O. M. HOWARD.

TYPE HOLDER OR CLAMP.

APPLICATION FILED FEB. 3, 1909.

955,802

Patented Apr. 19, 1910.

Fig. 1.

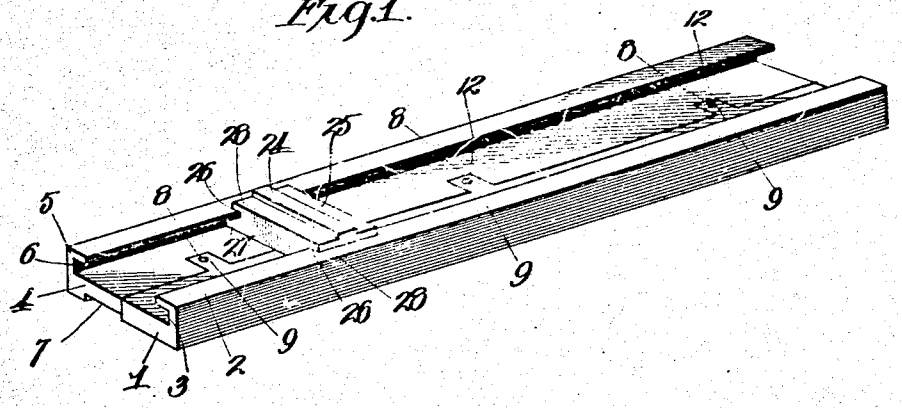


Fig. 2.

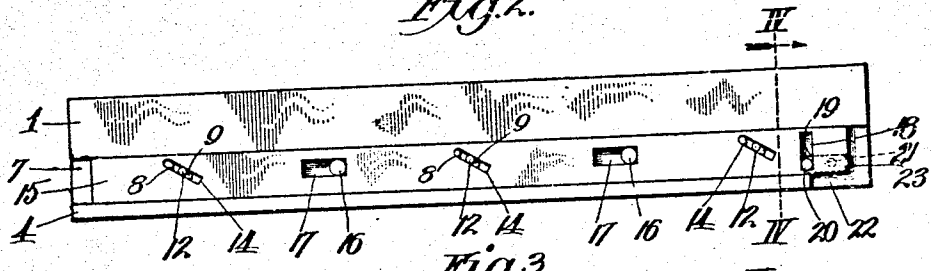


Fig. 3.

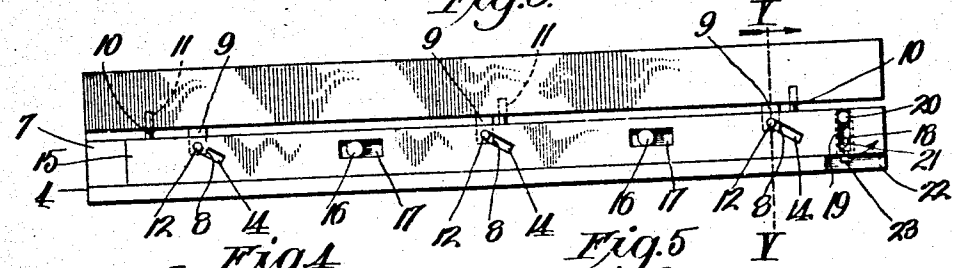


Fig. 4

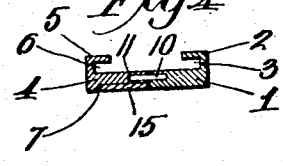
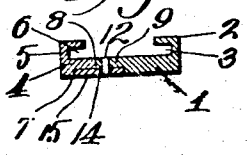


Fig. 5



Witnesses
Frank R. Glore
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UNITED STATES PATENT OFFICE.

ORANGE M. HOWARD, OF KANSAS CITY, MISSOURI.

TYPE HOLDER OR CLAMP.

955,802. Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed February 3, 1909. Serial No. 475,917.

To all whom it may concern:

Be it known that I, ORANGE M. HOWARD, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Type Holders or Clamps, of which the following is a specification.

This invention relates to a type-holder or clamp of that character in which one or more type may be easily and quickly clamped in line at any desired distance apart and my object is to produce a device of this character by which type can be easily, quickly and reliably secured in line and which is of simple, strong, durable and cheap construction, a further object being to produce a device of this character whereby the distribution of a line of type after service may be quickly and conveniently effected.

With these objects in view and others as hereinafter appear, the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1, is a perspective view of a type holder or clamp embodying my invention, and also shows a type in operative relation thereto. Fig. 2, is an inverted plan view of the same. Fig. 3, is a similar view with the type holder or clamp open. Fig. 4, is a cross section on the line IV—IV of Fig. 2. Fig. 5, is a similar view on the line V—V of Fig. 3.

In the said drawing, 1 indicates a base plate provided with an upwardly-projecting flange 2 at its outer margin formed with a longitudinal groove or channel 3 at its inner side.

4 indicates a companion base-plate arranged opposite and in the same horizontal plane as plate 1 and like the latter provided with an upwardly-projecting flange 5 having a longitudinal groove 6 at its inner side, and said plate is provided at its underside with a longitudinal recess 7 and in its inner edge with a plurality of notches 8 to receive tongues 9, projecting from the inner edge of plate 1, the tongues and notches 8 forming guides to insure direct transverse movement of the base plates, and to prevent independent movement vertically of said plates one of them is provided with a series of transverse pins 10 and the other with sockets 11 to slidingly receive said pins.

The tongues 9 are provided with depending pins 12 engaging parallel oblique slots 14 in a thin metal slide bar 15 occupying recess 7. Plate 4 is also provided with depending headed pins 16 engaging and preferably countersunk in longitudinal slots 17 in slide bar 15, said slide bar being also provided with a transverse slot 18 engaged by a crank 20 of a short lever 19 pivoted at 21 to plate 4, the lower edge of plate 4 being cut away at 22 to continue the recess 7 to the outer edge of said plate at one end to accommodate the operation of said lever and a suitable forked tool, not shown, to be engaged with the reduced outer end 23 of said lever to operate the same, said lever by preference being of such length that when standing longitudinally of the plate its free end shall terminate about flush with the adjacent end of the plate in order that two of the bars composed of plates 1 and 4 may be arranged endwise together should such arrangement be found desirable.

When the lever is operated its crank 20 presses against one wall of slot 18 and forces bar 15 to slide in the same direction and through the medium of the oblique or inclined slots and pins 12 force the plates 1 and 4 apart as shown in Fig. 3. When thus arranged one or more types may be secured on the upper side of the bar between flanges 2 and 5, it being noticed by reference to Fig. 1 that the type 24—representing the letter I—is mounted upon a block 25 provided with grooves 26 in its ends receiving the inwardly-projecting portions of flanges 2 and 5, portions 27 of the block forming tongues engaging grooves 3 and 6, the portions 28 of the block overlying said inwardly-projecting portions of flanges 2 and 5. After the type is placed in the position described, the lever is swung in the direction indicated by the arrow Fig. 3, and in such action slides bar 15 longitudinally in the reverse direction to that described, this action through the instrumentality of the pins 12 and inclined slots 14 causing plates 1 and 4 to approach and thus clamp the type reliably in position.

When it is desired to distribute the type, that is redispose them in the proper receptacles in a type case, the lever is operated to move the plates 1 and 4 apart sufficiently

to leave the type free to slide. The holder is then successively pointed toward the receptacles adapted to contain the different type carried by the holder in order that such type may slide by gravity or by a push applied by the operator, longitudinally out of the holder and into such receptacles; this action not only facilitating the distribution of the type but guarding against mistakes in returning them to their proper receptacles.

It will be understood of course that the combined thickness of the holder and type equals what is known as "type-high" in the trade and that with a holder of this character, thin metal type may be mounted on wood or other cheap bases, thus effecting a great saving of type metal and enabling a job printer to keep in stock a greater variety of type of both size and kind to meet the exigencies of his business.

It will also be understood that the holders may be of curved form as well as straight.

From the above description it will be apparent that I have produced a type holder or clamp possessing the features of advantage enumerated as desirable and I wish it to be understood that I do not desire to be restricted to the exact details of construction shown and described, but that I reserve the right to make such changes in the form, proportion, detail construction and arrangement of the parts as properly fall within the spirit and scope of the appended claims.

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

1. A type holder or clamp, comprising a pair of plates movable relatively toward and from each other and provided with upwardly-projecting flanges having longitudinal grooves in their inner faces, one of said plates having a longitudinal recess in its lower side, and a plurality of pins depending into said recess, a longitudinally slidable bar occupying said recess and provided with parallel oblique slots engaging certain of said pins and with longitudinal slots engaging the remaining pins, means for guiding said plates in their movement toward and from each other, and means for imparting sliding movement in one direction or the other to said bar to cause said plates to move apart or toward each other.

2. A type holder or clamp, comprising a pair of plates movable relatively toward and from each other and provided with upwardly-projecting flanges having longitudinal grooves in their inner faces, one of said plates having a longitudinal recess in its lower side, and a plurality of pins depending into said recess, a longitudinally slidable bar occupying said recess and provided with parallel oblique slots engaging certain of said pins and with longitudinal slots engaging the remaining pins, means for guiding said plates in their movement toward and from each other, and a lever pivoted to the recessed plate and engaging the slidable bar and adapted when swung in one direction or the other to impart longitudinal movement to said bar in one direction or the other.

3. A type holder or clamp, comprising a pair of plates movable relatively toward and from each other and provided with upwardly-projecting flanges having longitudinal grooves in their inner faces, one of said plates having a longitudinal recess in its lower side, and a plurality of pins depending into said recess, a longitudinally slidable bar occupying said recess and provided with parallel oblique slots engaging certain of said pins and with longitudinal slots engaging the remaining pins, transverse pins projecting from one of said plates into the opposing edge of the companion plate, and means for imparting sliding movement in one direction or the other to said bar to cause said plates to move apart or toward each other.

4. A type holder or clamp, comprising a pair of plates movable relatively toward and from each other and provided with upwardly-projecting flanges having longitudinal grooves in their inner faces, one of said plates having a longitudinal recess in its lower side, and a plurality of pins depending into said recess, a longitudinally-slidable bar occupying said recess and provided with parallel oblique slots engaging certain of said pins and with longitudinal slots engaging the remaining pins, transverse pins projecting from one of said plates into the opposing edge of the companion plate, tongues projecting from one of said plates and engaging the other to guard against independent endwise movement of said plates, and means for imparting sliding movement in one direction or the other to said bar to cause said plates to move apart or toward each other.

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

ORANGE M. HOWARD.

Witnesses:
HELEN C. RODGERS,
G. Y. THORPE.