A. L. SWAN.

Improvement in Bell Pulls.

No. 120,682. Patented Nov. 7, 1871.

Fig. 1.

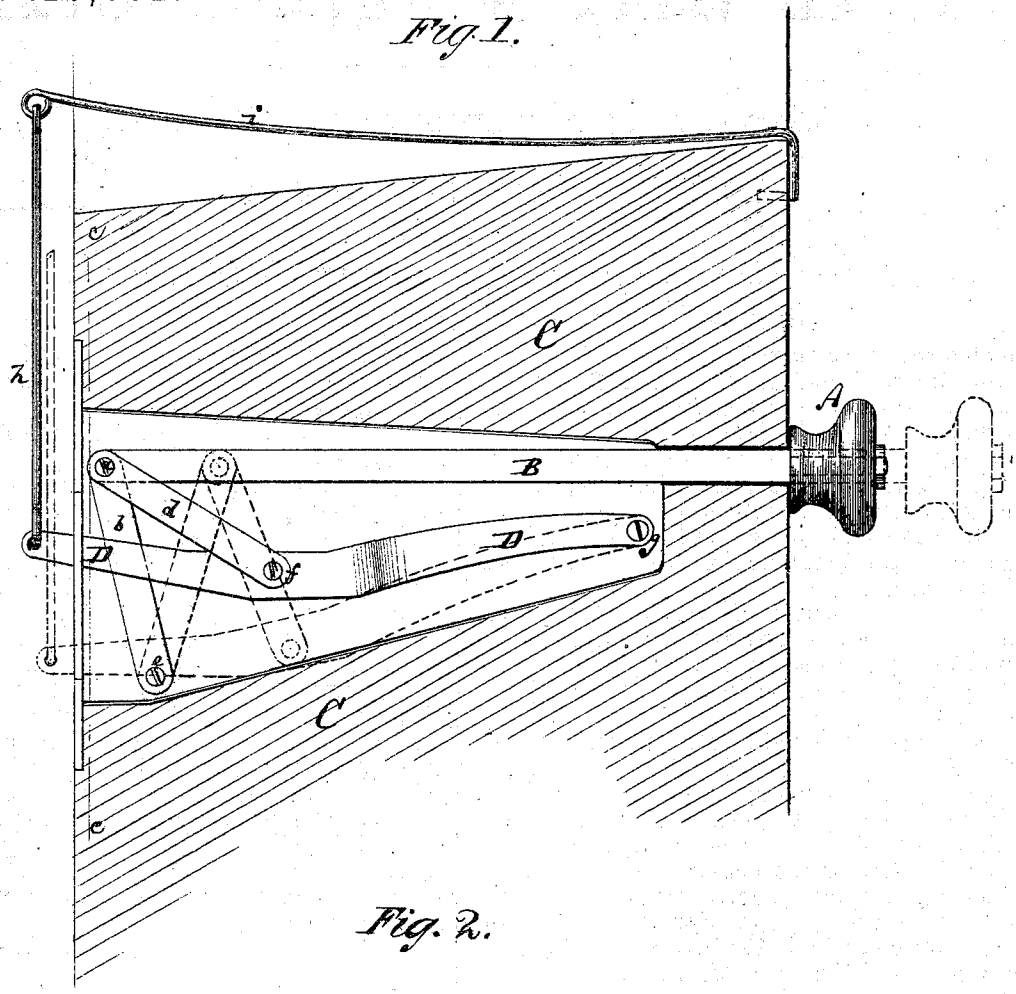
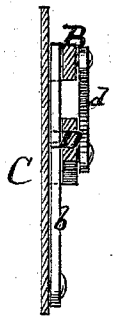


Fig. 2.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN BELL-PULLS.

Specification forming part of Letters Patent No. 120,682, dated November 7, 1871.

To all whom it may concern:

Be it known that I, AMOS L. SWAN, of Cherry Valley, in the county of Otsego and State of New York, have invented a new and useful Improved Bell-Pull; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a side view of my improved bell-pull. Fig. 2 is a transverse section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new arrangement of levers constituting a bell-pull; and has for its object, by the improved combination to insure reliable action under a short motion of the pull.

A in the drawing represents the knob, and B the pulling-rod of the bell-pull. The inner end of the rod B is, by a pivot, *a*, connected with the converging ends of two short levers, *b* and *d*. The lower end of *b* is at *e* pivoted to the frame or casing C of the door. The lower end of the lever *d* is, by a pin, *f*, connected with a lever, D. This lever D is at *g* pivoted to the casing C, and extends inward, its inner end being connected with the wire *h* that leads to the bell, and thereby also with the ordinary spring on the bell, shown in the drawing as spring *i*, the tendency of the said spring being to hold the free end of D elevated.

By pulling on the knob A the levers *b* and *d* will be swung so as to bring *d* into a more vertical position, thereby carrying the lever D down and causing it to pull on the wire that leads to the bell. A short motion of the knob will suffice to produce a complete swing of the lever D, and insure the desired disturbance of bell or stroke of clapper. On being let go the knob will, by the power of the spring *i*, be drawn in again and all parts brought back to their normal position. The rod B can thus not be retained half-way in or out, but will always be ready for full action.

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

The bell-pull mechanism, consisting of the rod B, levers *b*, *d*, and D, and spring *i*, all arranged to operate substantially as herein shown and described.

AMOS L. SWAN.

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