

(No Model.)

F. S. HORNER.
PLATEN PRINTING PRESS FEED GAGE.

No. 470,675.

Patented Mar. 15, 1892.

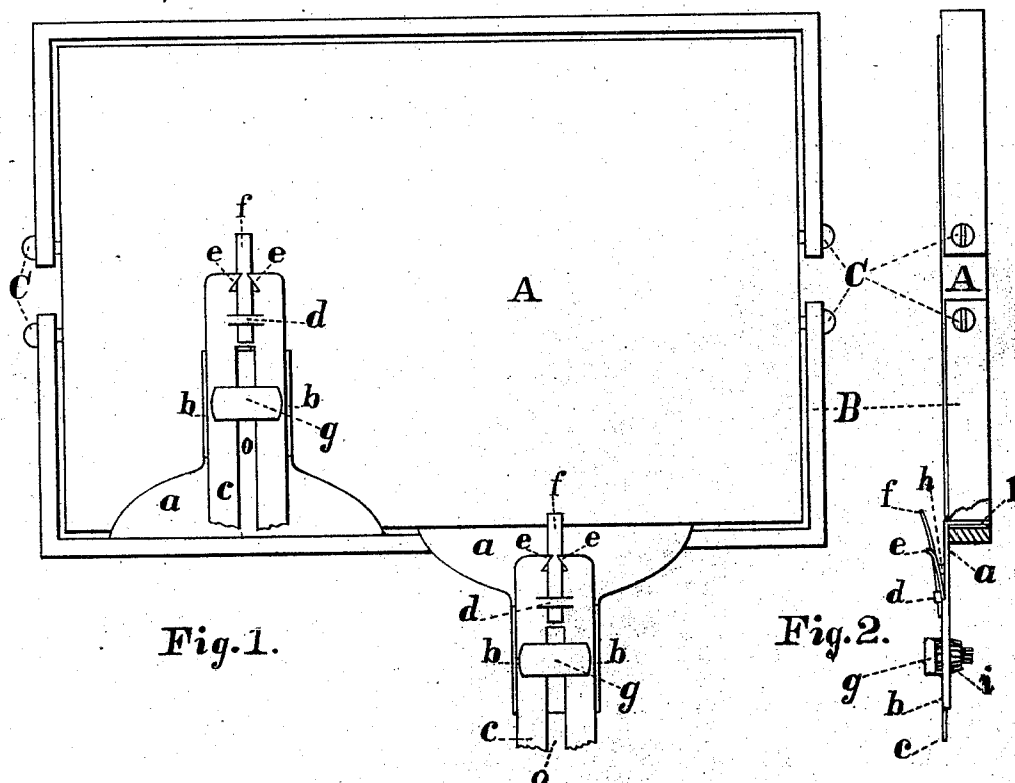


Fig. 1.

Fig. 2.



Fig. 3.

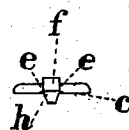


Fig. 4.

Frank S. Horner, Inventor

Witnesses

Frank M. Weston
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UNITED STATES PATENT OFFICE.

FRANK S. HORNER, OF MADISON, WISCONSIN.

PLATEN-PRINTING-PRESS FEED-GAGE.

SPECIFICATION forming part of Letters Patent No. 470,675, dated March 15, 1892.

Application filed June 29, 1891. Serial No. 397,892. (No model.)

To all whom it may concern:

Be it known that I, FRANK S. HORNER, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented a new and useful Platen-Printing-Press Feed-Gage, of which the following is a specification.

My invention relates to improvements in feed-gages for platen printing-presses; and the objects of my improvements are to construct a device which is retained in place by sliding a plate between the platen and lower bail without lifting the bail or attaching to any part, thus preventing displacement of coverings or injury to tympan, which also fastens the lower edge of the sheet which must be laid over the tympan after the form is made ready, thus avoiding the removal of the gage and the lifting of the lower bail, and which device also in one of its positions holds the sheet fed at any line from near the edge to the center of the platen, and on reversal of the parts holds such sheet at any line from near the edge to a distance below the platen, so as to print from a form the whole width of the latter, thus in effect increasing the working dimensions of the platen. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the platen and of my device in its two positions; Fig. 2, a right side elevation of the platen, partly broken away, and of the gage in its position as seen in Fig. 1 at the right; Fig. 3, a right side elevation of the slide and tongue, and Fig. 4 a front end view of the slide and tongue.

A represents a platen; B, its lower bail; C C, the bail's pivot-screws.

l represents a holder of metal plate equal in width to the thickness of the lower bail. It projects from the bracket hereinafter mentioned and is preferably a part of the plate forming the bracket, which latter it supports in two different positions, one being upward on the platen and one being downward below and adjacent to the platen. For either position of the bracket the holder l is inserted between the platen and the lower bail, by which parts it is held in place, aided by the resting of the bracket on the platen when in its upper position and by the resting of the

base of the bracket on the lower bail when in its lower position.

a represents a bracket, and it and the described holder l thereof are formed from one flexible plate of metal made broader for a distance from one end, a part of which broad part is bent perpendicular to the plane of the rest, forming the described holder l, while the remainder of the plate constitutes the bracket a. The bracket is provided through its narrow part with the upward narrow flanges b b at the edges, between which the slide herein-after mentioned is held. The bracket has a perforation near its center, and on its lower surface has a boss surrounding the perforation formed into a nut i, in which the tightening-screw g for bearing on the slide, to be described, is permanently inserted, the screw having a lower head for retention and an upper head for operation in clamping on the slide.

c designates a metal-plate slide placed upon the bracket h between the flanges of the latter. The slide has a central slot o extending from the rear end to near the front end. The slot is traversed by the tightening-screw g when the slide is moved in adjustment, and its open end allows the slide to be removed for reversal when the bracket is reversed. The slide is bowed so as to be slightly convex outwardly, so that near its upper end its spur or sheet-rest, to be described, will bear upon the tympan, and when the parts are reversed will bear upon the bracket, preventing the sheet fed from slipping below the spur.

To construct the upper or closed end of the slide for the convenient and proper feeding and holding of the sheet between the slide and tympan and between the slide and bracket when the parts are reversed, two cuts are made in such upper ends of the slide from near its center, extending diagonally a little distance to the right and left, respectively, forming a broad-based flap, which is bent inward at right angles, making a spur-rest h for the sheet when fed. The two parts formed by and outside of said cuts are turned slightly outward, forming lip-holders e e for the sheet. The holders have from such construction at their ends inward angular points, which hold in position the upward portion of

the tongue, to be described. To the rear of said rest *h* two parallel short cross-cuts are made in the slide to form the raised loop *d* for the insertion of the lower end of the tongue *f*, the upper part of which is inserted between the sheet-holders *e e* and under their inside points. The tongue *f* is a delicate metal strip bent slightly outward at the upper end, and is so inserted temporarily and used when very flexible sheets are fed.

For all work two gages are used. Where the form is enough narrower than the platen to admit below it on the platen the bracket and the added end of the slide as far down as to the rest *h*; both the brackets will be placed upon the platen, and the working ends of the slide will be placed above the free or smaller end of the bracket in the position seen in Fig. 1 at the left. When the form is too wide to allow such position of the said parts, both brackets will be placed in their position below the platen and the slides will be placed in reversed position as to the brackets, as seen in Fig. 1 at the right and in Fig. 2. The shift will be made either way by raising the bracket and holder, turning them and replacing the holder in reversed position, and also reversing the position of the slide on the bracket. When the gages, including the slides, are in that one of the two described positions which is required by the size of the form, the slides are moved so as to place the spurs or sheet-

rests *h h* in the proper line for the edge of the sheet, and the slides are then stayed by turning in the tightening-screws *g g*. When a trial impression has been taken and the form made ready by the putting on and taking-off thicknesses to make even impressions, the tympan will be made smooth by a sheet overlying it and having its lower edge inserted under the slides of the gages and its upper edge inserted under the upper bail, while the gage and the lower bale remain undisturbed, and the bales hold the sheet so made ready.

Different-sized gages are made for different-sized platens. Slides for use in the position below the platen are made shorter than for use in the other position, so as not to take unnecessary room.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a platen-printing-press feed-gage, the combination of a plate-bracket supported at the lower edge of the platen, a slide-plate thereon having near its end a loop and at its end an inward flap and outward-pointed lips, and a tongue inserted under said points and loop, substantially as and for the purposes set forth.

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Witnesses:

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