

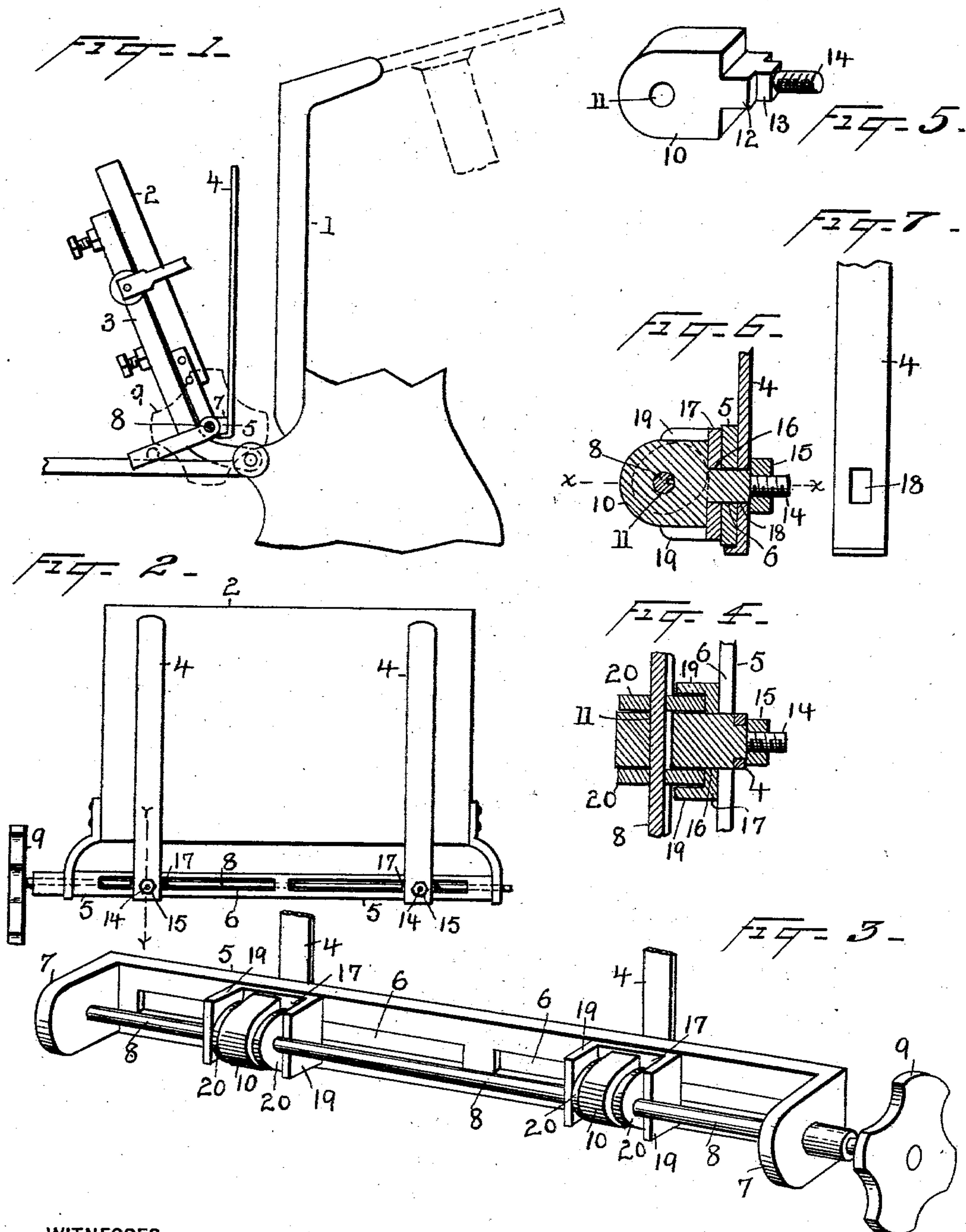
No. 629,089.

Patented July 18, 1899.

A. OLMESDAHL.
GRIPPER FOR PRINTING PRESSES.

(Application filed Apr. 18, 1899.)

(No Model.)



WITNESSES:

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AUGUST OLMESDAHL, OF NEW YORK, N. Y., ASSIGNOR TO WILLIAM OLMESDAHL, OF SAME PLACE.

GRIPPER FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 629,089, dated July 18, 1899.

Application filed April 18, 1899. Serial No. 713,470. (No model.)

To all whom it may concern:

Be it known that I, AUGUST OLMESDAHL, a citizen of the United States of America, and a resident of New York city, in the county and State of New York, have invented certain new and useful Improvements in Grippers for Printing-Presses, of which the following is a specification.

This invention relates to printing-presses, or, more particularly, to the grippers and means for securing them in an adjusted position. Usually the grippers are secured to their supporting-rod in an adjusted position by means of bolts the nuts of which are required to be loosened to admit of the shifting of the grippers and again tightened after the grippers have been adjusted to hold them in the desired position. The space is limited, and the securing-nuts cannot be conveniently reached, and considerable vexation and annoyance generally attend each adjustment. The objects of the present invention are to overcome these difficulties and to provide for a quick and ready adjustment of the grippers and to obviate the tightening and loosening of clamp-nuts. These objects are attained by the mechanism hereinafter more particularly described and claimed.

The improvement, briefly stated, consists of a rod journaled parallel with the bar supporting the grippers, a slide adjustable on said bar, a shouldered head having the rod passing therethrough and carrying the grippers, and cams slidable upon the rod and turnable therewith and held against opposite sides of the head by confining portions of the slide and serving to loosen and tighten the head with reference to the said bar upon rotation of the rod in one or the other direction.

The improvement also consists of the novel features, details of construction, and the combinations of parts, which hereinafter will be more fully described, illustrated, and finally set forth in the appended claims.

In the drawings, Figure 1 is a fragmentary view in elevation of a printing-press of the oscillating type, showing the application of the invention. Fig. 2 is a front view of the platen, grippers, and their mountings, showing the relative disposition of the parts. Fig.

3 is a detail perspective view of the gripper-supporting bar, the grippers, and their supporting and securing means. Fig. 4 is a detail longitudinal section on the line X X of Fig. 6. Fig. 5 is a detail perspective view of the head for supporting a gripper. Fig. 6 is a section on the line Y Y of Fig. 2. Fig. 7 is a detail view of a gripper.

Corresponding and like parts are referred to and indicated in all the views of the drawings and in the following description by the same reference characters.

The bed 1, platen 2, oscillating frame 3, and grippers 4 are well-known parts of a printing-press of the oscillating variety. The gripper-supporting bar 5 has longitudinal slots 6 and bent ends 7, the latter being apertured to receive the rod 8, provided at one end with a handle 9, which, as shown, is a wheel. The heads 10 for supporting the grippers are shouldered and formed with openings 11 for the passage of the rod 8. Each head 10 has shouldered portions 12 and 13, disposed at a right angle to each other, the part 12 entering the horizontal slot 16 of the slide 17 and the part 13 entering the vertical slot 18 of a gripper 4. A threaded shank and nut secure the head 10 to the bar 5, the shank projecting beyond the bar 5 and the nut 15 being mounted upon the said shank 14. The shouldered part 12 passes through the slots 6 and 16 and has ample play therein to admit of the gripper being moved freely after the nut 15 has been tightened or normally positioned and when the head is released from the clamping means.

A slide 17 is provided for each gripper and head and coöperates with the securing means therefor to hold their elements in fixed relation. Ears or flanges 19 at the terminals of the slide and forming a part thereof engage with the outer faces of cams 20 and prevent their spreading after the parts have been assembled. The slides are of approximately box form, and one is mounted upon each of the heads, the latter and the slides moving together.

A pair of cams 20 are mounted upon the rod 8 for each head and are disposed one on each side thereof. The cams are adapted to

turn with the rod 8 and are slidable thereon, with the heads, to any required adjusted position. As shown, a rib projects inward from each cam and enters a groove formed lengthwise of the rod 8 and constitutes the interlocking means between them. The cams bear against the slides and effect a binding of the parts and secure them to the bar 5 in an adjusted position.

The parts being assembled about as shown are held in working relation by means of the threaded shanks 14 and nuts 15, the latter in no sense creating a binding action. When the rod 8 is turned in one direction, the cams 20 are thrown away from the slides and the latter, the heads, the grippers, and the cams are liberated and can be slid upon the rod to any adjusted position within the range of movement allowed by the slots 6. After being adjusted the parts are secured by turning the rod 8 in an opposite direction, which brings the cams into forcible engagement with the slides and binds them and the heads bearing the grippers to the bar 5. It will thus be seen that the adjustment of the grippers can be easily and quickly effected.

The invention can be applied to any make or type of press having grippers of substantially the form shown, and in adapting the invention to a particular design of press it is to be understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from or sacrificing any of the advantages thereof.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a printing-press, the combination with the platen and a gripper coöperating therewith, of a bar, a rod journaled with reference to the bar and having the gripper slidable thereon, and a cam rotatable with and movable on the rod and adapted to secure the gripper in an adjusted position, substantially as set forth.

2. In a printing-press, the combination with the platen and a gripper coöperating therewith, of a bar forming a support for the gripper, a rod rotatably mounted, a head

bearing the gripper and adjustable on the bar and rod, and a cam for securing the head in an adjusted position and movable therewith and actuated by means of the said rod, substantially as described.

3. In a printing-press, the combination with the platen and a gripper coöperating therewith, of a bar forming a support for the gripper, a rod rotatably mounted, a head bearing the gripper and adjustable on the bar and rod, cams disposed upon opposite sides of the head and mounted on the rod and actuated thereby, and a slide movable with the head and adapted to hold the cams in fixed relation, substantially as specified.

4. In a device of the character described, the combination with a bar, a gripper, and a rotatable rod, of a head slidable upon the bar and rod and bearing the said gripper and a cam mounted on the rod and rotatable therewith and adapted to secure the head and gripper in an adjusted position, substantially as specified.

5. In a device of the character described, the combination with a slotted bar, a gripper, and a rotatable rod, of a head having a portion operating in the slot of the bar and bearing the said gripper, a cam placed against each side of the head and mounted upon the rod and actuated thereby, and a slide placed upon the head and holding the cams in fixed relation, substantially as described.

6. In combination a slotted bar having bent ends, a rod journaled in the bent ends and having a handle at one end, heads having right-angularly-disposed shouldered portions and threaded shanks, slides mounted upon one of the shouldered portions, grippers placed upon the other, nuts applied to the threaded shanks and holding the grippers in place, and cams held against the sides of the heads by the slides and mounted upon the rod to turn therewith and slide thereon, substantially as and for the purpose set forth.

Signed by me, at New York city, this 7th day of April, 1899.

AUGUST OLMESDAHL.

Witnesses:

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