

No. 881,616.

PATENTED MAR. 10, 1908.

E. PICKEL.

ADVERTISING MACHINE.

APPLICATION FILED NOV. 8, 1906.

3 SHEETS—SHEET 1.

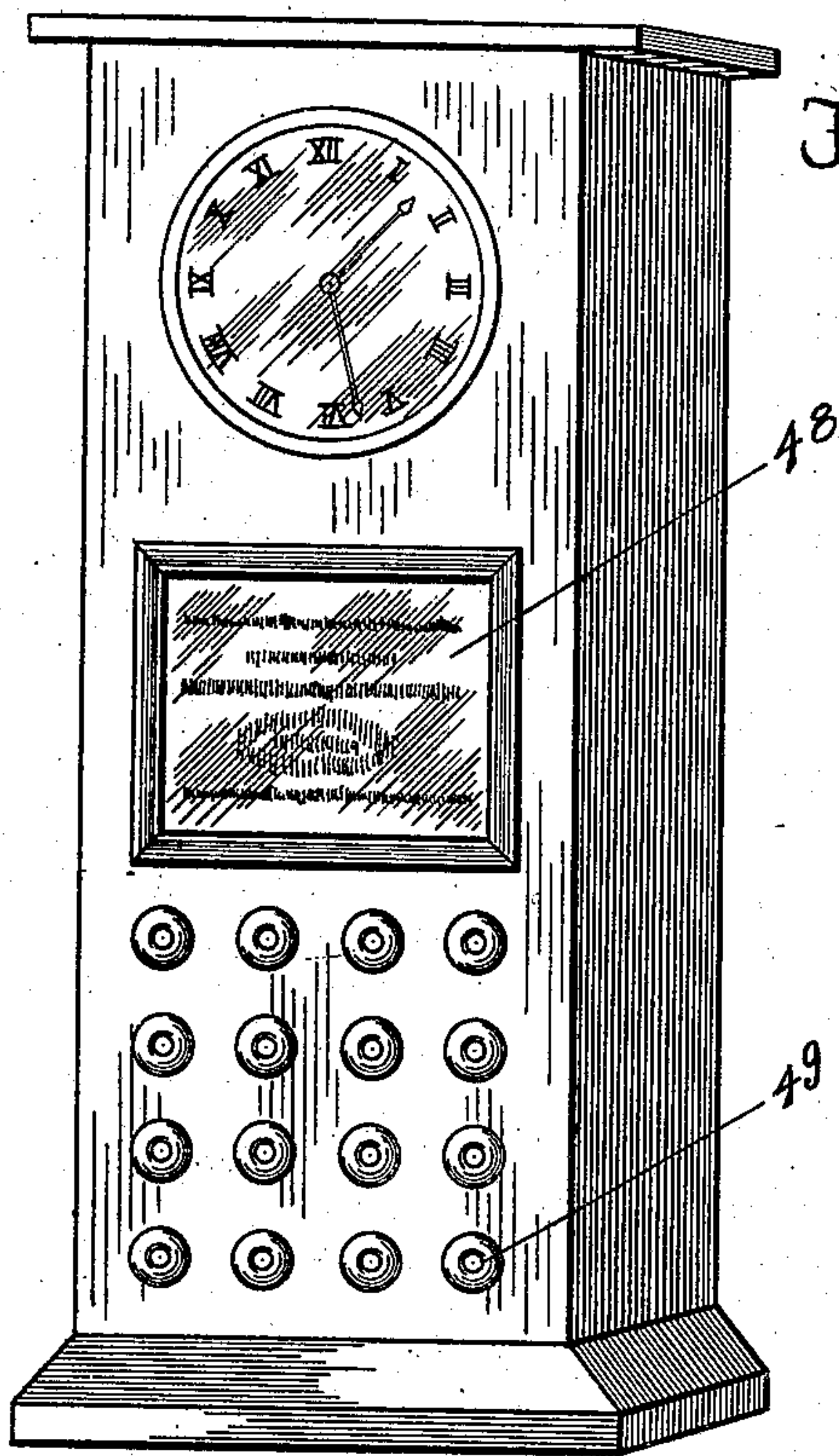


Fig. 1.

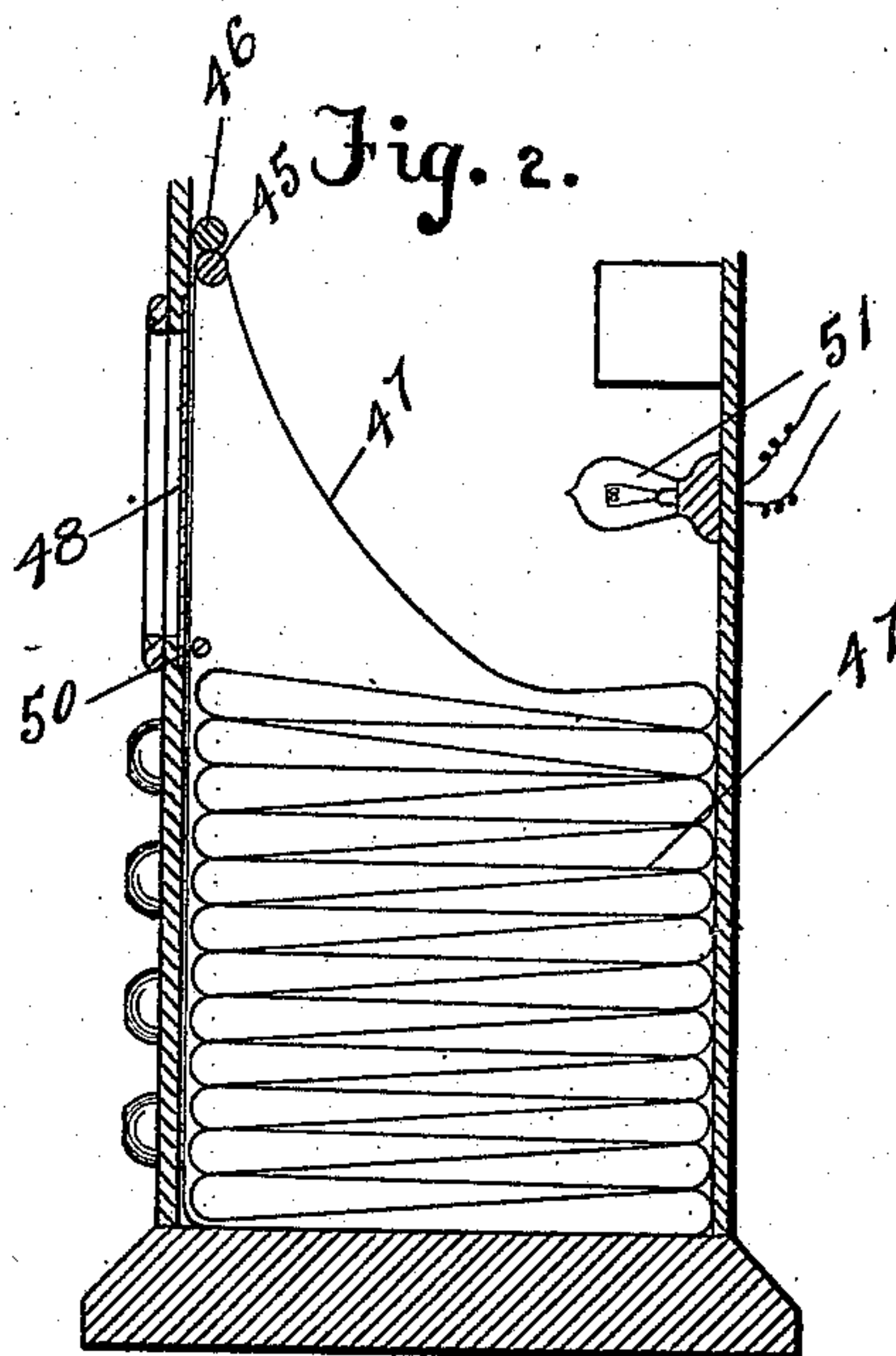


Fig. 2.

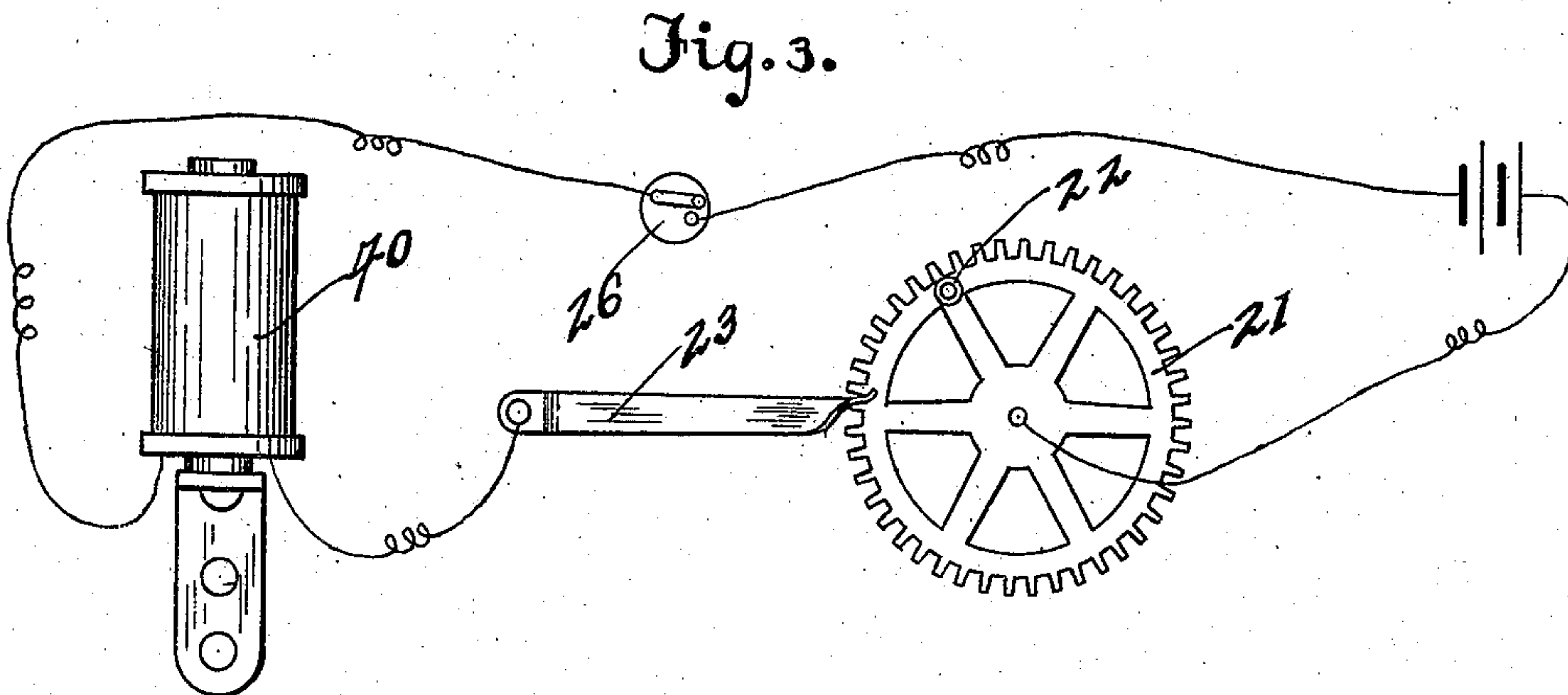


Fig. 3.

WITNESS:

Earl A. Marshall
J. G. Draper.

INVENTOR

Elsworth Pickel.

No. 881,616.

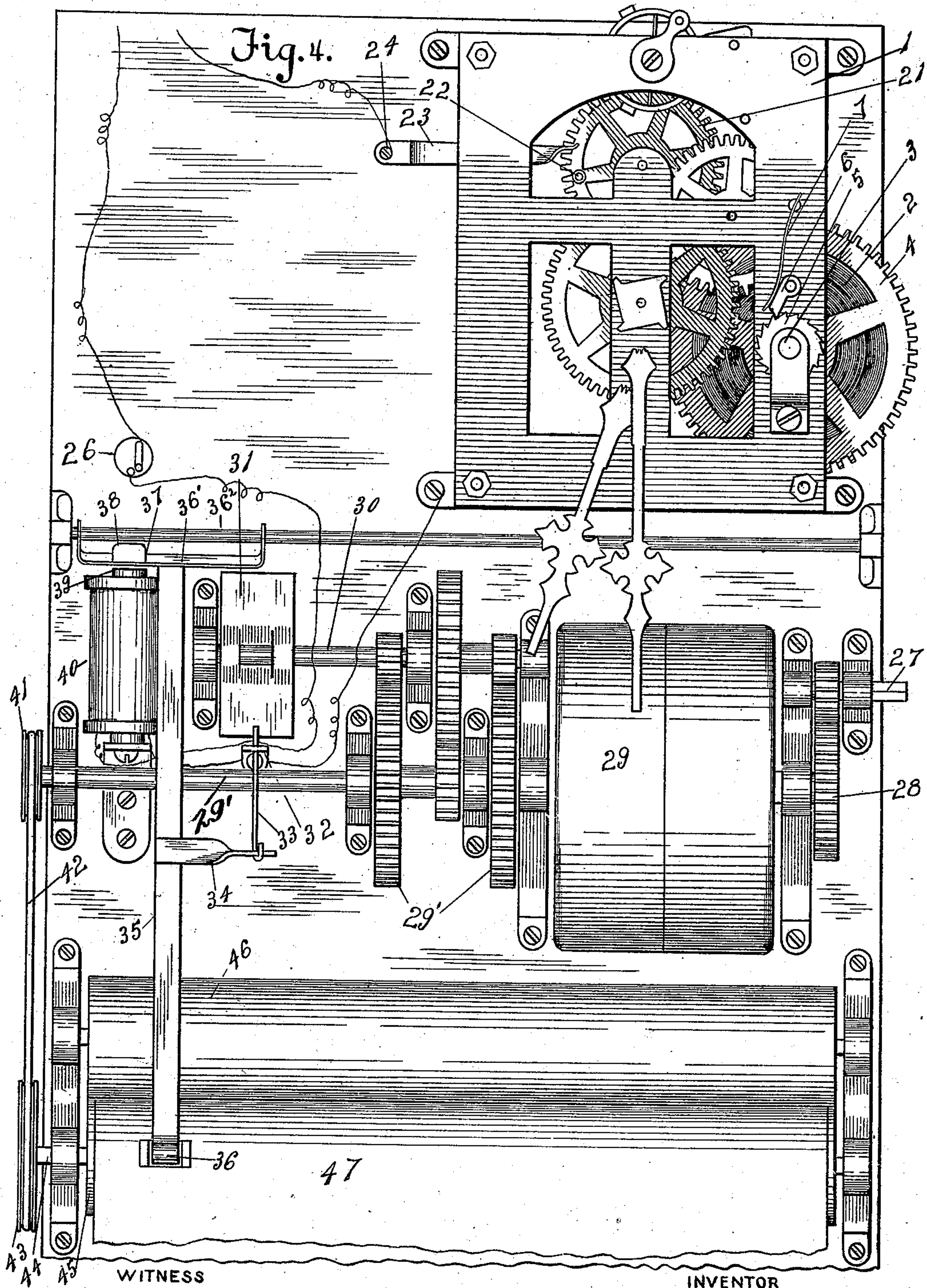
PATENTED MAR. 10, 1908.

E. PICKEL.

ADVERTISING MACHINE.

APPLICATION FILED NOV. 8, 1906.

3 SHEETS—SHEET 2.



Earl A. Marshall
J. G. Draper

Edmund Pickel

No. 881,616.

PATENTED MAR. 10, 1908.

E. PICKEL,
ADVERTISING MACHINE.

APPLICATION FILED NOV. 8, 1906.

3 SHEETS—SHEET 3.

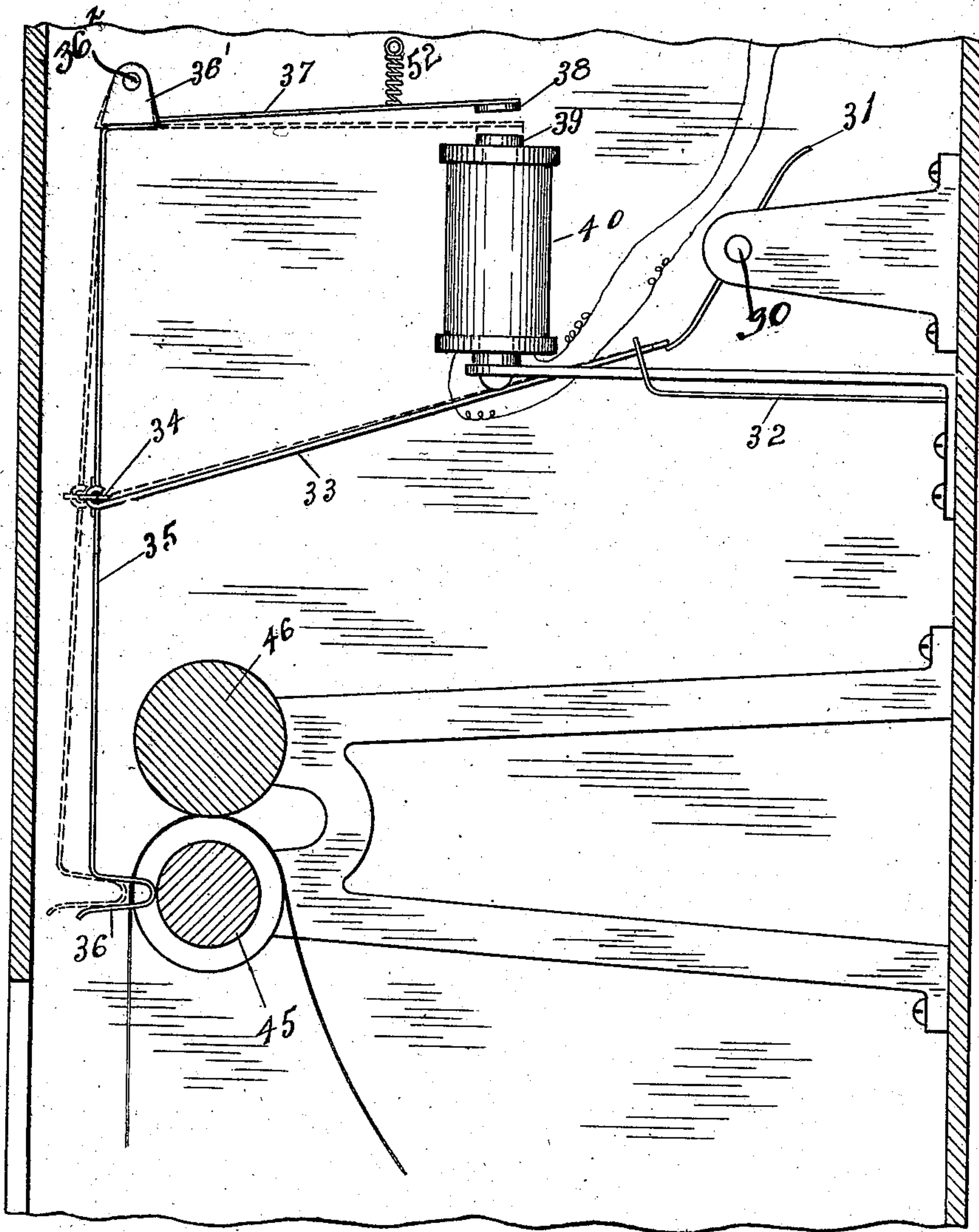


Fig. 5.

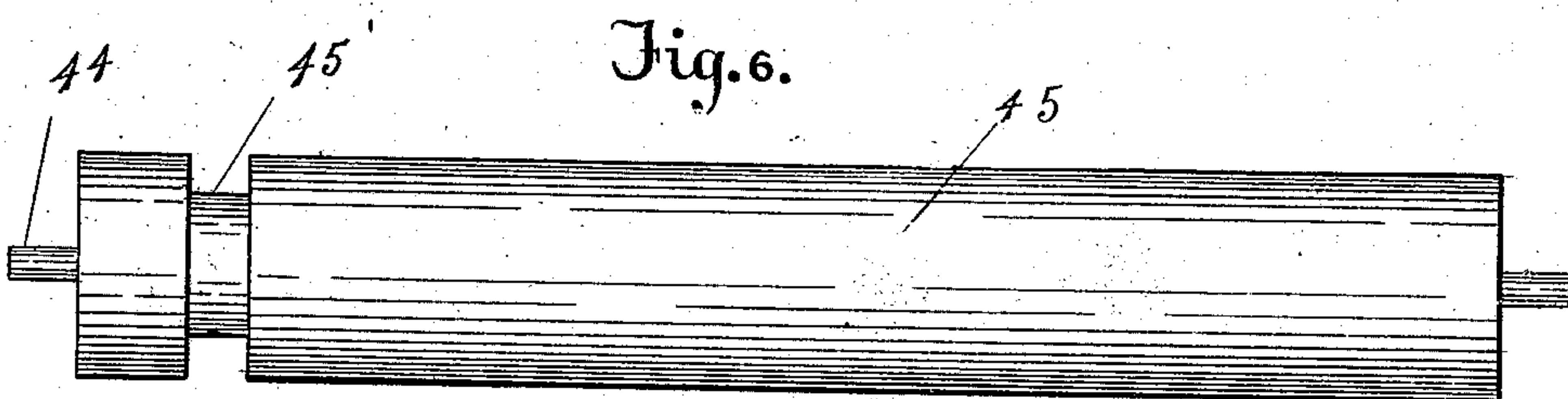


Fig. 6.

WITNESS

Earl A. Marshall
J. F. Draper.

INVENTOR

Edsworth Pickel.

UNITED STATES PATENT OFFICE.

ELSWORTH PICKEL, OF PORTLAND, OREGON.

ADVERTISING-MACHINE.

No. 881,616.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed November 8, 1906. Serial No. 342,511.

To all whom it may concern:

Be it known that I, ELSWORTH PICKEL, a citizen of the United States, residing at Portland, in the county of Multnomah and the State of Oregon, have invented a new and useful Advertising-Machine, of which the following is a specification.

This invention embodies a novel form of mechanism designed particularly for advertising purposes, and consists of means designed preferably to be associated with an automatic call-bell system of the type usually employed in hotels, including preferably, a periodically operating device, such as a clock, or the like, whereby an advertising appliance or device is adapted to be intermittently actuated to present to view advertising matter of a suitable nature.

The mechanism for operating the advertising means employed includes an electrically operated controller controlling the movement of an endless advertisement carrying belt, the operation of said controller being in turn governed by the clock mechanism of an automatic call-bell apparatus, which is adapted to effect periodical electrical connection of termini of a circuit including the said controller to admit of operation of the latter.

For a full understanding of the details of the invention, and the advantages thereof, reference is to be had to the following specific description, and to the drawings forming a part of this specification, and in which;

Figure 1 is a perspective view of a clock constructed especially for use in hotel call-bell systems and illustrating the invention applied thereto; Fig. 2 is a vertical transverse sectional view of the clock, partially broken away, bringing out more clearly the general arrangement of the advertising belt or apron; Fig. 3 is a view showing the electric circuit connections between the electro-magnet and the clock mechanism; Fig. 4 is a front view of the entire inclosed mechanism within the clock cabinet or case, the latter being broken away at its upper and lower portions; Fig. 5 is a partial vertical section of the inclosed mechanism including those parts mainly which comprise the governor and controller therefor; Fig. 6 is an elevation of the lower driving roller for actuating the endless belt.

In this description and throughout the drawings, like reference characters refer to like parts.

As shown most clearly in Fig. 1 of the drawings the clock, which is employed as a part of the automatic call-bell apparatus, may be of any suitable form, generally speaking, the main modification in its construction being in the cabinet or case thereof, and residing in the provision, at the front of the latter, of an opening of desired size preferably closed by a transparent plate 48, such as glass, or the like, and through which advertising matter of a more or less conspicuous nature, may be plainly viewed. The interior mechanism of the clock is such as is commonly used including a supporting frame 1 in which are mounted the customary mechanical parts including the spring 2, the winding shaft 3 therefor, the toothed wheel 4, the ratchet wheel 5 and cooperating pawl 6, and the spring 7 engaging the latter. The various other wheels, pinions, and detail parts utilized in the clock mechanism are not described in detail, but will be seen to be of conventional form.

The advertising mechanism constituting the essential feature of this invention is all inclosed in the clock cabinet and includes a pair of rollers 45 and 46, the former being located beneath the latter and constituting the driving roller of an endless strip or belt 47, which passes between the aforesaid rollers. The belt 47 may be of any suitable length, dependent upon the amount of advertising matter to be carried thereby, and after it travels upwardly between the rollers 45 and 46, it drops down into folds in the lower portion of the case or cabinet of the clock. A transverse rod 50 adjacent to the lower edge of the transparent plate 48, causes the belt 47 to move upwardly to the rollers 45 and 46, in close proximity to the said plate 48, thereby insuring that the advertising data applied to the belt will be readily visible when the belt stops in its intermittent operation. This advertising matter may be applied directly to the belt, or otherwise, as found best for the purpose. In rear of the belt may be located the light 51, the purpose of which is obvious.

Included in the clock mechanism is the toothed wheel 21 which makes one revolution every minute, and to which is attached

the contact 22, the latter constituting one terminal of an electric current including an electro-magnet 40 suitably supported, a circuit wire leading from the axle of wheel 21 to said magnet, and from the magnet to the pivot 24 of a contact lever 23 arranged at the upper portion of the clock and in such a position that it is engaged intermittently by the contact 22 projecting from the wheel 21. Once during each revolution of the wheel 21, the contact 22 engages the lever 23 and the circuit including the magnet 40 is thus completed and the said magnet energized to effect operation of the governor mechanism controlling the movement of the advertising belt or apron 47, which mechanism will now be described.

Arranged in the clock cabinet is a spring motor 29 of any conventional type, having the usual winding shaft 27 adapted to be turned by attachment of a suitable member at its outer end. On the outer end of the motor shaft 29' is a grooved wheel 41, secured thereto, a belt 42 connecting the wheel 41 with a similar wheel 43 connected with a journal 44 of the roller 45, whereby when the motor 29 operates, the rollers 45 and 46 are rotated and the belt or apron 47 is fed therebetween to bring additional advertising matter to view at the opening in the front of the clock cabinet. To normally prevent operation of the motor 29, a bell-crank lever 35 is employed, being formed with a suitable pivotal bracket 36' which is carried by a transverse rod 36². A fan governor 31 is mounted on a shaft 30 and connected by a train of gearing with the motor 29, so as to control the operation of said motor. An off-standing arm 34 extending from the vertical arm of lever 35 is connected to a catch rod 33 passing through a guide 32 and adapted by movement of the lever 35 to project into the path of rotation of the fan 31, to thereby prevent turning of the fan and stop the operation of the spring motor 29 and advertising belt 47 actuated thereby. The upper arm 37 of lever 35 has a soft metal contact 38 applied to its outer end to contact with the core 39 of magnet 40 and this portion of lever 35 virtually constitutes an armature actuated in an evident manner, on energizing of the magnet 40, to effect tilting of said lever. A spring 52 normally holds the members 38 and 39 separated.

Formed at the lower extremity of the vertical arm of lever 35 is a lateral hook 36 which is adapted to pass through any one of a series of perforations provided in and longitudinally of belt 47, near an edge of the latter. The roller 45 has an annular groove 45' near an end thereof and located so that the perforations of the belt 47 register therewith as the belt travels, and said groove receives the hook 36 therein when the latter interlocks with the belt and coöperates with

the latter to hold it at an adjustment such that an advertisement section of the belt 47 is visible through the transparent face plate 48 of the cabinet. The advertising mechanism may be prevented from operation by opening a suitable switch 26 of any suitable type.

Generally describing the operation of the advertising mechanism and associated parts, it will be apparent that at each periodical contact of part 22 with contact lever 23, the circuit including magnet 40 is closed, the magnet energized, and the arm 37 of lever 35 drawn downwardly, tilting the lever on its pivotal axis 36². This action causes the rod 33 to be pulled downwardly out of engagement with fan governor 31, permitting the motor 29 to operate, the hook 36 of lever 35 being simultaneously withdrawn from the perforation in the belt 47, in which it is received, in the manner above described. The contact of parts 22 and 23 is, of course, only momentary and immediately such contact is broken the electro-magnet 40 is demagnetized and does not tend to attract or hold the upper arm of lever 35 downwardly. The said lever, however, is prevented from assuming its normal position by engagement of the hook 36 with the outer surface of the belt 47. When the belt 47 has traveled far enough to present a new advertising card, the hook 36 will register with and enter another perforation in the belt 47, located at the proper point, thus locking the belt from further movement, the lever 35 tilting into its normal position and actuating the rod 33 so that the latter engages the fan 31 and immediately stops the motor 29.

The various details of construction of the mechanism hereinbefore set forth may, of course, be modified in accordance with the spirit and scope of the invention as defined in the appended claims.

Having thus described the invention what is claimed as new is:

1. In a machine of the class described, the combination of a motor, a shaft extending laterally from the motor and operably connected therewith, a fan mounted on said shaft, an electro-magnet adjacent to the fan, means for intermittently energizing said magnet, a bell-crank lever having an arm extending toward the electro-magnet and operable thereby, the other arm of the lever being provided with a hook, a strip operable by the motor and adapted to interlock with the hook of the lever, a lateral extension projecting from the hook arm of the lever, a rod loosely connected at one end with the extension and movable at its other end into and out of engagement with the fan, and a guide bracket provided with an opening through which the rod aforesaid slides in proper relation to the fan.

2. In apparatus of the type described, the

combination of a movable advertising strip, having a plurality of openings in its length, a roller over which said strip is adapted to pass and having an annular groove in its periphery
5 coincident with the openings in the strip, an intermittently operable member arranged to enter any opening in the strip and engage the bottom of the groove of the said roller to stop the strip in its movement, and means for actuating the strip.

ELSWORTH PICKEL.

Witnesses:

EARL A. MARSHALL,
J. F. DRAPER.