

No. 869,997.

PATENTED NOV. 5, 1907.

L. M. TODD & C. G. TIEFEL.

PRINTING APPARATUS.

APPLICATION FILED FEB. 14, 1903.

2 SHEETS—SHEET 1

Fig. 2.

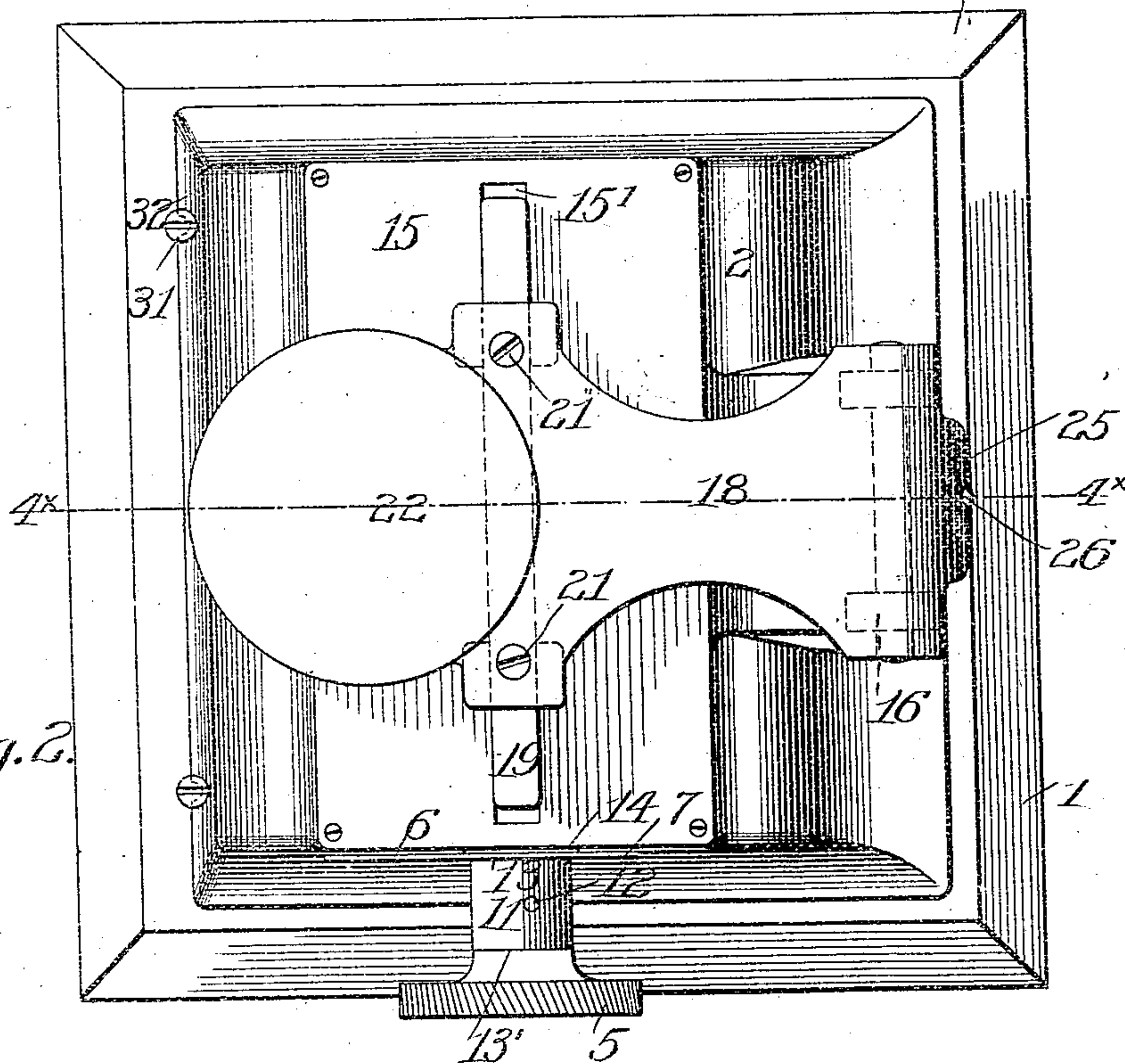
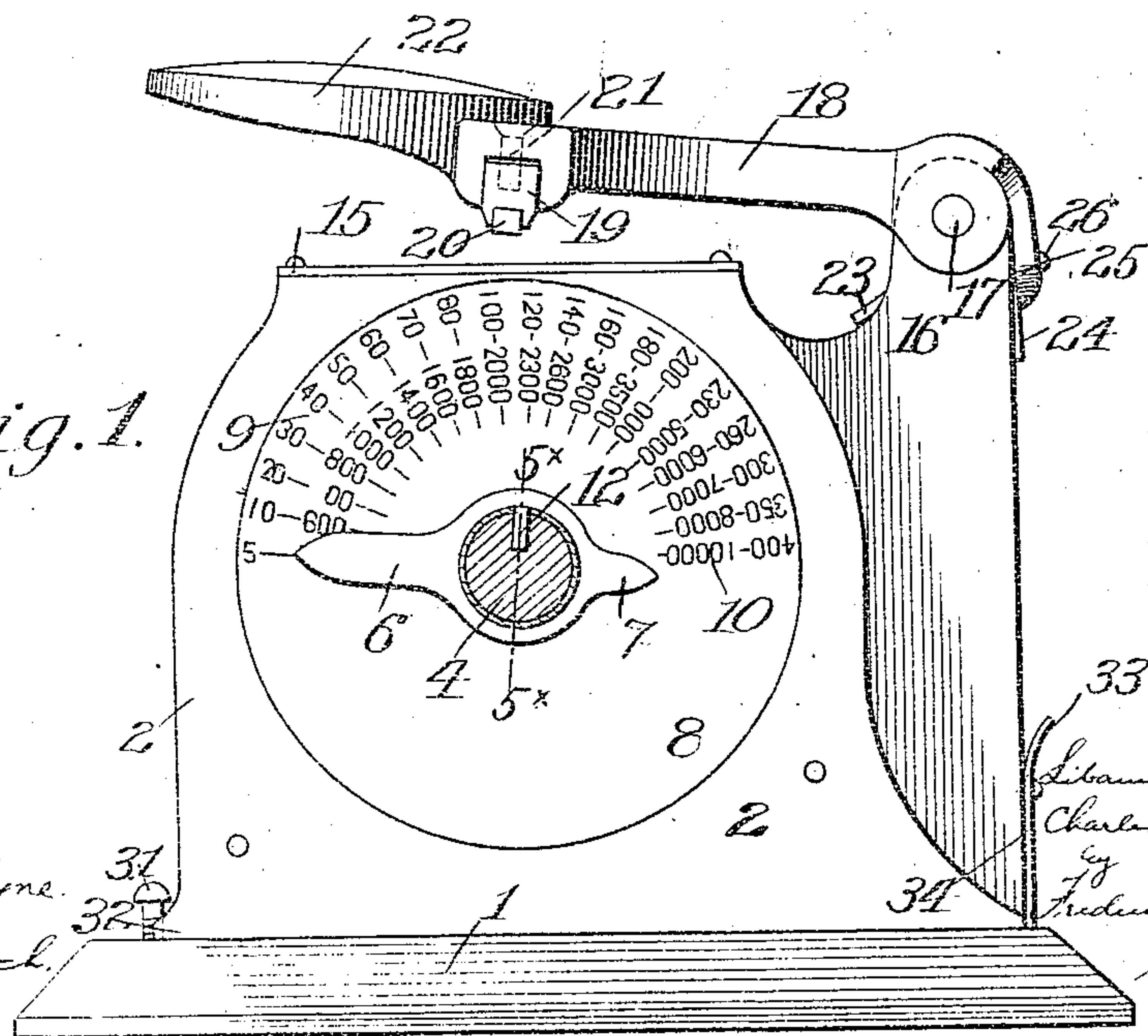


Fig. 1.



Witnesses
Walter B. Payne.
William A. Rich.

Inventors
L. M. Todd &
C. G. Tiefel
by
Frederick J. Church.
Attorney

No. 869,997.

PATENTED NOV. 5, 1907.

L. M. TODD & C. G. TIEFEL.

PRINTING APPARATUS.

APPLICATION FILED FEB. 14, 1903.

2 SHEETS—SHEET 2.

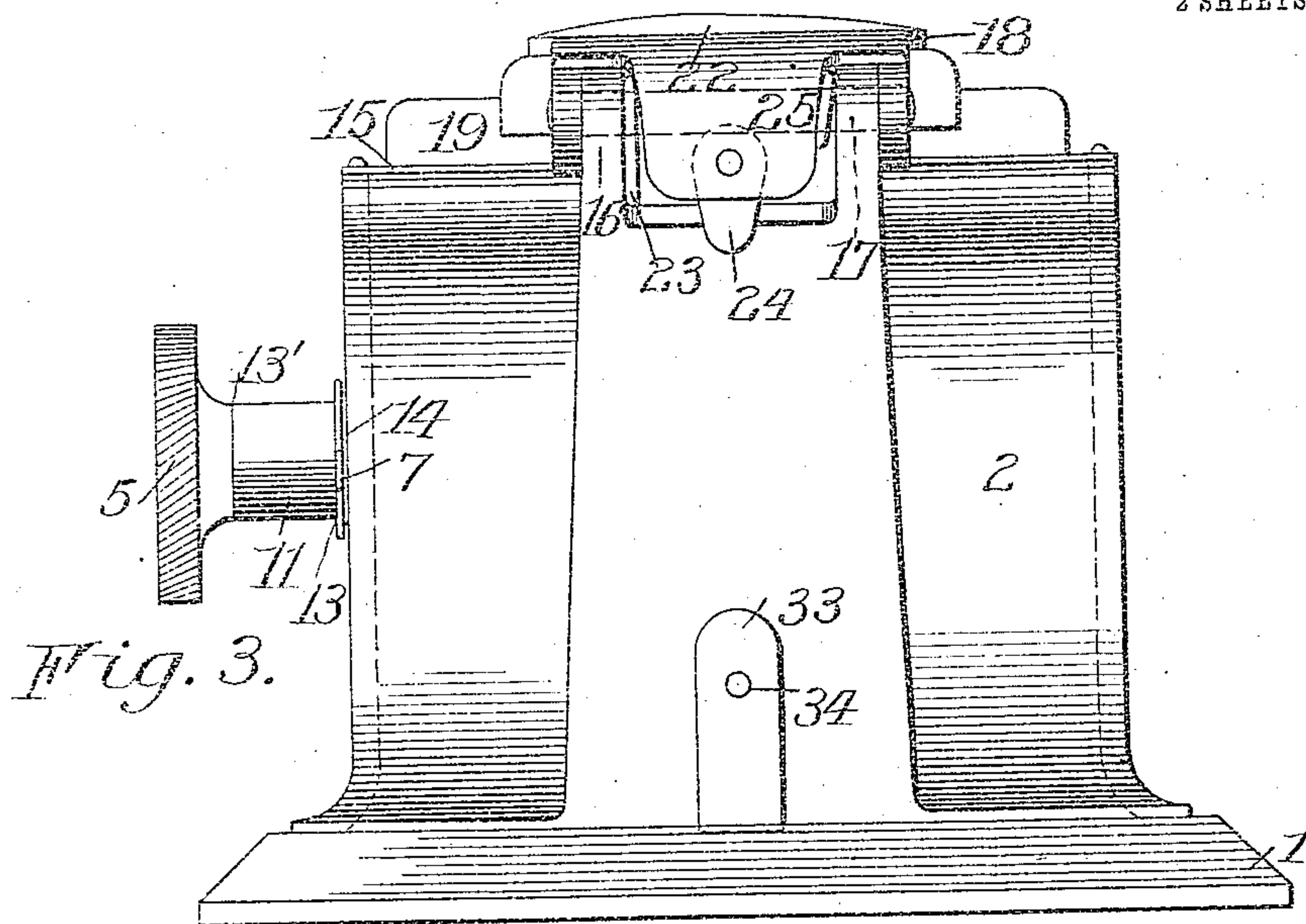


Fig. 3.

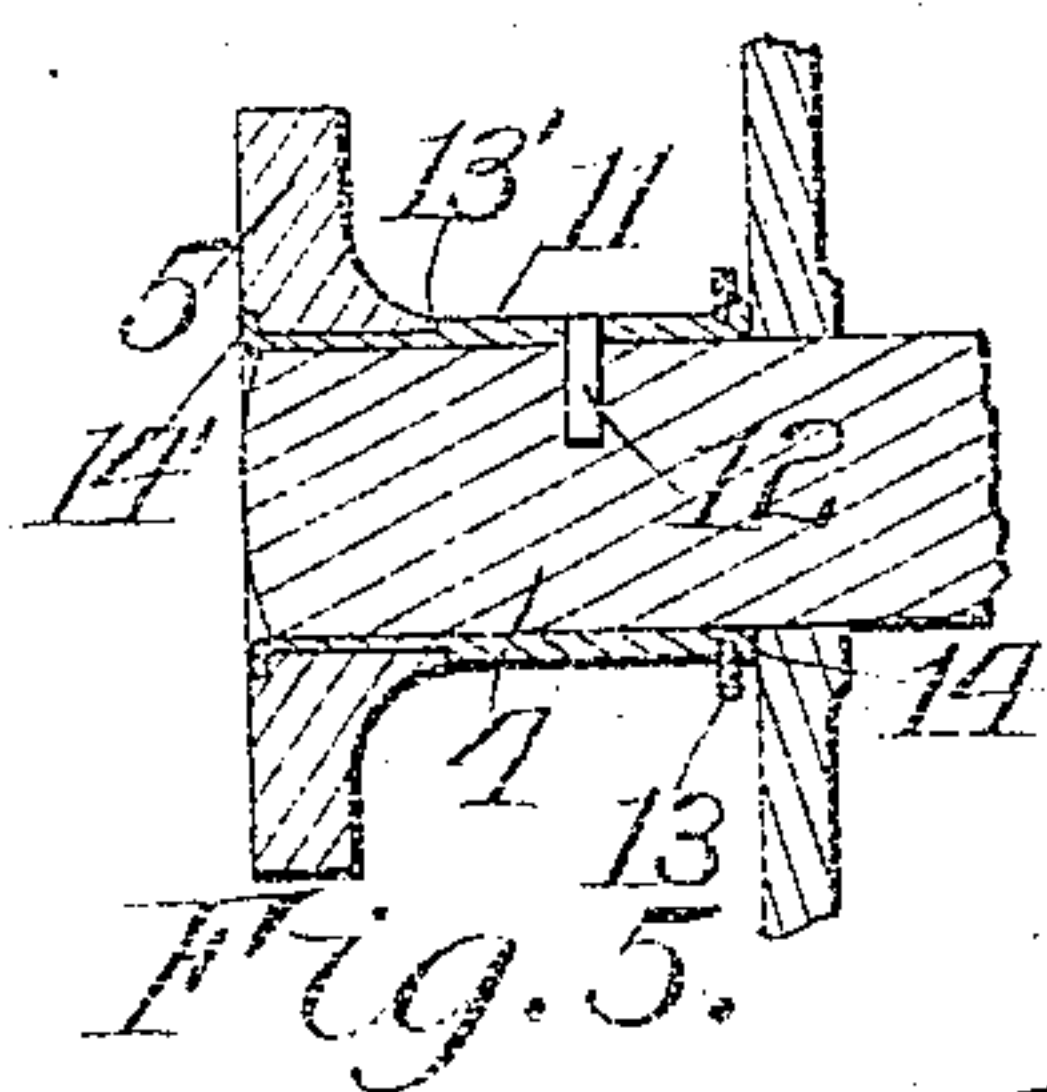


Fig. 5.

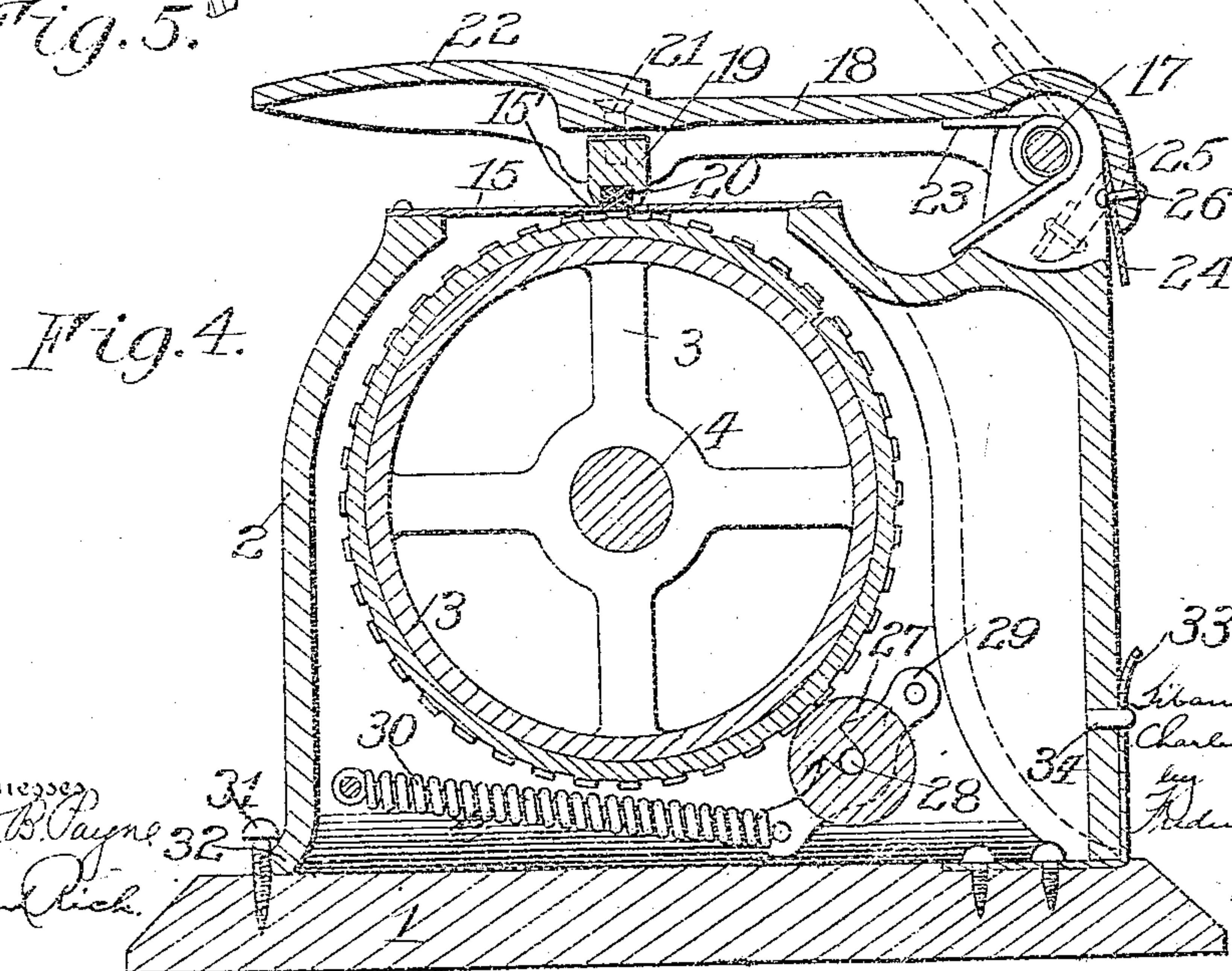


Fig. 4.

Witnesses
 Walter B. Payne
 William Rich.

33
Inventors
William M. Todd
Charles G. Tiefl
by
Rudolph F. Church,
their
Attorney

UNITED STATES PATENT OFFICE.

LIBANUS M. TODD AND CHARLES G. TIEFEL, OF ROCHESTER, NEW YORK, ASSIGNORS, BY
DIRECT AND MESNE ASSIGNMENTS, TO G. W. TODD AND COMPANY, OF ROCHESTER, NEW
YORK, A FIRM.

PRINTING APPARATUS.

No. 869,997.

Specification of Letters Patent.

Patented Nov. 5, 1907.

Application filed February 14, 1903. Serial No. 143,325.

To all whom it may concern:

Be it known that we, LIBANUS M. TODD and CHARLES G. TIEFEL, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Printing Apparatus; and we 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.

Our present invention has for its object to provide an improved printing apparatus adapted particularly for printing or embossing upon checks, drafts or other negotiable instruments, words or figures of limiting amounts and above which the instruments are not good.

To these and other ends the invention consists in certain improvements and combinations of parts, all as will be hereinafter 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 printing apparatus constructed in accordance with our invention. Fig. 2 is a top plan view thereof. Fig. 3 is a rear elevation. Fig. 4 is a cross sectional view taken on the line 4^x—4^x of Fig. 2. Fig. 5 is a detail sectional view of the line 5^x—5^x of Fig. 1.

Similar reference numerals in the several figures indicate similar parts.

A printing apparatus constructed in accordance with our invention embodies a base 1 and arranged thereon is a shell or casing 2 within which is mounted a printing wheel 3, provided upon its periphery with lines or rows of printing characters or type. The latter may be arranged to form suitable words or figures or a combination of the two to designate a limiting amount, as for instance, "Not over fifty \$50\$." The wheel is mounted upon a shaft or arbor 4 journaled in the casing and provided at one end with an operating handle 5. Also arranged on the shaft or handle are long and short indicating hands 6 and 7, respectively, which cooperate with a suitable graduated scale characters thereon corresponding to those on the printing wheel. This scale is arranged in the form of a disk, indicated by 8, mounted upon the side of the casing, and as the apparatus is normally operated below the level of the operator's eyes we find it convenient to arrange the characters that would ordinarily be located upon the lower half of the dial, or that portion arranged beneath the shaft or arbor 4, above it. This is particularly shown in Fig. 1 in which the smaller numerals constitute an outer row indicated by 9 with which the longer index finger 6 cooperates and the lower ones form a similar concentric row, indicated by 10, with which the short arm 7 registers. In arranging these numerals it will be noticed that the scales commence and end slightly above the horizontal diameter of the dial so that it is impossible for the two index arms to

register with numerals in the two rows at the same time, for, as the index fingers are arranged diametrically opposite to each other the longer one only registers with the outer row of the scale when the shorter one has been revolved out of cooperative position therewith. A convenient means of securing the index hands to the shaft 4 consists in forming them on an apertured plate mounted on a sleeve 11 secured to the shaft by a pin 12. The sleeve is provided with an annular shoulder 13 and the end, which projects through the index finger, is expanded or curled into engagement therewith, as indicated at 14, securely holding the finger in engagement with the shoulder. At its outer end the sleeve is provided with a similar shoulder 13' against which one end of the hub of the operating knob or handle 5 engages, the outer extremity 14' being expanded or rolled over, as shown. This is a convenient means of securing the parts for the index fingers and the operating knob both being mounted upon a sleeve they may be positioned and secured by a single fastening device such as the pin 12.

The casing 1 is provided with a flat top 15 which having an aperture 15', is located in a vertical line above the axis of the printing wheel, and operating therein is a platen, as will be further described. Provided at one side and preferably at the rear of the casing are lugs or ears 16 through which passes a pin 17 forming a bar on which is journaled an operating lever or handle 18 which extends over the top of the casing and is provided upon its lower side with a platen 19 having a face of elastic material 20. 21 indicates screws by means of which the platen is secured to the lever. The operating handle or lever 18 is provided upon its forward end with a flat top or hand piece 22 which is rounded slightly to adapt it to be operated by a blow from the operator's hand. The lever is normally held in elevated position, as shown in Fig. 1, with the platen raised slightly above the top of the casing 15, to permit the check or draft to be easily passed over the aperture 15', in which position it is held by means of the spring 23 arranged upon the pin 17. The upward movement of the handle is limited by means of a small latch piece 24 attached to the rearwardly extending lip 25 on the handle and which engages the casing 1 as will be understood. When it is desired to raise the handle to obtain access to the printing wheel, either for the purpose of examining or cleaning the type thereon, the latch 24 may be revolved upon its pivot 26, out of engagement with the casing, when the spring 23 will move the handle into the position shown in dotted lines in Fig. 4.

The ink is applied to the face of the type characters by means of an inking roller 27 which is provided with the shaft 28 having the ends adapted to be engaged in apertures or upon slots in arms 29 pivoted to the casing

and operated toward the printing wheel by means of coil springs 30. This arrangement holds the inking roller in yielding contact with the face of the printing wheel so that the type will be thoroughly inked and when one of the rows thereof is in the printing position, 5 beneath the aperture 15', the inking roller engaging between two of said rows will center the wheel. The arbor of the inking wheel also being secured in open slots permits it to be easily inserted and removed.

10 A detachable connection is afforded between the base and the casing by providing the former with pins or projections having heads 31 beneath which engages a flange 32 on the latter. At the opposite side the base is provided with a spring latch 33 with which engages 15 a stud or projection 34 to secure the parts in engagement.

The operation of the device will be readily understood. The operator, desiring to emboss or print upon a check or draft, grasps the handle 5 and revolves the printing wheel until one of the indicating fingers 6 or 20 7 corresponds with the desired amount indicated in one of the rows on the scale 8. The check or draft is then placed upon the flat top 15 of the casing and a sharp blow is delivered upon the end of the arm or lever 18 which forces the platen into engagement with one of 25 the rows of type characters as will be understood.

A printing apparatus constructed in accordance with our invention consisting of few parts, which may be easily formed and assembled, enables us to provide a device that is compact, neat in appearance and easily 30 manufactured.

We claim as our invention.

1. In a printing apparatus, the combination with a printing wheel having a plurality of rows of printing characters arranged longitudinally of the axis of the wheel

designating limiting amounts, said amounts in different 35 rows expressing different values, and a casing in which said wheel is journaled having an opening arranged above the wheel, of a dial mounted on the casing and provided with characters corresponding to the amounts appearing in the different rows on the wheel, said characters on the 40 dial being arranged in inner and outer rows on the dial, diametrically arranged index fingers of different lengths attached to the wheel and cooperating respectively with said inner and outer rows of characters on the dial, and a platen pivotally mounted on the casing and cooperating 45 with the wheel through said opening.

2. In a printing apparatus, the combination with a casing, a printing wheel therein having type characters thereon, an arm journaled in a bearing on the casing and a platen on the arm, of a spring normally moving the arm 50 away from the casing and a pivoted stop adjustable laterally on the arm into and out of engagement with the casing in rear of the bearing to limit the opening movement of the arm.

3. In a printing apparatus, the combination with a casing, a wheel journaled therein having printing characters and a scale provided with similar characters mounted on the casing, of a shaft secured to the wheel, an index 55 finger provided with an aperture and a sleeve secured to the shaft having a shoulder thereon and provided with an end extending through the aperture in the finger and expanded into contact therewith. 60

4. In a printing apparatus, the combination with a casing and a printing wheel journaled therein, independently movable arms provided with slots opening toward the 65 printing wheel, an inking roller having the shaft engaged in said slots and separate springs connected to the arms for holding them in engagement with the inking roller and to yieldingly support the latter in contact with the printing wheel.

LIBANUS M. TODD.
CHARLES G. TIEFEL.

Witnesses:

G. WILLARD RICH,
RUSSELL B. GRIFFITH.