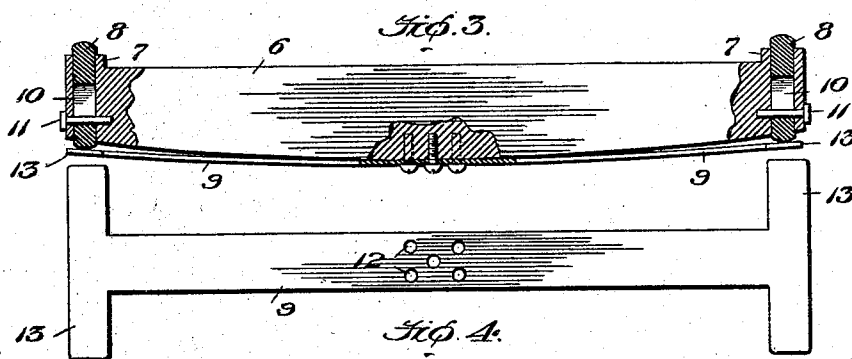
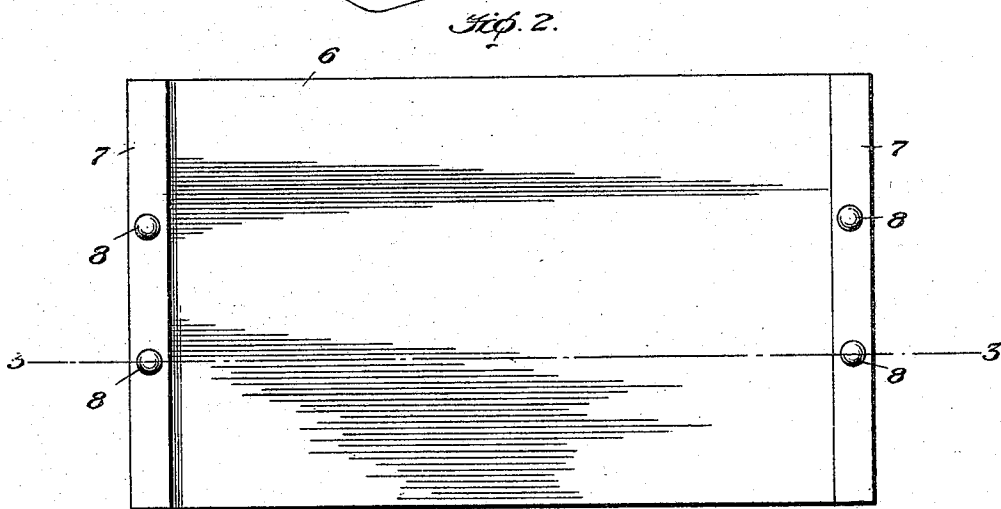
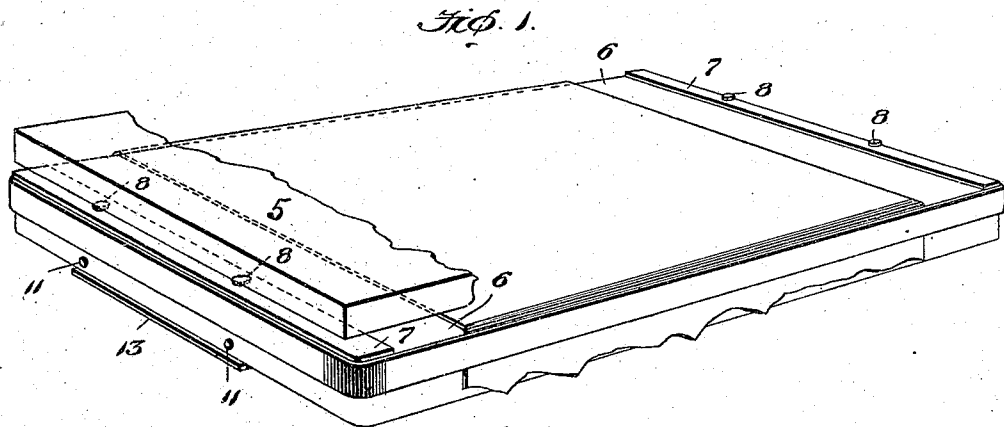


T. MARTIN.
ATTACHMENT FOR PRINTING PRESSES.
APPLICATION FILED JULY 27, 1908.

932,797.

Patented Aug. 31, 1909.



Inventor

Thomas Martin.

Witnesses:

Edwin L. Bradford
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384

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UNITED STATES PATENT OFFICE.

THOMAS MARTIN, OF BIRMINGHAM, ALABAMA.

ATTACHMENT FOR PRINTING-PRESSES.

932,797.

Specification of Letters Patent. Patented Aug. 31, 1909.

Application filed July 27, 1908. Serial No. 445,601.

To all whom it may concern:

Be it known that I, THOMAS MARTIN, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented new and useful Improvements in Attachments for Printing-Presses, of which the following is a specification.

My invention relates to an improvement in platens for platen printing presses, its object being to provide bearing surfaces at each side of the platen which receive the bed or type carrier and level it, bringing it and the platen into the accurate parallelism necessary to insure the taking of a perfect impression and to prevent wear of type due to their tendency to drag when there is any relative movement between bed and platen, other than at right angles, during the taking of an impression. Further, by thus providing the long even contacts between bed and platen at each side, I secure a uniform pressure across the whole face of the platen irrespective of the manner in which the type may be set in the bed and of any lost motion due to wear in the bearings. This arrangement also prevents any tipping back of the platen when engaging a heavy form and, by causing the bed to engage the platen with uniform pressure, I effect a considerable saving of time in the make-ready for the tympan.

A further object of my invention is to provide yielding means which project above the bearings and have a tendency to adjust the platen and bed before the latter engages the solid bearings, thus reducing the jar of contact between these parts and enabling a more rapid operation of the press.

My invention will be more fully understood by reference to the drawings, in which:—

Figure 1 is a perspective view of a platen provided with my improved raised bearings. Fig. 2 is a plan view of a platen formed with the raised bearings integral therewith and provided with spring buffer pins. Fig. 3 is a side view of Fig. 2, broken away at the marginal edges along the line 5—5. Fig. 4 is a plan view of the spring which engages the buffer pins.

Similar reference numerals refer to similar parts throughout the drawings.

As illustrated in the accompanying drawings I form the platen 6 with raised bearing

shoulders 7 at each end thereof which serve as raised bearings. The height of the shoulders is not sufficient to interfere with the making of the impression as the bed 5 and platen engage, but is calculated to insure an engagement between such parts which brings them into parallelism before the making of the impression, should either have been displaced or out of line in any manner.

I provide two or more vertical openings extending downwardly through each raised bearing 7 and I provide in each a buffer pin 8 which projects above and below the platen, its lower end being engaged by a leaf spring 9 and pressed upwardly to hold its upper end slightly above the top of the raised bearing. I provide a slot 10 in each of the pins and lock them in position by a pin 11, which is forced into the end of the platen and through the opening 10. The leaf spring 9 is provided with suitable holes 12 for the reception of the screws which fasten it to the bottom of the platen and the ends 13 of the spring are widened so as to engage the two buffer pins disposed at each end of the platen. These pins will engage the bed first and thus serve as a yielding means to start the adjustment of bed and platen which is completed by the contact of the bed with the bearing.

In operation, as the bed swings downwardly to print the impression on the sheet of paper lying on the tympan 14, which is held in position in the usual manner by clamps 15, the side edges of the bed or the surfaces thereof which would be engaged by the rollers (not shown) of the press will engage the pins 8 and then the bearings 7 and will be thereby brought into the necessary parallelism with the platen so that, when forced inwardly to make the impression, it will engage the whole surface of the paper with uniform pressure thus insuring a perfect copy irrespective of any lost motion on the press due to wear in its joints which work loose from long continued service. Since the pressure of the type in the bed over the whole tympan will be uniform, it will not be necessary to patch the make-ready except in case different faced type is used in the same form, much saving in time resulting from this as where the type have the same face the make-ready requires no more time than that necessary to select the required number of sheets for the type used.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a platen printing press, the combination with a platen having raised bearing surfaces at each side, of cushioning means which project above said bearing surfaces, and a bed having surfaces which engage said bearing surfaces as and for the purposes described.

2. A platen for printing presses having raised bearing surfaces at each side of the tympan, and spring-pressed buffer pins which project above said bearing surfaces, in combination with a bed adapted to engage said surfaces for the purposes described before completing an impression.

3. A platen for printing presses having raised bearing surfaces at the side edges thereof, of buffer pins which move in openings at each end of the platen and project above the same, means to retain said buffer pins in said openings, and spring means which press against the lower end of said pins, substantially as described.

4. The combination with a platen, of

raised bearing surfaces at each side thereof, buffer pins which project normally above said surfaces, a leaf spring secured to the under side of said platen provided with enlarged ends which engage the lower ends of the buffer pins at each side of the platen, substantially as described.

5. The combination in a platen press, of a platen and its cooperating type bed, of means for adjusting and holding said bed and platen in proper relative position during the making of an impression, said means comprising yielding buffers and solid bearings, said buffers and bearings being so positioned as to present first a yielding and then a rigid engagement between the platen and bed distinct from the engagement of the type in the bed with the platen.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS MARTIN.

Witnesses:

NOMIE WELSH,
ANNIE L. PEACE.