tongue E, has a plate *g*, projecting from it. This plate is inclined, its upper end being in contact with the support B.

The spiral spring D, around the arbor C, keeps the arbor elevated to its highest point and the pin *e*, above the projecting plate *g*, of the tongue E, as shown clearly in Fig. 1. By depressing the arbor C, the pin *e*, will pass over the outer side of the plate *g*, and as said plate is inclined the pin *e*, will force the tongue E, inward toward the support B, and when the pin passes off the lower part of *g*, the tongue by its own elasticity will fly suddenly outward and the hammer *f*, be brought in contact with the shell A, producing the requisite sound, the hammer striking the shell but once for each depression of the arbor. The pin *e*, passes up behind the projecting plate *g*, as soon as the hand is removed from the knob *b*, in consequence of the spring D, raising the arbor C.

This is a very simple arrangement, it is not liable to get out of repair, and may be cheaply constructed.

The shell A, may be constructed or cast of the usual metal. The support B, is constructed of metal, and the tongue E, formed of any elastic metal.

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

A spring hammer tongue E, provided with a projection *g*, so arranged as to be operated upon by a pin *e*, attached to an arbor C, for the purpose set forth.

ALBERT W. HALE.

Witnesses:

A. M. WARD,

SHERMAN C. BELDEN.