

No. 636,474.

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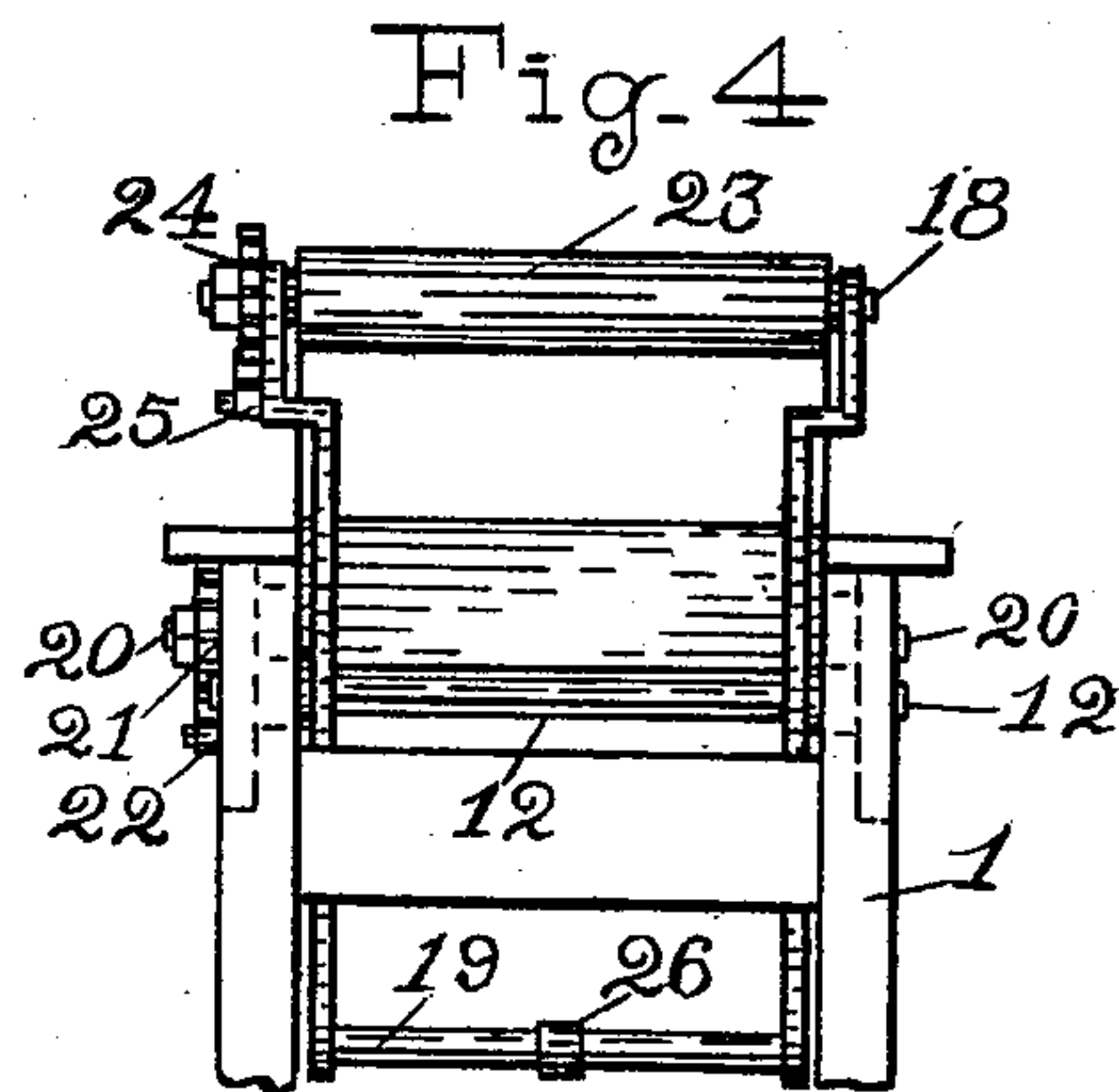
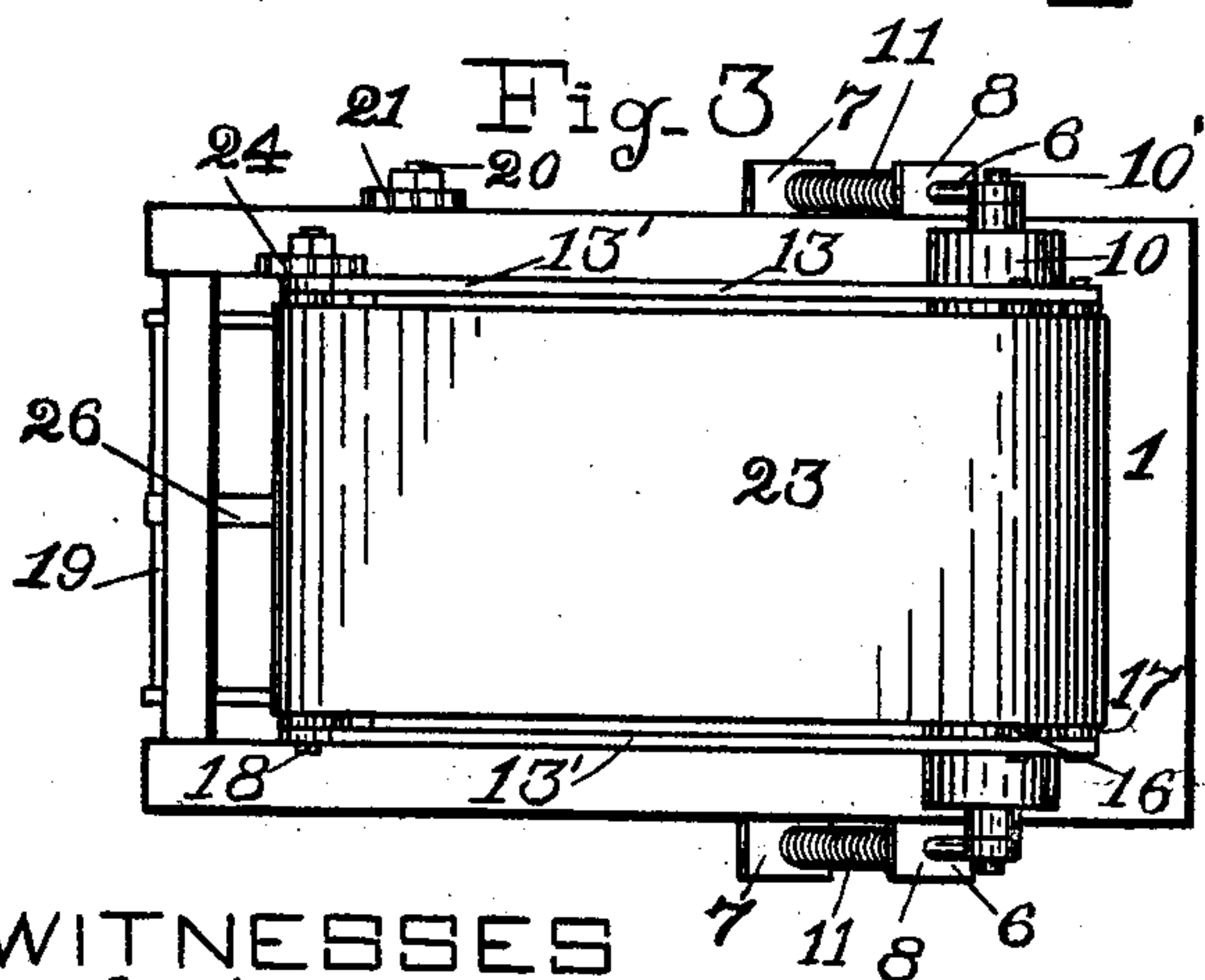
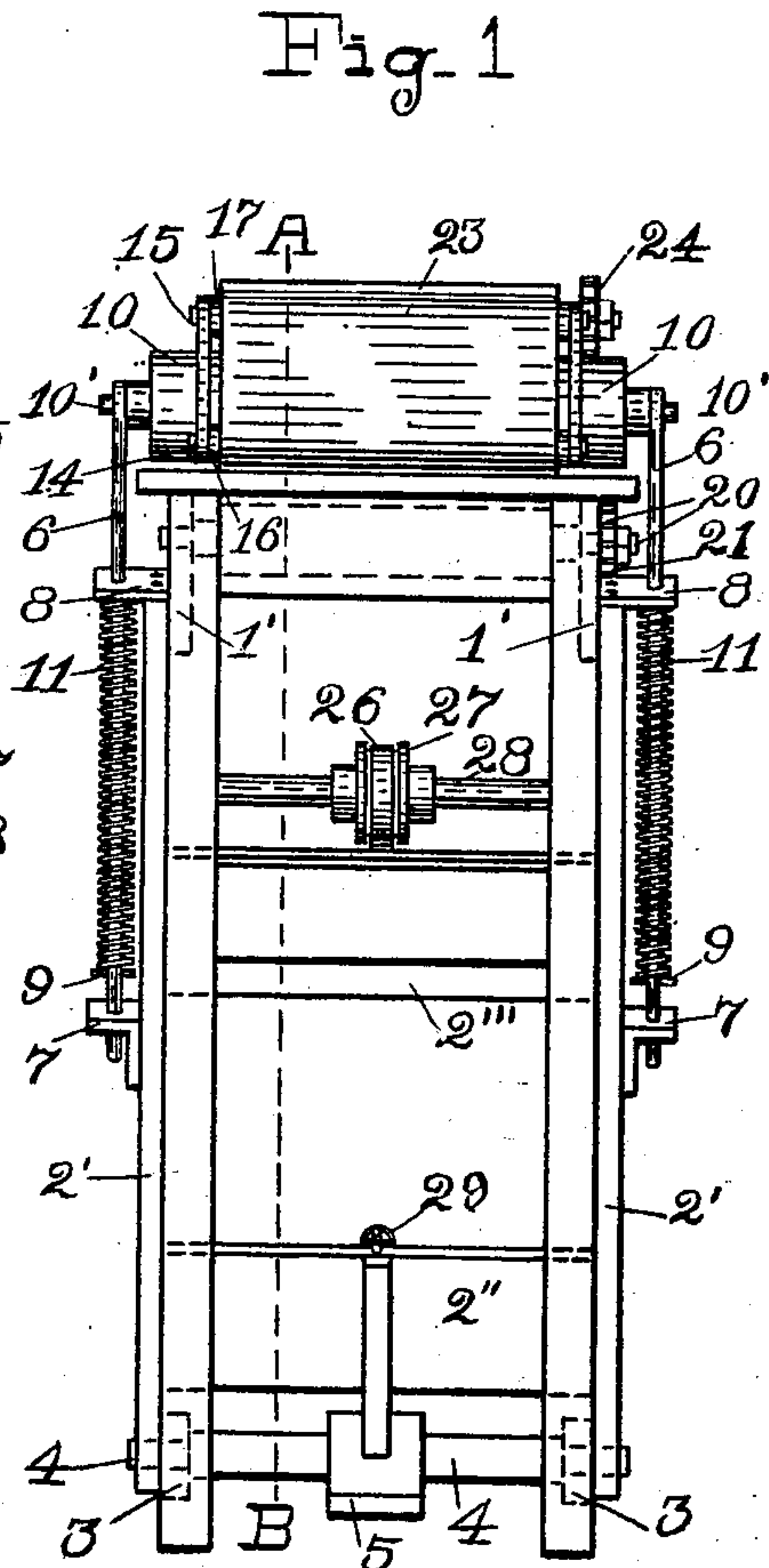
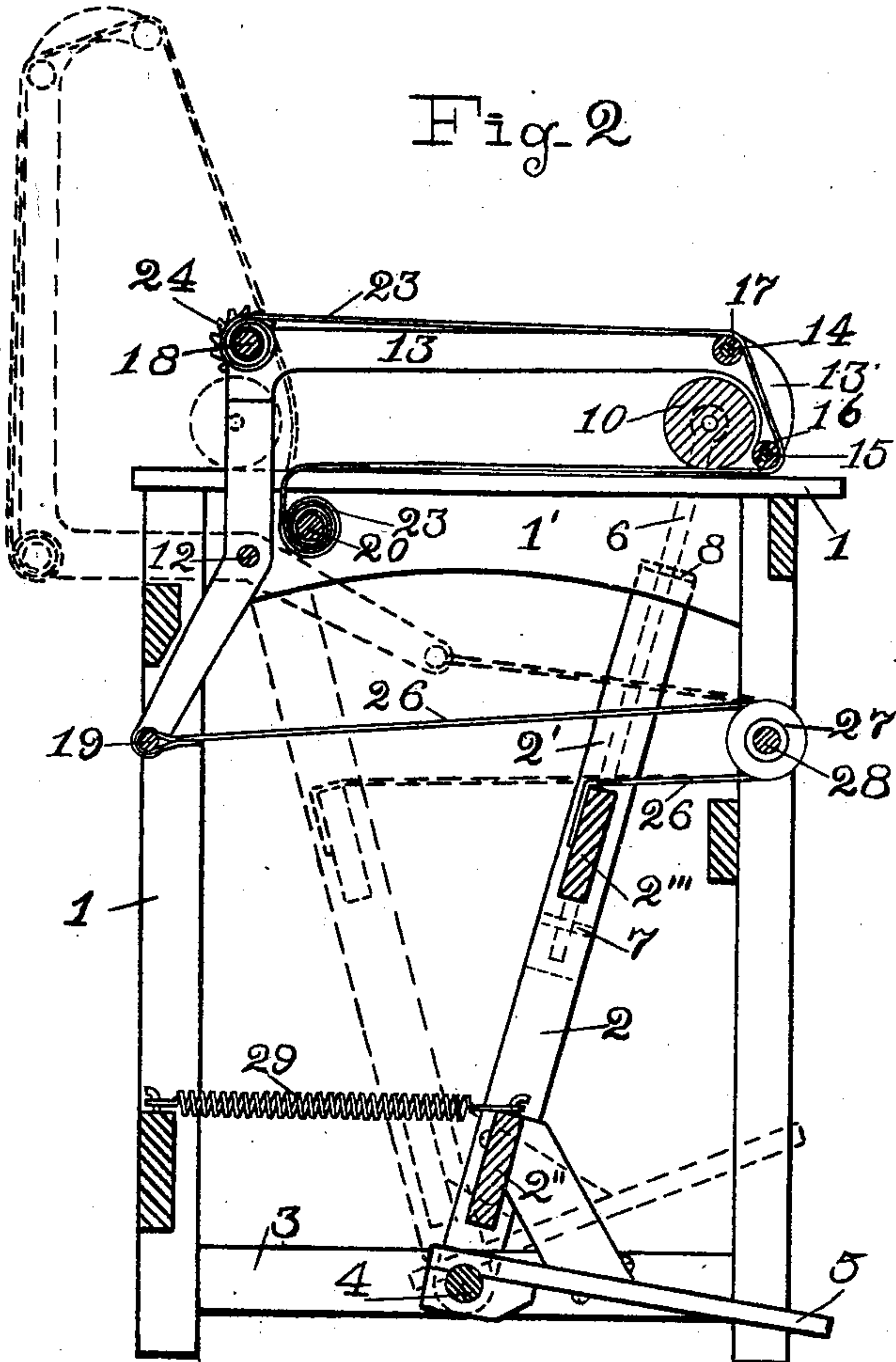
W. R. TOBIAS.

MACHINE FOR MOUNTING PHOTOGRAPHIC PRINTS, &c.

(Application filed June 14, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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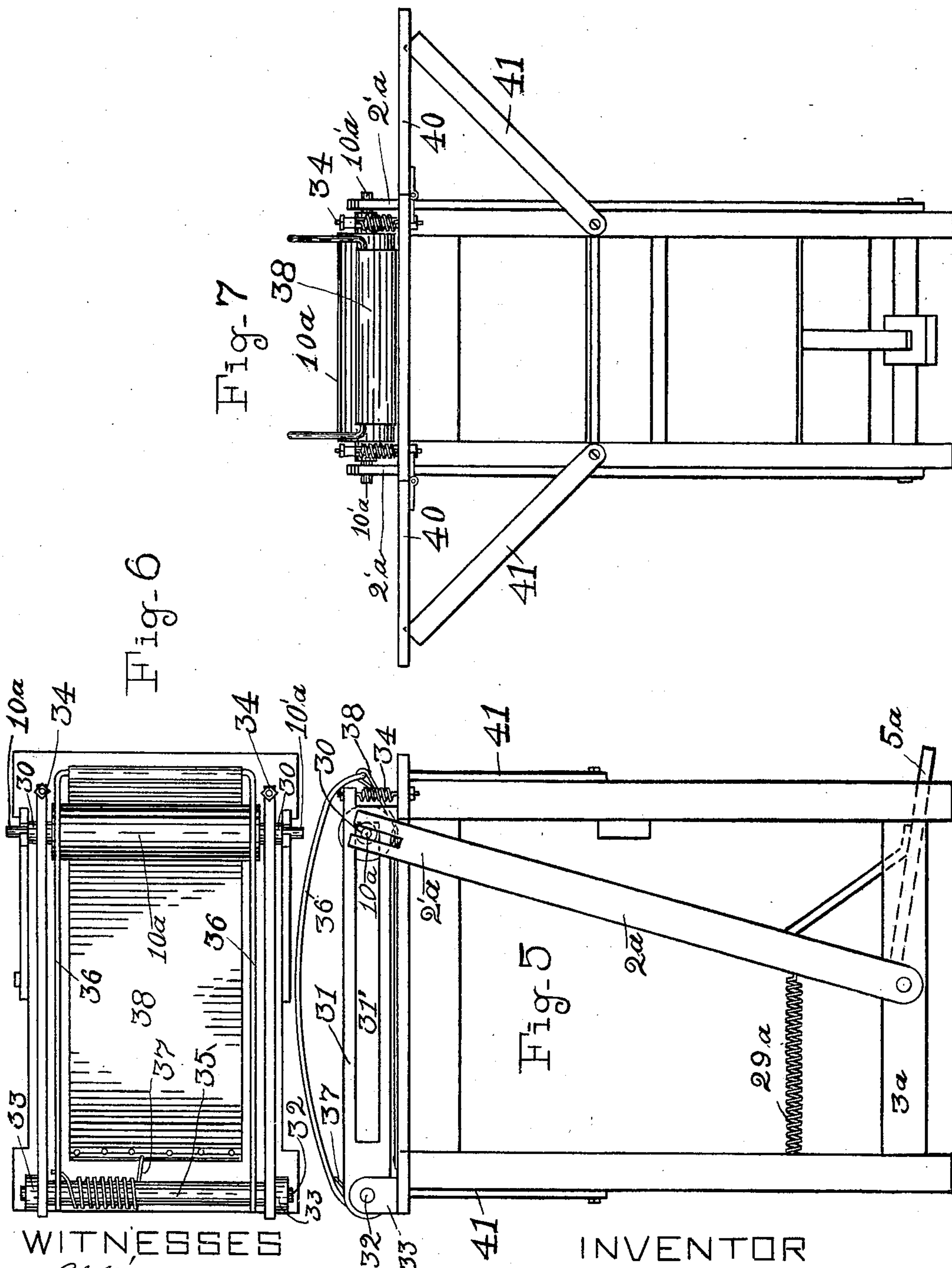
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WILLIAM ROTH TOBIAS, OF PERTH AMBOY, NEW JERSEY.

MACHINE FOR MOUNTING PHOTOGRAPHIC PRINTS, &c.

SPECIFICATION forming part of Letters Patent No. 636,474, dated November 7, 1899.

Application filed June 14, 1899. Serial No. 720,495. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROTH TOBIAS, a citizen of the United States of America, and a resident of the city of Perth Amboy, county of Middlesex, State of New Jersey, have invented certain new and useful Improvements in Machines for Mounting Photographic Prints and Such, of which the following is a specification.

My invention relates to new and useful improvements in photographers' print-mounting presses or machines for mounting photographic prints and the like upon cardboard or other mounting, the object being to provide a machine by which photographic prints and other similar articles may be attached or pasted to their mounts and rapidly and thoroughly pressed thereon with but little effort and means to avoid air-bells or abrasions in or displacement of the prints, which frequently occur while using the means heretofore provided for this purpose.

To this end my invention consists of the constructions and combinations of parts hereinafter described and illustrated, and particularly pointed out in the claims.

Referring to the drawings accompanying and forming a part of this specification, Figure 1 is a front view of a table furnished with my improvements. Fig. 2 is a sectional side view of same, taken on the dotted line A B in Fig. 1. Fig. 3 is a plan view, and Fig. 4 is a partial rear view, of Fig. 1. Fig. 5 is a side view of a table and shows a modified form of constructing and arranging some of the features of the invention. Fig. 6 is a plan view of Fig. 5. Fig. 7 is a front end view of Fig. 5 and shows adjustable leaves on each side of the table.

In the specification like reference-numerals are used to designate similar parts.

In Figs. 1, 2, 3, and 4 a stand or table 1 is shown provided with the swinging or oscillating frame 2, which consists of the arms 2' 2' and the cross-bars 2'' and 2''' and is pivoted near its lower end upon the shaft 4, supported by the lower side bars 3 3 of the table. The treadle 5 is supported at one end by the shaft 4 and connected by a brace with the cross-bar 2'' of the swinging frame. Shafts or rods 6 6 are mounted longitudinally adjustable in apertures in the brackets 7 7 and plates 8 8 upon

the frame-arms 2' 2' and are bored through near the lower ends to receive the pins 9 9 and at their upper ends are formed with eyes or suitable bearings for engaging with the axle 10' of the roller 10. Spiral springs 11 11 encircle the rods 6 6 and at their upper ends press upwardly against the plates 8 8 and at their lower ends press downwardly against the pins 9 9 on the rods, and thus exert downward pressure upon the roller 10.

Supported in the upper side bars 1' 1' of the table is a shaft 12, supporting an upper frame 13, journaled thereon. This frame 13 is composed of the side members 13' 13', connected at their front end by the shafts 14 15, having the rollers 16 17 thereon, and at the back end by the roller 18 and shaft 19. A roller 20 is journaled on and between the upper side bars 1' 1' of the table and on one end outside the side bar has a ratchet-wheel 21 fastened thereto, adapted for engagement with a pawl 22, pivoted on the side bar. Centrally on the roller 20 is fastened and wound one end of a strip of flexible absorbent material 23, preferably blotting-paper, which extends upwardly from the roller 20 and is bent and extended forwardly on the table-top and under the roller 10 and the roller 16 and then extends upwardly and backwardly over the roller 17 and to the roller 18, upon which the other end is fastened and wound. One end of the roller 18 carries a ratchet-wheel 24, and a pawl 25 on the frame 13 is adapted for engagement therewith. Fastened centrally on the bar 19 of the upper frame 13 is a flexible strip 26, which is extended forwardly and downwardly over the flanged pulley 27, journaled on the cross-bar 28, and then rearwardly and is fastened to the cross-bar 2''' of the swinging frame. A coil-spring 29 is connected at one end with the bar 2'' of the swinging frame and at the other end is fastened to the lower rear cross-bar of the table. Its purpose is to exert a backward strain on the oscillating frame 2 and acting therethrough and through the flexible strip 26 to raise the upper frame and blotting-strip from the table-top by causing it to swing on the shaft 12 and to return the said oscillating frame and the roller 10 to the starting or normal position.

Normally the treadle, oscillating, and up-

per frame are in the position shown in dotted lines in Fig. 2, and, as will be plainly seen, a large part of the top of the table is then clear and ready to receive the work.

5 The cardboard or other mounting may then be placed on the top of the table, and the photographic print, which has been previously moistened with an adhesive solution or paste, is placed upon the mount. Then
10 the treadle 5 may be depressed to cause a forward movement of the roller 10, and the blotting-strip 21 will then be engaged by the roller and the frame 13, and the blotting-strip will be brought downwardly to the position shown in full lines in Fig. 2. As the
15 roller passes over the blotter and the print and its mounting the springs 11 11 exert a downward pressure thereon sufficiently heavy to press the print tightly to place on its mount
20 and also to roll out all air-bells. The purpose of the blotting-strip is to protect the face of the print, to absorb the moisture from the exposed surfaces on the print and mount, and to prevent abrasion or dislodgment of
25 the print by the roller. When a portion of the blotting-strip becomes too moist to use, a portion may be unwound from either of the rollers 20 or 18 and a like portion taken upon the other roller. Then the overmoist
30 part may have time to dry. After the roller has traveled forward over the print the pressure may be taken from the treadle, and the roller will be forced backwardly, and the upper frame and blotting-strip will be swung
35 upwardly to the position shown in dotted lines in Fig. 2 by means of the spring 29.

In Figs. 1, 2, and 3 the roller 10 is held downwardly by the springs 11 11 and shafts 6 6, and as it travels over the work it may
40 elevate or lower to conform to the thickness of the cardboard and mounted strip, and the arm-rods 6 6 adjust longitudinally on the arms to allow the roller 10 to conform to the blotting-strip and the work on the flat top of
45 the table while on its course.

In Figs. 5, 6, and 7 the oscillating frame 2^a is pivoted on the lower side bars 3^a and is provided with the treadle 5^a and is connected with and the upper end is normally pressed
50 backwardly toward the rear of the table by the spring 29^a. The upper ends of the swinging arms 2^a 2^a are forked or slotted out about centrally, and the axle 10^a of the roller 10^a passes through the said slots. On the said
55 roller-axle, near each end of the roller, is the revolubly-supported rollers or wheels 30 30, adapted for engagement in the elongated slots 31' 31' of the side arms 31 31. The said side arms 31 31 are pivoted near their rear ends
60 on the shaft 32, supported on the table by the brackets 33 33, and the forward ends of the arms are normally held down against the table by springs 34 34. A tube or sleeve 35 is supported on the shaft 32, and secured near
65 each end thereon is a spring-frame 36. The coil-spring 37 encircles the sleeve 35, and one end engages with the table-top. The other end

presses upwardly against one arm of the spring-frame 36 and tends to rotate the sleeve and lift the said spring-frame to an upright
70 position. The flexible strip or blotter 38 is secured at its rear end to the table and extends forwardly and is fastened at the front to the cross-bar or front member of the spring-frame 36. The adjustable or drop leaves 40 40
75 are hinged to the central top leaf of the table, and the braces 41 41 41 41 are pivoted on the table-legs and adapted for engagement at their ends with notches cut into the under
80 side of the adjustable leaves, and their purpose is to support the leaves in the position shown in Fig. 7.

The operation of the device when constructed after the modified form shown in Figs. 5, 6, and 7 is thus: When the treadle
85 5^a is depressed, the frame 2^a swings forwardly at its upper end and carries with it the roller 10^a, which is adapted to travel forwardly while in engagement with the side arms 31 31 and to pull the blotter 38 and its spring-frame 36
90 downwardly. The roller then passes over the blotter and the prints and mounts which were previously placed together on the table, and as the side arms 31 31 are adapted for putting the downward pressure on the roller
95 and have the springs secured to the front end and connected with the table it will be plainly seen that as the roller moving forwardly engages with the raised surface on the blotter, caused by the thickness of the mount or
100 work, the side arms 31 31 will be pressed upwardly at their forward end to allow the roller to travel over the work. The springs 34 34 may of course be adjusted to any desired tension and caused to exert through the side bars
105 the desired downward pressure on the roller. When the treadle is released, the swinging frame will be caused to swing backwardly by the spring 29^a and the blotter 38, and its frame will be lifted upwardly from the work.
110

Having thus described my invention sufficiently clear to enable one skilled in the art to make and use same, what I claim is—

1. In a press for mounting photographic prints the combination of a table and an oscillating frame carrying a roller, a strip of flexible material secured on the table and means for oscillating the roller-frame and causing the roller to travel on the flexible strip and to be pressed against the work, substantially as
115 described.
120

2. In a press for mounting photographic prints the combination of a table and a swinging frame carrying a roller, springs connected with the roller and the swinging frame, a strip
125 of flexible material secured on the table and means for swinging the frame and causing the roller to travel on the flexible strip and to be pressed against the work substantially as described.
130

3. In a photoprint-mounting machine the combination of a table, a roller mounted on arms adapted to swing and carry the roller over the surface of the table, a flexible strip

of material connected to the table and secured on a frame pivoted on the table and adapted to be swung to position for engaging with the work on the table, and to be swung upwardly therefrom to an upright position, means for swinging the arms and oscillating the roller and for swinging the strip-carrying frame substantially as described.

4. In a roller-press for mounting photographic prints &c. the combination of a table having a flat top, a strip of absorbent material fastened at one end to the table and at the opposite end to an adjustable frame, a roller, mechanism for causing the roller to travel forwardly and back over the absorbent strip and means for pressing the roller against the strip while on its course substantially and for the purpose set forth.

5. In a roller-press for securing together a plurality of flat articles, the combination of a table having a flat surface, a roller journaled on a moving member, a flexible strip adapted to be placed over the articles to be fastened together to protect them from being displaced or injured by the roller, mechanism for automatically oscillating the roller-bearing member and placing the strip upon and removing it from the said articles substantially and for the purpose defined.

6. In a photographic-print-mounting press the combination of a table, a roller, a swinging frame pivoted to the table and carrying shafts supported longitudinally adjustable thereon and engaging with the roller, springs connected with the swinging frame and the shafts and adapted to press the shafts longitudinally on the frame and acting through the shafts to cause the roller to be pressed toward the table, and means for oscillating the swinging frame and causing the roller to travel forward and backwardly on the table substantially and for the purpose set forth.

7. In a press the combination of a table having a flat surface for receiving the work and a roller journaled on a spring-compressed expansible and oscillating frame, a flexible strip mounted on a frame pivoted on the table, the strip adapted for engagement between the roller and the work, means for swinging the strip to and from the work, a treadle for oscillating the roller-bearing frame in one direction and means adapted to oscillate the frame in the opposite direction, substantially as described.

8. In a photographer's mounting-press the combination of a table, an oscillating frame

pivoted at its lower end on the table and having a roller mounted on the upper portion, a flexible strip having one end secured on a roller mounted on the table, and the other end secured on a roller mounted on the rear of a swinging strip-carrying frame pivoted on the table, the strip-carrying frame having cross-bars adapted for supporting the strip in position at the front end and means for swinging the strip-carrying frame and for oscillating the roller-bearing frame substantially as shown.

9. In a press for securing sheets of paper or the like upon cardboard or other mounting, the combination of a table and a roller-supporting and oscillating frame mounted thereon; a flexible strip adapted for overlying the work and secured to the table and to a swinging frame pivoted to the table; a flexible device connecting the strip-frame and the roller-frame and arranged for transmitting motion from the roller-frame to the strip-frame; means for oscillating the roller-frame to carry the roller forwardly and back over the strip and work.

10. In a press for mounting photographic prints the combination of a table and a swinging frame carrying a roller, a strip of flexible material secured on the table, means for swinging the frame and causing the roller to travel on the strip and to press it against the work and means for shifting and holding the flexible strip alternately in different positions to bring different sections thereof to the work, substantially as described.

11. In a photographer's mounting-press the combination of a table, an oscillating frame pivoted thereon, shafts mounted on bearings, on the oscillating frame, a roller journaled on the shafts, springs connected with the roller, a flexible strip on the table adapted for overlying the papers or articles to be mounted the roller arranged to be passed over the strip and the members to be mounted, a treadle on the oscillating frame adapted for oscillating the frame and means for shifting and holding the flexible strip alternately in different positions to bring different sections thereof to the work substantially and as described.

Signed by me at Perth Amboy, New Jersey, this 10th day of June, 1899.

WILLIAM ROTH TOBIAS.

Witnesses:

JOHN J. DEITCHE,
JOSHUA B. FORCE.