

O. WALTHER.
FABRIC MULTICOLOR PRINTING PRESS.
APPLICATION FILED OCT. 6, 1908.

927,616.

Patented July 13, 1909.

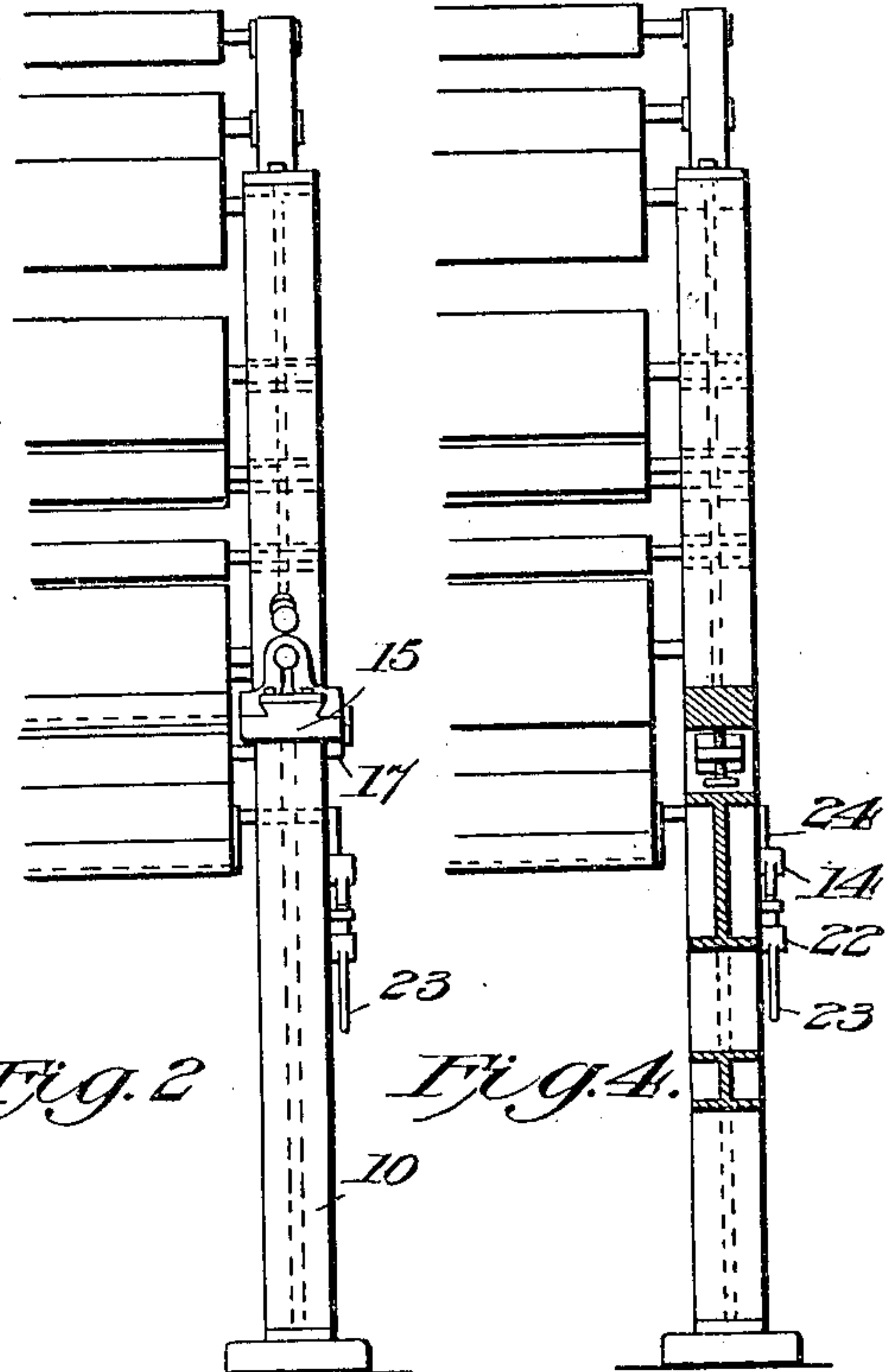
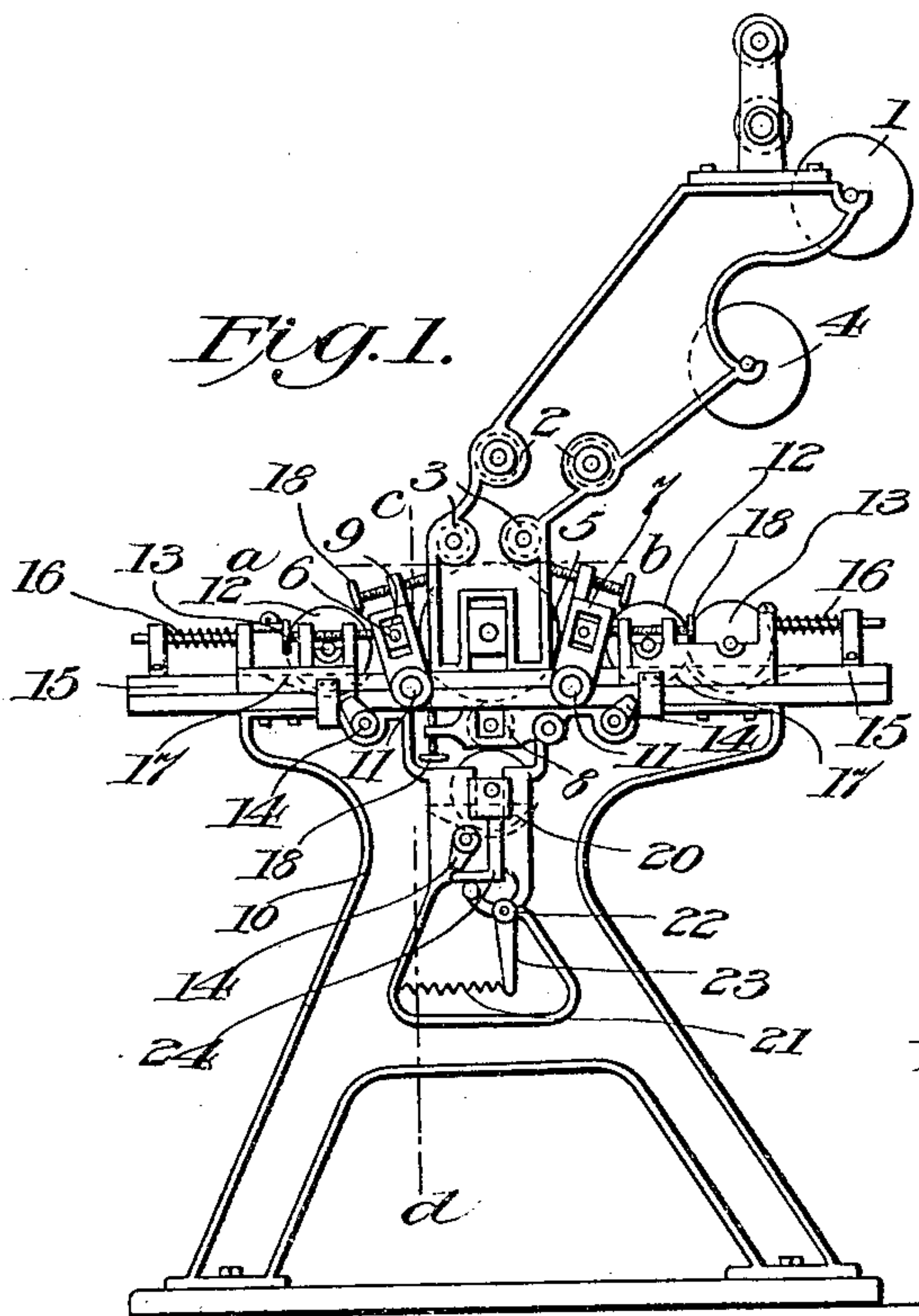


Fig. 3.

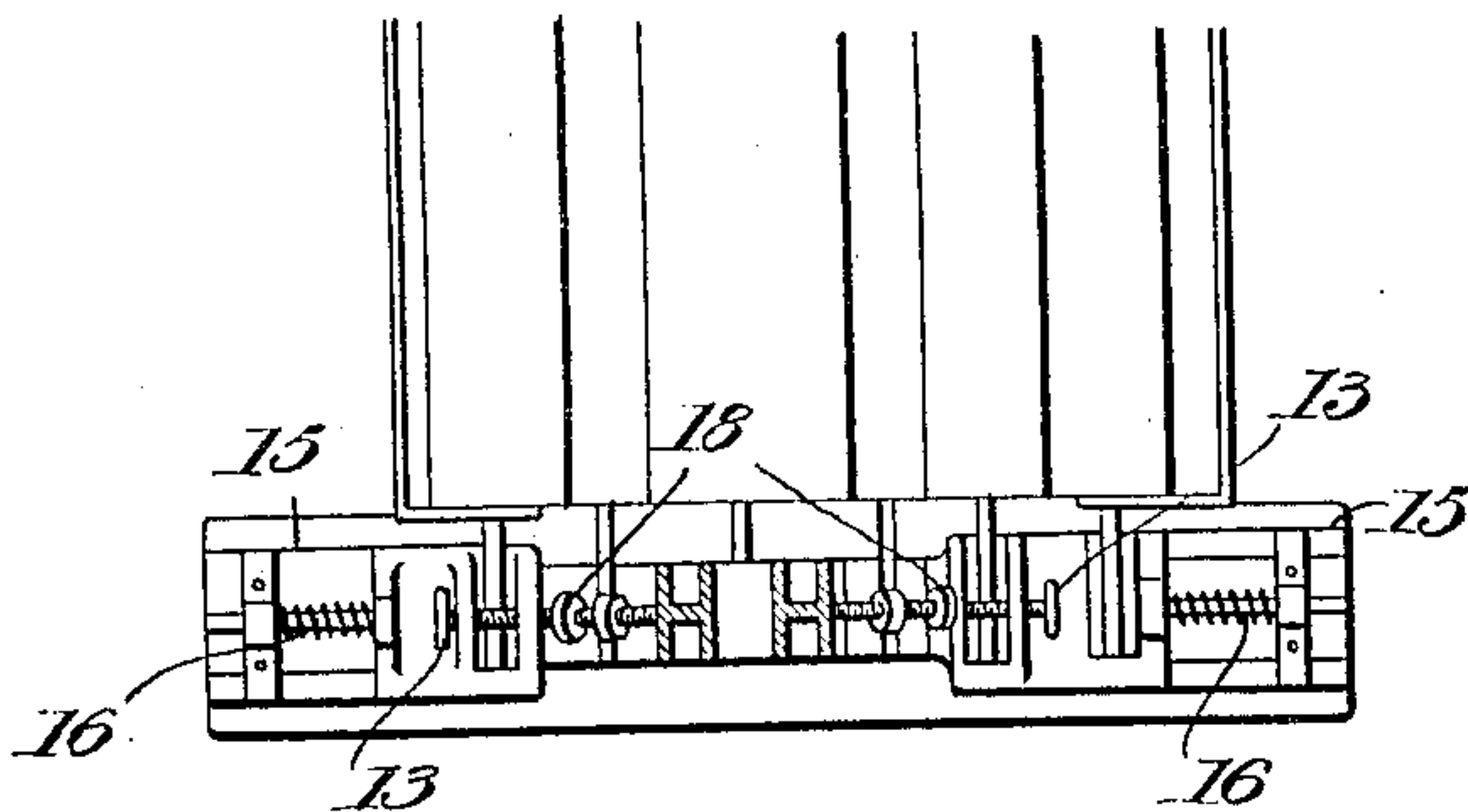
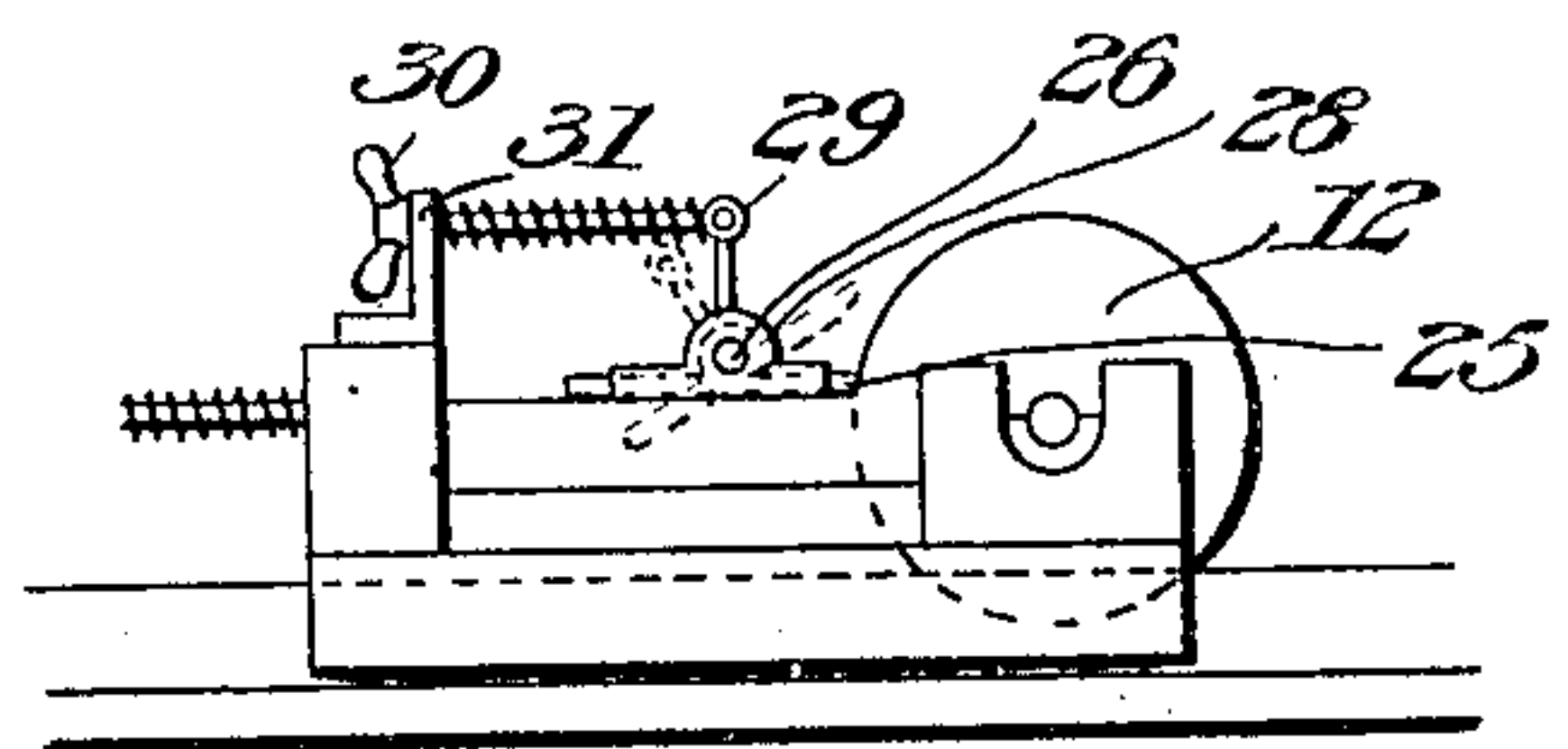


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

OSWIN WALTHER, OF RADEBEUL, GERMANY.

FABRIC MULTICOLOR-PRINTING PRESS.

No. 927,616.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed October 6, 1908. Serial No. 456,465.

To all whom it may concern:

Be it known that I, OSWIN WALTHER, a subject of the German Emperor, residing at Radebeul, in Saxony, Germany, have invented certain new and useful Improvements in Fabric Multicolor-Printing Presses, of which the following is a specification.

This invention relates to a roller printing machine for multi-color printing on textile fabrics, and comprises improved means for easily and rapidly moving the rollers to and from the fabric during the printing operation. For this purpose the printing rollers are so supported by their bearings that when the inking rollers, carried in the known manner by slides, are removed from them the printing rollers are removed by gravity from the web.

A construction embodying the invention in a machine with relief printing rollers is shown in the annexed drawings in which:—

Figure 1. is a side elevation, Fig. 2. a partial front view. Fig. 3. is a plan view of a section on the line *a—b*, Fig. 4 a longitudinal section on the line *c—d* on Fig. 1, and Fig. 5. shows the arrangement and working of the strickle plate or bar.

The rollers marked 1. 2. 3 and 4 are guide rollers over which the web passes to the impression cylinder 5. The printing rollers 6. 7 and 8. abut against the cylinder 5 at the sides and bottom respectively. The lateral printing rollers 6 and 7. are carried by arms 9 pivoted at 11, 11 to the frame 10, so that when the inking rollers 12 are removed from the printing rollers 6 and 7 the arms 9 carrying the latter rock, by gravity, until they meet abutment screws 13. The inking rollers are removed from the printing rollers by means of cams 14, actuatable by lever or hand wheel, and adapted to displace the feet 17 of the inking roller bearings in guides 15, against the action of springs 16. When the springs 16 move the inking and printing rollers, the printing rollers are stopped at the proper distance from the impression roller, by abutment screws 18 which are carried by the arms 9 and make contact with the frame 10.

The inking roller 20 and printing roller 8 underneath the impression roller are moved in a similar manner, but for simplicity they are displaced by means of a double-armed lever 23 pivoted at 22 and connected by a spring 21 to the frame. The foot 24 of the inking roller bearing rests upon the lever 23.

The plate 25 (Fig. 5) is rotatable about its longitudinal axis 26, and the rib 28 thereof is engaged by a fork 29, which can be adjusted by means of a nut 30 and spring 31 so that by turning the nut the edge of the plate can be adjusted relatively to the inking roller 12.

The rollers may be actuated by means of gear wheels.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

1. In a roller printing press for multi-color printing on textile fabric the combination of an impression cylinder, printing rollers, rocking arms carrying said printing rollers having their pivotal centers so placed that the rollers tend to fall away from the impression cylinder by gravity, and means for inking said printing rollers movable to and from the same and adapted when in operative contact, to hold said printing rollers in printing position.

2. In a roller printing press for multi-color printing on textile fabric the combination of an impression cylinder, printing rollers, rocking arms carrying said printing rollers having their pivotal centers so placed that the rollers tend to fall away from the impression cylinder by gravity, inking trains for said printing rollers, cams for removing the inking trains from the printing rollers and springs tending to move the inking trains into contact with said rollers and thereby moving the printing rollers into printing position.

3. In a roller printing press for multi-color printing on textile fabric the combination of an impression cylinder, printing rollers, rocking arms carrying said printing rollers having their pivotal centers so placed that the rollers tend to fall away from the impression cylinder by gravity, and means for inking said printing rollers movable to and from the same and adapted when in operative contact, to hold said printing rollers in printing position, together with abutments for limiting the displacement of said printing rollers in both directions.

In witness whereof I have signed this specification in the presence of two witnesses.

OSWIN WALTHER.

Witnesses:

WILHELM SCHMIDL,
PAUL ARRAS.