

No. 793,956.

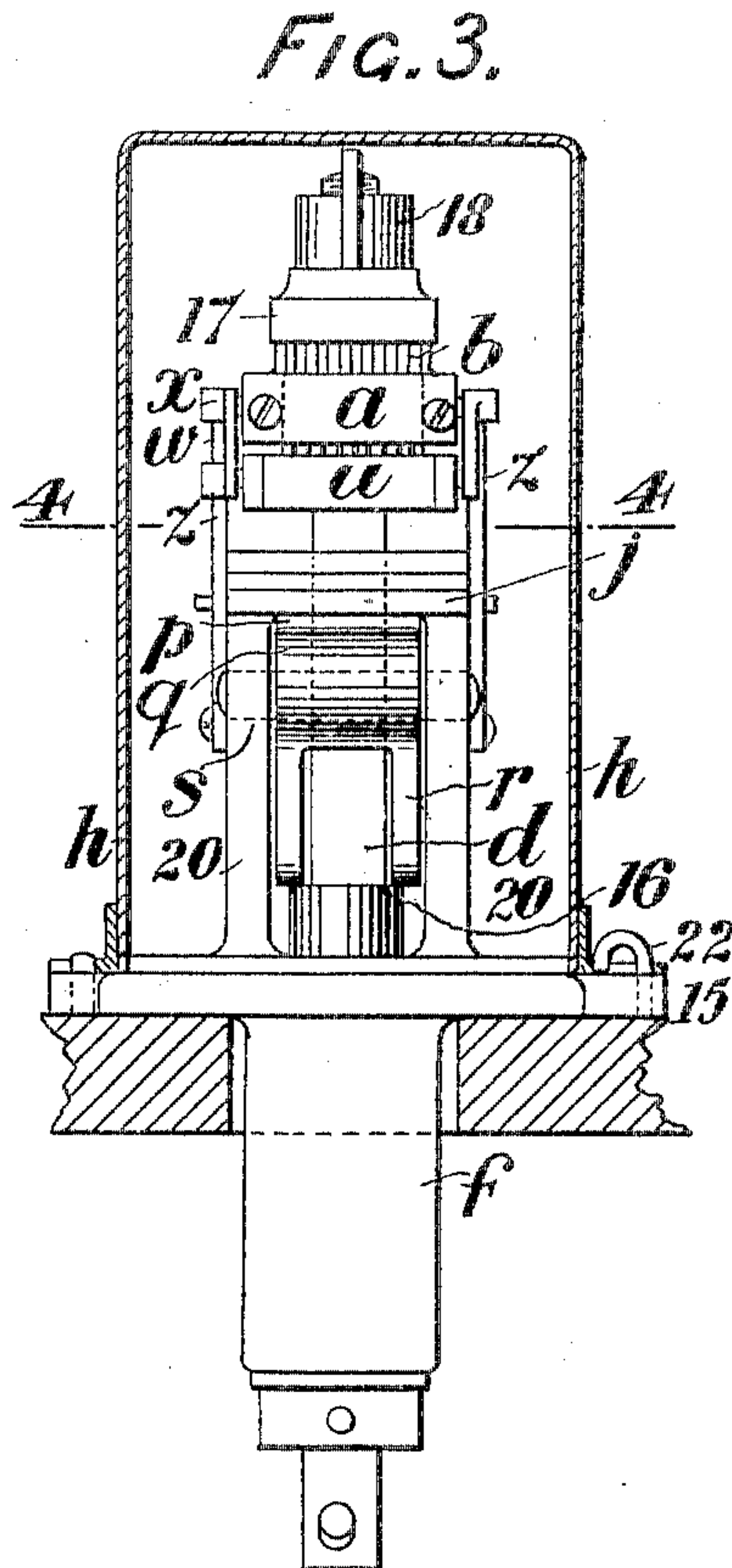
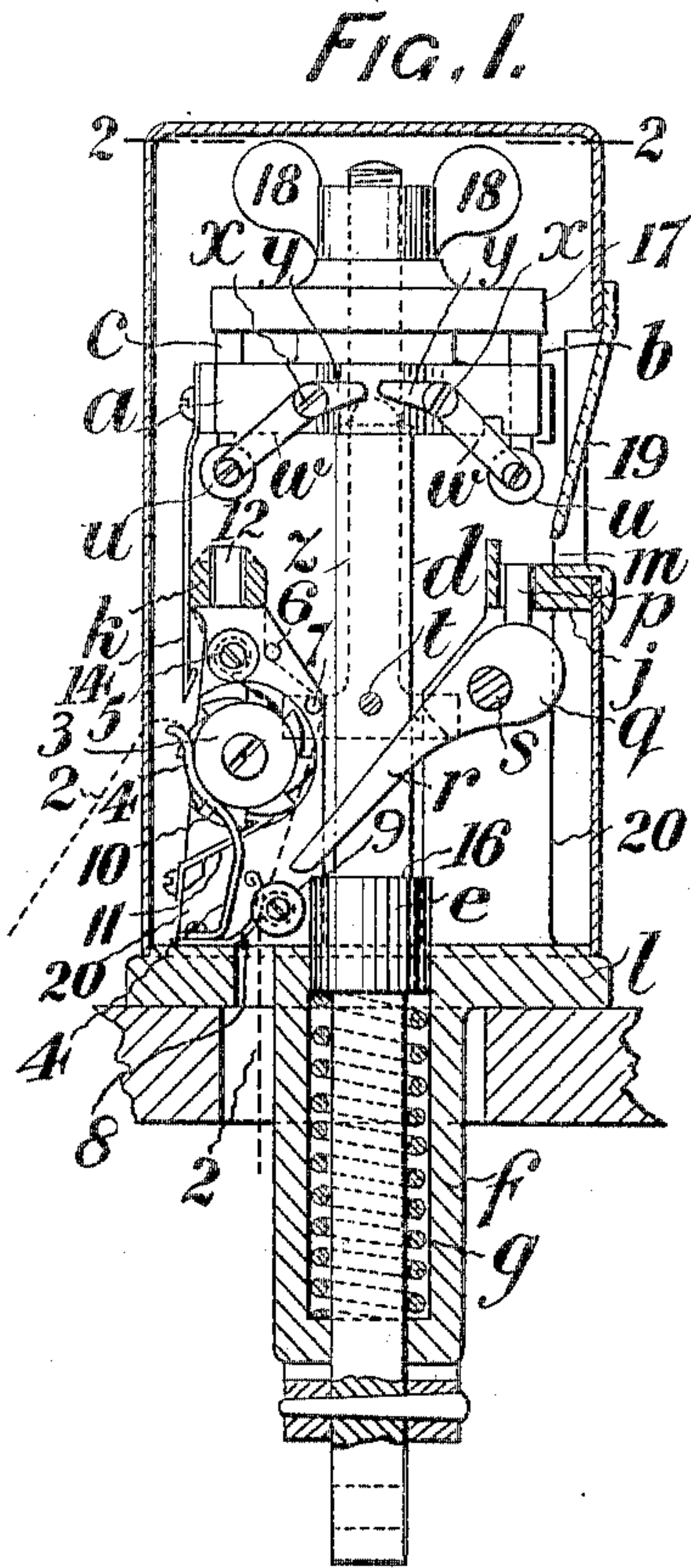
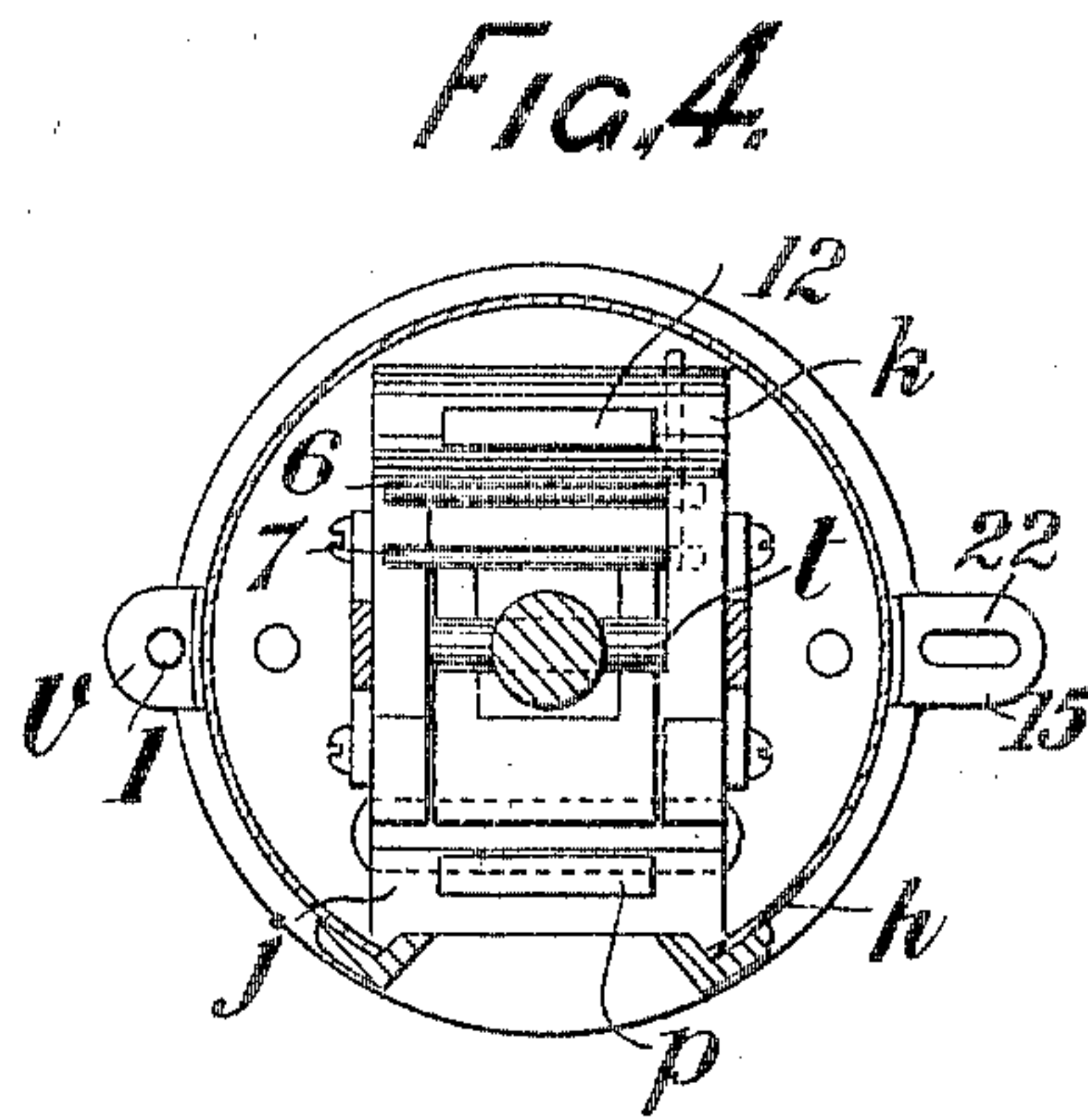
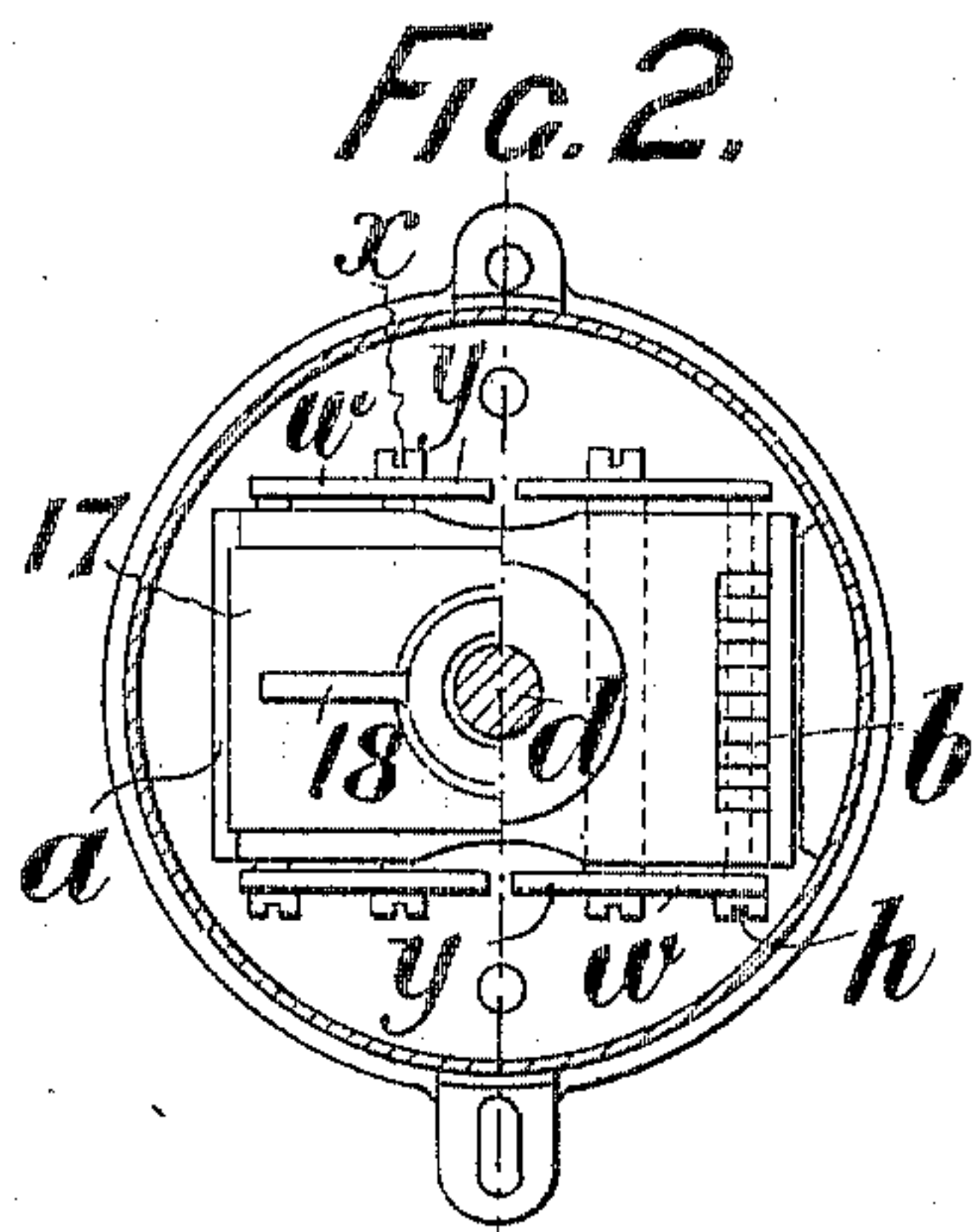
PATENTED JULY 4, 1905.

G. RAINAY-WALTON & C. C. WARDROP.

APPARATUS FOR DATING AND CHECKING THE ISSUE OF RAILWAY OR OTHER TICKETS.

APPLICATION FILED APR. 18, 1904.

2 SHEETS—SHEET 1.



Witnesses:
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A. K. M. M. M.

Inventors:
George Rainay-Walton
Charles Campbell Wardrop
by Henry Orthof
Attest

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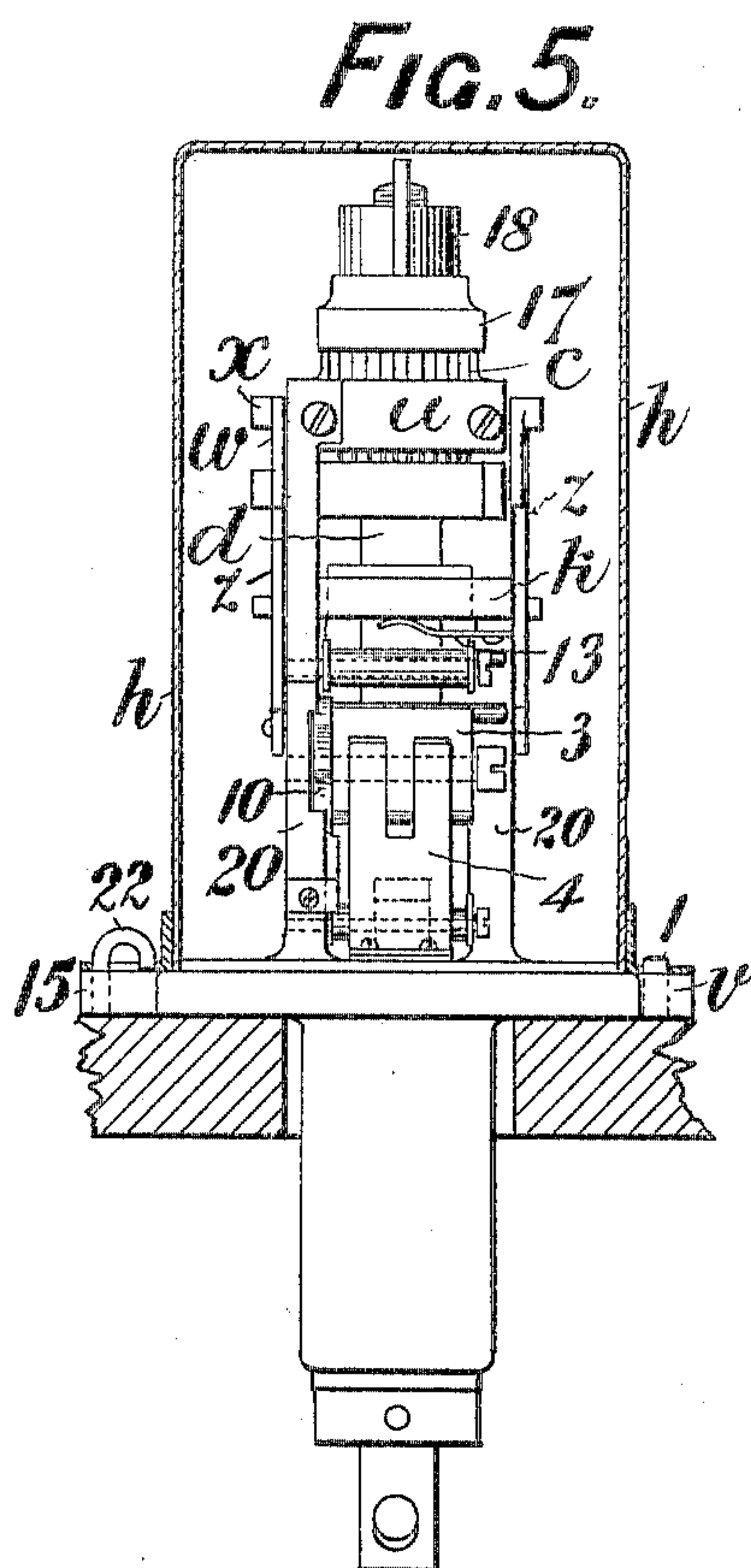
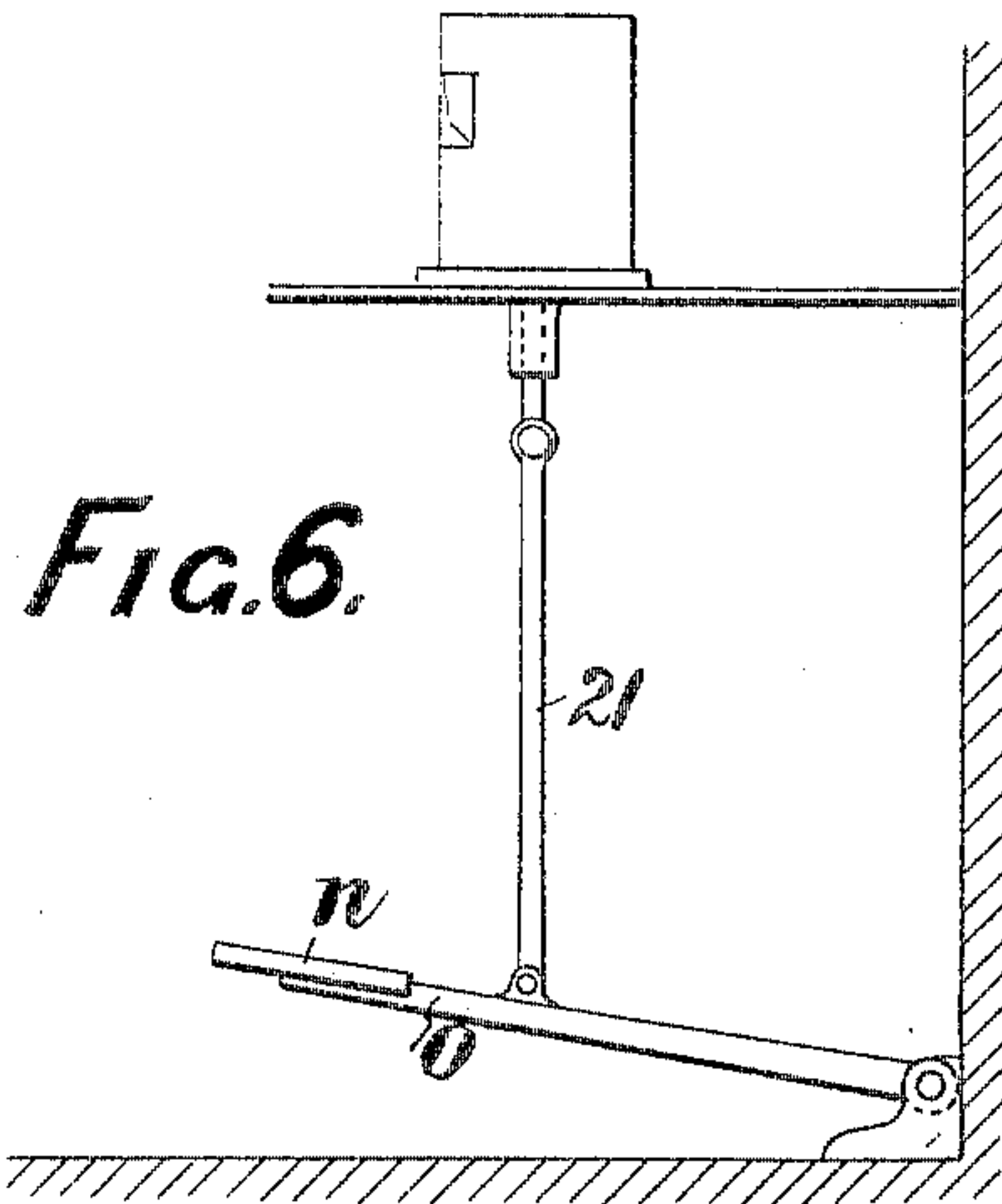
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2 SHEETS—SHEET 2.



Witness:
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UNITED STATES PATENT OFFICE.

GEORGE RAINAY-WALTON AND CHARLES CAMPBELL WARDROP, OF
BUENOS AYRES, ARGENTINA.

APPARATUS FOR DATING AND CHECKING THE ISSUE OF RAILWAY OR OTHER TICKETS.

SPECIFICATION forming part of Letters Patent No. 793,956, dated July 4, 1905.

Application filed April 18, 1904. Serial No. 203,786.

To all whom it may concern:

Be it known that we, GEORGE RAINAY-WALTON and CHARLES CAMPBELL WARDROP, residing at No. 775 Galle Reconquister, Buenos Ayres, Argentina, have invented new and useful Improvements in Apparatus for Dating and Checking the Issue of Railway or other Tickets, of which the following is a specification.

This invention relates to apparatus for dating railway and other tickets and for checking the number of such tickets issued.

According to this invention the power for working the apparatus is transmitted by means of a lever placed under the booking-desk and actuated by the foot of the booking-office clerk, thus differing from the ordinary devices used at the present time, which are operated by the impact resulting from a forward push of the hand after the ticket has been placed in the printing-slot. In combination with the ticket printing or dating arrangements is a second set of type, which by the same action of the foot prints or records on a strip of paper the number of times the instrument is operated, thus keeping a check on the booking-office clerk.

In order to enable the invention to be readily understood, reference is made to the accompanying drawings, in which—

Figure 1 is a part vertical section and part side elevation of the improved ticket-dating apparatus. Fig. 2 is a horizontal section on the line 2 2, Fig. 1, showing half the fly-nut and type-cover removed. Fig. 3 is a front view of the apparatus, part of the casing being removed. Fig. 4 is a section on the line 4 4, Fig. 3; and Fig. 5 is a back view of the apparatus, part of the casing being removed. Fig. 6 is a general view of the complete apparatus.

The apparatus suitably consists of a cast-iron or other metal head-piece *a*, carrying two sets of type *b* and *c*, respectively, one set *b* being for dating the tickets and the other set *c* for printing the record on the paper slip. The head-piece *a* is attached in a suitable manner to a metal rod *d*, capable of working in an upward and downward direction and

suitably guided, say, by means of an enlargement *e* on the rod *d* fitting and moving in a socket *f*. The rod-head and the type are kept in the normal or uppermost position by a steel spring *g*, contained in the cast-iron box or socket *f*, which may form a portion of or be integral with the outer case *h* for the mechanism. Two tables *j* *k*, which may be constructed of cast-iron, are supported by standards on the flange *l* of the socket *f*, which form, as it were, the base-plate of the apparatus. The ticket to be dated is placed on the table *j*, being inserted through a slot *m* in the case, and the type *b*, through the medium of the cast-iron head *a* and spindle *d*, actuated by means of the pedal *n*, Fig. 6, through the medium of the lever *o* and connecting-rod 21 when the pedal is depressed by the operator's foot, is brought down into contact with the ticket, thus embossing and printing the date on it. At the same time as the type *b* descends a platen or impression block *p* is raised and the ticket is embossed between the two as well as receiving an ink impression from the type. The block *p* is raised by means of a cam *q*, which is turned by a forked lever *r*, shown formed integrally with the cam *q* and pivoted at *s*. The lever *r* is operated during the descent of the rod or spindle *d* by means of a pin or projection *t* upon the latter, which projection engages the lever *r* and depresses the end thereof, thus turning the lever about its pivot. The lever is returned to its former position by means of a shoulder 16 of the enlargement *e* butting against the lever as the spindle ascends. The great advantage of using foot-power instead of hand-power lies in the increase of pressure which can be brought to bear on the ticket, thus always insuring a perfect impression of the type. Ink-pads are always kept in contact with the types except during the printing and are moved out of position by suitable means as the types move downward. The ink-pads are conveniently rollers *u* *u*, rotatably mounted between the ends of two pairs of levers *w*, pivoted at *x* *x* to the head *a* and having tails *y* *y*. Cams or plates *z* *z* are suitably fastened to the standards 20, which sup-

port the tables j k , and as the head-piece a descends the tails of the levers come into contact with the plates z z and are turned about the pivots x , thereby causing the inking-rollers v v to move inward clear of the types b c . The pads may be conveniently pivoted and kept in position by an elastic band or spring. The inking-rollers may be either absorbent or may be of the usual composition and may be supplied with ink from an inking-table or by means of feed-rollers.

The recording arrangement consists of a strip of paper or other material 2, carried over a series of rollers and also over the top of the table k . As shown in Fig. 1, the paper coming from a suitable supply first passes through a tension device, consisting of a spring 8, pressing upon a roller 9, between which parts 8 and 9 the paper strip passes. From thence the paper is taken over a roller 7, under a roller 6, over a table k , over a roller 5, and lastly over a milled or roughened roller 3, being held in close contact therewith by means of a blade-spring 4, fixed to the base l and suitably concaved and pronged at the end contacting with the roller 3. The paper strip 2 is fed by this roller out through an opening in the casing, as shown in dotted lines. At one end of the roller 3 is fixed a ratchet-wheel 10, and a spring-pawl 14, attached to the head-piece a , engages the wheel and turns it forward one tooth at every ascent of the head-piece for the purpose of feeding the paper forward the desired distance. A locking-pawl 11 is also provided to prevent backward movement of the ratchet. An impression-block 12 is provided in the table k and is supported upon a blade-spring 13, attached underneath the table. The rollers 3, 5, 6, 7, and 9 are supported in bearings in the left-hand of the standards 20, Fig. 5, of the table k .

The types are retained in their boxes or recesses in the head a by means of a cover-piece 17, which is held down upon the types b c by means of a fly-nut 18. When it is desired to remove or exchange the type, the nut 18 is loosened, the cover 17 is turned through ninety degrees, when it will be clear of the type, which are then readily handled.

A glass window 19 may be provided at the aperture m for the insertion of the tickets, or the piece 19 may be of brass or other metal.

The type c might take the form of a numbering-stamp, which at every movement of the head could be arranged to advance the number last indicated by one.

The casing is suitably held down to the desk by means of an eye v for the reception of a bolt 1 on one side and a slotted lug 15 and padlocked staple 22 on the other side.

The paper strip may be already numbered or be replaced by a number of separate tickets or pieces of paper already numbered or

marked in a suitable manner, one number or ticket or piece being fed out at every operation of the press, thereby obviating the employment of the types c .

What we claim as our invention, and desire to secure by Letters Patent, is—

1. A ticket printing and indenting machine, comprising a vertically-sliding head, a type-box in said head, a revoluble plate for retaining type in said box, a sliding rod fixed to said head, means for lowering and means for raising said head, and an impression-table beneath said head, substantially as set forth.

2. A ticket printing and indenting machine, comprising a vertically-sliding head, a type-box in said head, means for retaining type in said box, a sliding rod fixed to said head, means for lowering and means for raising said head, an impression-table beneath said type-head, a vertically-sliding impression-block in said table, and means for vertically sliding said block when said type-carrying head descends, substantially as set forth.

3. A ticket printing and indenting machine, comprising a vertically-sliding head, a type-box in said head, means for retaining type in said box, a sliding rod fixed to said head, means for lowering and means for raising said head, an impression-table beneath said head, an ink-roller, links on said head for suspending said roller beneath said type-box, and means for removing said roller as said head descends, substantially as set forth.

4. A ticket printing and indenting machine, comprising a type-carrying head, type-boxes in said head, means for retaining type in said boxes, a sliding rod fixed to said head, means for lowering and means for raising said head, an impression-table beneath one of said type-boxes, a positively-operated vertically-sliding impression-block in said table, an impression-table beneath the other of said type-boxes and a flexibly-supported block in the last-named table, substantially as set forth.

5. A ticket printing and indenting machine, comprising a type-carrying head, type-boxes in said head, means for retaining type in said boxes, a sliding rod fixed to said head, means for lowering and means for raising said head, an impression-table beneath one of said type-boxes, a positively-operated vertically-sliding impression-block in said table, an impression-table beneath the other of said type-boxes, a flexibly-supported block in the last-named table, means for guiding and tensioning a record-strip over said table, and means for feeding said strip step by step, substantially as set forth.

6. A ticket-dating machine comprising a type-carrying head, a reciprocating vertical rod fixed to said head, means for lowering and means for raising said rod, two impression-tables beneath said type-carrying head one for the tickets and one for the record,

type boxes or receptacles in said head and a cover fixed over said head for retaining the type substantially as set forth.

7. A ticket-dating machine comprising a type-carrying head, a reciprocating vertical rod fixed to said head, a foot-lever connected with said rod for lowering the same, a spring bearing against said rod for raising same, an impression-table beneath said type-head, a movable impression-block in said table, a cam supporting said block, a lever connected to said cam for operating same, and projections on said rod for operating said lever substantially as set forth.

8. A ticket-dating machine comprising a type-carrying head, a reciprocating vertical rod fixed to said head, a foot-lever connected with said rod for lowering the same and a spring bearing against said rod for raising same, an impression-table beneath said type-head, a movable impression-block in said table, a cam supporting said block, a lever connected to said cam for operating same, projections on said rod for operating said lever, levers pivoted on said head, inking-rollers mounted between said levers and cam-plates for operating said levers substantially as set forth.

9. A ticket-dating machine comprising a type-carrying head, a reciprocating vertical rod fixed to said head, a foot-lever connected with said rod for lowering same and a spring bearing against said rod for raising same, two impression-tables beneath said type-head one for the tickets and the other for a record-strip, a movable impression-block in each table, a cam supporting said block in the ticket-table, a lever connected to said cam for operating same, projections on said rod for operating said lever, a spring supporting said block in the record-strip table, levers pivoted on said head, inking-rollers mounted between said levers, cam-plates for operating said levers, a feed-roller for said strip, a spring for holding said strip up to said roller, a ratchet on said roller and a pawl on said head for operating said ratchet, guide-rollers for said strip and a tension device for said strip substantially as set forth.

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CHARLES CAMPBELL WARDROP.

Witnesses:

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