

W. B. MARTINDALE.
AUTOMATIC TIME STAMP.

No. 497,331.

Patented May 16, 1893.

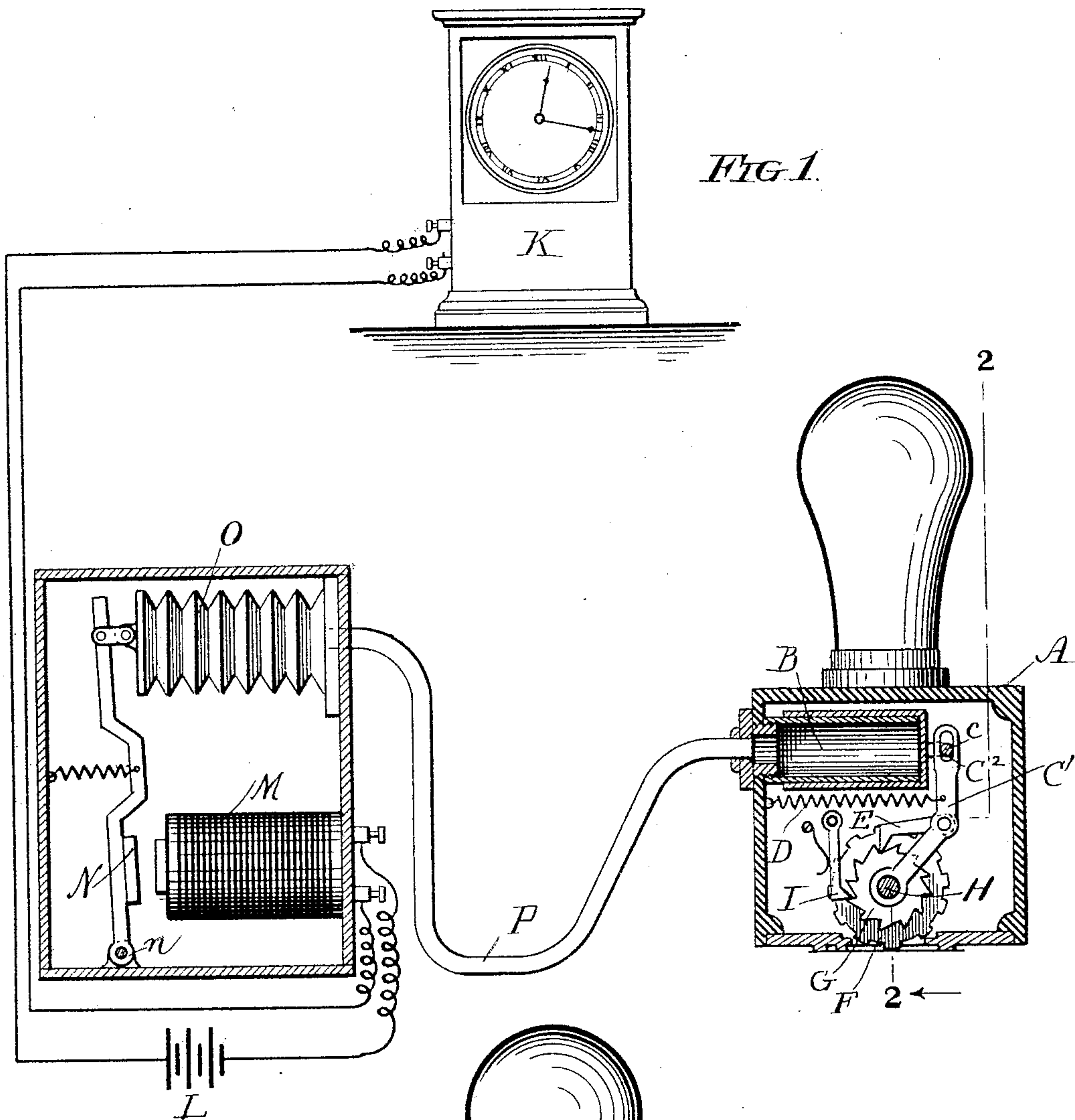
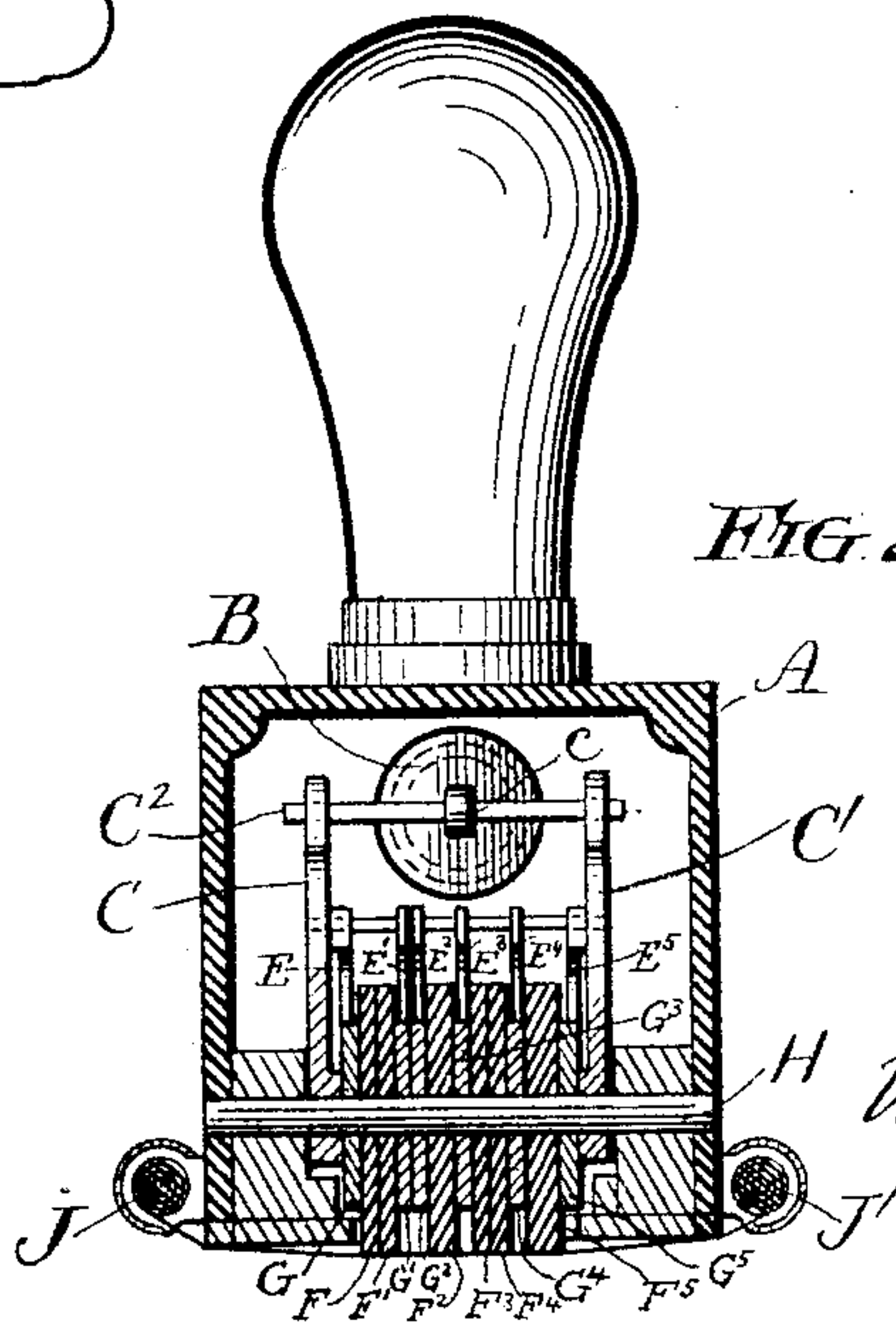


FIG. 2.



Witnesses:
J. B. Halpermy
A. E. Koch

Inventor:

Warren B. Martindale

(No Model.)

2 Sheets—Sheet 2.

W. B. MARTINDALE.
AUTOMATIC TIME STAMP.

No. 497,331.

Patented May 16, 1893.

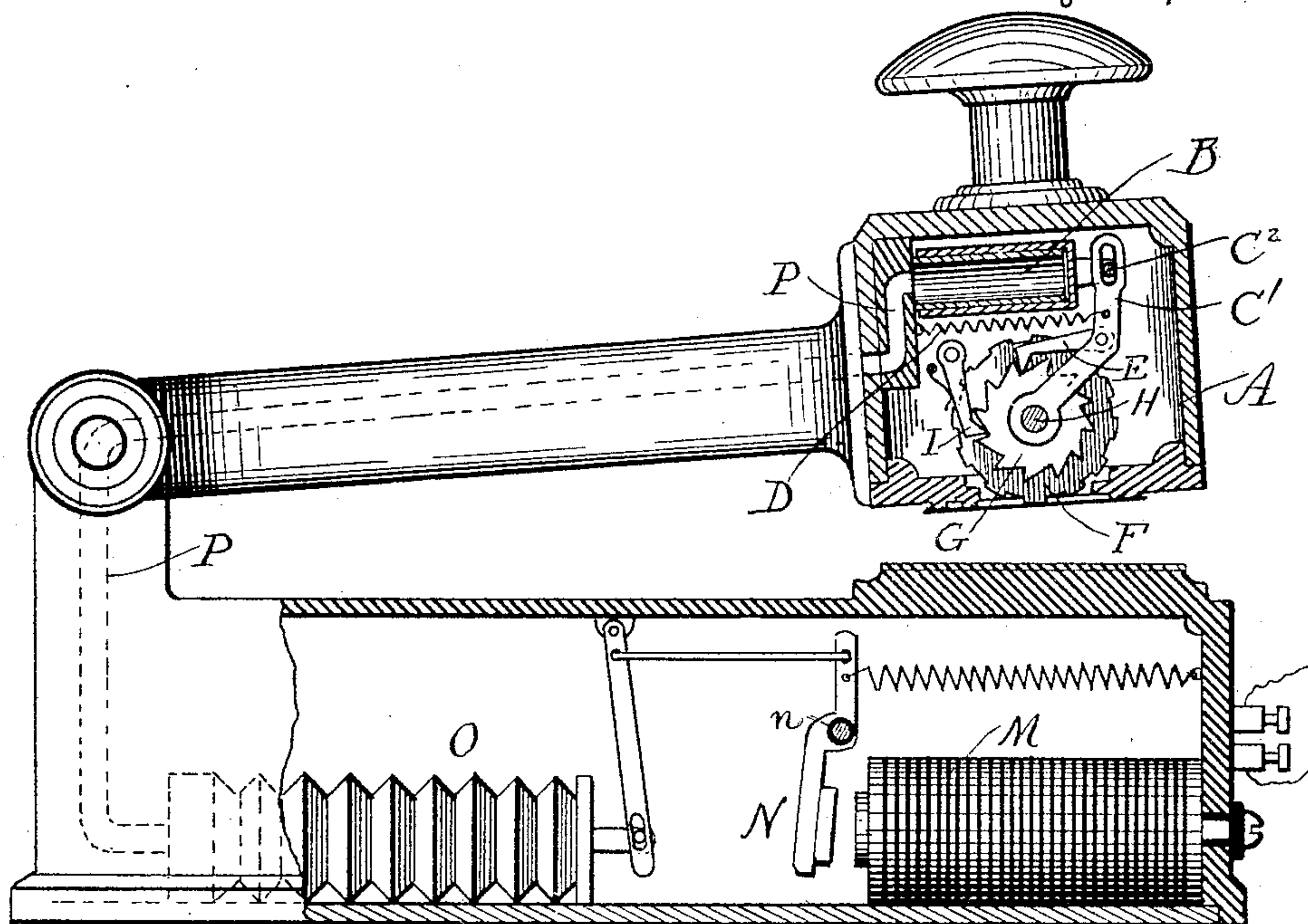


FIG. 3.

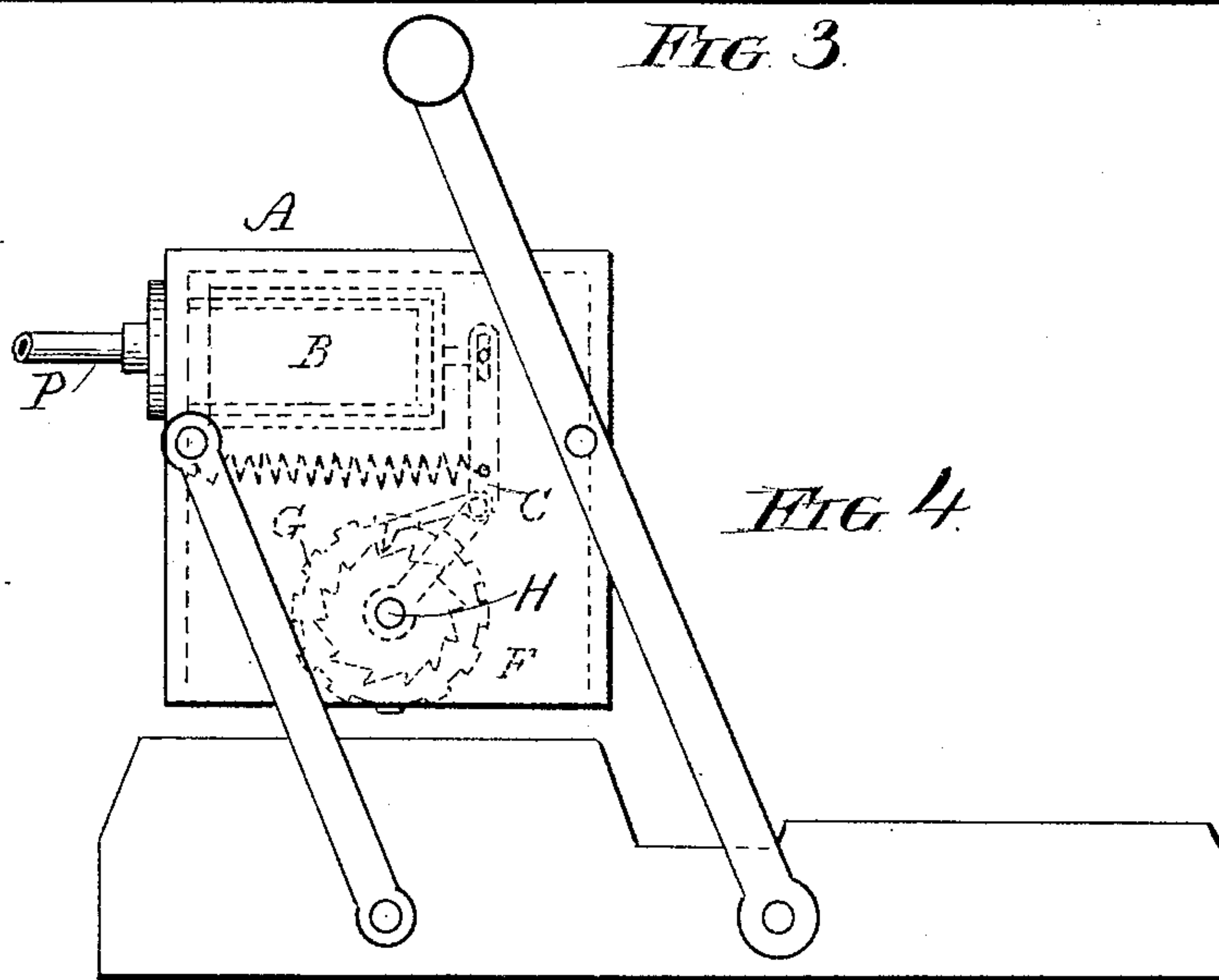


Fig 4

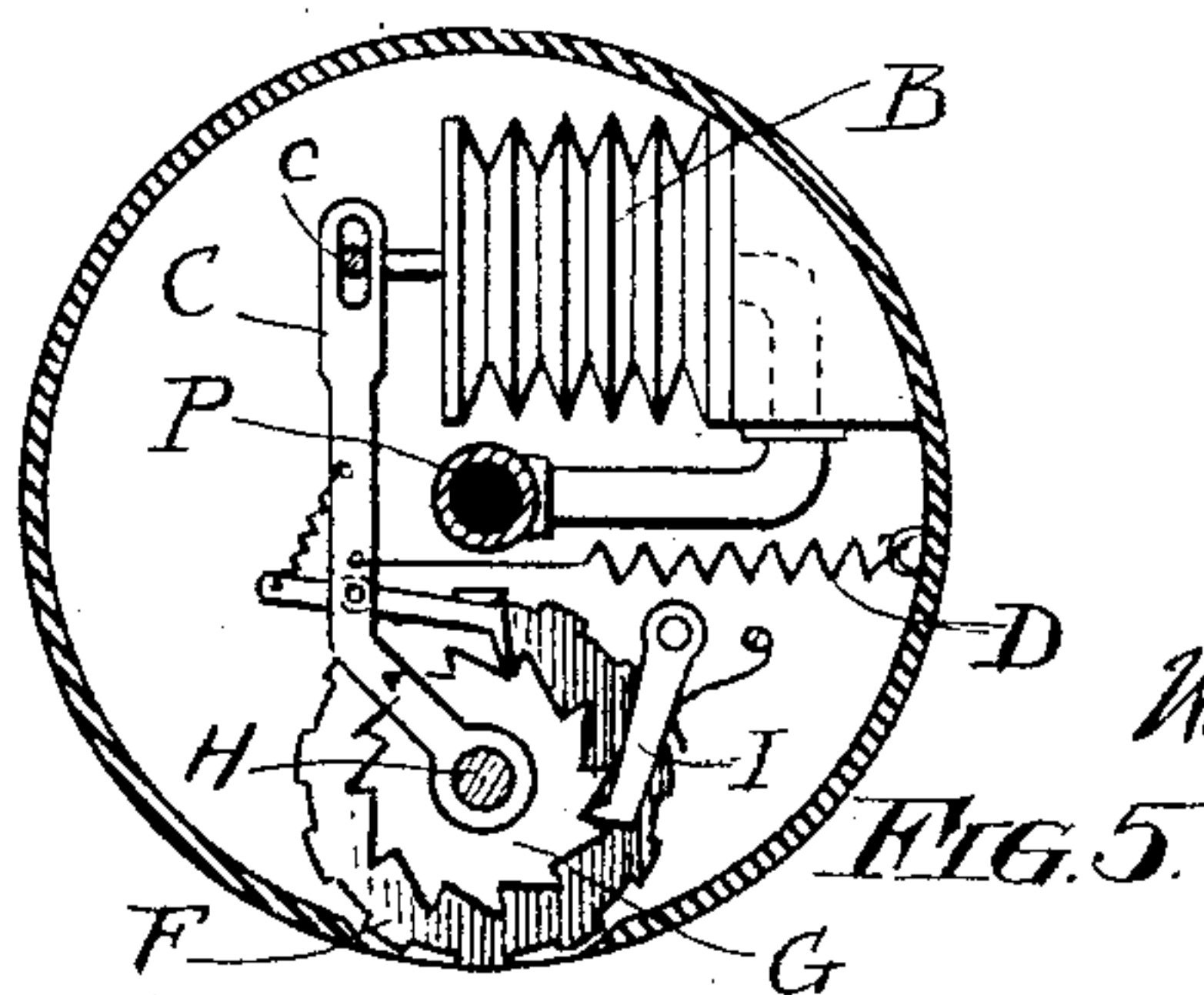


FIG. 5.

Witnesses:
J.B. Halpenny
H.E. Koch

Inventor:

Warren B. Martindale

UNITED STATES PATENT OFFICE.

WARREN B. MARTINDALE, OF ROCHESTER, INDIANA.

AUTOMATIC TIME-STAMP.

SPECIFICATION forming part of Letters Patent No. 497,331, dated May 16, 1893.

Application filed June 30, 1892. Serial No. 438,543. (No model.)

To all whom it may concern:

Be it known that I, WARREN B. MARTINDALE, of the town of Rochester, in the county of Fulton, in the State of Indiana, have invented certain new and useful Improvements in Automatic Time-Stamped; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon, making part of this specification.

This invention relates to automatic time dating stamps, of the class adapted to make the impression on the upper side of the paper and has for its object to provide a simple and less cumbersome device for automatically changing the time mechanism in synchronism with a regulating time piece.

It consists in the combination of a pressure chamber, preferably in the form of a bellows, with the time printing mechanism, and means for operating the same periodically in synchronism with a time regulator, by causing air or liquid to be forced through a tube to the said pressure chamber at regular intervals, governed by the time regulator thereby causing the automatic movement of said time printing mechanism in synchronism with the said time regulator, substantially as described and claimed.

In the accompanying drawings, Figure 1, is a sectional side elevation of a hand stamp embodying my invention. Fig. 2, is a vertical section in line 2, 2 of Fig. 1. Fig. 3, is a longitudinal section showing my invention as applied to a time stamp, having a swinging arm. Fig. 4, is a sectional side elevation showing my invention as applied to a time stamp adapted to make the impression by a lever movement. Fig. 5, is a vertical section, in a plane transversely to the axis of the type wheels, of a time stamp embodying my invention, in which the printing mechanism is carried in a revolving head or cylinder adapted to make impressions therefrom by the revolution of said cylinder.

Similar letters indicate like parts in all the figures.

A, represents the casing or movable head carrying the mechanism of the time stamp, of which mechanism B is the pressure chamber fitted in the casing A, preferably in a horizon-

tal position transversely to the axis of the type wheels.

C, C', are parallel levers connected at the upper ends with a cross bar C², which is attached at c by a pivotal joint to the movable end of the pressure chamber B, the levers C, C', being pivoted at their lower ends, preferably on the axial shaft H of the time indicator wheels and therefore free to be swung back by the movement of the pressure chamber B and retracted by the spring D.

The indicator mechanism for the time stamp is mounted within the casing directly under the pressure chamber B in close proximity thereto. Said indicator mechanism as shown consists, as is usual in this class of stamps, of a series of wheels F, F', F², F³, F⁴, F⁵, with the type on the peripheries thereof to indicate the date and time of day when brought into line of print at the bottom, each of said wheels carrying a ratchet G, G', G², G³, G⁴, and G⁵ adapted to be engaged and actuated by means of the reciprocating pawls E, E', E², E³, E⁴ and E⁵, carried by the levers C, C', and regulated by stop pawls as at I.

The details of construction, arrangement and operation of the time printing mechanism form no part of my present invention, and I do not confine myself to the use of type wheels, but type bands or any other time indicating mechanism of approved description may be used.

The indicating mechanism shown in the drawings is in its general construction and mode of operation substantially the same as described in Letters Patent of the United States granted to Joseph D. Mallonee, on August 12, 1890, No. 434,396.

J, J', are spools carrying an ink ribbon through which impressions are made, but any other suitable inking device may be employed.

My invention consisting in a method of causing the automatic movement of the mechanism of the time stamp, in synchronism with a time regulator by the pressure of fluid through a tube at regular intervals. I have shown in Fig. 1, means for producing such pressure. Thus, K is a clock containing a circuit closer of any approved design, shown in circuit with an electric battery, L; M an electro-magnet, N an armature for said magnet pivoted at n, and having a spring to retract the same, the

upper end of its lever being attached to the compressing device O which is connected by the tube P with the pressure chamber B in the time stamp.

5 The operation is as follows: The clock closing the electric circuit at regular intervals causes the magnet to attract its armature, the movement of which brings a pressure upon the compressing device, O, forcing the air or
10 liquid through the tube P to the pressure chamber B, causing the same to expand and carry back the pawl levers C, C', which as soon as the pressure is removed from said compressing device by the release of the ar-
15 mature, is again retracted by the spring D thereby causing the movement of the time mechanism one step.

I do not confine myself to this method of producing impulses of air or liquid which may
20 also be produced at regular intervals by any of the usual and well known methods, as by a pneumatic clock of any approved pattern.

It is obvious that the pressure chamber de-
25 scribed, being lighter than an electro-magnet, will render a hand stamp much more convenient to handle than one in which the magnet is embodied in the stamp, and being connect-
ed with the time regulator by a flexible rubber tube may be carried freely in the hand
30 and the impression made wherever desired.

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

1. In a time stamp, the combination, with the time printing mechanism, of a pressure

chamber, adapted to be actuated by fluid im- 35
pulses, and means for transmitting the move-
ments thereof to said time printing mech-
anism.

2. In a time stamp, the combination, with the time printing mechanism, of a pressure 40
chamber, adapted to be actuated by fluid im-
pulses, means for transmitting motion from
said pressure chamber to the time printing
mechanism, a time regulator, and time trans-
mitter, consisting of a tube through which 45
fluid is forced at intervals governed by the
time regulator, substantially as described.

3. In a time stamp, the combination, with the time printing mechanism, of a pressure
chamber adapted to be actuated by fluid im- 50
pulses, means for transmitting motion from
said pressure chamber to the time printing
mechanism, and a prime motor, consisting of
an electric battery, time mechanism in circuit
with said battery, an electro-magnet, also in 55
said circuit, an armature for said magnet, a
compressing device, suitably connected with
said armature, and a tube connecting said
compressing device with the pressure cham-
ber, substantially as described. 60

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

WARREN B. MARTINDALE.

Witnesses:

JUDD B. LIGHT,

ROME C. STEPHENSON.