E. L. MEGILL.

Feed-Guides for Printing-Presses.

No. 161,049. Patented March 23, 1875.

Fig. 1.

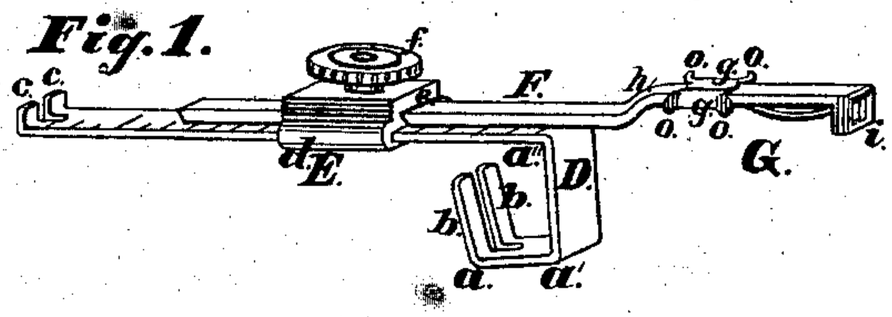


Fig. 7.

Fig. 2.

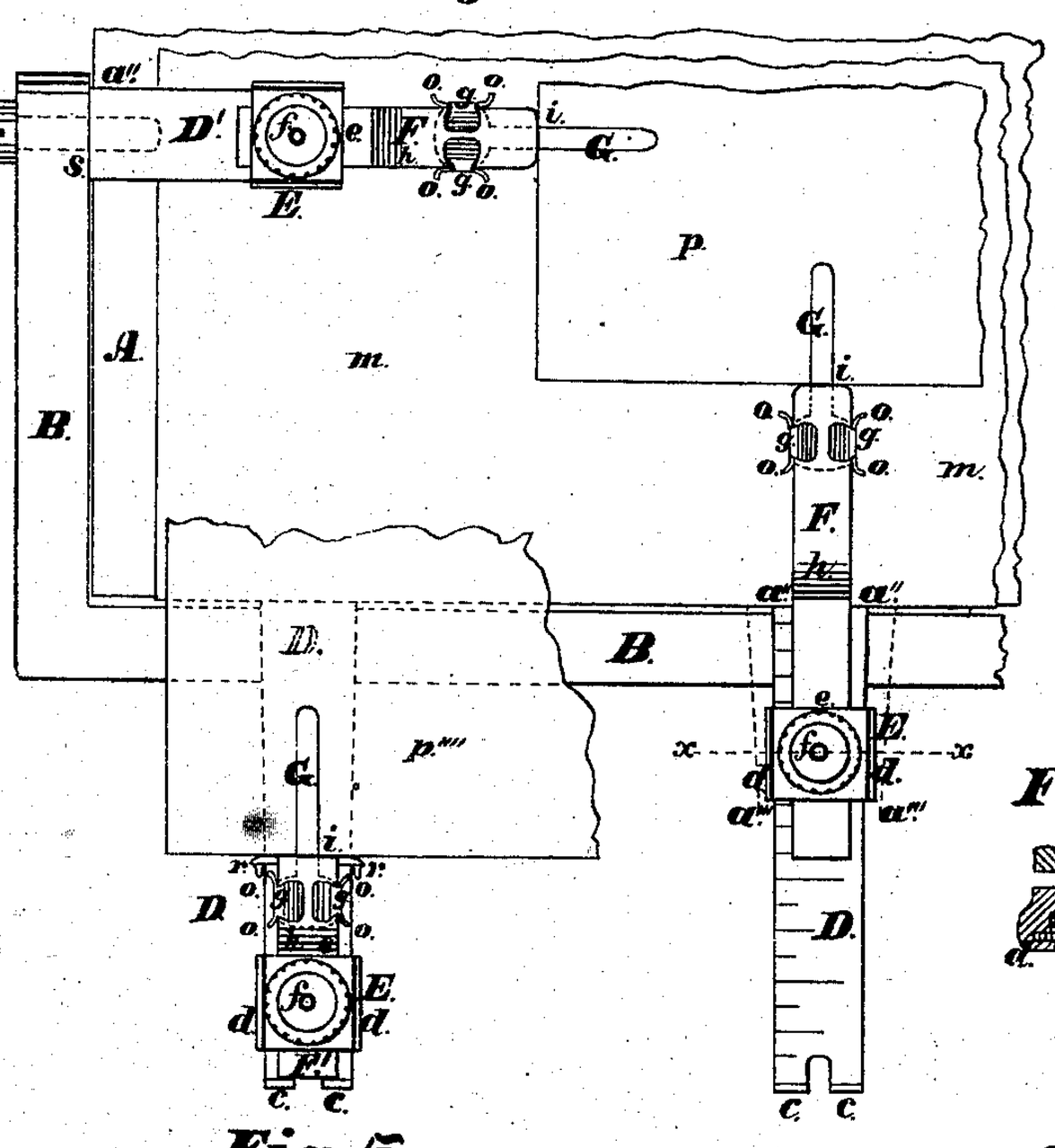


Fig. 3.

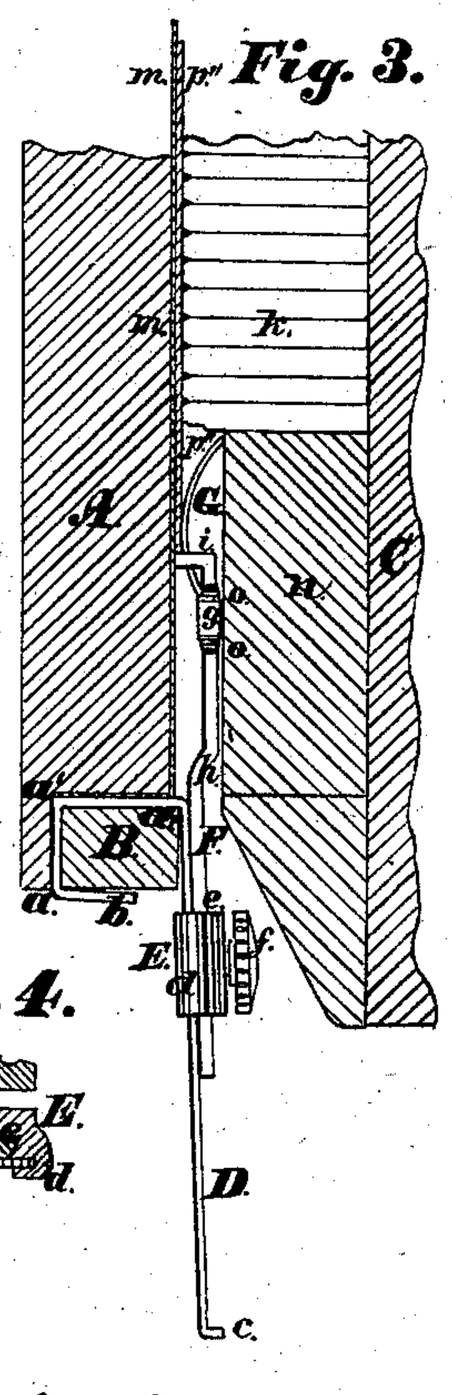


Fig. 4.

Fig. 5.

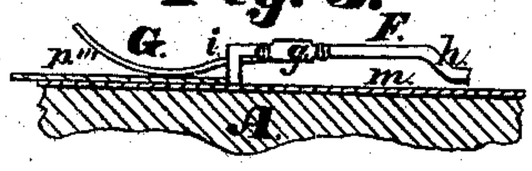
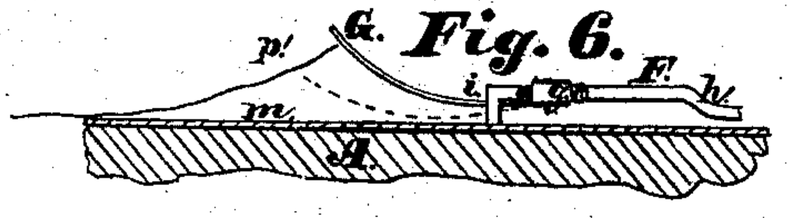


Fig. 6.



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IMPROVEMENT IN FEED-GUIDES FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **161,049**, dated March 23, 1875; application filed August 1, 1874.

To all whom it may concern:

Be it known that I, EDWARD L. MEGILL, of Brooklyn, county of Kings and State of New York, have invented a new and useful Improvement in Feed-Guides for Printing-Presses; and declare that the following is a full, clear, and exact description thereof, reference being had by letters and figures to the annexed drawings.

My invention is embodied in two distinct parts or features—a holder and a feed-guide—which, when combined, furnish a firm and reliable gage, easy of adjustment, affording perfect register, and allowing rapid feeding for all classes of work without mutilation to the tympan-sheets or alteration in the press, the holder for the feed-guides being intended to have a permanent attachment. It further consists in constructing a feed-guide in such a manner that sheets of paper, having any degree of blank space between their edges and the line of type-matter, or their edges curled upward to a height that would allow them to pass over the ordinary gages, may be printed without trouble or disarrangement. It also consists in obviating the difficulty of printing cards in colors, hereinafter more fully described.

Figure 1 is a perspective view of my new feed-guide and holder combined. Fig. 2 is a plan of the platen of a printing-press, showing three feed-guides attached, one at the side and two at the bottom. Fig. 3 is a side view of my invention in position on a section of the platen and tympan-clamp, in connection with a section of the bed of the press, in the act of taking the impression. Fig. 4 is a section on line *x x*, drawn across Fig. 2, enlarged. Fig. 5 is a side view, showing the feed-guide holding a card, by friction and elastic pressure, to the face of the tympan-sheet; and Fig. 6 in readiness to receive and conduct a curled sheet of paper to its place. Fig. 7 is a front view of that part which holds the side feed-guide between the tympan-clamp and the platen.

A is the platen, B the tympan-clamp, and C the type-bed, of a printing-press. My invention is composed of four distinct parts, and has for its first the hold-fast D, of sheet metal, which grasps the clamp B by being folded around it, forming angles *a a' a''*. The clamp B is hinged to the platen A by the screw B', and is raised in the usual manner for changing the tympan-sheets *m* in "making ready" the job to be printed, and when forced down again, to secure the tympan-sheets *m*, the hold-fast D being connected with the clamp B, is carried with it, and also fastened at the same time. The hold-fast D is adjustable along the clamp B, when raised, and may be separated, if necessary, by springing back the fingers *b b*. Said hold-fast is graduated to show the position of the feed-guides, and is provided with guards *c c*, to prevent the clasp E from coming off. In part of its length it is of a tapering width, so that by moving the clasp E, having lugs *d d* toward the angle *a''*, it becomes fixed upon it. When in this position, the guide F, being beveled on one side, is inserted through the dovetailed passage *e* as far as required, and, by a pressure from the set-screw *f*, is forced against the hold-fast D and the sides of the passage *e*, which, connectedly, serve to hold the said feed-guide firmly upon the tympan-sheet *m*, and, with the clasp E fixed upon hold-fast D, as above explained, prevent it from vibrating to the right or left, assisted also by the stress on the hold-fast D, produced by its running upward in an oblique line from the level of the platen A. The clasp E is countersunk to receive the flanged end of the set-screw *f*, to prevent it from coming out, as shown in Fig. 4. G is an adjustable elastic lip, provided with laps *g g*, which fold over the edges of feed-guide F, and press tightly upon the upper surface, to produce a friction to keep it in place. Said lip is passed through the mortise *i*, and adjusted to the margin of the sheet of paper *p* to be printed; or, as far outward as possible without striking the form *k* when taking the impression, and when there is to be printed a sheet without any margin it can be pushed back to the stop-curve *h* out of the way. Thus the lip G is made available for sheets of any degree of margin.

Knobs *o o o o* are used to change the position of the lip G. The tendency of the lip G produced by the curve is upward, which leaves a space between the point and the face of the tympan-sheet *m* wide enough to receive curled or other sheets of paper, *p'*, and conduct them

to the face of the feed-guide F, as shown by Fig. 6. As the platen A approaches the bed C the furniture *n* surrounding the form *k* strikes the point of the lip G and bears it down upon the curled edge of the paper *p''* to the tympan-sheet *m*, in which operation it is kept in a straight line by the sides of the mortise *i*, and is immediately followed by the impression represented by Fig. 3. The object in forcing the edge of the paper down to the lower edge of the guide is to keep the entire sheet level, and cause it to register perfectly. As the platen A recedes from the bed C the lip G, having an elastic temper, springs back to its previous shape and position, ready to receive and conduct the next sheet of paper. The lip G has an additional curve, which inclines it downward, and produces a steady pressure upon the tympan-sheet *m*, as shown in Fig. 5, under which the end of cards *p'''* to be printed in colors are slid and prevented from retreating from the face of the feed-guide F by the shaking of the press or otherwise, on its way to take the impression.

Feed-guides F are of different lengths, the number for each press being varied according to the distance allowed them to extend beyond the edge of the platen A, and are intended to reach the center of said platen.

By moving the clasp E from the tapering part of the hold-fast D to its narrower portion, the feed-guide F', which is a modification of the feed-guide F, may be readily secured at any part of said hold-fast, which admits the extension of the sheets *p''''* far beyond the edge of the platen A, and furnishes for such sheets a firm and reliable gage. Said feed-guide F' is prevented from vibrating over the hold-fast D by the teeth *r r* projecting downward on each side of it.

The feed-guide F, which is placed to gage sheets on the face of the platen A is made rigid and kept from vibrating, as hereinbefore explained, by forcing the clasp E upon the tapered part of said hold-fast. If, in any case, the extension of the sheets is not required, the clasp E may be permanently secured, and the surplus end of the hold-fast may be cut off. Side hold-fast D' is permanently attached to the press in a different manner from that already described, whereby the fingers *b b* and angles *a' a* are dispensed with. Projecting downward at a right angle, *a''*, from the hold-fast D', is a ring, *s*, constructed of one piece of sheet metal, through which the clamp-screw B', in securing the tympan-clamp B, is passed to prevent said hold-fast from rising or upsetting out of its position between the clamp B and platen A. Hold-fast D', though represented in Fig. 2 as suspended over the tympan-sheet *m*, may be reversed and extended in the opposite direction.

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

1. In a holder for feed-guides, the hold-fast D, tapered in part of its length, having guards *c c* and fingers *b b* bent into angles *a a' a''*, by which it is retained upon the tympan-clamp, and thus secured to the platen of a printing-press, in combination with the countersunk clasp E, provided with lugs *d d*, flanged set-screw *f* and dovetailed passage *e*, to receive and hold the feed-guides F and F', substantially as herein described.

2. In a feed-guide for printing-presses the beveled feed-guide F, having stop-curve *h* and mortise *i*, in combination with the adjustable elastic curved lip G, provided with laps *g g* and knobs *o o o o*, arranged and constructed to project outward the distance allowed by the margin of the sheet of paper to be printed, and vibrate toward the tympan-sheet by the action of the bed and platen in taking the impression, substantially as herein described.

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Witnesses:

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J. FITZPATRICK.