

F. J. HERRICK.
Bell-Striking Mechanism.

No. 221,730.

Patented Nov. 18, 1879.

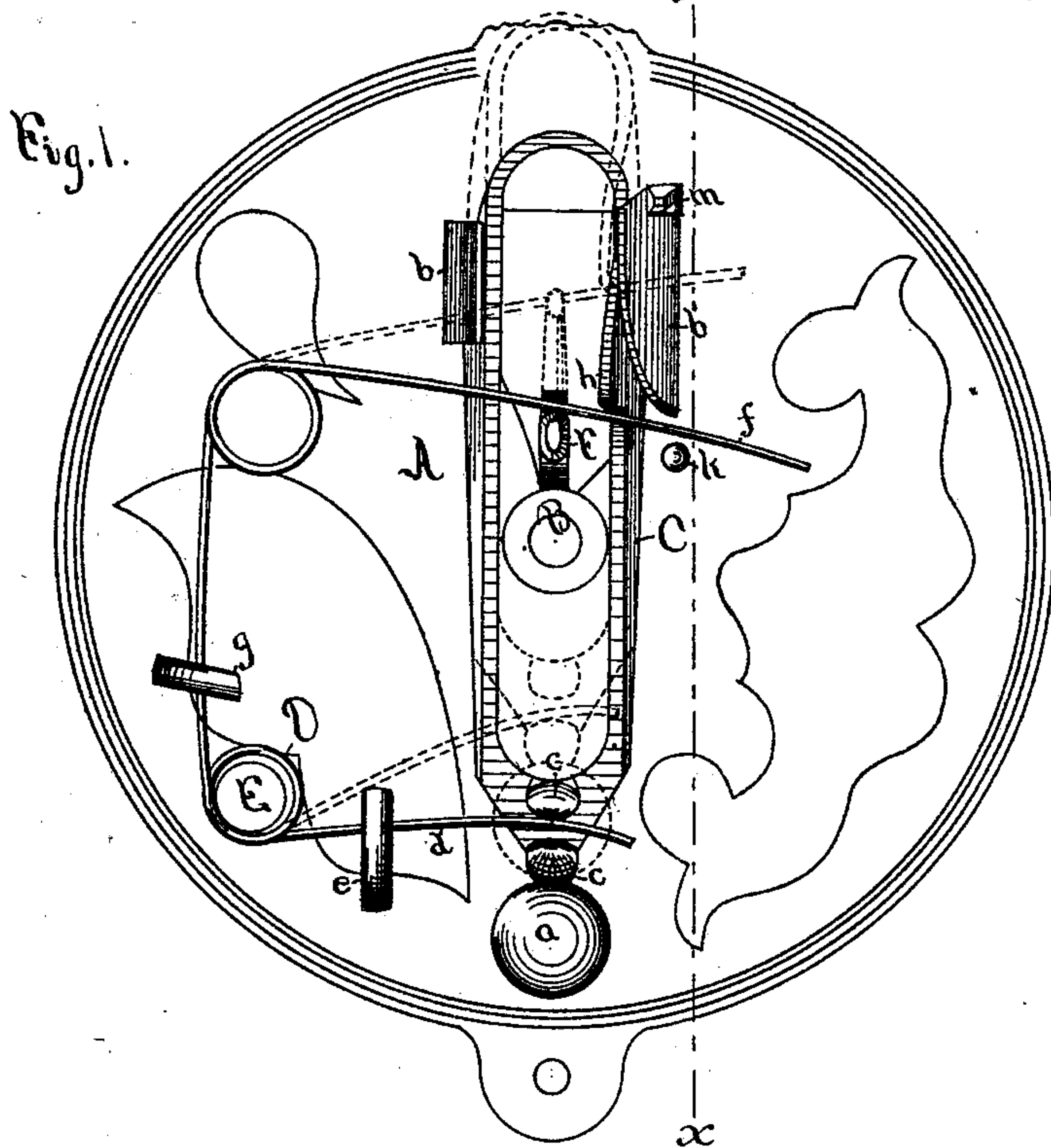
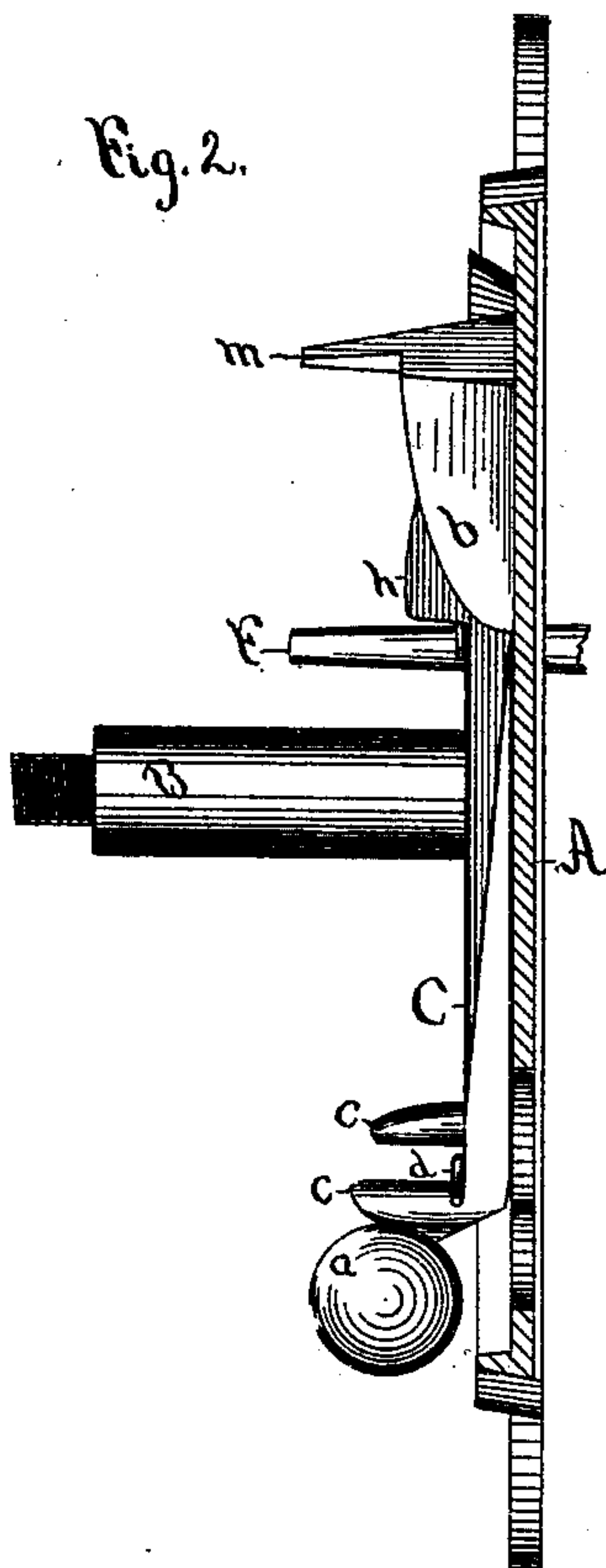


Fig. 2.



Witnesses.
W. B. Thomson
P. J. Markley

Inventor
Frank J. Herrick
By James Shepard
att'y

UNITED STATES PATENT OFFICE.

FRANK J. HERRICK, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN BELL-STRIKING MECHANISMS.

Specification forming part of Letters Patent No. **221,730**, dated November 18, 1879; application filed May 10, 1879.

To all whom it may concern:

Be it known that I, FRANK J. HERRICK, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Bell-Striking Mechanism, of which the following is a specification.

My invention consists in the peculiar construction of certain parts, and in the combination of parts, as hereinafter described.

In the accompanying drawings, Figure 1 is a front elevation of a bell-striking mechanism which embodies my invention, and Fig. 2 is a sectional view of the same on line *xx* of Fig. 1.

A designates the base-plate; B, the central post, to which an ordinary gong-bell is designed to be attached. C designates a longitudinally-moving slide, the lower end of which constitutes the hammer *a*. This slide C is slotted or provided with a longitudinal opening, into which the post B is received, so as to form one of the longitudinal guides for said slide. At the upper end of the slide there are two lugs, *b b'*, cast on the base-plate A, between which the slide is received and guided. These lugs are hooked toward each other, and the sides of the slide are correspondingly beveled, so as to prevent the slide from working forward out of place.

Just above the hammer *a* there are two lugs, *c c*, on the slide C, between which lugs one arm, *d*, of the spring D rests, said arm acting upon the lower lug to force the slide and hammer against the inside of the bell, and upon the other to rebound said slide and hammer. This spring is hung upon a stud, E, around which it is coiled, as in ordinary springs, and the arm *d* strikes a stop, *e*, to rebound said arm. The outer end of said stop is hooked, so as to prevent the spring from working forward. This arm also passes in front of the lower end of the slide, so that holding the spring in place also holds the lower end of the slide from coming forward. The other arm, *f*, of the spring D extends upward under a like hooked stop, *g*, and then turns to one side and across the front of the slide, either with or without one or more coils at the bent corner.

Just above the arm *f* there is a hook or

shoulder, *h*, on the slide C, for engagement with said arm.

The front edge of the lug *b'* is rounded off or inclined, to act as a trip or cam, and it projects forward farther than the shoulder *h* on the slide.

This mechanism is principally designed for use with an ordinary bell-lever hung upon the outside of the door.

F designates the end of said lever, which is passed through an orifice in the plate, and just under the arm *f* of the spring. A stop, *k*, on the base-plate holds said arm in proper position when the lever is not present, so that said lever may be passed in from the outside without having to lift said arm.

The operation is as follows: When the lever F is raised by depressing its outer end the arm *f* is forced upward against the shoulder *h* on the slide C, thereby carrying said slide with it. The end of the arm *f* is long enough, so that it rides on the inclined front of the lug *b'*, and the slide is carried with said arm *f* until the incline throws said arm so far forward as to disengage it from the shoulder of the slide, ready for another action. The broken lines in Fig. 1 indicate the position of the parts just before the return of the slide and hammer.

I have herein described the arm *f* as formed on and constituting a part of the spring, and for the sake of cheapness I prefer to so form it; but it is evident that a spring-actuated rigid arm or lever might be hung to oscillate on a post, and having also slight play flatwise and interposed between the lever and shoulder of the slide would operate in the manner described.

In case it is desired to use this striking mechanism for a pull-bell, then the lever F will, of course, be dispensed with, and a wire can be fastened directly to the arm *f*, or its equivalent, guided, of course, by proper guides, and the mechanism would operate as hereinbefore described. The prominent projection *m* at the upper end of the lug is for the purpose of preventing any possibility of the arm *f* ever being raised so high as not to return to its proper place.

I am aware that a shouldered and sliding

hammer has been combined with a longitudinally-moving latch-bolt or a lock-bolt, which carried a spring-arm, engaging the shoulder on the slide, and was disengaged therefrom by an incline at the side of the hammer, and I hereby disclaim the same.

I claim as my invention—

1. In a bell-striking mechanism, the longitudinal slide, carrying a hammer and provided with the projecting shoulder, in combination with the operating lever, the oscillating arm interposed between said lever and shoulder on the slide, the inclined lug, and suitable spring mechanism, substantially as described.

2. In a bell-striking mechanism, a longitudinally-sliding hammer, in combination with

the lever F and spring D, having two arms, which act, respectively, upon said hammer and lever, substantially as described, and for the purpose specified.

3. In a bell-striking mechanism, the combination of the base-plate A, having lugs *b b'* hooked toward each other to form a dove-tailed recess between them, the front edge of the lug *b'* being inclined to form a cam, the slide C, hooked stop *e*, and spring D, the two arms of which act, respectively, in connection with the stop *e* and lug *b'*, substantially as described, and for the purpose specified.

FRANK J. HERRICK.

Witnesses:

JAMES SHEPARD,
N. C. NOBLE.