

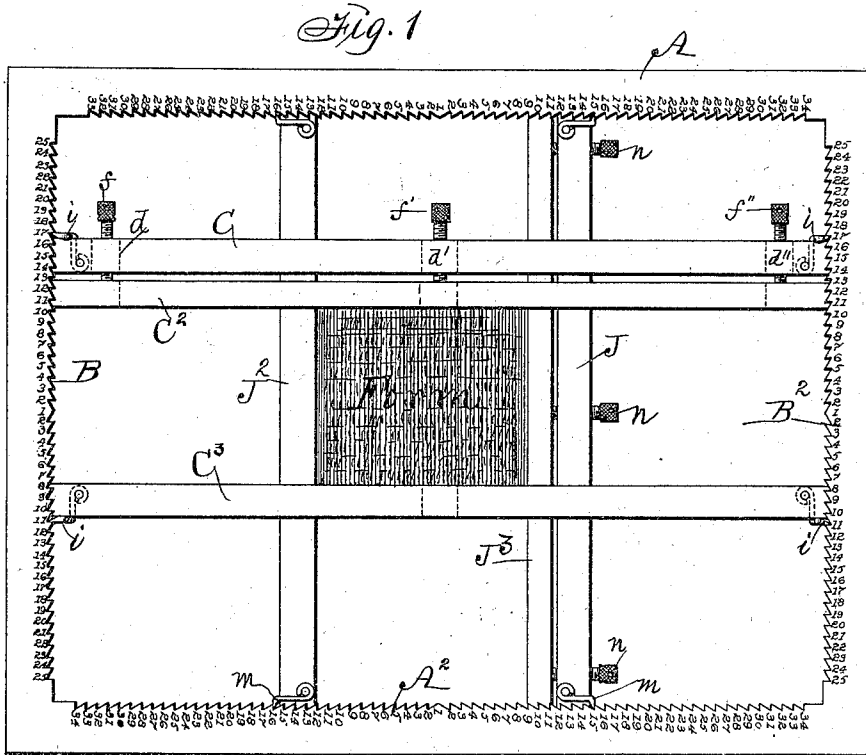
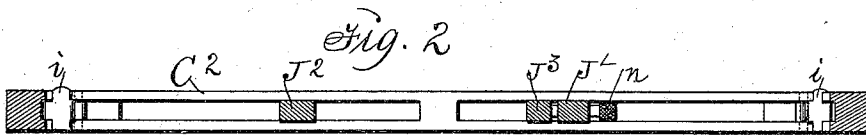
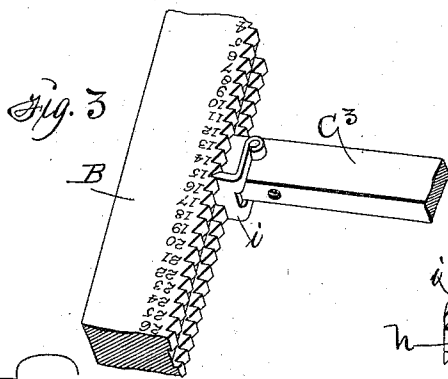
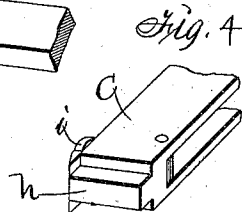
No. 625,005.

Patented May 16, 1899.

G. W. WILKINSON.
 PRINTER'S CHASE AND FORM LOCK.

(Application filed Feb. 11, 1898.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE W. WILKINSON, OF POMEROY, IOWA.

PRINTER'S CHASE AND FORM-LOCK.

SPECIFICATION forming part of Letters Patent No. 625,005, dated May 16, 1899.

Application filed February 11, 1898. Serial No. 670,003. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WILKINSON, a citizen of the United States, residing at Pomeroy, in the county of Calhoun and State of Iowa, have invented a new and useful Printer's Chase and Form-Lock, of which the following is a specification.

My objects are to provide a printer's chase adapted for adjustably connecting and retaining within the chase all the parts required for locking forms of different sizes therein successively and at different times, to facilitate the labor of locking and unlocking forms, and to save time and labor in the work required in fitting and fixing form-locking mechanism to a form in a chase.

My invention consists in a chase and form-locking mechanism constructed, arranged, and combined as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the chase and the adjustable form-locking mechanism combined therewith and in contact with a form in the center of the chase. Fig. 2 is a transverse sectional view showing one of the movable slotted bars locked at its ends to the parallel end pieces of the rectangular frame and chase. Fig. 3 is a perspective view of a piece of one of the parallel sides of the chase and a piece of one of the solid adjustable bars adjustably fastened thereto by means of a pawl pivoted to the end portion of the bar. Fig. 4 is a perspective view of the end portion of one of the slotted bars, showing a portion of a pawl that extends into the slot and is pivotally connected with the bar. Fig. 5 is a perspective view of one of the pawls adapted to stride the end portion of a solid bar pivoted thereto, as shown in Fig. 3.

The letters A and A² designate the parallel sides, and B and B² the parallel ends, of the rectangular frame or chase. They are preferably made of solid metal bars of uniform thickness and provided with grooves in their inside faces by means of a metal-plane or in any suitable way. Their inner parallel edges at the tops and bottoms of the grooved sides and ends are provided with notches or ratchet-teeth that project from the end portions of the bars toward their centers. The four parts of the frame thus constructed are rigidly

joined together at their ends, as required to produce solid corners, by mortises and tenons or in any suitable way. Each notch or tooth on the inner faces of the bars is designed to measure the space of a pica type or one-sixth ($\frac{1}{6}$) of an inch.

C is a slotted bar that has three solid sections d , d' , and d'' , one at each end portion and one at its center, that have screw-threaded horizontal bores or screw-seats, into which are fitted set-screws f , f' , and f'' , adapted to be operated by a person's fingers, as required in locking and unlocking a form.

C² is a slotted bar corresponding with the bar C in length and contiguous thereto and designed to engage one edge of a form. It is solid at its end portions and center where the set-screws contact therewith.

C³ is a slotted bar corresponding with the bar C, excepting that it has no screw-seats, and is designed to engage the edge of a form parallel with the edge of the same form engaged by the bar C². Each end of each of the slotted bars C, C², and C³ has a tenon h on its end, as shown in Fig. 4, that fits and slides in the grooves of the parallel ends A and A² of the chase, and in each end of each of said slotted bars is pivoted a pawl i , as shown in Fig. 4, to engage the ratchet-teeth on the edges of the inside faces of the ends of the chase.

J, J², and J³ are solid bars extended through the slotted bars C, C², and C³, slidably connected therewith to extend at right angles thereto and parallel with the sides B and B² of the chase. Their ends extend into the grooves in the inside faces of the said parallel sides, and each one of the bars J and J² has a pawl m , pivotally connected with its end, as shown in Fig. 3, to engage the teeth on the parallel sides B and B² of the chase.

The bars J² and J³ are designed to engage the parallel edges of a form, and set-screws n , fitted in screw-seats in the bar J, are designed to engage the bar J³ and press it against the contiguous edge of a form, as required to lock the form between the bars J² and J³. It is obvious that the bars C² and C³ engage the other two parallel edges of the form and are readily pressed against the form by means of the bar C and the set-screws f , f' , and f'' , as required to lock the form. It is also obvious that different sizes of forms can thus be advan-

tageously locked and unlocked in the chase without the use of detachable furniture and quoins or parts that may be removed and misplaced and that require time and care in removing and replacing them.

Numerals on the top faces of the four sides of the chase corresponding with the pica-measures and teeth on the inner edges of the chase facilitate moving and adjusting the sliding bars C C² C³ and J J² J³, as required to fit them to forms of different sizes and locking the forms therewith.

Having thus described the construction, function, operation, and utility of my invention, what I claim, and desire to secure by Letters Patent therefor, is—

1. In a printer's chase, a slotted bar having tenons on its ends, a pawl pivoted in each slotted end of said bar, a screw-seat in each solid section of the bar, a screw in each screw-seat and a straight solid bar extended parallel with the slotted bar, in combination with a chase having grooves in the inside faces of two parallel portions thereof and ratchet-teeth on their edges above and below the grooves, for the purposes stated.

2. A slotted bar having tenons on its ends, pawls pivoted in the bar to project over the tenons, screw-seats at the ends of the slots, set-screws in said seats, a chase having grooves in its inside face to admit the tenons and ratchet-teeth on the edges of the chase above and below the grooves projecting in reverse ways on the opposite sides of the centers of the parallel parts of the chase, a second slotted bar corresponding with the first-mentioned bar and having a pawl in each end, and a third slotted bar in contact with the inner ends of the screws in the first-mentioned bar, and solid bars extended through the slots of the slotted bars and slidingly connected therewith and with parallel parts of the chase and provided with means for fastening them to the chase for the purposes stated.

3. An elbow-shaped bifurcated pawl in combination with the solid end of a bar slidingly connected with slotted bars that are detachably fastened and adjustably connected with the parallel inside faces of a chase and a chase having grooves and ratchet-teeth in its inside faces as shown and described for the purposes stated.

4. A printer's chase and form-locking mechanism comprising a frame having grooves on the inside faces of its parallel parts and pica-measures in the form of ratchet-teeth in the top and bottom edges of the grooves and projecting in reverse ways from the center of each of the parallel parts, a slotted bar having pawls pivoted in its end portions to engage said teeth, and tenons to enter the said grooves in the chase and screw-seats at the ends of the slots and set-screws fitted therein, a second bar corresponding with the first-mentioned bar but without screw-seats and set-screws, a third slotted bar having its ends fitted in the grooves of the chase and its side face in contact with the inner ends of the set-screws, a solid bar extended through the three slotted bars and its ends fitted in the grooves of the chase and pawls pivoted to its end portions to engage the teeth on the chase and set-screws extended through screw-seats in the bar, a second solid bar extended through the three slotted bars and its ends fitted in the grooves in the chase and provided with pawls to engage the teeth of the chase, and a third solid bar extended through the three slotted bars and in contact with the inner ends of the set-screws in the first-mentioned solid bar, all arranged and combined to operate in the manner set forth for the purposes stated.

GEORGE W. WILKINSON.

Witnesses:

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