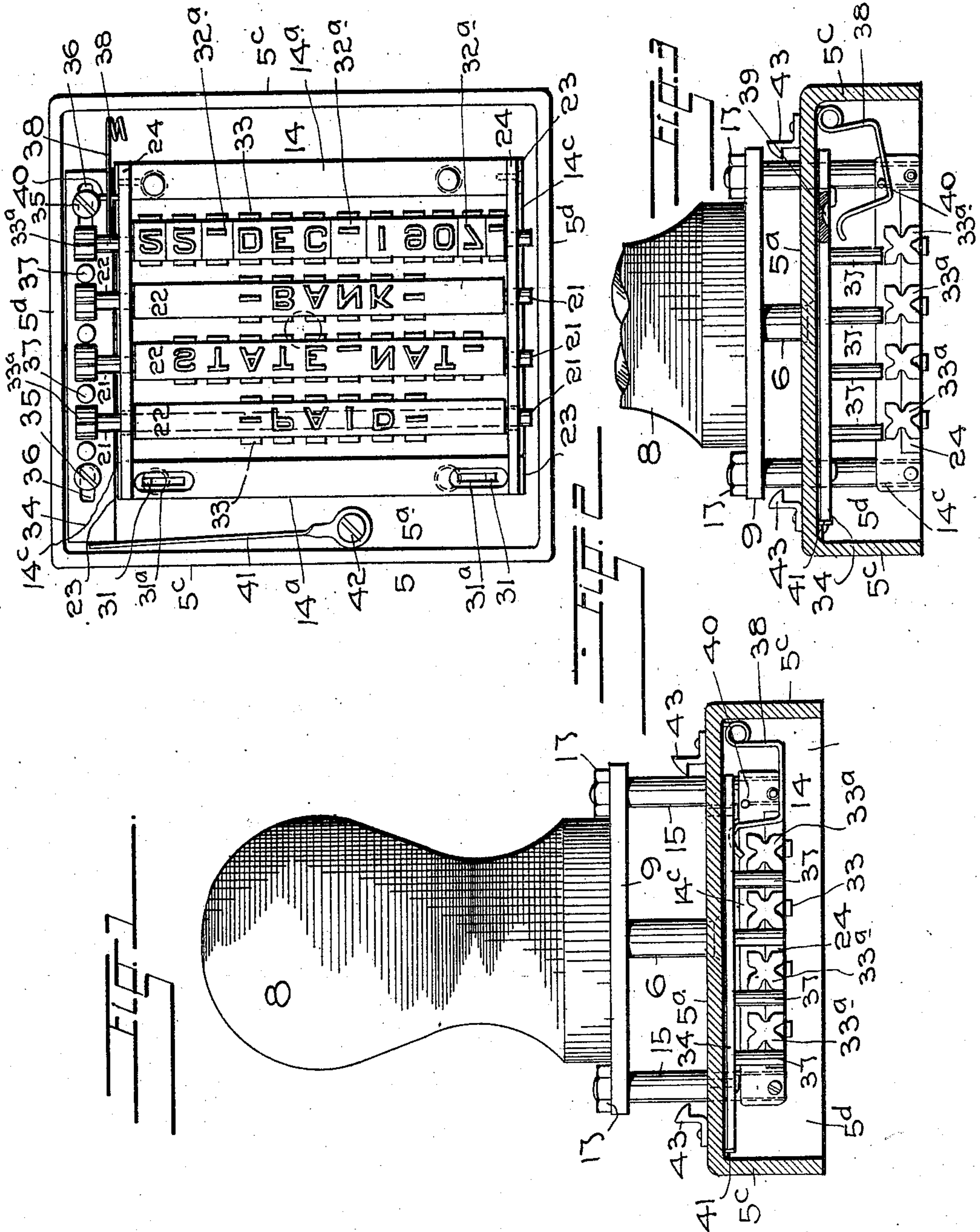


No. 877,148.

PATENTED JAN. 21, 1908.

J. V. WECKBAUGH.
STAMPING INSTRUMENT.
APPLICATION FILED JAN. 23, 1907.

3 SHEETS—SHEET 1.



WITNESSES:

E. H. Burrows.
J. M. Stump

INVENTOR.
Joseph V. Weckbaugh

BY *L. J. Belland*

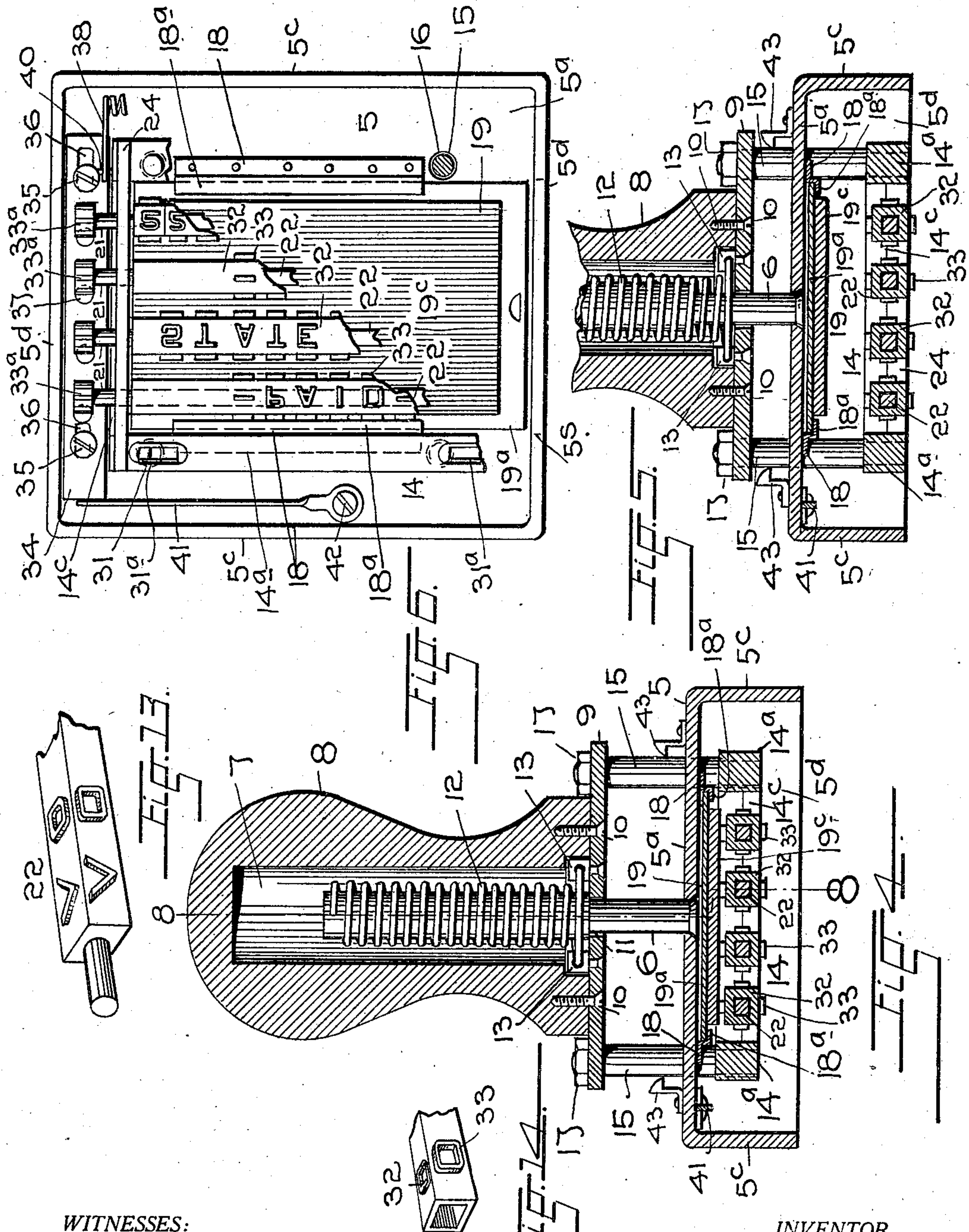
ATTORNEY.

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WITNESSES:

E. K. Burrows.
H. W. Stump.

INVENTOR.

Joseph V. Weckbaugh

BY

ATTORNEY.

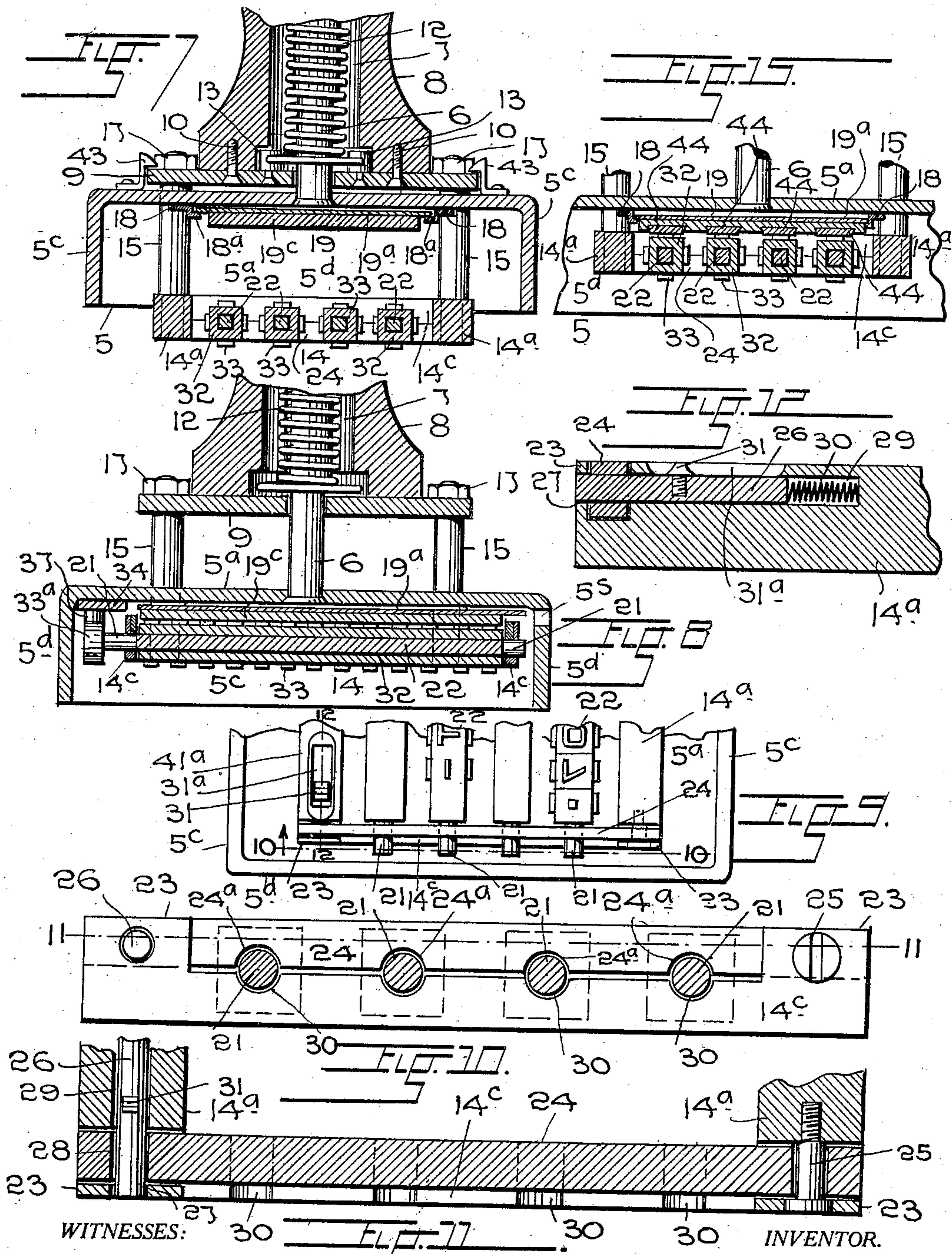
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3 SHEETS--SHEET 3.



WITNESSES:
E. H. Burrows.
A. M. Stump

INVENTOR.
JOSEPH V. WECKBAUGH
BY.
J. J. McQuade
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOSEPH V. WECKBAUGH, OF DENVER, COLORADO.

STAMPING INSTRUMENT.

No. 877,148.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed January 23, 1907. Serial No. 353,734.

To all whom it may concern:

Be it known that I, JOSEPH V. WECKBAUGH, a citizen of the United States of America, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Stamping Instruments, of which the following is a specification.

My invention relates to the class of devices which, being actuated by hand, are employed to stamp impressions from rubber or metal type upon paper or other surfaces and has for its object to provide an instrument of the class named in which the maximum of simplicity, economy of construction and ease of operation shall be combined with durability, thorough practicability in use and great rapidity of action.

Further advantageous characteristics of my construction will be disclosed at intervals in the following description, reference being had to the accompanying drawings in the various views of which like parts are similarly designated and in which

Figure 1—represents a side elevation of the instrument, partly in section, Fig. 2—an underneath view thereof, Fig. 3—a fragmentary elevation similar to that shown in Fig. 1, the operating parts being shown in lowered position, Fig. 4—a central vertical section through the device, Fig. 5—a similar view of the instrument with the operating parts in the lowered position, Fig. 6—a fragmentary underneath view of the apparatus, Fig. 7—a fragmentary, central, vertical section of the instrument with its type-carrying plunger-frame in the lowermost position, Fig. 8—a fragmentary vertical section taken along a line 8—8, Fig. 4, Fig. 9—an enlarged fragmentary, underneath view of the instrument illustrating the means employed to lock the type-bars in place, Fig. 10—an enlarged section taken along a line 10—10, Fig. 9, showing the locking means in inverted position, Fig. 11—a fragmentary section through the plunger frame taken along a line 11—11, Fig. 10, Fig. 12—an enlarged section along a line 12—12, Fig. 9, Fig. 13—a fragmentary view in perspective of a solid type bar, as used in the device, Fig. 14—a similar view of one of the type sleeves employed in the construction, shown in the assembly drawings, and Fig.

15—a fragmentary sectional view of the base and operating bars, showing a modified form of ink pad.

Referring to the drawings, the numeral 5 designates a hollow, preferably rectangular base, comprising the normally horizontal top plate 5^a, the vertical sides 5^c and the there-onto adjoining end plates 5^d. A column or post 6, rigidly secured in central relation to the top plate, extends upwardly therefrom and projects into a longitudinal, cylindrical recess 7 formed in the operating handle 8 which is centrally secured upon a plate 9 by screws 10 or other suitable means. Column 6, projecting through an opening 11 in the plate into the recess, is surrounded by a helically coiled spring 12, the upper extremity of which is secured to the said column in proximity to its upper end, while its lowermost coil is held in fixed relation to the plate 9 by means of screw bolts 13.

The numeral 14 designates the preferably rectangular plunger frame which, in practice, carries the type used in producing the impressions and which is composed of the parallel side bars 14^a and the therewith integral end bars 14^c.

Rigidly secured onto the frame 14 at its corners are four posts 15 of equal length, which, extending upwardly through diametrically corresponding openings 16 in the top plate 5^a of the base, are secured at their upper extremities by means of nuts 17 to the before named plate 9. The frame 14 and the operating handle being thus firmly connected in parallel relation to each other and the top plate of the base, are normally held in an elevated position when the frame is in engagement with the inner surface of the plate 5^a, by action of the spring 12 and when by pressure upon the hand piece, the plunger frame is depressed, the consequent expansion of the spring will cause the operating members to return to their normal position, the moment the pressure is released.

Secured along the inner surface of the top plate 5^a of the frame, and in parallel relation to the sides 5^c are two strips 18, the inner off-set portions 18^a of which, being spaced from the said surface, form guide ways for the outer, longitudinal edges of a member 19 designed to supply ink to the type when

the plunger frame is in its uppermost position. Member 19 is composed of a metal plate 19^a and a thereto secured pad 19^c made of felt or other absorbent material and which being of lesser width than the plate, permits the longitudinal edges of the latter to project within the before mentioned guide ways. A slot 5^s in one of the ends 5^d of the base exceeding the plate 19^a in width, affords means to install or remove the pad without disturbance to the other elements of the instrument.

The parallel end members 14^c of the plunger frame 14 are provided at their lower edges with a number of equidistant, semi-circular notches 20, which afford seats for the cylindrical extremities 21 of a plurality of angular type bars 22. Members 14^c are furthermore provided at their outer ends with downwardly ranging flanges 23 spaced from the adjacent end surfaces of the side bars 14^a of the frame, which being of greater width than the therewith connecting end members, extend beyond their notched lower edges. The seats thus provided at each extremity of the end members 14^a are, in practice, occupied by the extremities of locking bars 24, which being provided with semi-circular notches 24^a spaced to correspond with those in the plunger frame, will when positioned in engagement with the notched edges of the latter, secure the type bars in parallel relation to each other and the side members of the frame. Bars 24 are hingedly secured to the plunger frame at one of their extremities by means of pins 25, which projecting through corresponding apertures in the flanges 23 and the bars 24, are screwed into threaded recesses in the adjacent ends of the side bars of the frame. The opposite ends of the locking bars are normally held in position by means of draw bolts 26 disposed in registering, diametrically equal bores 27, 28 and 29 respectively in the flanges 23, the therewith engaging ends of the bars and the adjacent portions of the side members 14^a. The bolts when shot, are retained in position by coil springs 30, which being disposed within the recesses 29 engage their adjacent inner extremities and they may be withdrawn by manipulation of screw bolts 31 which being screwed into correspondingly threaded apertures in the bolts, project through slots 31^a cut longitudinally in the end portions of the side members of the frame.

The type bars 22 may be made solid as shown in Fig. 13 or they may be composed of an angular core, the ends of which are made cylindrical to occupy the seats in the end members of the frame, and a correspondingly shaped sleeve 32 which surrounding the angular portion of the core, carries the therewith integral type 33 upon its

outer surfaces. Although the sleeves as shown in the drawings are preferably made rectangular in cross section, it should be understood that they may be composed of a greater number of sides, which to adapt the type bars to the requirements of the operation of the instrument, should be of even number and arranged to produce a regular polygon. Sleeves 32 may be composed of two or more adjoining sections 32^a as is shown in Fig. 2, for the purpose of facilitating the changing of certain portions of the type such as a date or a name of the day or month, or they may be made in one continuous piece, extending the full length of the angular portion of the core which it surrounds.

The type bars are provided at one of their cylindrical extremities, which extend beyond the corresponding end member of the frame, with a preferably integral toothed wheel or pinion 33^a, the teeth of which equal in number the sides of the bars of which they form part. A narrow plate 34, slidably mounted upon the inner surface of the plate 5^a of the base, by means of screws 35 extending through longitudinal slots 36, has a plurality of equidistantly arranged pins 37 which extending downwardly, project respectively alongside and in engagement with the pinions 33^a on the type bars. The slide 34 is retained in its normal position, when the type in the plunger frame is in engagement with the inkpad in the upper portion of the base, by means of a resilient detent 38 which being secured to the base, engages an indentation 39 in the lower surface of the slide, and the plunger frame has a laterally extending projection or stud 40 arranged to engage the detent and carry it out of engagement with the sliding bar during the downward movement of the frame. A spring 41 secured to the base by means of a screw 42, in engagement with one of the extremities of the sliding bar, is arranged to impel the latter longitudinally for the purpose of projecting the pins 37 in the path of the teeth of the respective pinions as soon as the latter, during the downward movement of the plunger frame, have progressed beyond the lower extremities of the pins, and the detent 38 has been released from contact with the slide. Spring dogs 43 secured upon the outside of the frame in the path of opposite edges of the plate 9, are designed to secure the plunger frame and the therewith connected parts against retrograde motion when for the purpose of repairs or interchanging of type sleeves, the handle has been brought to its lowermost position as illustrated in Fig. 7. In place of having one common inkpad to ink the type on the various bars in the plunger frame, a plurality of smaller pads 44 provided with different colored inks, may be se-

cured in parallel order upon the plate 19^a of member 19, as shown in Fig. 15, for the purpose of producing multi-colored impressions from the type.

5 Having thus described the mechanical construction of the device, I will now proceed to explain its operation. The principle upon which my invention is based is that by providing the instrument with a plurality of
10 identical sets of type, the time ordinarily used to ink the type after each impression or in the so-called self inking stamps, the time occupied in reversing the position of the type to bring it in contact with the ink pad, may
15 be considerably reduced by alternately supplying one of the sets with ink and employing the adjoining set to produce the impression. With this object in view the four sides of each type bar are provided with identical
20 type so that no matter which side is brought in contact with a surface, the impressions are at all times alike. When the base of the instrument is placed upon a flat surface and the handle is depressed, the lowermost series
25 of lines of type forming part of the several type bars, are brought in contact with the said surface and the characters of which it is composed are impressed thereupon. During the downward movement of the plunger
30 frame, the stud 40, as hereinbefore explained, by engaging the detent 38, released the sliding bar 34 so that the moment the pinions were brought below the lower extremities of the pins 37, the latter were projected in the
35 path of their teeth by action of the spring 41, with the result that during the return stroke of the plunger frame, the said teeth coming in contact with the extremities of the pins, will cause the rotatable type bars to describe
40 a quarter of a revolution and subsequently impel the sliding bar to reassume its original position before the uppermost type engages the inkpad. It will thus be observed that, after an impression has been made from one
45 of the series of type, the lines on the adjoining surfaces of the bars are brought in contact with the inkpad and that the type which was supplied with ink prior to producing the said impression, is simultaneously brought to
50 the lowermost position, in readiness to be impressed upon the surface.

As the mode of securing and interchanging the type sleeves and the purpose of the retaining dogs as well as the manner of securing and renewing the inkpad have been referred to at intervals in the course of the foregoing description, further explanation of the operation of these parts of my invention is omitted.

60 Having thus described my invention what I claim is:—

1. A stamping device comprising in combination, a stationary base, a reciprocating carrier having a plurality of successively ar-

65 ranged, identical groups of type, an inking member upon the base normally in contact with one of the said groups, and automatic means for impressing each group in succession upon the surface beneath the base.

2. A stamping device comprising in combination, a stationary base, a reciprocating carrier having a plurality of successively arranged, identical groups of type, an inking member upon the base in contact with one of the said groups when the carrier is in raised position, means to depress the carrier so as to impress one of the said groups upon the surface beneath the base and to break contact between the type and inking member and automatic means to bring a succeeding group in contact with the inking member during the return stroke of the carrier.

3. A stamping device comprising in combination with a suitable base, a reciprocating carrier, type bars rotatably mounted thereon, each comprising a core and a sectional, prismatic sleeve, the sides of which carry identical groups of type, an inking member upon the base arranged to engage one side of the said sleeves, and means to rotate the said bars a fraction of a revolution during each reciprocating movement of the carrier.

4. A stamping device comprising in combination with a stationary base, a reciprocating carrier, type bars rotatably mounted thereon, each of the said bars having peripheral, equidistantly, identical groups of type, an inking member arranged upon the base and normally engaging one side of the said bars, when the carrier is in raised position, toothed wheels fixed upon the bars, and a sliding member held resiliently upon the base and having projections extending in the path of the said toothed wheels when the carrier is in a lowered position.

5. A stamping device comprising in combination with a suitable base, a reciprocating carrier, type bars rotatably mounted thereon, each of the said bars having peripheral, equidistantly arranged, identical groups of type, an inking member arranged upon the base to engage one side of the said bars, toothed wheels fixed upon the bars, an actuating member slidable upon the base and having projections normally extending alongside the said wheels, a detent on the base to retain the member against displacement, means on the carrier, to release the said detent during downward movement of the carrier and a spring arranged to propel the said member so as to place its projections in the path of the said wheels when the carrier is in a lowered position.

6. A stamping device comprising in combination with a stationary base, a reciprocating carrier, type bars rotatably mounted

thereon, each bar having a plurality of peripheral equidistantly arranged, identical groups of type, an inking member comprising a plurality of separated pads secured
5 upon the base, the said pads being arranged to normally respectively engage one group of type of each bar, and automatic means to rotate the said bars a fraction of a revolu-

tion during each reciprocating movement of the carrier.

10

In testimony whereof I have affixed my signature in presence of two witnesses.

JOSEPH V. WECKBAUGH.

Witnesses:

G. J. ROLLANDET,

SAMUEL H. THOMPSON, Jr.