

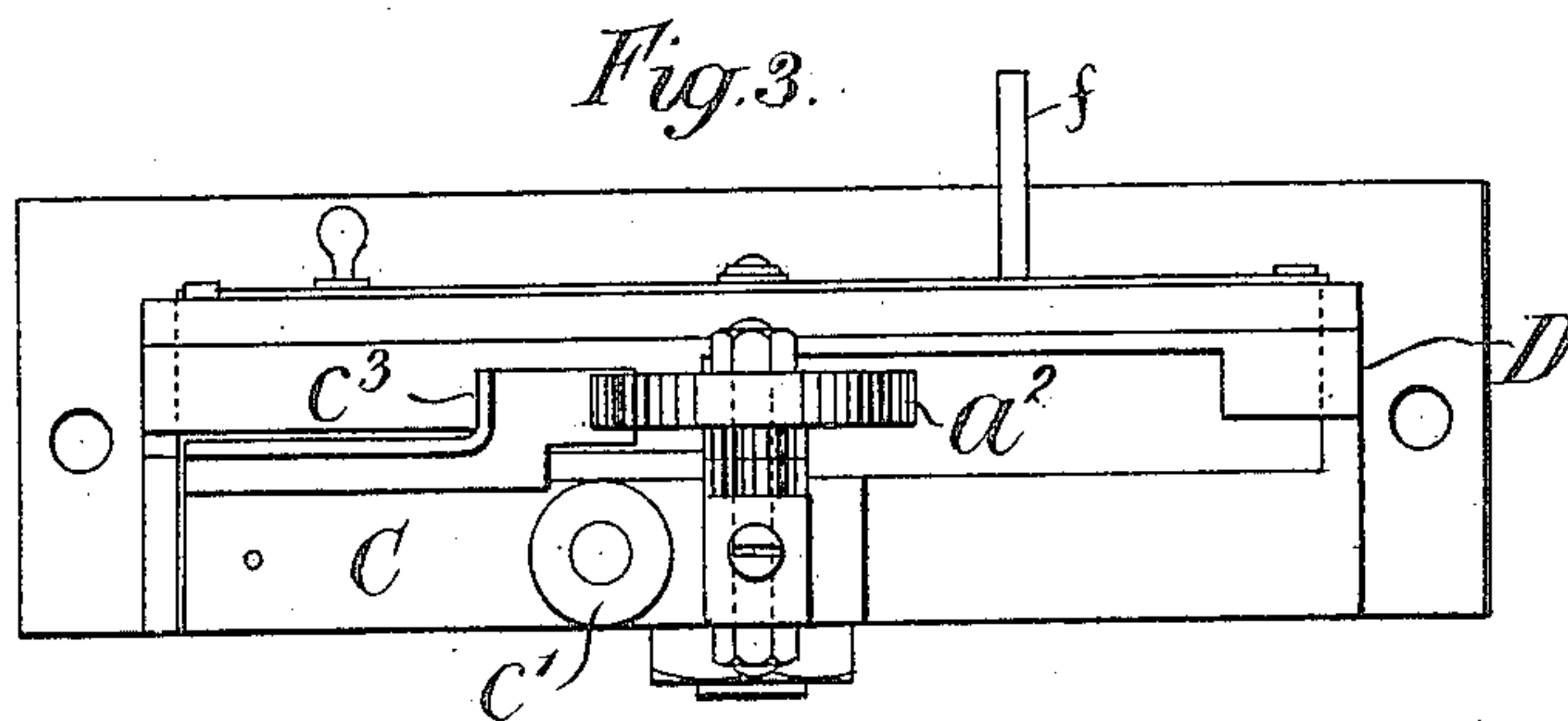
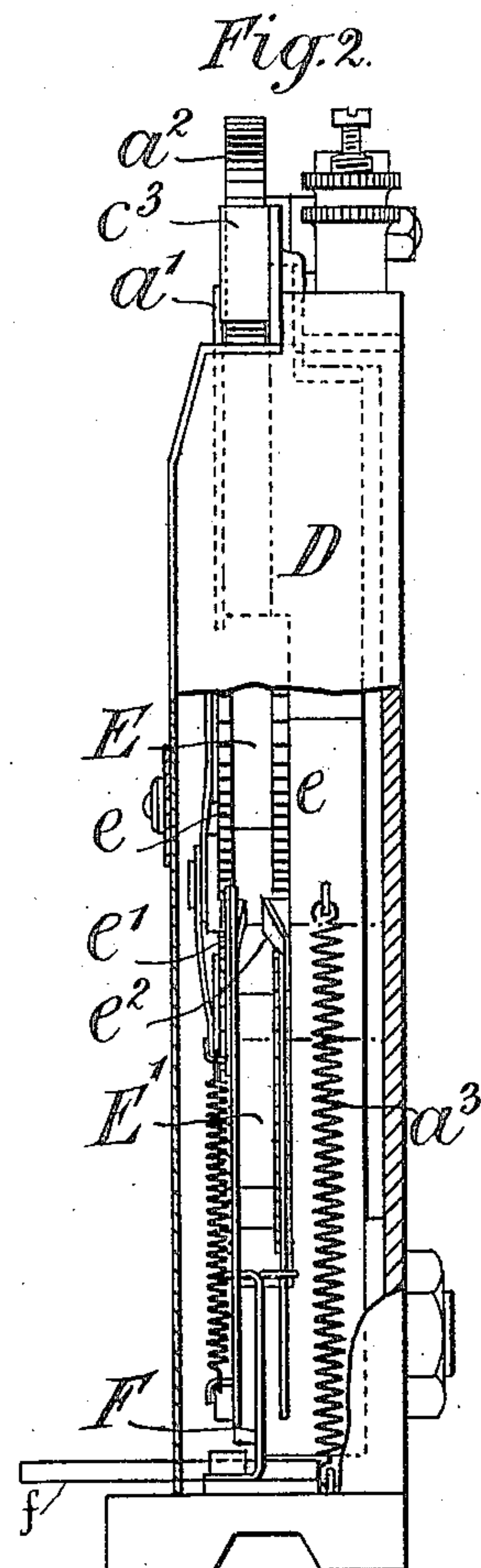
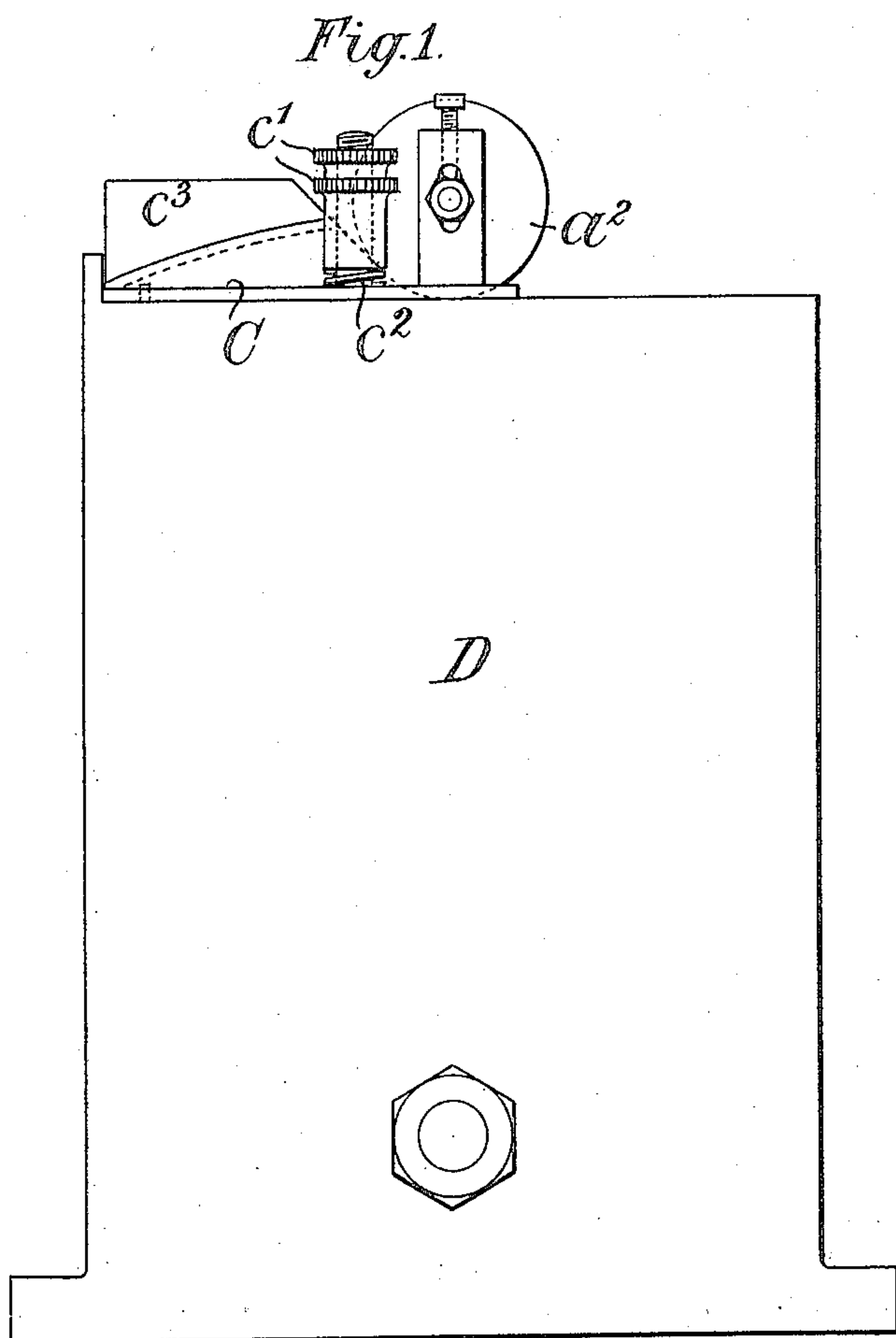
No. 875,139.

PATENTED DEC. 31, 1907.

J. A. WALTON.
TICKET PRINTING APPARATUS.

APPLICATION FILED MAR. 29, 1907.

2 SHEETS—SHEET 1.



Witnesses:

J. W. Galt
J. H. Stephenson

Inventor:

James Arthur Walton

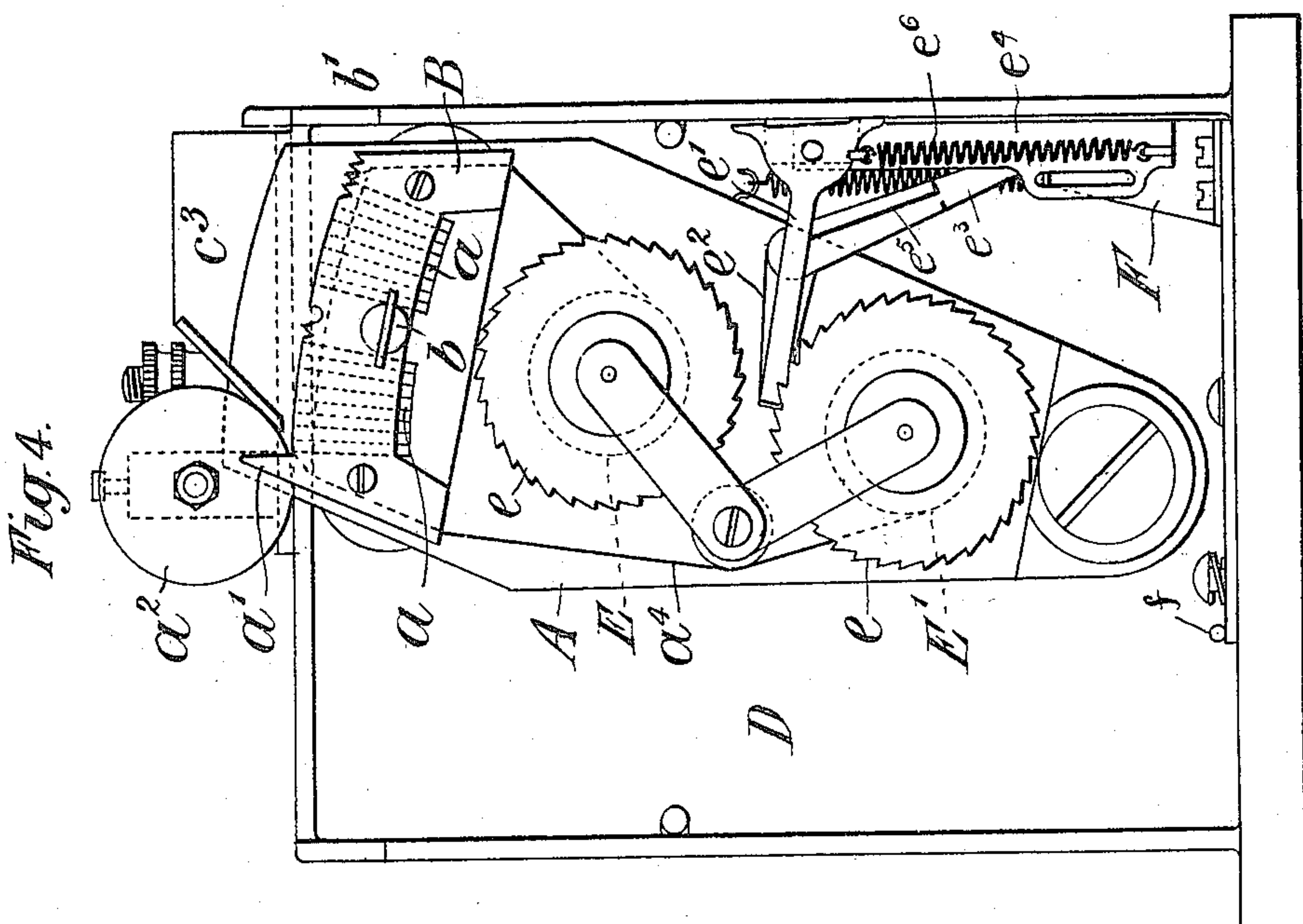
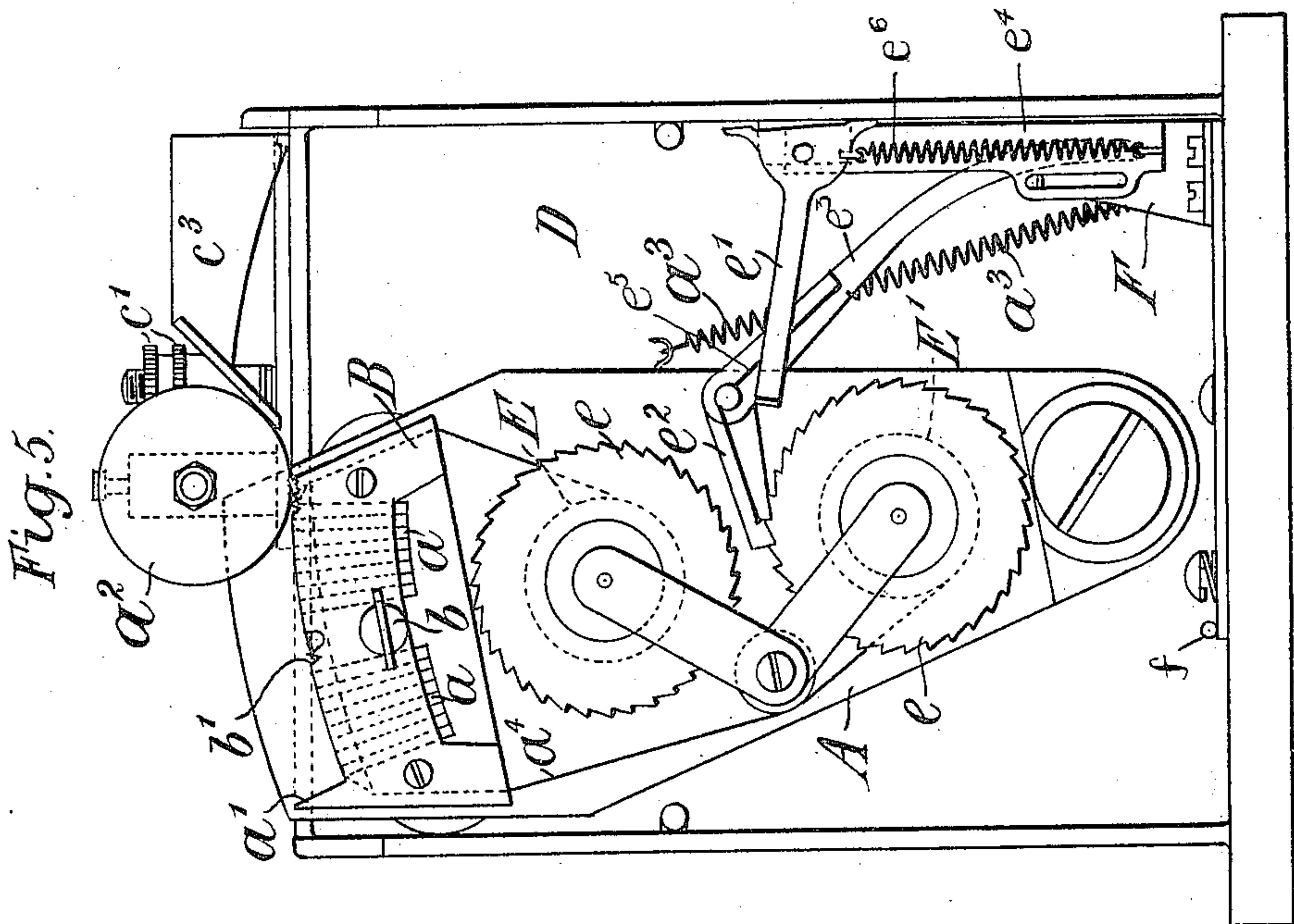
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TICKET PRINTING APPARATUS.

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2 SHEETS—SHEET 2.



Witnesses:

Wm. M. Fair
J. Fred Stephenson

Inventor:

James Arthur Walton

UNITED STATES PATENT OFFICE.

JAMES ARTHUR WALTON, OF HULL, ENGLAND.

TICKET-PRINTING APPARATUS.

No. 875,139.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed March 29, 1907. Serial No. 365,318.

To all whom it may concern:

Be it known that I, JAMES ARTHUR WALTON, a subject of the King of Great Britain and Ireland, and residing at 61 West street, Hull, in the county of York, England, have invented new and useful Improvements in Ticket-Printing Apparatus, of which the following is a specification.

This invention relates to apparatus applicable for use in printing dates or other matter upon tickets, and is more particularly although not exclusively intended for dating railway tickets. Such tickets commonly require dating at each end; and the primary object of the present invention is to enable such double dating to be effected at a single operation.

In the accompanying drawings, Figure 1 is a back elevation, Fig. 2 a side elevation and Fig. 3 a plan illustrative of printing apparatus constructed according to the present invention. Figs. 4 and 5 are front elevations with the cover-plate removed showing the type carrier in two different positions.

Assuming the invention to be applied, by way of example, to the dating of each half of a railway ticket, the requisite printing type *a* is set up in duplicate in a pivotally mounted carrier *A*. The ticket is introduced lengthwise over the face of the type and engages with a lateral projection *a'* formed upon the carrier. Upon the ticket being moved horizontally, the carrier is operated in unison, and as the former passes beneath a roller *a²* it is pressed with sufficient force against each set of type as to receive successive impressions therefrom, one on each half of the ticket. A spring *a³* may be employed to return the carrier to its normal position.

In the construction illustrated, the type *a* is set up in a casing *B* which may be attached to the carrier *A* by a thumb-screw *b*. Upon the outer plate of this casing is formed the projection *a'* with which the ticket engages while being printed, and the ticket is prevented from slipping while passing under the pressure roller *a²* by means of teeth *b'*. The pressure roller *a²* is carried by a bracket *C* which is mounted upon the top of the casing *D* in such a manner that by means of nuts *c' c'* and a spring washer *c²* the pressure of the roller *a²* upon the type may be regulated. The bracket *C* is also formed with a guide *c³* for introducing the ticket between the roller and the type.

The type may be inked by a roller mount-

ed in any convenient position, or an inked ribbon may be fed over the face of the type, as in certain kinds of type-writing machines. In the latter case, I prefer to employ two spools *E E'* mounted one above the other upon the type carrier. Each spool is furnished with a ratchet-wheel *e* on either side, with which two pawls *e' e²* respectively engage. One of these pawls (*e'*) serves to operate the winding spool and the other (*e²*) to check back lash, the former being pivotally mounted upon the casing *D* while the latter is pivotally mounted upon the type-carrier *A*. Each pawl is connected to a slide *F* mounted upon the casing *D* in such a manner that the two pawls *e' e²* may be brought into engagement with the one or the other spool. This is effected by moving the slide *F* horizontally by means of the bar *f* whereupon the pawls *e² e'*, which are respectively connected by arms *e³ e⁴* to the slide *F*, are disengaged from the one spool and brought into engagement with the other spool. The pawls *e² e'* are connected to their respective arms by means of springs *e⁵ e⁶*, which springs also serve to maintain the pawls in engagement with the ratchets on the spool. The one end of the ribbon *a⁴* is connected to one of the spools (*E*) and a portion of the ribbon wound thereon, the remaining portion of the ribbon is passed over the type and connected to the other spool (*E'*). The pawls *e' e²* are brought into engagement with this spool by means of the slide (*F*) and, during the return movement of the type-carrier *A*, the spool *E'* is rotated by the pawl *e'* mounted upon the casing. By these means, the ribbon is unwound from the one spool, and, after passing over the face of the type, is wound upon the other spool. When the ribbon has been wound to the full extent upon the gathering spool, the automatic return of the type-carrier to its normal position after printing the ticket is interfered with by reason of the feed of the inking ribbon becoming arrested. The pawls are thereupon disengaged from the winding or gathering spool and brought into operation upon what had previously been the supply spool, the latter now becoming the winding spool.

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

1. In apparatus for printing dates or other matter upon the opposite ends of tickets, the combination, with a casing formed with a

slot, of a spring controlled arm whereof the one end is pivotally mounted in the casing while the opposite end projects through the slot in said casing, a type carrier mounted on
5 said arm and furnished with radially projecting printing type, means for inking said type, an adjustable pressure roller, and a stop on said carrier against which as also against the said arm the ticket abuts, while
10 the type carrier is vibrated for the purpose of printing the ticket.

2. In ticket - printing apparatus of the kind herein referred to, the combination, with a pivotally mounted type-carrier and

an inking ribbon supported upon the type, 15 of a pressure roller mounted upon a bracket secured to the casing of the apparatus a nut and a spring - washer for securing said bracket, whereby the pressure of the roller upon the type may be regulated. 20

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES ARTHUR WALTON.

Witnesses:

JNO. WM. TAIT,
J. FRED. STEPHENSON.