

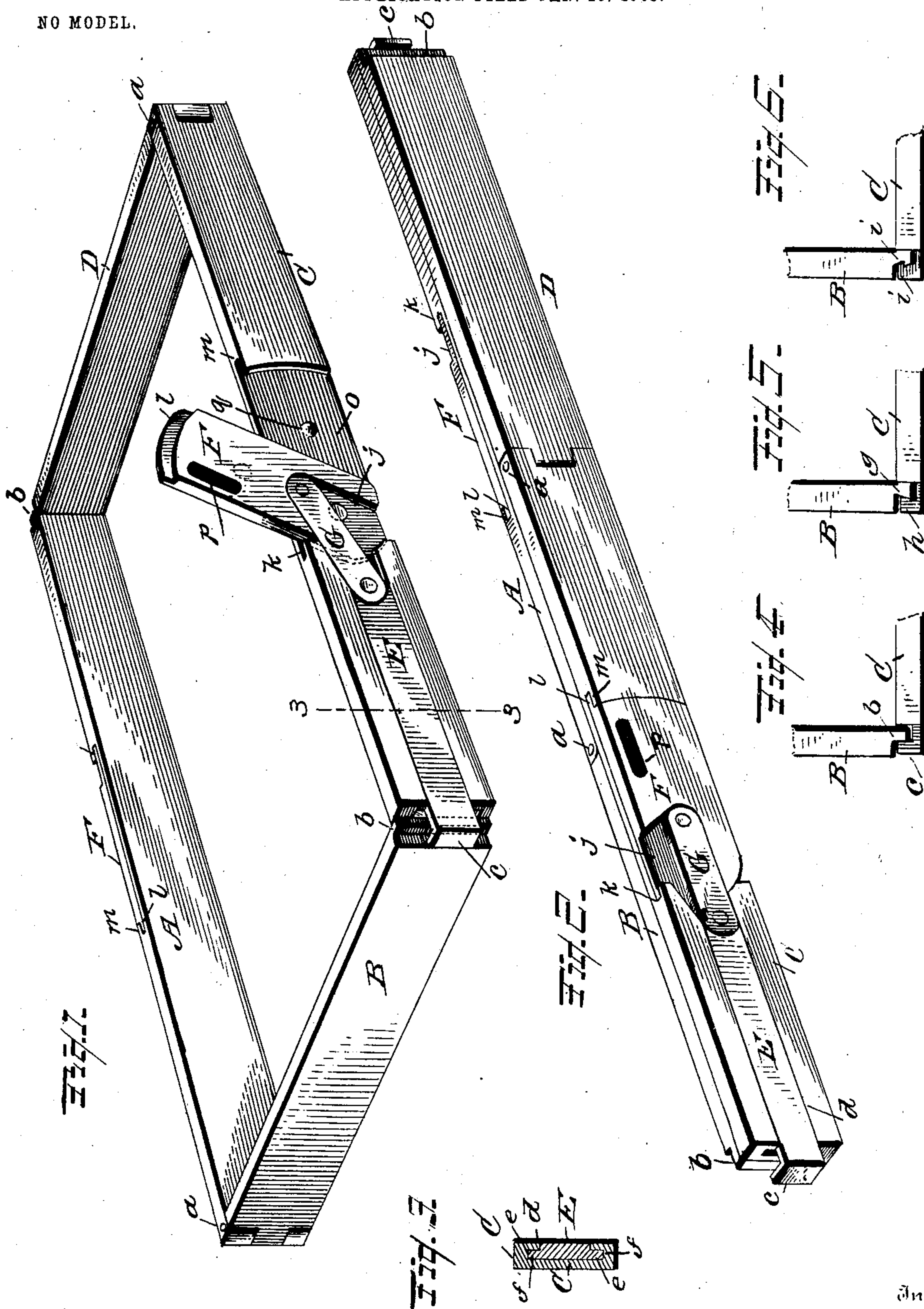
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PATENTED JULY 21, 1903.

W. H. FRANCIS.  
BINDER FRAME FOR TYPE PAGES.

APPLICATION FILED JAN. 16, 1903.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## BINDER-FRAME FOR TYPE-PAGES.

SPECIFICATION forming part of Letters Patent No. 734,166, dated July 21, 1903.

Application filed January 16, 1903. Serial No. 139,344. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HENRY FRANCIS, a citizen of the United States, residing at Washington, in the District of Columbia, have  
5 invented certain new and useful Improvements in Binder-Frames for Type-Pages; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings,  
10 making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of devices adapted to take the place of the usual cord or string with which a page of  
15 type is temporarily bound or held together to prevent squabbling or pieing previous to being secured in the printer's chase.

The object of the invention is to provide a durable, simple, and effective clamping or  
20 binder frame composed of hinged sections and suitable means for holding or locking the same together around and against the type-page to securely retain the type in place after being set up and also enabling corrections to  
25 be conveniently made when required, the hinged sections of the frame enabling the same to be placed in a compact form to economize space on the make-up bank or for the purpose of transportation, thereby securing  
30 a device of this character that may be quickly and easily applied and the saving of time, labor, and annoyance to the printer.

The invention consists in a clamping or binder frame for type-pages constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a perspective view of a binder-frame embodying my invention, showing one of the locking-levers in a raised position previous to being depressed to lock the hinged sections together; Fig. 2,  
40 a perspective view showing the hinged sections separated and extended in a straight line and placed together for the purpose of economy of space on the make-up bank or for other purposes; Fig. 3, a cross-section taken on line 3 3 of Fig. 1; Fig. 4, a detail plan view of one corner of the binder-frame, showing the overlapping ends; Fig. 5, a similar  
45 view showing a modification thereof; Fig. 6, 50 a second modification of the overlapping ends.

view showing a modification thereof; Fig. 6, 50 a second modification of the overlapping ends.

The binder-frame consists of two separable sections, each section comprising two bars A B and CD, respectively, which may be of any  
55 suitable metal and of any desirable width and length, depending altogether upon the size of the type-page around which the frame is placed to hold the type together after being set up, the size and shape of the frame de-  
60 pending upon the size and shape of the page of type. The two bars forming each section of the frame are pivoted or hinged together at *a* in any well-known manner found best adapted to the purpose, the bars A C in the  
65 present instance forming the sides of the frame and the bars B D the ends thereof when the two frame-sections are together, as shown in Fig. 1 of the drawings. The bars  
70 B D at their free ends have rabbeted edges *b* of any suitable construction, with which engage the jaws *c* upon the free ends of slidable arms E, said arms engaging grooves *d* in the outer sides of the bars, which grooves have  
75 extensions *e* for the flanges *f* of the arms to engage, as shown in Fig. 3 of the drawings.

Any suitable form of slidable arms may be substituted for the arms shown and may be of any desirable construction and seated in the side of the bars in any preferred manner  
80 found most desirable.

The rabbeted edges of the bars B D and the jaws of the slidable arms E shown in Fig. 1 of the drawings, are further shown in detail in Fig. 4 of the drawings, there being a slight  
85 space between the rabbeted edges and jaws to allow the frame to be tightly drawn against the type-page or to insure the frame tightly binding the sides of the page of type.

In Fig. 5 of the drawings, which represents  
90 a modification of the rabbeted edge and jaw, the rabbeted edge *g* and jaw *h* are slightly in the form of a dovetail to engage each other, or, if preferred, the rabbeted edge and jaw may be formed with teeth *i* to engage  
95 each other, as shown in Fig. 6 of the drawings.

In describing the various forms of the rab-



beted edges of the bars B and the jaws of the slidable arms E it is evident in view thereof that the edge of the bar and the free end of the arm may be constructed in any desirable manner that will admit of the ends of the bar and arm engaging each other to form the frame around the type-page and retain the type in place after being set up, and I shall therefore term the invention as a "binder-frame" for type-pages.

Suitable means are provided for operating the slidable arms E, and one of many means is shown in the drawings to serve this purpose, although I do not wish to be understood as limiting my invention thereto. The means shown comprises, in part, a pivoted lever F, connecting with the slidable arm E through the medium of a toggle-link G, one end of said link being pivoted to the end of the arm and the opposite end of the link pivoted to the lever in a mortise *j*. The mortised or pivoted end of the lever F is rounded or curved to allow said lever to move on the arc of a circle in operating the slidable arm E, and the reduced edge of the lever engages a guide-groove *k*. The opposite end of the lever F has a curved flange *l* to engage the guide-groove *m*, so that when the lever is down and on line with the bar to which it is pivoted it will rest in the seat *o* and be flush with said bar. The lever F has preferably a groove or slot *p* for convenience of handling with the fingers and may also be provided with a depression or indentation upon its inner side to engage a slight projection *q* upon the seat *o*, so that the two will engage each other when brought opposite, or any other suitable and well-known means may be provided to lock the lever in position and prevent its being accidentally raised.

It will be noticed that the slidable arms, as well as the pivoted levers, are seated in recessed portions of the arms of the hinged sections of the frame, so that they will be flush therewith, and giving to the bars a uniform thickness throughout their length, so that when the two sections of the frame are brought together, as shown in Fig. 2 of the drawings, the frame will take up comparatively little room upon the make-up bank, and thereby economize space thereon, as well as materially facilitating packing in the transportation of the frames.

The hinging of the two bars forming the sections of the frame enables the above-described advantages to be attained, as well as enabling any corrections in the type-page to be conveniently made by simply removing one of the frame-sections and swinging out the end bar of the remaining section, thereby enabling the type to be moved backward or forward for insertion or taking out lines of type.

An important advantage is secured in having the two frame-sections each composed of two bars hinged together, in that it enables

the end bar of either section to be swung out on line with the side bar to which it is hinged to form a continuation thereof, so that in making corrections the type may be moved backward or forward for the insertion or taking out a line or lines of type.

It is evident that any suitable means may be employed for pivoting or hinging the two arms forming the sections, each section being separably connected together by any means found most convenient, and I desire it to be understood that many changes and modifications may be resorted to in the several details of construction without affecting the essential features of the invention, and any such substitution of one mechanical construction for another as would come within ordinary mechanical judgment may be employed for connecting the two frame-sections together and holding them around and against the type-page as would be found desirable.

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

1. A binder-frame for type-pages, comprising two separable frame-sections, each consisting of two bars which form respectively one side and end of the frame, the two bars of each section being hinged together whereby the end bar thereof may be swung out on line with the side bar to form a continuation thereof to facilitate the type being moved backward or forward for the insertion or taking out a line or lines of type in making corrections, and suitable means for holding the frame-sections together, substantially as and for the purpose set forth.

2. A binder-frame for type-pages, comprising two separable frame-sections, each section consisting of two bars hinged together which form one side and end of the frame, one of the bars of each section having a slidable arm to engage the bar of its fellow section to connect the two sections together, substantially as and for the purpose described.

3. A binder-frame for type-pages, comprising two separable frame-sections, each section consisting of two bars hinged together which form one side and end of the frame, the end bars having a flanged or rabbeted end of suitable construction, and the side bars having slidable arms with jaws to engage therewith, and means for operating the arms, substantially as and for the purpose specified.

4. A binder-frame for type-pages, comprising two separable frame-sections, each section consisting of two bars hinged together which form one side and end of the frame, the free end of one of the bars of each section having a rabbeted or engaging projection, slidable arms upon one of the bars of each section adapted to engage therewith, pivoted levers upon said arms, and toggle-links connecting said levers with the arms, by which said arms are operated, substantially as and for the purpose set forth.



5. A binder-frame for type-pages, comprising two separable frame-sections, each section consisting of two arms suitably hinged together and forming one side and end of the frame, one of the bars of each section having a guide-groove upon its outer side, a slidable arm seated therein and adapted to engage the free end of the arm of its fellow section, and means for operating said arm, whereby the sections are held together or released, substantially as and for the purpose described.

6. A binder-frame for type-pages, comprising two separable frame-sections, each section consisting of two arms hinged together and forming one side and end of the frame, one of the bars of each section having guide-grooves with grooved extensions, a slidable arm with flanges to engage therewith, said arm adapted to engage the free end of the bar of its fellow section to secure the two sections together, and a suitable lever device connecting the slidable arm to operate the

same, substantially as and for the purpose specified.

7. A binder-frame comprising two separable frame-sections, each section consisting of two arms which form one side and end of the frame, one of the bars of each section having a guide-groove and a mortised seat upon its outer side, a slidable arm seated in the guide-groove and adapted to engage the free end of one of the arms of its fellow section to connect the two sections together, a pivoted lever seated in the mortised seat and connecting with the slidable arm through the medium of a toggle-link, and means for locking said lever in position when depressed and on line with the bar to which it is pivoted, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM HENRY FRANCIS.

Witnesses:

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GEO. E. TERRY.