

S. S. CHANDLER.

Door Bell.

No. 30,800.

Patented Dec. 4, 1860.

Fig. 1.

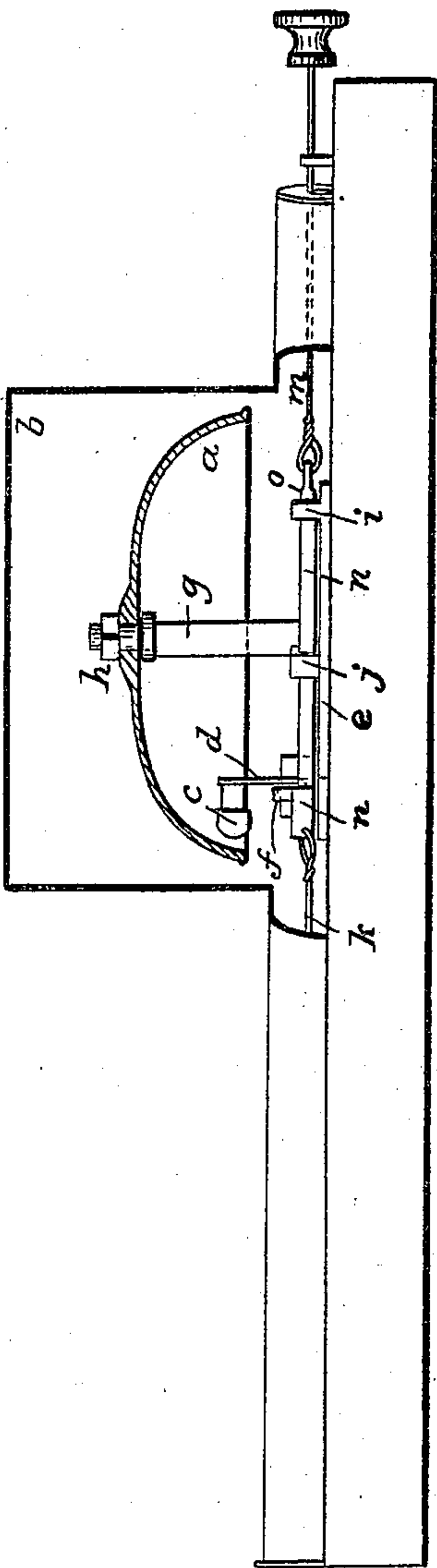
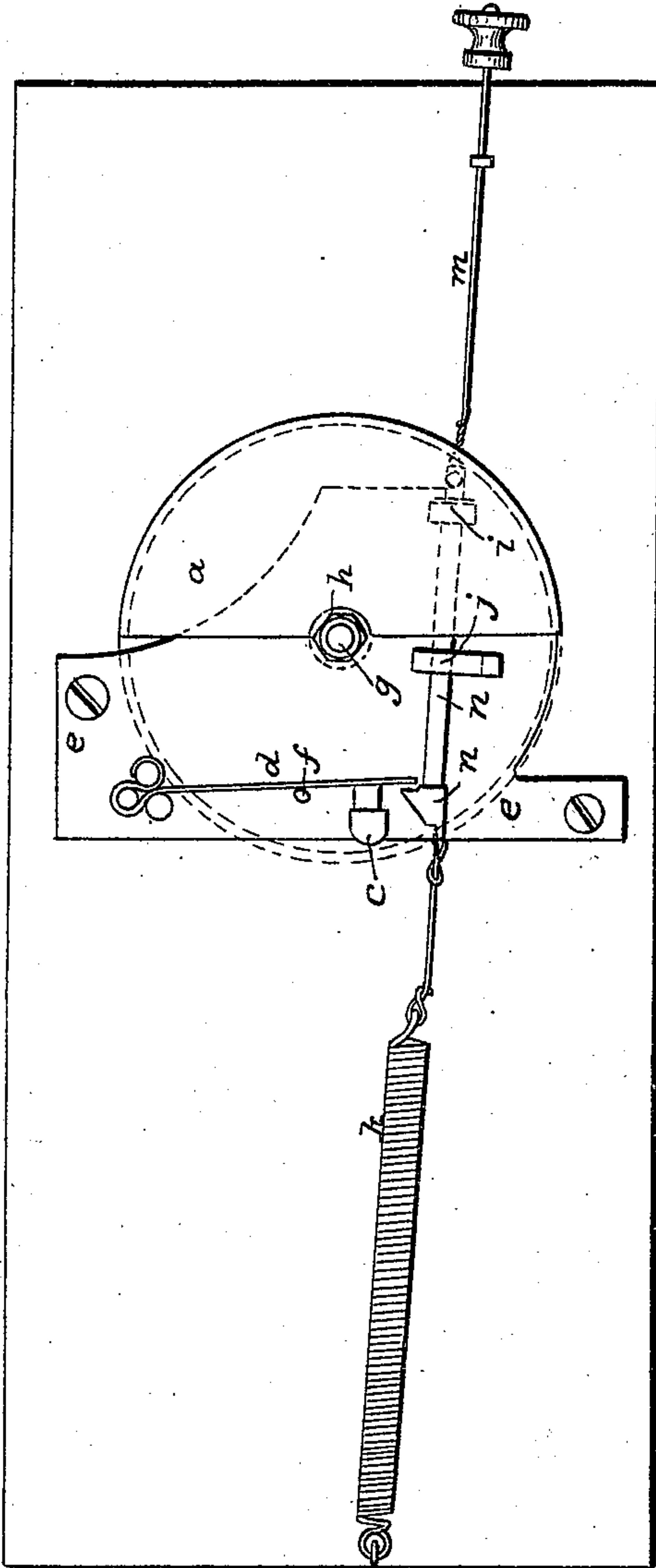


Fig. 2.



Witnesses:

D. B. Crosby

W. H. Gates.

Inventor:

S. S. Chandler

UNITED STATES PATENT OFFICE.

SAMUEL S. CHANDLER, OF CHELSEA, MASSACHUSETTS.

STRIKING MECHANISM FOR GONGS.

Specification of Letters Patent No. 30,800, dated December 4, 1860.

To all whom it may concern:

Be it known that I, SAMUEL S. CHANDLER, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented an
5 Improved Mechanism for Striking Gong or Bells; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my inven-
10 tion so full and exact as to enable those skilled in the art to practice it.

Figure 1, shows a vertical section through the center of the gong, *a*, and the case, *b*, which protects it, exhibiting in elevation the
15 mechanism which operates the hammer *c*. Fig. 2, is a plan of the gong and the striking mechanism, one half of the former being represented as transparent to exhibit the latter.

20 The hammer, *c*, is fixed to a spring carrier *d*. This carrier is secured to the base plate, *e*, and, when the parts are in their normal position, rests against a pin, *f*, by which the hammer is kept from constant contact with
25 the gong to prevent checking its vibrations. The gong is supported over the base plate by the standard, *g*, to which it is secured by the nut *h*. Two guide pieces, *i*, and *j*, are fixed to *e*, through which the latch piece
30 *n* is made to move as in guides, the piece *j* being slotted to permit lateral as well as longitudinal movement of the latch, which has the spiral spring *k*, fixed to one end, and the pull *m* to the other. The free end of *d*
35 extends beyond the hammer, so as to be in the path in which the end of the latch *n* moves when it is operated by the pull; by continued movement of *m* the latch and hammer are moved, extending spring *k*, till the
40 inclination of *d* to the latch, and the amount of its spring pressure, is such as to give a lateral movement to the latch and spring *k*, which lets *d*, slip off from the latch, which by a reverse lateral movement returns to the
45 position it held before the spring *d* slipped off from it. The hammer then moves for-

ward toward the gong by the force of spring *d*, which strikes against pin *f*. The momentum acquired by the hammer, however, carries it forward against the gong, bending
50 spring *d* over pin *f*, the reaction of *d* bringing the hammer to the position shown in the drawings after the blow is given. When the strain upon the pull is released, the contraction of *k* brings the inclined part of the
55 latch end, against the end of *d*, which gives sufficient lateral movement to the latch to cause it to pass *d*, and then by a further longitudinal and reverse lateral movement to
60 assume its normal position, ready to operate again as before described.

Too great contraction of the spring *k* is checked by the stop, *o*, in the latch piece, *n*, which strikes against the guide, *i*. The
65 spring, *k*, operates upon the latch to produce both of its retractile movements, the lateral as well as the longitudinal. In exposed situations the case *b* is employed to prevent accumulation of ice and snow within
70 or upon the gong and the mechanism.

The mechanism is operated with remarkable ease, is capable of very rapid operation, and gives but one blow of the hammer for each pull upon *m*, and is perfectly sure
75 to operate, all of which are of importance where a gong is used as a signal to engineers &c.

I claim—

The arrangement of spring, *k*, the peculiarly shaped latch piece, *n*, slotted guide, *j*, and the guide, *i*, when combined and made
80 to operate with the pull, *m*, spring, *d*, hammer, *c*, and stop, *f*, of a gong or bell striking apparatus, in the manner substantially
85 as described.

Executed by me this thirty first day of October, A. D. 1860.

S. S. CHANDLER.

In the presence of—

J. B. CROSBY,
WM. H. CADES.