

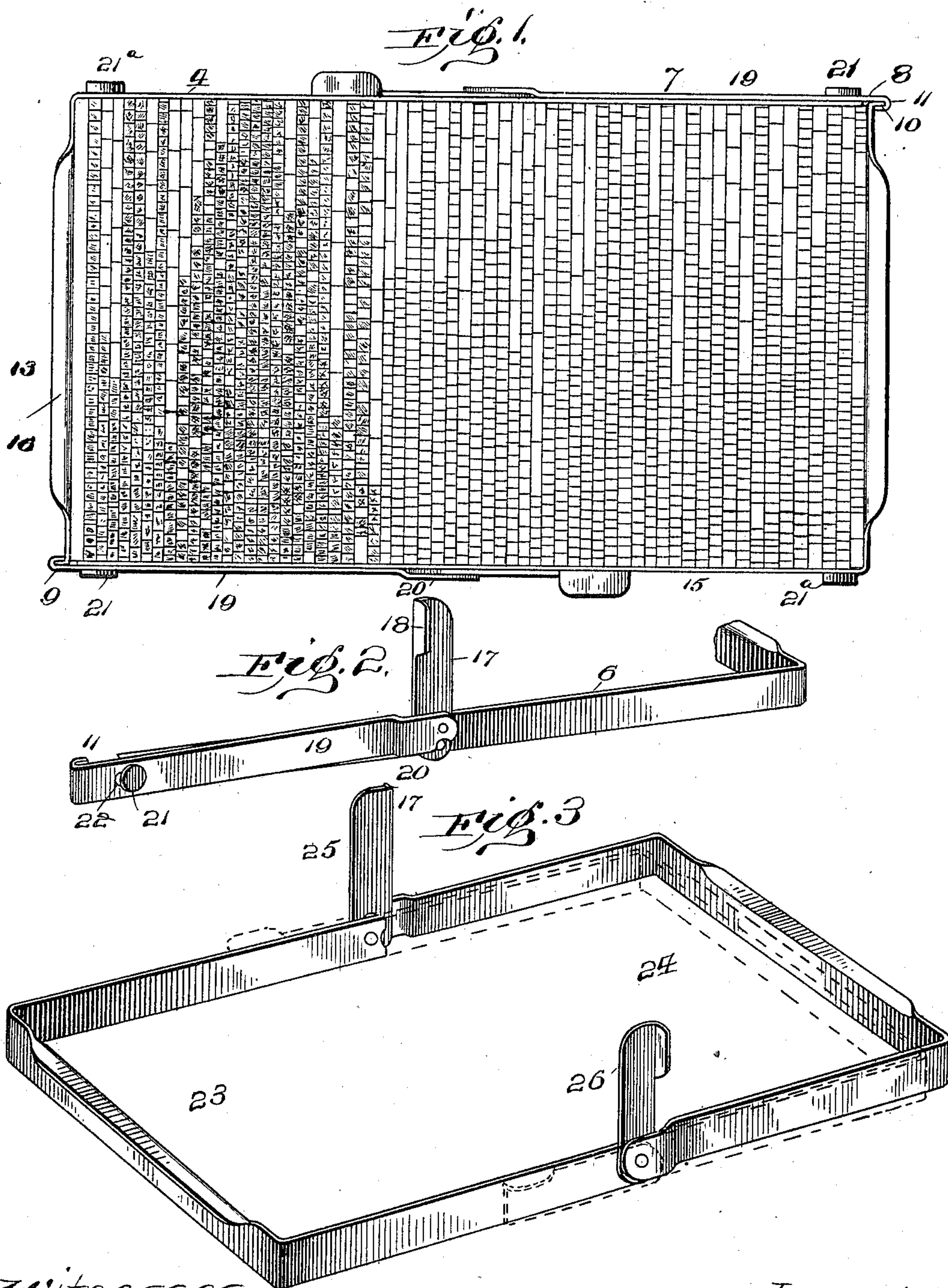
No. 719,321.

PATENTED JAN. 27, 1903.

W. H. FRANCIS.  
CLAMP FOR PAGES OF TYPE.

APPLICATION FILED JUNE 21, 1900.

NO MODEL.



witnesses:  
J. M. Fowler Jr.  
O. H. Rudlong

Inventor  
William Henry Francis  
by Joseph M. Ruell  
his Atty.



# UNITED STATES PATENT OFFICE.

WILLIAM HENRY FRANCIS, OF WILMINGTON, DELAWARE.

## CLAMP FOR PAGES OF TYPE.

SPECIFICATION forming part of Letters Patent No. 719,321, dated January 27, 1903.

Application filed June 21, 1900. Serial No. 21,074. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HENRY FRANCIS, a citizen of the United States, residing at Wilmington, in the county of Newcastle and State of Delaware, have invented certain new and useful Improvements in Clamps for Pages of Type; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

It is a common practice in printing establishments to tie a page of type with a cord or string preparatory to imposing it; and hence my invention has for its object to produce a temporary binder or clamp-fastener for pages of type that will hold the types composing the page securely in place and that can be more readily and quickly applied and removed than a cord, thereby making it more convenient to make corrections; and my invention consists, essentially, of a clamping frame or band having movable heads or members that are adapted for longitudinal or rectilinear movement with respect to each other and the confined page or body of type, and which members are respectively provided with a toggle lock-joint that comprises a hand operating-lever that is pivoted in a manner to provide an eccentric movement with sufficient leverage to permit of a sufficient reciprocatory movement or throw of the sliding parts and which utilizes the pressure conferred by said leverage to securely lock the body of type to which it is applied.

Referring to the accompanying drawings, Figure 1 represents a plan view illustrating the application or use of my novel page binder or clamp, showing the operating or locking levers in a closed position. Fig. 2 represents a portion of the frame constituting said page-binder, while Fig. 3 shows a modified form of said binder or clamp, indicating the locking-levers in a normally open position.

My clamp or locking-frame consists, essentially, of a metallic framework comprising, preferably, two angle-pieces 6 and 7, which are provided at their diagonally opposite corners with interlocking joints 8 and 9, which in turn consist, respectively, of interlocking tongues 10 and sockets 11 and which permit

of the frame members being assembled so as to stand edgewise and present flatwise a metal face of a height to make a sufficient support for the type that is intended to be confined thereby.

The head or end portions of the framework 12 and 13 are formed integral with the side portions or bars 14 and 15 by a right-angle bend that extends at a length slightly exceeding the width of the page of type for which it is intended. The right-angle bends are formed with a strengthening lip or rib 16, as shown.

In order to cause the reciprocation of the sliding members 8 and 9 in and out of locking engagement with the body of type, I provide on the respective side bars intermediate of their ends the following operating and locking mechanism.

17 represents a rocking operating lever or bar that is provided with a thumb-piece or ear 18 and which is fulcrumed at its lower end in a manner to lie flatwise against the outer face of the side bar, as shown.

Pivotaly united to the rocking lever, to the outer face thereof, is the reciprocating reach-bar 19, that is provided with an offset portion or arm 20 at the point where it is pivotaly attached to said operating-lever to form a sheave that lies flatwise against said operating-lever, thus presenting three thicknesses of the metal plate employed in the frame structure.

The movement of the lever-bar carries the reach-bar in a reciprocating movement forward and backward during the partial rotation of said lever-bar, and the movement of said lever and bar is limited by the limiting-stop 21, which projects from the side bar through the guide-slot 22.

The limiting stop or stud 21 is made to project a distance equal to the three thicknesses of plate constituting the joint above referred to in order to present a bearing that will admit of the locking of said frame in its entirety in a chase, if desired. It will thus be seen that the head members may be thrown in either direction by equal movements of the reach-bars upon the simultaneous manipulation of the respective operating lever-bars.

The clamp or binder will of course be made



of different sizes corresponding to the different sizes of pages they are required to be applied to.

In Fig. 3 there is shown a modified form of clamp-frame, which comprises two hinged sections 23 and 24, that are connected by the operating-levers 25 and 26 in a manner to provide a toggle-joint at the hinged positions and which are shown in normal open position in full lines and in a closed position in dotted lines.

The operation of the clamp has been indicated in the foregoing description; but particularly stated the operation is as follows: When the form has been made and placed in position, as shown in Fig. 1, the frame is adjusted to an open position, as shown in Fig. 3, and placed over and about the body of type, when the levers are depressed until the heads are drawn into operative contact with the end portions or lines of the body of type.

In large work the frame may be provided with operating-levers positioned at suitable points on the end bars, and the strengthening-lip may be dispensed with or divided at those points.

Although I have illustrated my invention as applied especially to pages of type, I do not limit myself thereto and may apply the

device herein described to any body of matter or material that is required to be held securely together in the manner prescribed.

Having described my invention, what I desire to claim as new and useful is—

1. A type-fastening device comprising a rectangular clamping-band composed of two longitudinally - movable angular members, and a pair of operating-levers respectively fulcrumed flatwise to the outer face of each side bar of the angular members, and a reach-bar pivotally united to each of said operating-levers, substantially as and for the purpose set forth.

2. A type-fastening device comprising a pair of angle members that comprise each longitudinally - movable members, having guiding-slots and stop-pins respectively, and means for imparting longitudinal movement to the respective parts of each member, that comprises a toggle - jointed lever, substantially as described.

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

WILLIAM HENRY FRANCIS.

Witnesses:

O. H. BUDLONG,  
JOSEPH W. BUELL.