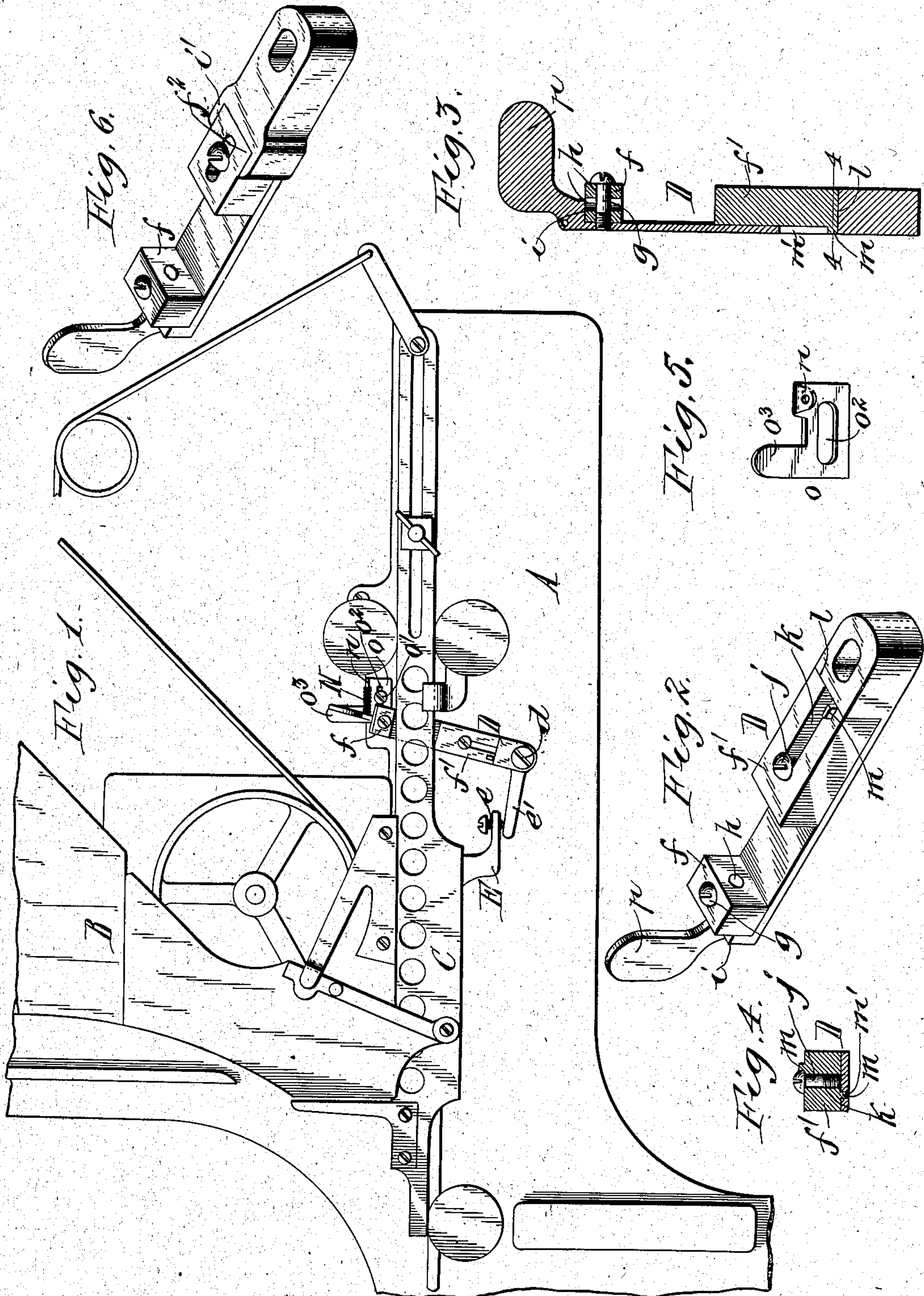


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ASSEMBLER SLIDE BRAKE.
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ASSEMBLER-SLIDE BRAKE.

No. 815,651.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LEE F. SMYTH, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Assembler-Slide Brakes for Linotype-Machines, of which the following is a specification.

This invention relates to a brake designed more especially for restraining the forward movement of the assembler-slide of a linotype-machine while the line of matrices is being assembled in the stick. As ordinarily constructed such brakes consist of a rock arm or lever carrying brake lugs or jaws arranged to grip the assembler-slide at diagonally opposite points, so that when the brake stands perpendicular to the slide it releases the same, while when swung at an angle to that position it firmly grips the slide and prevents its displacement. To render the brake reliable, its gripping points or edges must be comparatively sharp, and when the bearing-points of the ordinary brake become dull or blunt the brake loses its efficiency and must be replaced by a new one.

One of the objects of my invention is to provide the brake with a plurality of bearing points or edges which can be brought into use one at a time, thus enabling a worn point or edge to be readily replaced by a sharp one and correspondingly lengthening the life of the brake.

Further objects of the invention are to provide the brake with means for facilitating its manual release and to improve the construction of the means for regulating the tension of the brake-spring.

In the accompanying drawings, Figure 1 is a fragmentary front elevation of the assembling mechanism of a linotype-machine embodying the improved brake. Fig. 2 is a detached perspective view of the brake. Fig. 3 is an irregular longitudinal section thereof. Fig. 4 is a cross-section in line 4-4, Fig. 3. Fig. 5 is a detail view of the adjustable bracket to which the brake-spring is attached. Fig. 6 is a perspective view of a modified construction of the brake.

Similar letters of reference indicate corresponding parts throughout the several views.

A is the frame which supports the assembling mechanism of the linotype-machine, B the casing containing the customary matrix-

chutes, (not shown,) and C the assembler-slide which receives the matrices from the chutes. This slide may be of ordinary construction and is guided and reciprocated by any suitable or customary means—for example, that employed in the well-known Mergenthaler machines.

D indicates the brake which coöperates with the slide and which is mounted on the usual stud *d*, projecting from the frame A below the slide C, so as to be capable of rocking lengthwise of the slide.

E is the customary actuating member for automatically releasing the brake preparatory to advancing the slide for delivering the line of matrices to the elevator. In the construction shown this member carries a set-screw *e*, which bears upon the usual rock-arm *e'* of the brake.

The body or main arm of the brake is provided above and below the assembler-slide with brake blocks or shoes *f f'*, which are adapted to bear at diagonally opposite points or corners against the upper and lower edges of the slide, as shown in Fig. 1. The blocks have sharp corners which form the gripping edges of the brake, and one or both of the blocks are rotatably or reversibly secured to the brake-body, so that when one set of corners become worn the position of the blocks can be changed to present a new or sharp set to the slide. In the preferred construction shown in the drawings the upper block *f* is secured to the body of the brake by a screw *g* or similar fastening member adapted to pass through either of two holes *h h*, which extend through the block at right angles to each other. By this construction when a corner of the upper block becomes dull from wear it is readily replaced by a new one by simply loosening the fastening-screw sufficiently to release the block from the brake-body, giving the block a quarter-turn and again securing it in place. When the last-named corner becomes unserviceable, the block is given another quarter-turn, and so on until the four corners at the same end of the block become worn. By then reversing the block end for end the remaining four sharp corners may be successively brought into use in the manner above described. This upper reversible block or shoe thus furnishes eight different gripping edges or corners instead of the single edge afforded by the upper lug or jaw of the assem-

bler-slide brake heretofore used. In order to prevent swiveling or displacement of this block when the same has a single fastening-screw, as shown, the upper end of the brake-body is provided with a stop-flange *i*, against which the upper side of the block abuts.

The lower brake-block *f'* is reversibly secured to the front side of the brake-body, preferably by a screw *j* passing through a longitudinal slot *k* of the block. When the active upper corner of this block becomes worn, the opposite sharp corner is brought into position to replace the worn one by simply releasing the block and reversing it. When both corners of this lower block become worn, they may be resharpened by removing the block, filing its front end, and replacing the block. The slot of the block permits the same to be adjusted toward the upper block to compensate for the removed stock. In order to prevent swiveling or turning of the slotted block when its lower end is out of contact with the shoulder *l* near the lower end of the brake-body, said block is provided on its front and rear sides with stop-lugs *m m*, located on opposite sides of its slot. One or the other of these lugs projects into a longitudinal slot *m'* in the brake-body, according to the position of the block, as shown in Figs. 3 and 4. These stop-lugs while preventing lateral displacement of the block permit its adjustment relative to the upper block.

While greatly prolonging the life of the brake, the improvement has the further advantage that when the brake is once attached to the machine it need not be removed, as the adjustment and change of position of the blocks can be readily effected without disturbing the brake-body.

N is the customary spring for yieldingly holding the brake in engagement with the assembler-slide. One end of this spring is secured to the upper end of the brake, while its opposite end is attached to an ear *n*, projecting forwardly from a bracket or plate *o*. This bracket is adjustably secured to the frame *A* by a set-screw *o'*, passing through a horizontal slot *o²* in the bracket, or by other suitable means, so that upon loosening the screw the bracket can be adjusted to regulate the tension of the spring *N*, as required. The bracket is preferably provided with an upwardly-extending lug or finger-piece *o³* for conveniently shifting it when loosened.

As shown in the drawings, the brake may be provided at its upper end with a forwardly-projecting finger-piece *p*, by which it can be conveniently released by hand. If desired, other means may be employed for preventing the slotted block from swiveling on its fastening-screw. For example, the raised lower portion of the brake-body may be provided at both sides with stop-lugs *i'*, which overlap

the adjacent sides of the slotted block *f²*, as shown in Fig. 6.

While my invention is herein shown and described in connection with the assembler-slide of a linotype-machine, the same may obviously be used for other purposes.

I claim as my invention—

1. A brake having a shoe or gripping member adapted to engage one side of a part to be restrained, a block or shoe provided with a plurality of gripping edges adapted to engage the opposite side of said part, and means for securing said block in different positions, substantially as set forth.

2. A brake having a shoe or gripping member adapted to engage one side of a part to be restrained, a reversible block or shoe provided on different portions thereof with gripping edges adapted to engage the opposite side of said part, and means for securing said shoe in place, substantially as set forth.

3. A brake comprising a body having a shoe or gripping member adapted to engage one side of a part to be restrained, a block or shoe having a plurality of gripping-surfaces adapted to engage the opposite side of said part, a fastening member for said block passing through the same, and a stop for preventing turning of said block on its fastening means, substantially as set forth.

4. A brake comprising a body provided with a stop-flange, a block or shoe abutting against said flange and having a plurality of gripping edges adapted to engage one side of a part to be restrained, fastening means for said block, and a second gripping member also mounted on the brake-body and adapted to engage the opposite side of said part, substantially as set forth.

5. A brake comprising a body having a shoe or gripping member adapted to engage one side of a part to be restrained, a block or shoe having a plurality of gripping edges adapted to engage the opposite side of said part and provided with screw-holes passing through different sides of the block, and a fastening-screw adapted to pass through either of said holes into the brake-body, substantially as set forth.

6. A brake comprising a body having a shoe or gripping member adapted to engage one side of a part to be restrained, a block adjustable relatively to said shoe and having a plurality of gripping edges adapted to engage the opposite side of said part, and means for securing said block in different positions, substantially as set forth.

7. A brake comprising a body having a longitudinal slot, spaced shoes or blocks mounted on the body and adapted to engage opposite sides of a part to be restrained, one of said blocks being reversible and having a longitudinal slot and provided on opposite

sides with stop-lugs either of which is adapted to engage the slot of the brake-body, and a fastening member passing through the slot of the reversible block into the brake-body, substantially as set forth.

5 8. An assembler-slide brake carrying spaced gripping shoes or blocks and provided at its upper end with a forwardly-extending finger-piece, substantially as set forth.

10 9. An assembler-slide brake, comprising a body having gripping edges, a bracket hav-

ing a longitudinal slot and a finger-piece, a set-screw passing through said slot and a spring connecting said body with the bracket, substantially as set forth.

Witness my hand this 25th day of March, 1905.

LEE F. SMYTH.

Witnesses:

C. F. GEYER,
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