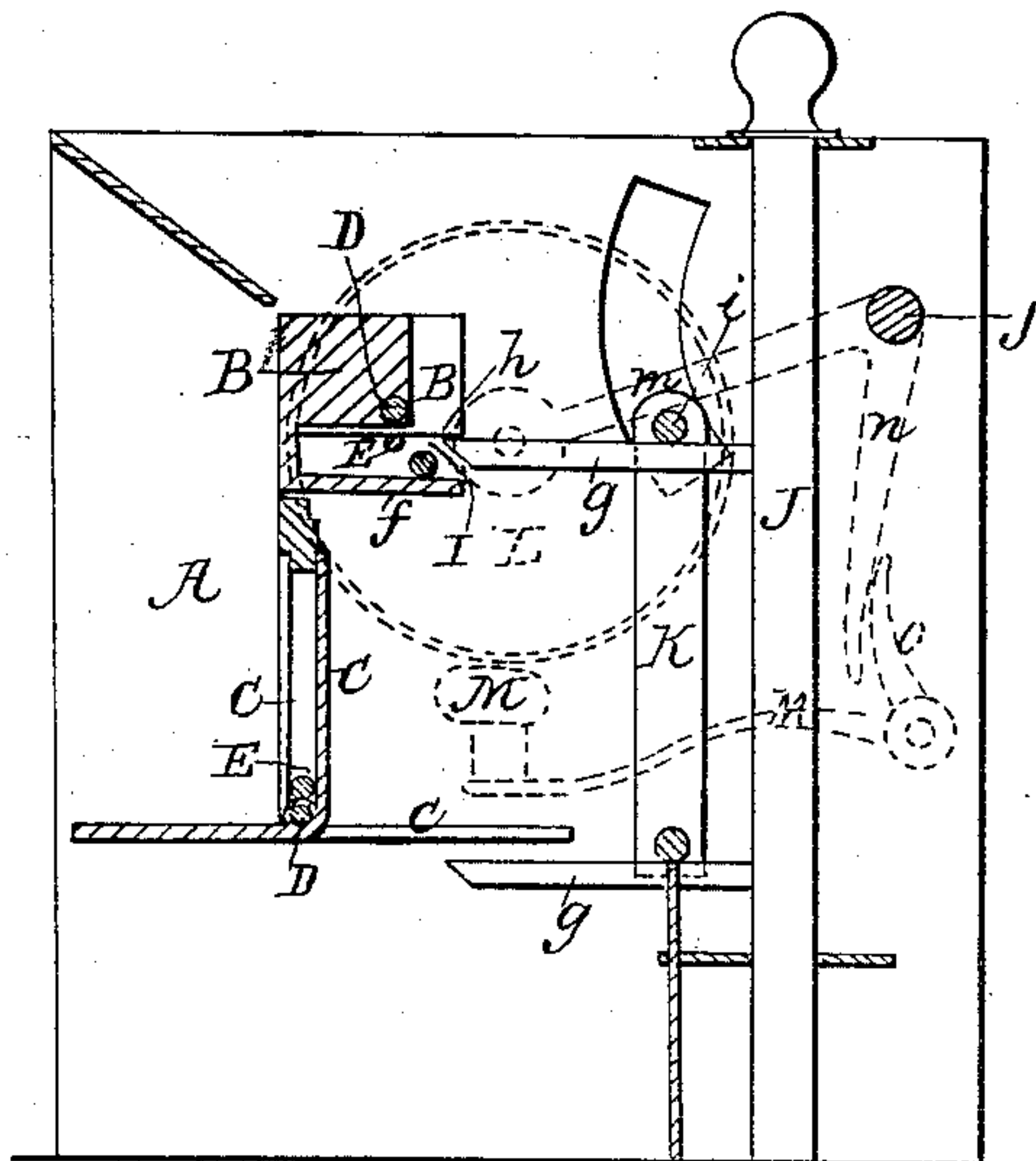
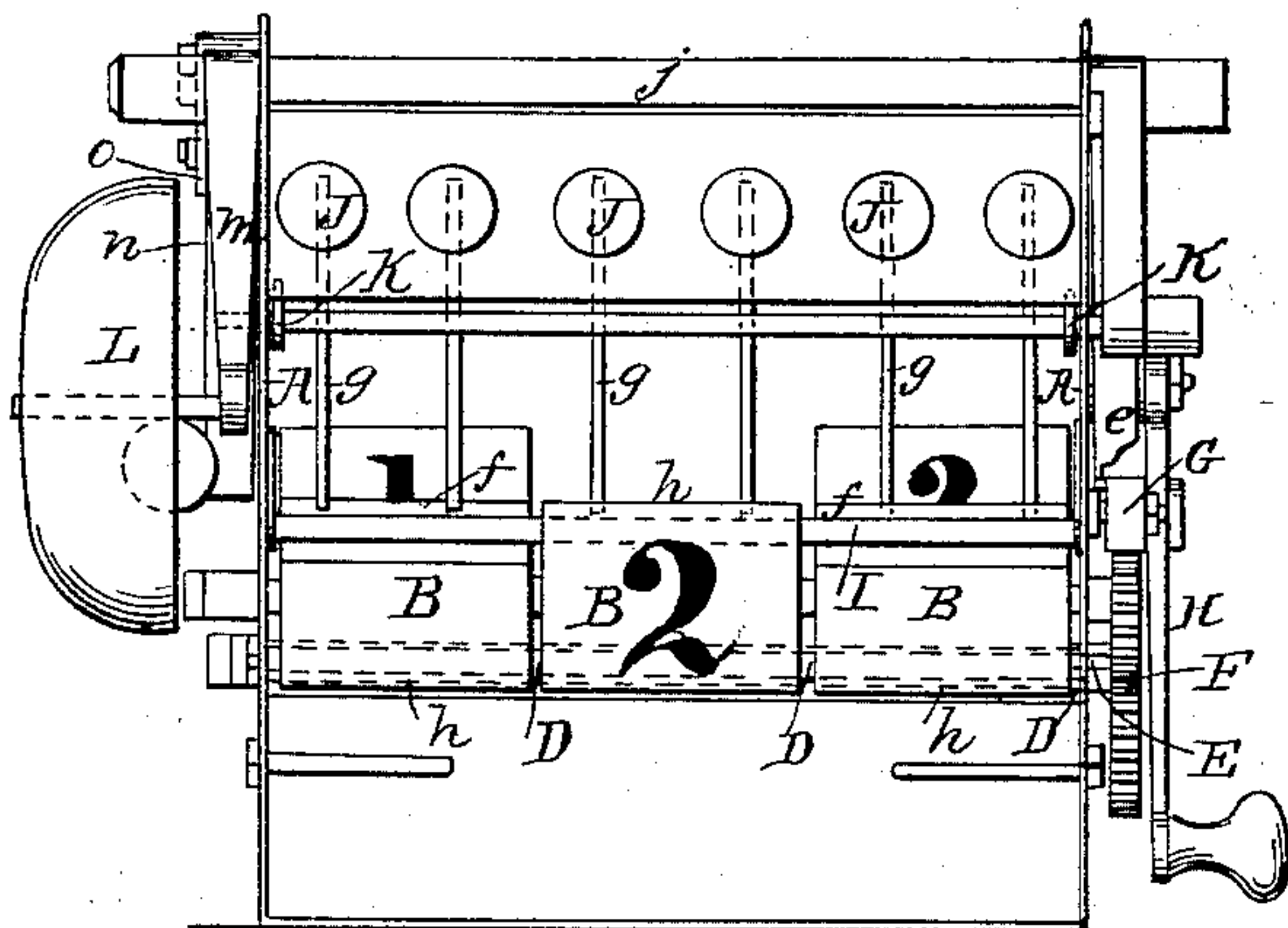
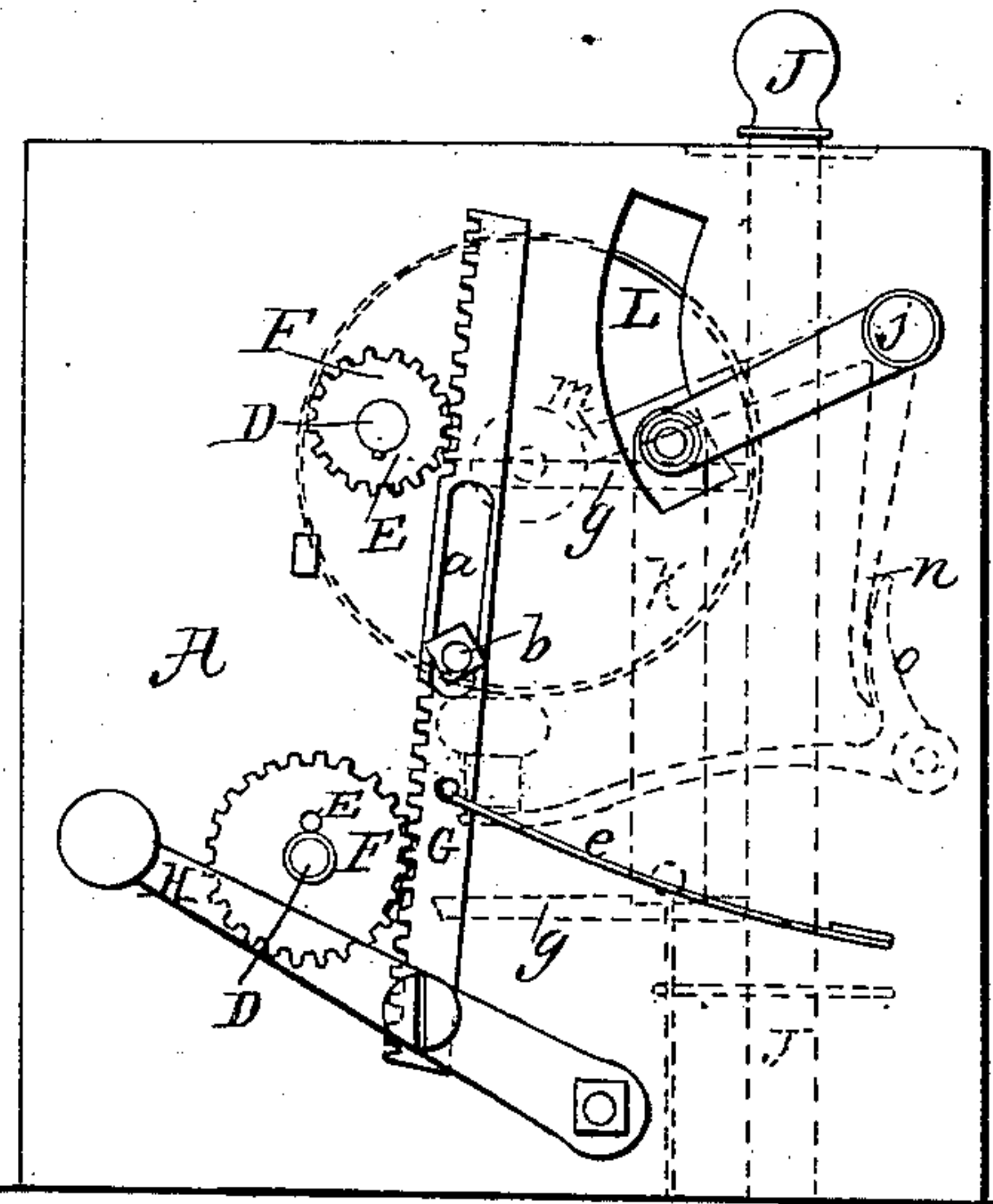
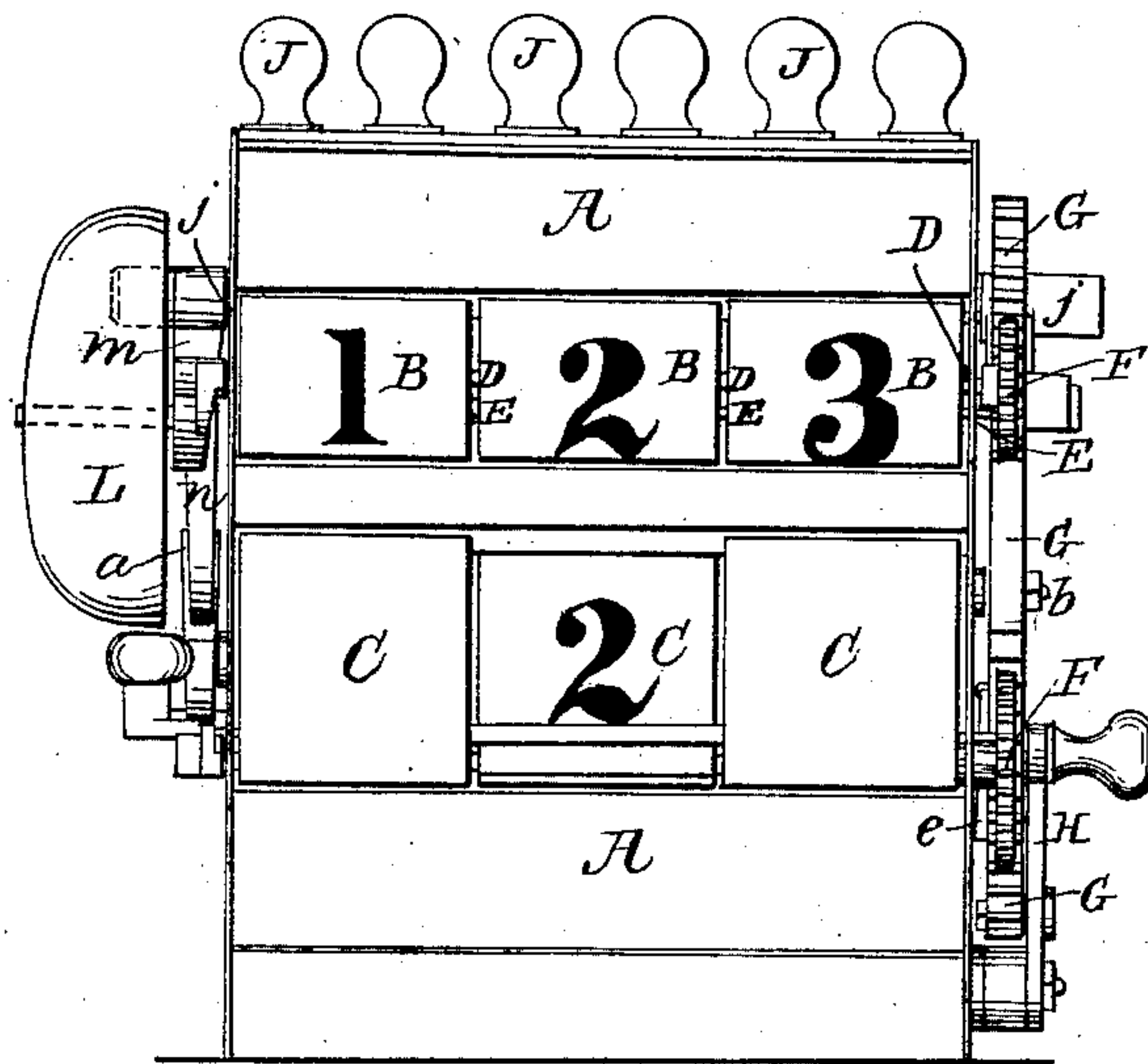


W. HORSFALL.

Annunciator.

No. 10,071.

Patented Oct. 4, 1853.





# UNITED STATES PATENT OFFICE.

WM. HORSFALL, OF NEW YORK, N. Y.

## ANNUNCIATOR FOR HOTELS.

Specification of Letters Patent No. 10,071, dated October 4, 1853.

*To all whom it may concern:*

Be it known that I, WM. HORSFALL, of the city, county, and State of New York, have invented certain new and useful Improvements in Constructing Annunciators for Hotels and other Places; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a front view of the annunciator. Fig. 2, is a plan of the same. Fig. 3, is a side elevation and Fig. 4, is a vertical central longitudinal section of the same.

Similar letters of reference in each of the several figures indicate corresponding parts.

This invention relates to a new method of constructing and arranging the index plates so that each of them can be operated and its number exposed to view, and also the alarm sounded, by simply employing a vertical rod having a horizontal lifting or tripping arm which extends underneath each of the swinging index plates; the said rod and arm being arranged in such relation to the rocking or swinging frame which carries the alarm bell that as either of the rods are raised for the purpose of tripping one of the index plates and exposing its number to view, the said frame and bell will also be raised and the pendulous hammer allowed to descend some distance, and consequently when the rod descends, which it does instantly after the index plate has been tripped; the swinging frame and its alarm bell will descend also and cause the short finger of the pendulous hammer to be operated upon by a lever connected to the arm which sustains the bell and the long arm or weighted end of the pendulous hammer to rise, strike the bell and sound the alarm.

My invention relates to a new and simple method of throwing the index plates, either separately or a number together, back to their proper places after the number has been seen and attended to. This manner of constructing and arranging and operating the plates so that the number can be indicated and the alarm sounded at the same time is very simple and convenient as well as durable, no springs or complicated mechanism being employed. And the manner of throwing the plates back to their proper place is also very simple and renders the operation very easy and perfect. There is not much liability of this arrange-

ment becoming deranged, and in case it should, each index plate can be replaced at one fourth the present cost.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A, represents a case into which the index plates B, B, B, are placed—also the rods for tripping the plates and the swinging frame which operates the bell and hammer; these parts may however be arranged in any suitable place and position. The index plates may be made of the same shape as those lettered B, B, B, or they may be constructed similar to those lettered C, C, C, Figs. 1, 2, and 4, those B, however are found to be most convenient, the plates B, which I shall confine my description to, are hung on a horizontal rod D, and vibrate or turn upon it, they being tripped or thrown back after indicating their numbers, by means of the eccentric rod E, placed just below the rod D; the rod D, is secured in a cog wheel F. and the rod E, is also secured eccentrically in it; this cog wheel F, gears into the movable rack bar *b*, which has a slot *a*, through it for the pin *b*, to work in as the rack moves up and down, which latter operation is performed by depressing the lever H, Fig. 3; by performing which operation the cog wheel revolves a short distance and causes the eccentric rod to perform the operation of throwing the plates back to their position in the most perfect manner as will be seen in Figs. 1, 2, and 4. The lever is thrown upward again by the spring *e*. The index plates turn perfectly free of the rod D, and are sustained in their proper places by the rod I, as seen in Fig. 2, and are kept steady, while indicating, by said rod as seen in Fig. 4, the part *f*, of the plate bearing underneath the rod and cannot pass by it. J, J, J, are the trip bars or rods, each having a horizontal arm *g*, *g*, *g*, as seen in Figs. 2, 3 and 4; the extreme end of which has its position underneath the part *h*, of the index plates as seen in Figs. 2 and 4; and consequently as the rod is raised, it will strike against the part *h*, and tilt or trip the index plate and throw it to the position shown in section in Fig. 4, and expose its number to view. After this operation the before described arrangement to throw back the plate to its proper place is employed.



K, is the swinging or rocking frame to which the alarm is attached; the rod *i*, which carries the bell is connected to the rock shaft *j*, in the manner shown in the drawings Figs. 2, 3, and 4; this rod rests on top the horizontal arms *g, g, g*, and consequently as the rods, J, J, J, are raised it rises and lifts the bell L, and allows the hammer to fall a short distance. The rocking arm *m*, of the bell has another arm or lever *n*, attached to it, as seen in Figs. 3, and 4, which lever *n*, rests against the short arm *o*, of the pendulous hammer M, and as the rods J, J, J, descend causes the said short arm to be thrown outward and the long arm M, carrying the hammer, to rise and meet the bell as it descends and strike it and sound the necessary alarm, after which all the parts remain in their appropriate place ready for another operation.

What I claim as my invention and desire to secure by Letters Patent is—

1. The manner herein shown and de-

scribed of constructing and arranging the index plates B, B, B, or C, C, C, in combination with the alarm and its necessary attachments, so that each plate can be operated and its number exposed to view and also the alarm sounded instantly after, by simply employing a rod J, having a tripping arm *g*; in the manner and for the purpose herein specified.

2. I also claim the manner herein described and shown of throwing the index plates back to their proper position by means of the eccentric rod E, in combination with the peculiar construction and arrangement of the said index plates, the eccentric being operated in any manner equivalent to that shown and described.

In testimony whereof I have hereunto set my hand.

WILLIAM HORSEFALL.

Witnesses:

A. G. NEWMAN,  
R. W. FENWICK.