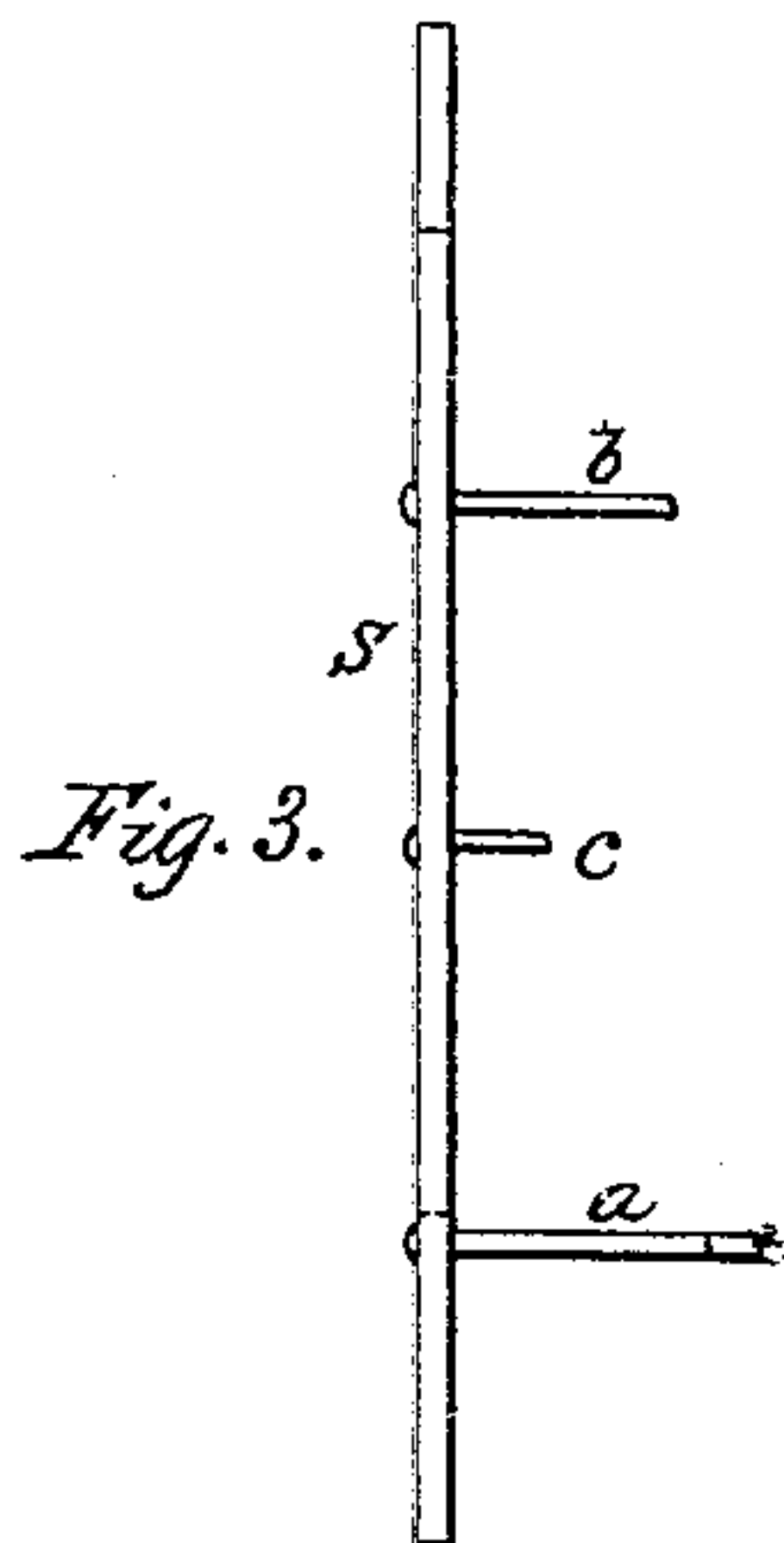
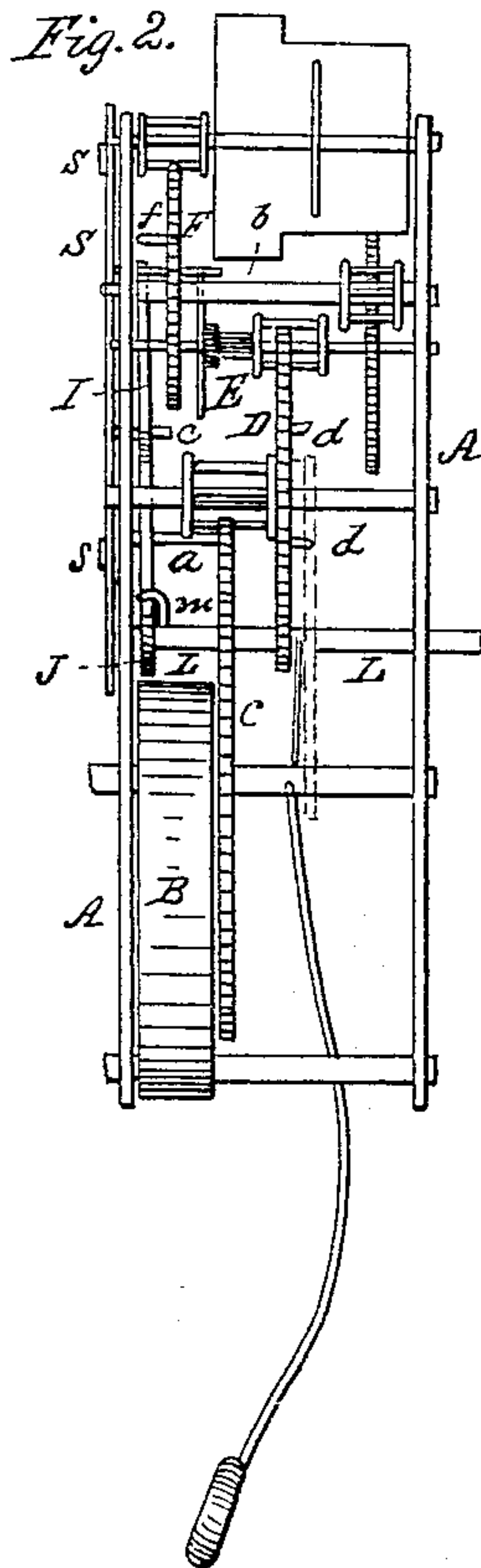
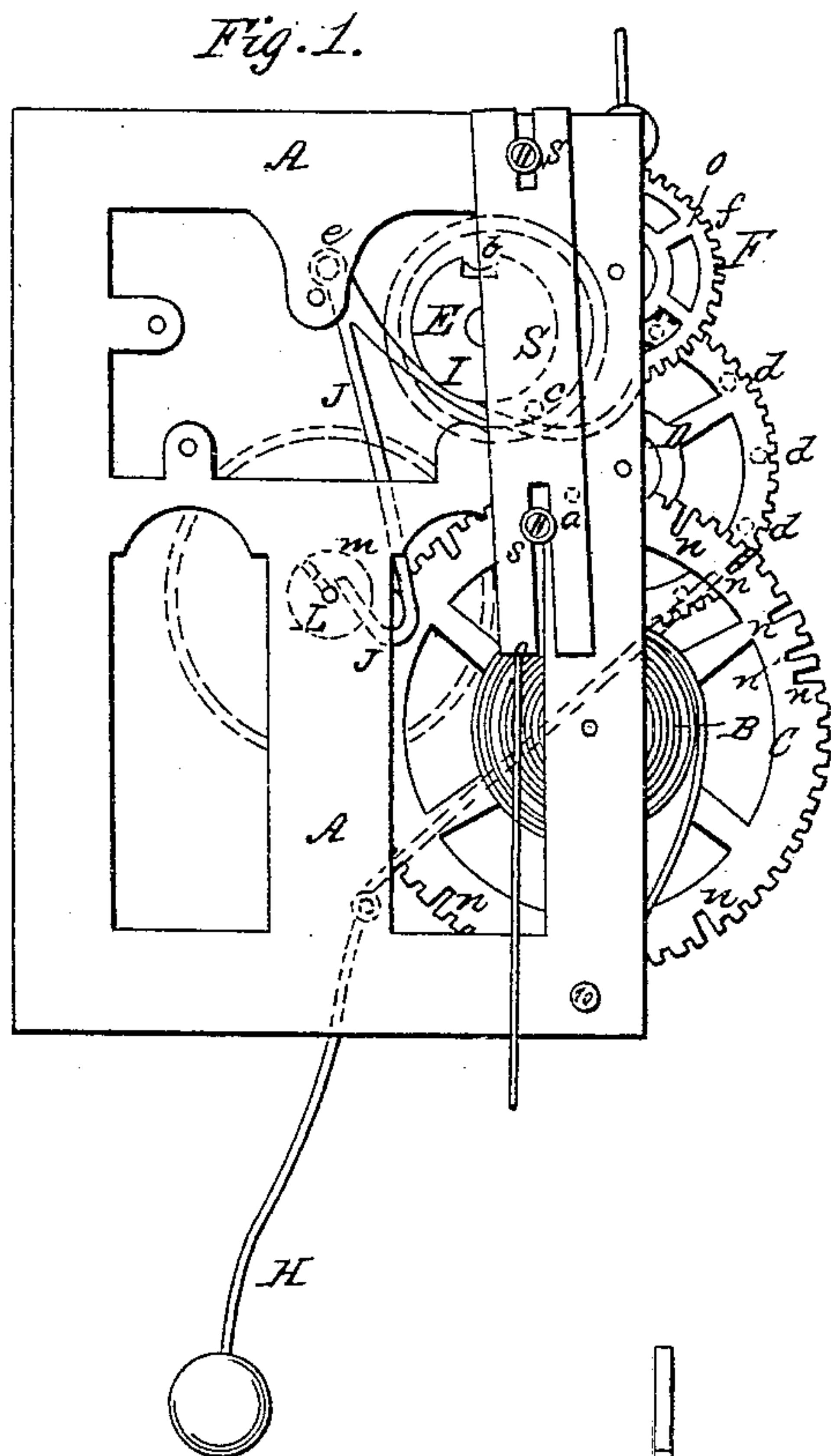


B. BACON.

Striking Works for Clocks.

No. 57,843.

Patented Sept. 11, 1866.



Witnesses:

A. C. Henry
J. W. Herthel

Inventor:

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UNITED STATES PATENT OFFICE.

BENJAMIN BACON, OF MORRISON, ILLINOIS.

IMPROVEMENT IN STRIKING-WORKS FOR CLOCKS.

Specification forming part of Letters Patent No. **57,843**, dated September 11, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN BACON, of Morrison, in the county of Whiteside and State of Illinois, have invented a new and useful Improvement in Striking-Works for Clocks; and I do hereby make known and declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

My invention consists in arranging a vertically-reciprocating slide provided with two pins or projections, in combination with the cam and count-wheel of a clock, so that said pins will rest in suitable notches in the cam and count-wheel when the slide is in its lowest position, and thus prevent the striking-works from operating, while the upward movement of said slide, produced as hereinafter specified, will detach said pins from said cam and count-wheel, and permit the works to move until the proper number of strokes are given, when said pins fall again into their appropriate rests or stops upon the cam and count-wheel aforesaid, and stop said striking-works until the slide is raised again at the proper time, as hereinafter more fully set forth.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a rear elevation of my invention; Fig. 2, a side or edge view of the same; and Fig. 3, a detached edge view of the slide with its attachments.

Similar letters of reference in the several figures indicate the same parts of my invention.

A represents the frame which supports the movements of the clock; B, the spring which propels the striking-works; and C, the count-wheel, constructed in the usual manner, having deep slots in its periphery (marked *n*,) arranged at variable distances from each other, the spaces between being proportioned to number of strokes intended to be given to indicate the changing hours.

D represents a wheel provided with a series of pins, *d*, whose revolution operates the hammer H to give the required number of blows.

E represents the cam, which is provided with a notch, as shown, and is so connected by means of suitable gearing as to make one complete revolution while the count-wheel revolves the space of a single cog, as represented upon its periphery.

F represents a wheel which gears into or with the shaft of the cam E in any suitable manner, and is provided with a pin, (marked *f*,) which, in connection with the arm or lever I, serves to check or hold the works from moving, after the slide is moved up, until released at the proper moment, as hereinafter specified.

S represents the before-mentioned slide, which may be arranged upon the rear or front of the clock, as desired, and be secured by means of screws or pins *s*, or in any other suitable manner which will permit an upward-and-downward sliding motion of the same. This slide is provided with the pin *a*, which operates upon the count-wheel, the pin *b*, which operates upon the cam, and a projection, *c*, upon which the arm or lever I operates to raise the slide, as hereinafter fully set forth.

Instead of the projection *c*, the said arm I may be so arranged as to act upon either of the pins *a* or *b*, if preferred.

I J represent a forked lever, pivoted at *e* to the frame A, the arm I extending out just beneath the pin *c* upon the slide, and curved up at the end so as to hook or catch upon the pin *f* upon the check-wheel F when raised up, as hereinafter mentioned.

The arm J extends downward, as shown, near the arbor of the minute-hand L, so that the revolution of said arbor brings a cam, *m*, in contact with the lower end of said arm once in each hour or revolution, and raises up the arms J and I, which latter raises the slide S, and disengages the pins *a b*, respectively, from the cam and count-wheel, but at the same time locks the wheel F, as before mentioned, until such time as the cam *m* upon the arbor L releases the arm J, when the arm I drops and unlocks the check-wheel F, and the striking commences and continues until the proper number of strokes are given, when the appropriate notch in the count-wheel comes under the pin *a*, and the notch in the cam comes under the pin *b*, and the slide drops, the pins falling into their appropriate rests, and the striking-works stop until again released by the

hourly action of the cam *m* upon the arm *J*, when said above-described operation is repeated.

Instead of the check-wheel *F*, the end of the arm *I* might engage with a pin upon the fly or any other wheel, which would check the movement of the striking-works until the cam *m* should release said arm and allow it to drop.

It may be observed that the action of the cam at each revolution thereof raises the slide up from the cogs in the count-wheel until the appropriate stop-notch is reached.

Having described the construction and op-

eration of my invention, I will now specify what I claim and desire to secure by Letters Patent.

I claim—

In combination with the count-wheel and cam of a clock, a slide, *S*, provided with pins *a b*, or their equivalent, arranged and operating substantially as and for the purposes herein specified.

BENJAMIN BACON.

Witnesses:

WM. LANE,

N. S. HULETT.