

No. 779,570.

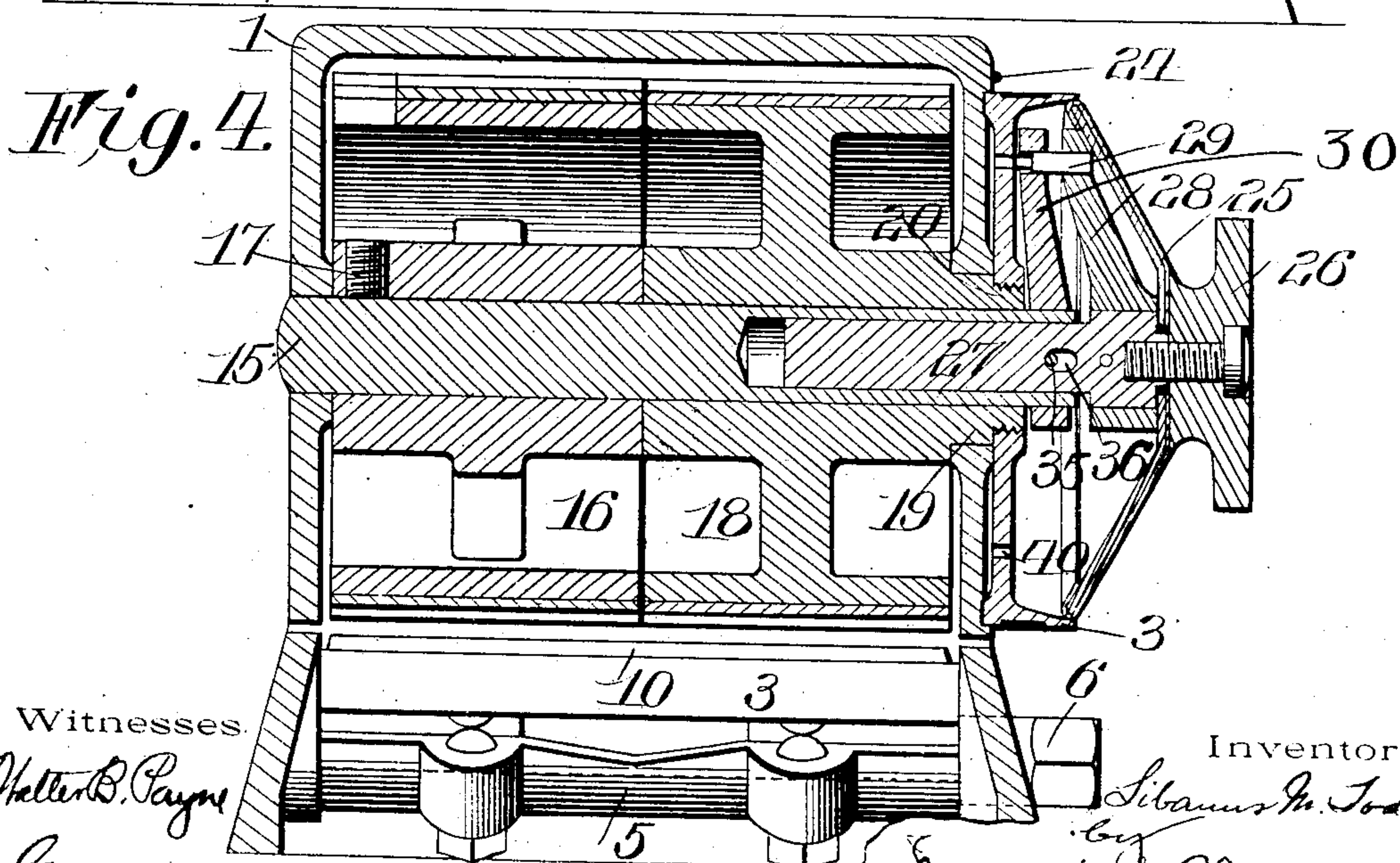
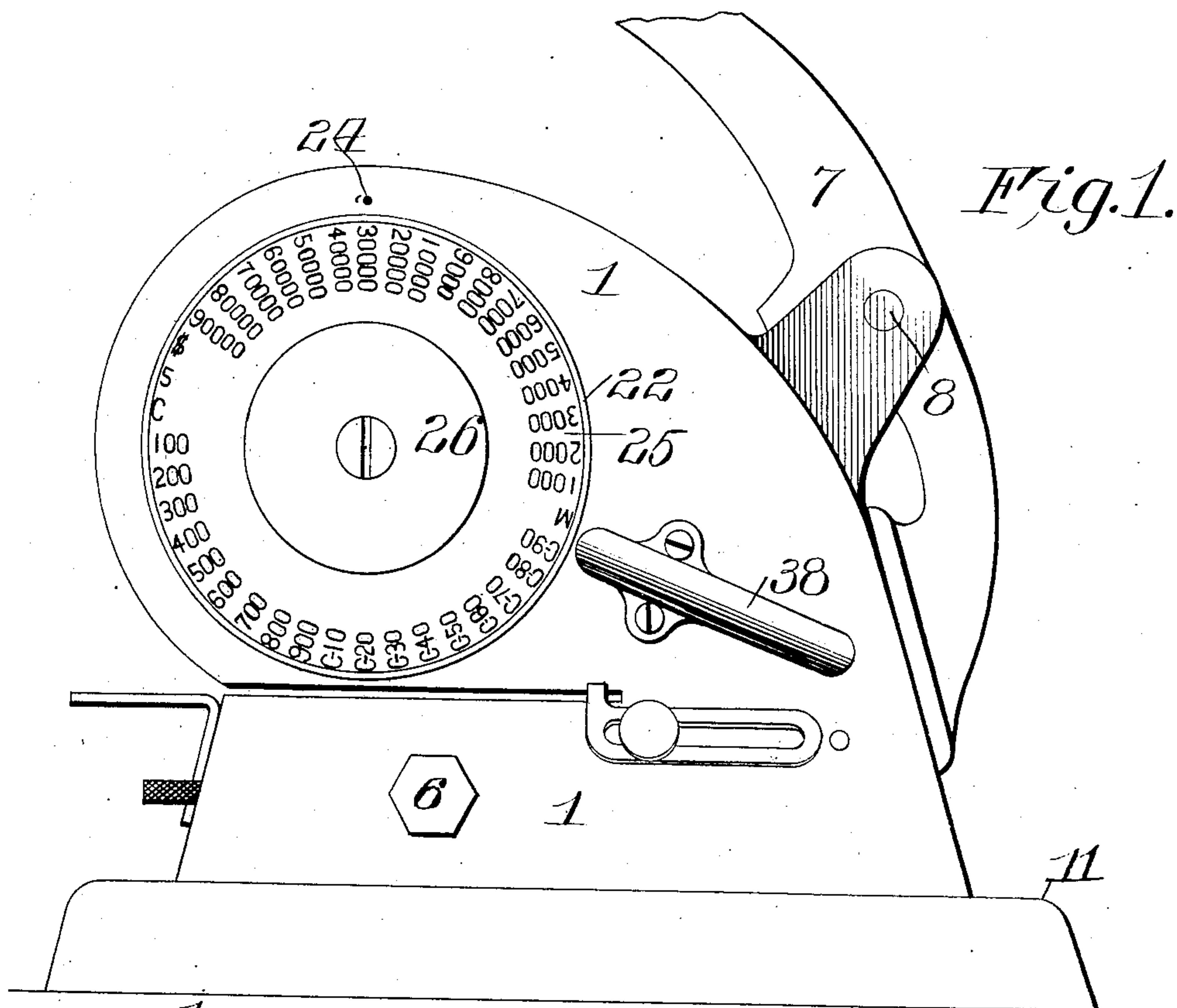
PATENTED JAN. 10, 1905.

L. M. TODD.

PRINTING APPARATUS.

APPLICATION FILED SEPT. 2, 1902.

3 SHEETS—SHEET 1.



Witnesses.  
Halter B. Payne  
G. Willard Rich.

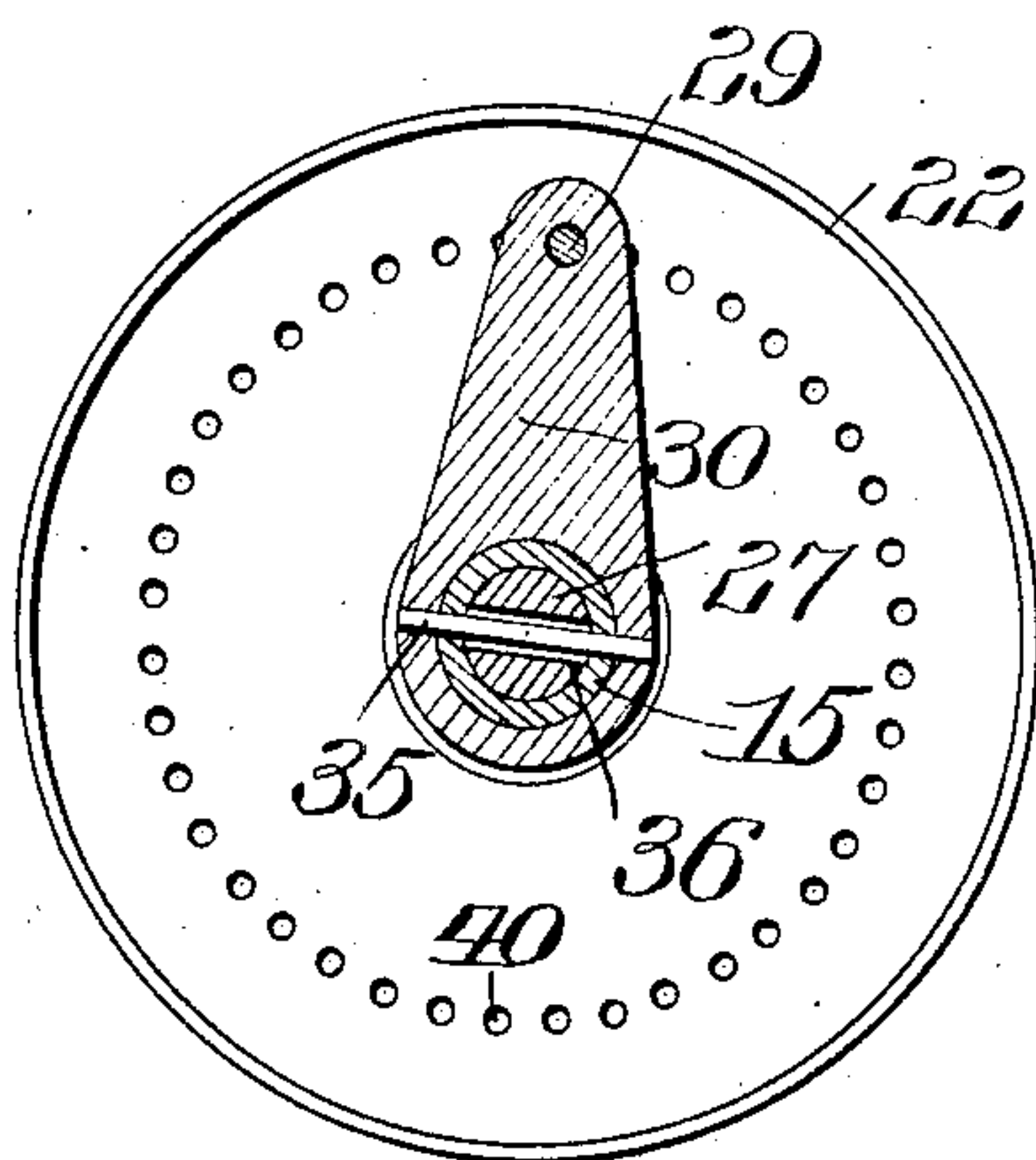
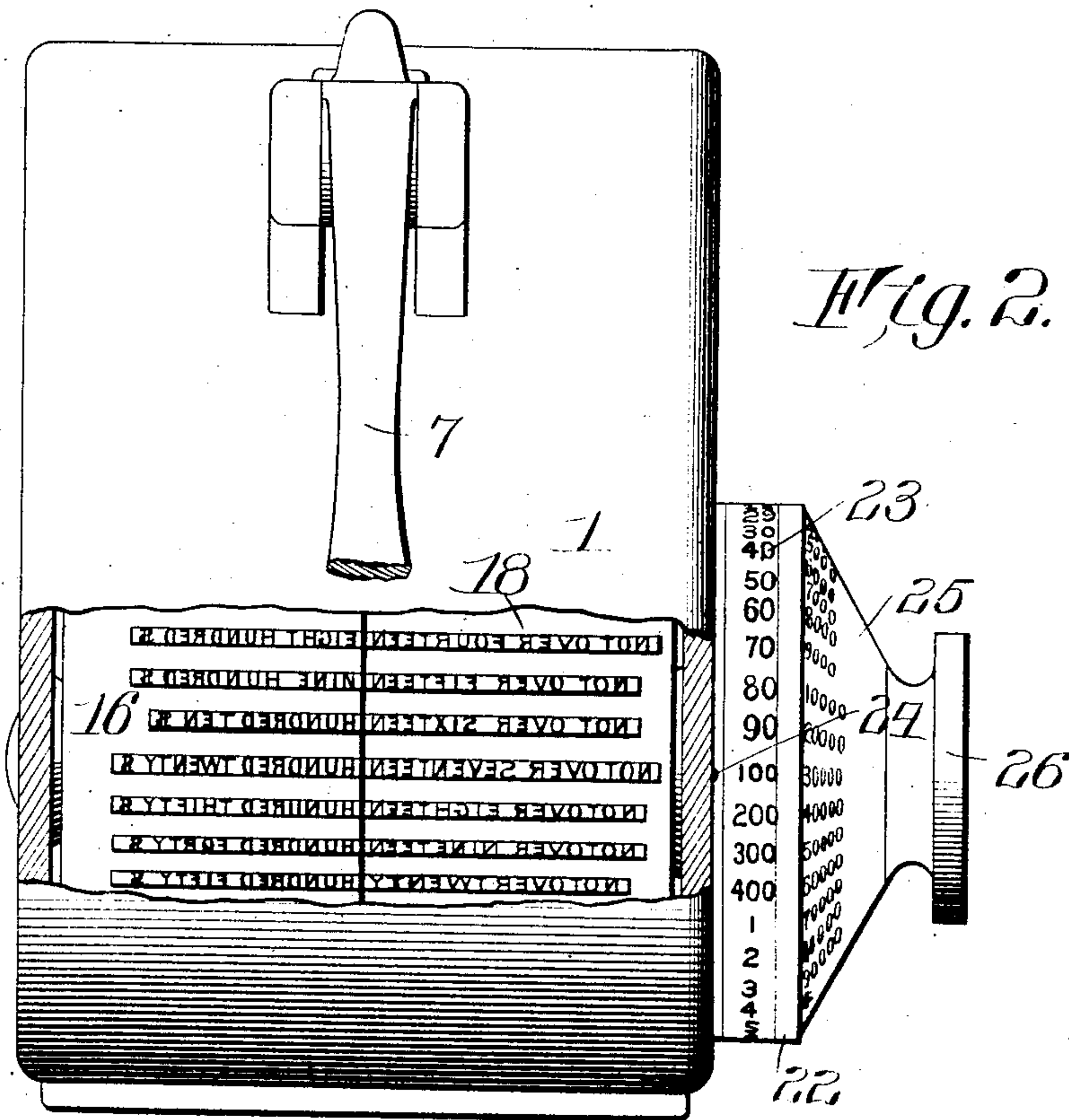
Inventor.  
Liberius M. Todd  
by  
Eugene W. Church  
his Attorney

No. 779,570.

PATENTED JAN. 10, 1905.

L. M. TODD.  
PRINTING APPARATUS.  
APPLICATION FILED SEPT. 2, 1902.

3 SHEETS—SHEET 2.



Witnesses.

Walter B. Payne.  
Willard Rich.

Inventor.

L. M. Todd  
by  
Frederick Church  
his Attorney

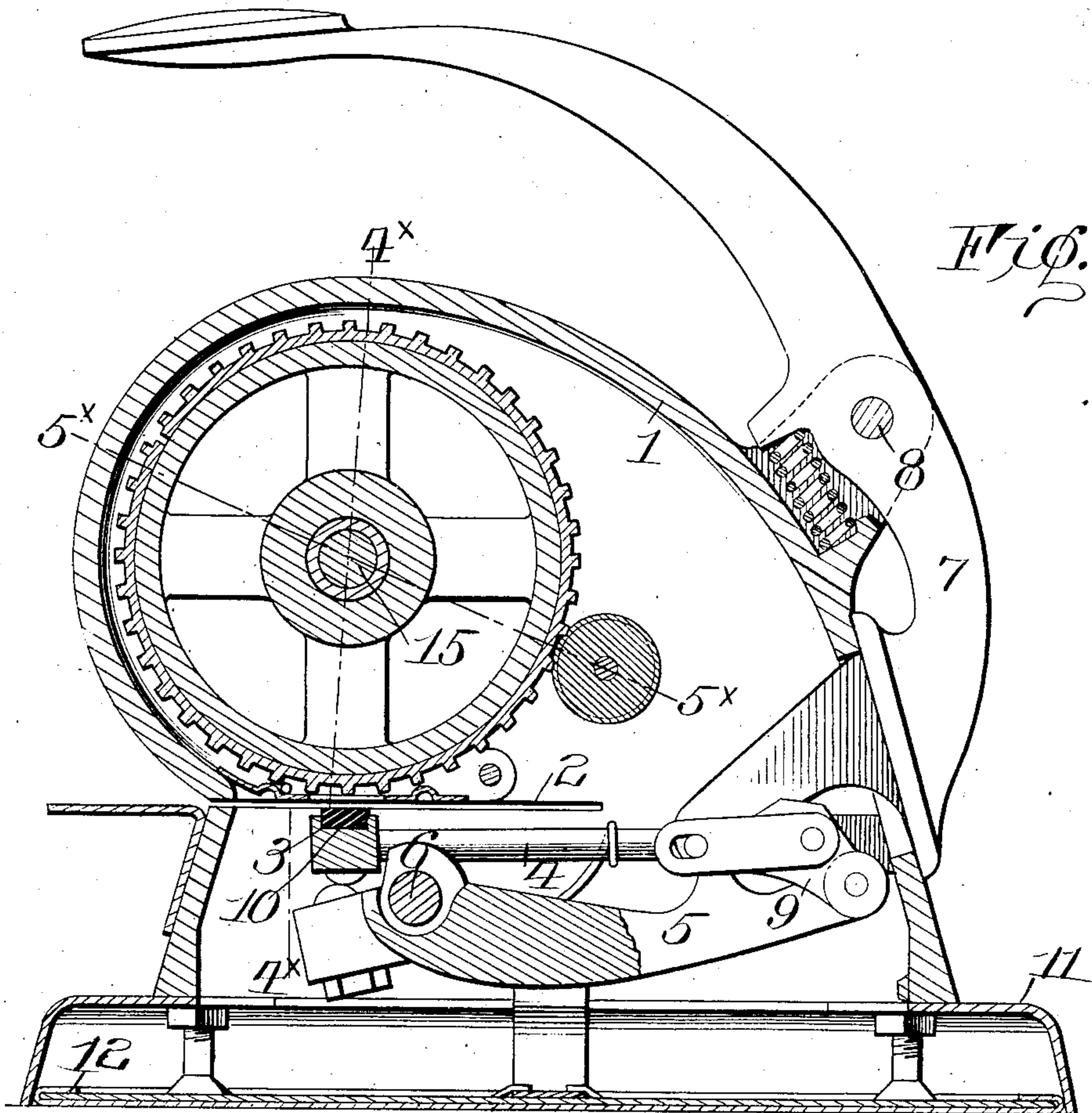


No. 779,570.

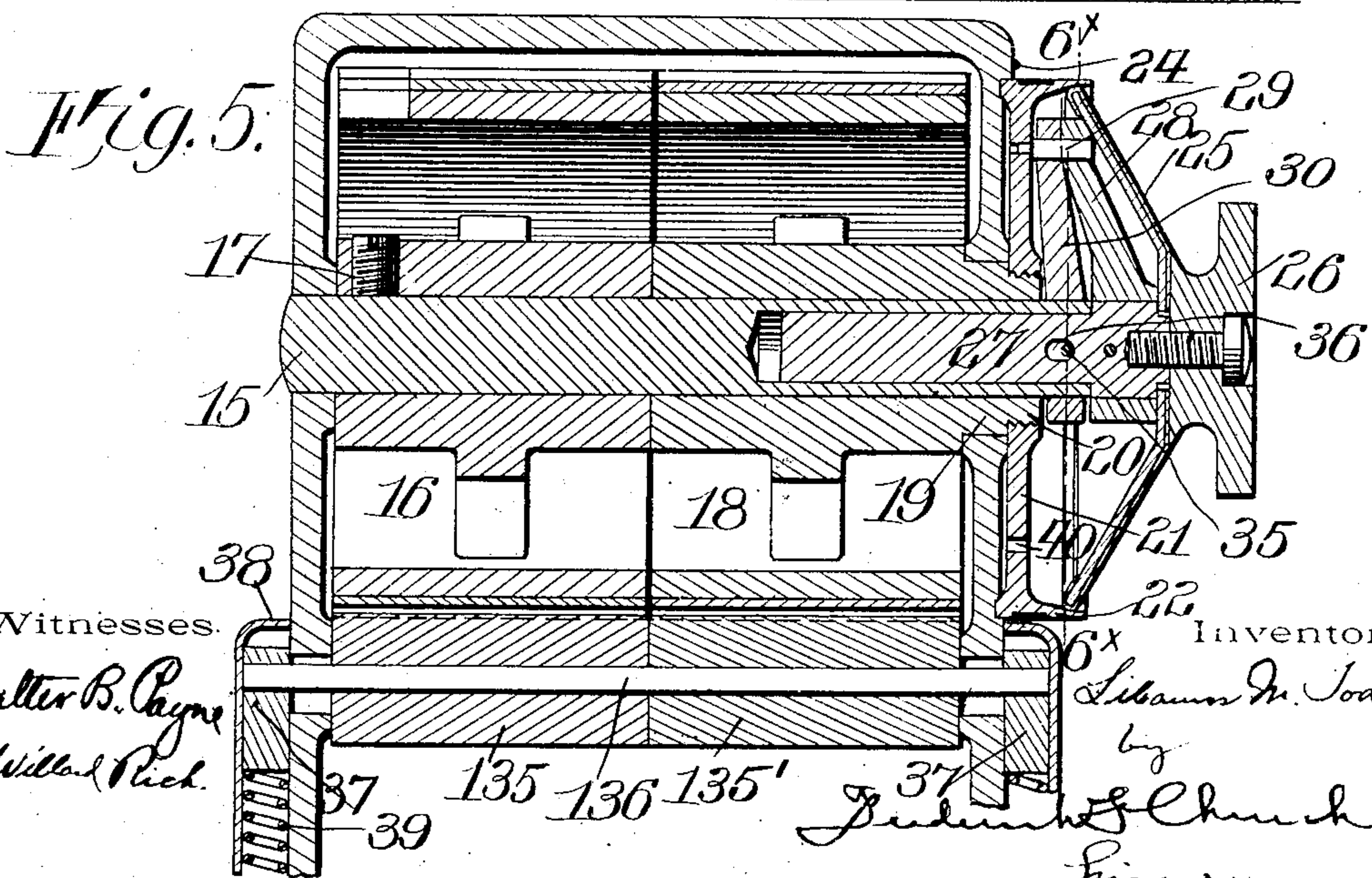
PATENTED JAN. 10, 1905.

L. M. TODD.  
PRINTING APPARATUS.  
APPLICATION FILED SEPT. 2, 1902.

3 SHEETS—SHEET 3.



*Fig. 3.*



*Fig. 5.*

Witnesses.  
*Walter B. Payne*  
*W. H. Rich*

Inventor.  
*L. M. Todd*  
by  
*J. H. Church*  
Attorney



# UNITED STATES PATENT OFFICE.

LIBANUS M. TODD, OF ROCHESTER, NEW YORK, ASSIGNOR TO G. W. TODD AND COMPANY, OF ROCHESTER, NEW YORK, A FIRM.

## PRINTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 779,570, dated January 10, 1905.

Application filed September 2, 1902. Serial No. 121,846.

*To all whom it may concern:*

Be it known that I, LIBANUS M. TODD, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Printing Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide a device adapted to be employed in embossing or printing upon checks, drafts, or other negotiable instruments a limiting amount above which such instrument is not good; and it consists in providing an apparatus so constructed that the operating parts thereof may be adjusted to give a wide range or combination of characters, this being accomplished generally by employing a plurality of separate printing-wheels arranged for independent or simultaneous operation.

To these and other ends the invention consists in certain improvements in construction and combinations of parts, all as will be more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings, Figure 1 is a side elevation of a check-protector constructed in accordance with my invention. Fig. 2 is a top plan view thereof shown with a portion of the casing broken away. Fig. 3 is a cross-sectional view. Fig. 4 is a longitudinal sectional view through the printing-wheel, taken on the line 4<sup>x</sup> 4<sup>x</sup> of Fig. 3. Fig. 5 is a similar view taken on the line 5<sup>x</sup> 5<sup>x</sup> of Fig. 3, and Fig. 6 is a cross-sectional view on the line 6<sup>x</sup> 6<sup>x</sup> of Fig. 5.

Similar reference-numerals in the several figures indicate similar parts.

In appearance and operation my present device is similar to that shown in my prior application, Serial No. 119,216, and it embodies generally the casing or support 1, provided with a narrow slit or aperture 2, adapted to receive a check or draft, above which are journaled printing-wheels to be more fully described hereinafter. These wheels are pro-

vided upon their faces with suitable printing characters, with which coöperates a platen 3, mounted upon the movable arms 4 and adapted to be operated toward the printing-wheels by means of a lever 5, journaled upon a shaft or arbor 6. The means for operating the lever consists of an operating-handle 7, pivoted at 8 upon the exterior of the casing and having its lower end projecting through an aperture therein and connected to the lever by a pivoted link 9, forming a toggle connection between the handle 7 and the end of the lever 5, whereby as the upper end of the operating-handle 7 is depressed the link is revolved upon its pivots, causing the forward end of the lever 5 to be moved relatively to the printing-wheels, carrying with it the platen 3. The engaging surface of the latter is preferably composed of elastic material 10, which as the platen is moved into engagement with the printing-wheels will allow the type characters to emboss the instrument by stretching the fibers of the paper.

Arranged in the upper part of the casing 1 is a shaft or arbor 15, having mounted thereon a printing-wheel 16, secured by a set-screw 17, having secured upon its periphery a stereotype-sheet provided with the printing characters, and also arranged on said arbor is a similar wheel 18, the hub of which is extended, as shown at 19, forming a journal-bearing in the casing and also having a reduced outer threaded end 20, upon which is mounted a disk or plate 21, having the outer flange or rim 22. This latter constitutes a dial and is provided upon its surface with characters 23, arranged relatively and corresponding to those on the wheel 18, said characters on the rim 22 being adapted to coöperate or register with a suitable stationary index 24 upon the exterior of the casing, whereby the operator may readily determine when a desired character on said wheel is in printing position. In order to permit the adjustment of the first-mentioned printing-wheel 16 and also to determine when the characters thereon are in operative position, I provide a suitable dial 25, bearing indicating characters



corresponding to the characters on the wheel 16, which are also adapted to cooperate with the index 24, and this dial I connect to the shaft or arbor 15, and for convenience in manipulation it is provided with a suitable operating-handle 26. However, as it is desirable that the two printing-wheels be capable of simultaneous rotation, as well as an independent adjustment, I provide the end of the shaft or arbor 15 with a recess in which is mounted a longitudinally-movable operating member or shaft 27, to which the dial 25 is attached. Also mounted on said member is an arm 28, carrying an inwardly-projecting pin 29, extending through an aperture in a similar arm 30, rigidly attached to the shaft or arbor 15 by means of a pin 35 passing transversely through the arbor and also through the member 27, the latter being provided with an elongated aperture 36, which permits the member 27 and the arm 28 thereon to be moved outwardly slightly to disengage the inner end of the pin 29 from one of a series of apertures 40, arranged in the disk 21, as shown in Fig. 4. The arm 30 affords a means of connection between the movable shaft 27 and the shaft or arbor 15, carrying the printing-wheel 16, and as the pin 29 is located a considerable distance from the center of rotation the parts can be made to operate freely and without the lost motion between them that would occur were the shaft 15 and the member 27 secured together by a spline or feather-key, as will be understood. Inasmuch as the outer dial 25 is not arranged proximate to the index 24, the operator will be more naturally inclined to register the indicia thereon with the character on the rim 22 standing opposite the stationary index, and therefore while it is desirable that the parts operate freely it is also essential that there be no lost motion between the dial and the wheel 16. Further, this arrangement insures the accurate alinement of the selected characters on the two wheels.

While any suitable characters may be applied to the faces of the printing-wheels, a preferable arrangement is one in which the type or printing characters are arranged in rows upon suitable stereotype-plates, as before mentioned, and in my present device I provide one of such plates, preferably the one mounted upon the wheel 18, with suitable words indicating a limiting amount and also words indicating such amount or portion thereof—as, for instance, “Not over fifteen,” &c., as shown in Fig. 2—and upon the adjacent printing-wheel I employ similar lines of type characters, which may consist of the words or figures intended to be read in connection with those upon the other wheel—such as the words “One,” “Two,” &c., or “Eight hundred,” “Nine hundred,” &c., followed either by the word “Dollars” or by the usual dollar-sign.

Suitable devices for inking the printing

characters are provided, and in my present structure I have shown separate inking-rollers 135 135' for each of the printing-wheels 16 and 18, which are journaled on the shaft 136. These rollers are comparatively small in diameter, so that they normally lie between the rows of printing characters and serve to center the printing-wheels, although allowing them to rotate independently, and to allow the rollers to yield the ends of the shaft 136 are carried in blocks 37, operating in radially-extending guides or cap-pieces 38 on the casing and actuated toward the printing-wheels by springs 39.

The casing or support 1 is mounted upon a suitable base 11, and the latter is provided with a removable closure 12, whereby access may be had to the interior of the casing.

The operation of the device will now be readily understood. The operator desiring to print or emboss an instrument to prevent fraudulent changes in the amount written in the body thereof rotates the wheels until the desired combination is in the printing position. For convenience in description the arbitrary amount of one hundred and thirty thousand dollars is selected. To adjust the printing-wheels, the operator grasping the handle 26 revolves them simultaneously until the index-figures 100 on the flange or rim 22 registers with the stationary index 24 on the casing, thus indicating that the corresponding printing characters and the words of limitation reading “Not over one hundred” on the wheel 18 are in printing position. This wheel is centered and held stationary by its inking-roller 135', and the operator moving the handle 26 laterally, may revolve the printing-wheel 16 independently until the index-figures on the dial 25 indicating “Thirty thousand” shall also register with the index 24. If a check or draft be now inserted in the slit 2 and the handle 7 operated, it will be moved forcibly into engagement with the printing-wheels and embossed, in this instance, with the words reading “Not over one hundred thirty thousand dollars.”

The outward movement of the handle 26, it will be understood, withdraws the end of the pin 29 from engagement with the disk 21, and if the handle be now returned to its normal position the pin will engage one of the apertures 40 and lock the parts together, when the two wheels may be revolved either to cause the type to be inked from the rollers 135 135' or for other purposes. By this arrangement it will be seen that any of the printing characters on one wheel may be combined with the characters on the other wheel, so that the number of amounts that may be indicated are greatly increased. While I have shown but two printing-wheels, it will be understood that a greater number of such wheels might be employed and other arrangements of printing characters employed for the same



object or for other purposes, and I therefore do not confine my invention to the device illustrated.

I claim as my invention—

- 5 1. In a printing apparatus, the combination with a casing, a plurality of wheels arranged therein and provided with printing characters, of a dial for each wheel having indicia corresponding to the characters on their respective  
10 wheels, a stationary index cooperating with the dials, means for operating one of the wheels, connections between said wheel and the other wheel whereby the latter may be adjusted by the operation of the former, and  
15 a platen cooperating with the wheels.
2. In a printing apparatus, the combination with a casing, a plurality of wheels arranged therein and provided with printing characters, of a dial for each wheel having indicia corresponding to the printing characters on their  
20 respective wheels, an index cooperating with the dials, a single device for setting each of the wheels and detachably securing them together, and a platen cooperating with the  
25 wheels.
3. In a printing apparatus, the combination with a casing, a plurality of wheels arranged therein provided with printing characters, of a single operating device for independently  
30 revolving the separate wheels and securing them together, and a platen cooperating with the wheels.
4. In a printing apparatus, the combination with a casing, a plurality of wheels supported  
35 therein provided with printing characters, an operating device connected to one of the wheels and means for detachably connecting the device with the other wheel, of dials for the separate wheels rotated by the operating de-  
40 vice, an index cooperating with the dials and a platen cooperating with the wheels.
5. In a printing apparatus, the combination with a casing, a plurality of wheels supported  
45 therein provided with projecting printing characters and inking-rollers engaging between adjacent characters on each wheel to center them, of an operating device connected to one wheel and detachably connected to the other whereby one wheel may be operated  
50 independently of the other or both wheels operated together, and a platen cooperating with the wheels.
6. In a printing apparatus, the combination with a casing, having an arbor journaled there-  
55 in, a plurality of wheels supported on the arbor and provided with printing characters and dials carried on the arbor and connected to each of the wheels having indicia corresponding to the characters on their respective  
60 wheels, of an index on the casing cooperating with the dials, an operating device on the arbor connected to one wheel and detachably connected to the other, and a platen cooperating with the wheels.
- 65 7. In a printing apparatus, the combination

with a casing having an arbor therein, a plurality of wheels mounted on the arbor and provided with printing characters, of an operating device movable longitudinally of the arbor, means for connecting the device with  
70 the wheels to revolve them independently or collectively and a platen adapted to cooperate with the wheels.

8. In a printing apparatus, the combination with a casing having an arbor journaled there-  
75 in, a wheel secured to the arbor having printing characters thereon and a similar wheel revolubly mounted on the arbor, of an operating device normally connecting the wheels and movable longitudinally of the arbor to dis-  
80 engage it from one of them.

9. In a printing apparatus, the combination with a casing having an arbor journaled there-  
in, a wheel attached to the arbor having printing characters thereon and a similar wheel  
85 revolubly mounted on the arbor, of centering devices for the separate wheels, an operating device connected to the arbor to revolve the wheel thereon and movable longitudinally on the arbor to disengage it from the other wheel.  
90

10. In a printing apparatus, the combination with a support, an arbor journaled therein and a printing-wheel secured thereto, of a second printing-wheel journaled on the arbor, an operating member movable longitudinally of  
95 the arbor, connections between the member and arbor located exteriorly of the latter and means for engaging said member with the second wheel.

11. In a printing apparatus, the combina-  
100 tion with a support, an arbor journaled therein, and a printing-wheel secured thereto, a second printing-wheel journaled on the arbor and a dial secured to the latter wheel, of an operating member movable into and out of en-  
105 gagement with the dial and connections between the member and arbor to cause their simultaneous rotation.

12. In a printing apparatus, the combina-  
110 tion with a support, an arbor journaled therein and a printing-wheel secured to the arbor, of an operating member movable longitudinally of the arbor and attached thereto, a second printing-wheel journaled on the arbor having a dial and an arm on the movable member en-  
115 gaging the dial to lock the separate wheels together.

13. In a printing apparatus, the combina-  
120 tion with a support and a plurality of printing-wheels journaled therein and provided with projecting type characters and an inking-roller yieldingly engaging each wheel to center it, of an operating member and means for engaging it with the wheels whereby one wheel may be operated independently of the  
125 other or the wheels operated collectively.

14. In a printing apparatus, the combina-  
130 tion with a support, an arbor journaled therein and a wheel secured to the arbor and provided with projecting type characters, a second wheel



having similar type characters and a separate inking-roller engaging each wheel to center it, of an operating member attached to one of the wheels and movable into and out of engagement with the other wheel whereby one wheel may be adjusted independently of the other, or both wheels rotated together.

15. In a printing apparatus, the combination with a support, an arbor journaled therein and a wheel secured to the arbor and provided with printing characters, a second printing-wheel loosely journaled on the arbor and a dial attached to the second wheel having indicia corresponding to the type characters on said wheel, of an operating member movable longitudinally of the arbor, a dial on said member provided with indicia corresponding to the type characters on the first wheel, connections between the member and arbor and devices engaging the member with the second wheel operated by the longitudinal movement of said member.

16. The combination with a casing, an arbor journaled therein and a printing-wheel mounted thereon, a second printing-wheel journaled on the arbor having a dial connected thereto and provided with apertures, of an arm attached to the arbor, a member movable longitudinally on the arbor and an arm thereon provided with a pin guided in the first-mentioned arm and having the end cooperating with the apertures in the dial and means for limiting the movement of the member on the arbor.

17. In a printing apparatus, the combination with a casing, an arbor therein and a printing-wheel secured to the arbor, of a second printing-wheel journaled on the arbor, means for rotating one of said wheels independently of the other, a movable platen cooperating with the wheels, and means for connecting the wheels whereby they may be rotated together.

18. In a printing apparatus, the combination with a casing, an arbor journaled therein and a printing-wheel secured to the arbor, of a second printing-wheel journaled on the arbor, an operating device for rotating one of the wheels independently of the other, a movable platen cooperating with the wheels and means for connecting the wheels for simultaneous rotation.

19. In a printing apparatus, the combination with a casing, an arbor journaled therein and a printing-wheel secured thereto, of a second printing-wheel journaled on the arbor, an operating device attached to the arbor for rotating the first-mentioned wheel and means for rotating the second wheel, detachable connections between the two wheels and a movable platen cooperating with the latter.

20. In a printing apparatus, the combination with a casing, an arbor journaled there-

in and a printing-wheel secured thereto, of a second printing-wheel journaled on the arbor, means for rotating the latter, means movable longitudinally of the shaft and detachably connecting said wheels and a movable platen cooperating with the latter.

21. In a printing apparatus, the combination with a casing, a plurality of printing-wheels journaled therein having printing characters thereon, and inking devices cooperating with the wheels, of means for rotating the wheels independently to permit a particular character on one wheel to be adjusted into alinement with a particular character on the other, means for connecting said wheels whereby they may be rotated into engagement with the inking devices and a movable platen cooperating with the wheels.

22. In a printing apparatus, the combination with a casing, a plurality of printing-wheels journaled therein having projecting type characters and separate inking-rollers cooperating therewith to center the wheels, of means for revolving the latter independently to permit particular characters on the wheels to be arranged in alinement, means for connecting the wheels whereby they may be rotated simultaneously and a movable platen cooperating with the wheels.

23. In a printing apparatus, the combination with a printing-wheel having amount-indicating characters prefixed by characters indicating a limitation, a corresponding printing-wheel having amount-indicating characters suffixed by characters indicating a termination of the amount, said amount-indicating characters on the two wheels cooperating with each other, of inking devices for the wheels, means for rotating them, connections between the wheels detachably engaging one with the other whereby they may be rotated simultaneously, and a movable platen cooperating with the latter.

24. In a printing apparatus, the combination with a printing-wheel having amount-indicating characters prefixed by characters indicating a limitation, a corresponding printing-wheel having amount-indicating characters adapted to cooperate with the corresponding characters of the other wheel and suffixed by characters, indicating a termination of the amount indicated by the characters of both wheels, of ink-applying devices, means for adjusting the wheels independently, a locking device for detachably securing the wheels together whereby they may be rotated simultaneously and a movable platen cooperating with the wheels.

LIBANUS M. TODD.

Witnesses:

G. WILLARD RICH,  
ELIZABETH C. SQUIER.