D. WECKERLIN.

Feed-Guide for Printing-Presses.

No. 197,305. **Patented Nov. 20, 1877.**

Fig. 1

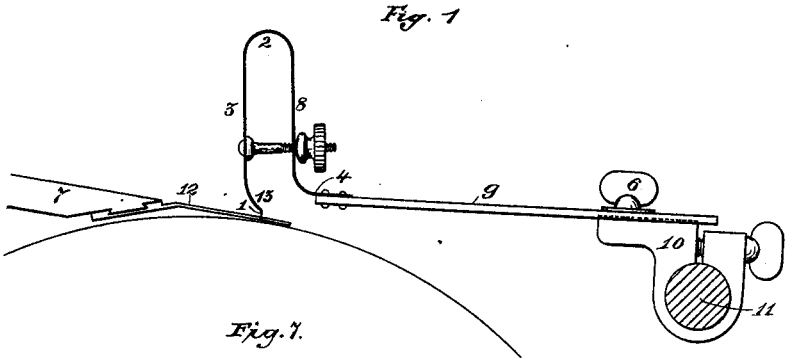


Fig. 2

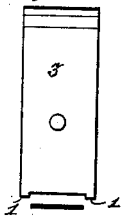


Fig. 7.

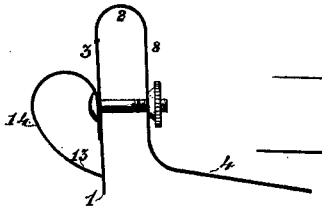


Fig. 3

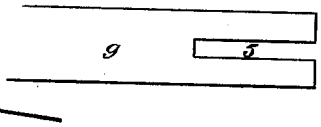


Fig. 8.

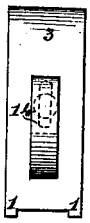


Fig. 4.

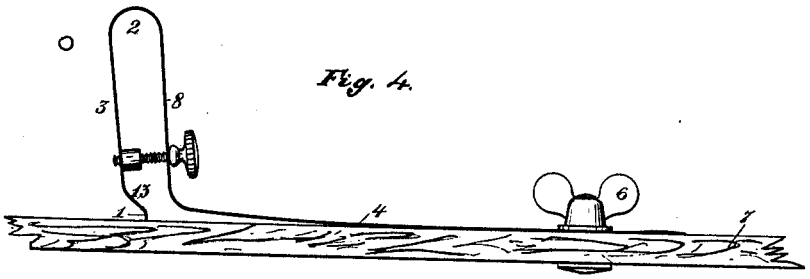


Fig. 5

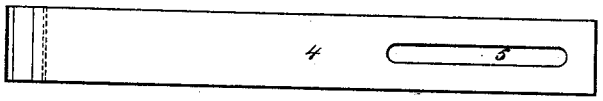
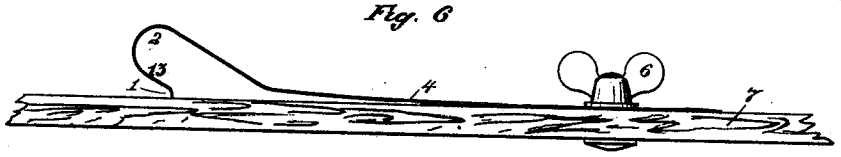


Fig. 6



Witnesses
Geo. H. Graham.
John L. Condron

Inventor
D. Weckerlin
By Munson & Philipp
Attorneys

UNITED STATES PATENT OFFICE.

DOMINICK WECKERLIN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FEED-GUIDES FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **197,305**, dated November 20, 1877; application filed January 31, 1877.

To all whom it may concern:

Be it known that I, DOMINICK WECKERLIN, of Brooklyn, Kings county, State of New York, have invented a certain new and useful Improvement in Feed-Guides for Printing-Presses, of which the following is a specification:

Figure 1 is an elevation, showing the device as applied to a cylinder printing-press. Fig. 2 is an end elevation. Fig. 3 is a plan view. Fig. 4 is an elevation, showing the gage applied to a feed-table. Fig. 5 is a plan view thereof. Fig. 6 is an elevation of a simple construction embodying this invention, and Figs. 7 and 8 illustrate the application to the gage or guide of a sheet-guard.

This invention relates to the guides or gages used upon printing-presses to govern the position of the paper as it is fed thereto; and consists, primarily, of a flexible strip of metal so bent as to form a bearing-foot at one end, and a horizontal spring at the other, whereby, when the gage is attached to a table, or otherwise held to bear upon a sheet-supporting surface, the said foot will press thereon with such force as to prevent the sheet from slipping underneath it, and thus become deranged from its proper position.

It also consists in so bending its end as to form a loop which shall provide two approximately parallel plates, which may be held in adjustable relation to each other by means of a screw or similar device, as illustrated in Figs. 1 and 4, and in details of construction fully hereinafter set forth.

The primitive form of this device is a flat plate of metal, bent at one end to provide a nearly vertical foot, 1, the body or shank 4 of which is bent so as to form a horizontal spring. This guide, thus constructed, may be attached to a feed-table, as a side or end guide, by means of a clamp-screw, as 6. When thus secured in place the pressure of the horizontal spring 4 forces the foot 1 down upon the sheet-supporting surface with a gentle pressure, which will insure a perfect and continuous contact therewith, whereby the sheet, when pushed against it, will not slip beneath it, but be stopped and registered against its face. In this form its adjustment is effected wholly by means of the elongated slot 5 in its shank 4, which embraces the adjusting clamp-screw 6.

In order to secure nice adjustments, it is preferable to form the bend 2 as a spring-loop, which shall provide two approximately parallel plates, 3 8, as is seen in Figs. 1 and 4. These plates are connected together by means of a screw-bolt or similar device, by the operation of which the free plate 3 is brought toward or allowed to move from its companion plate 8.

This form of the device may, of course, receive its main adjustment through the slotted body 4 and clamp-screw 6, as in Fig. 4. It may be attached to a bar, 9, similarly adjustable upon a hub, 10, which embraces a rock-bar, 11, as in Fig. 1, which construction is especially adapted for use in cylinder printing-machines where the gage overlies the cylinder, and is used for adjusting the front edge of a sheet. The forms shown in Figs. 1 and 4 will have their main adjustment made through the slotted bar 9 or shank 4 by the clamp-screw 6, and the finer adjustments will be made by carrying the plate 3 from or toward the plate 8 through the operation of the screw-bolt or equivalent adjusting-screw. In the form shown in Fig. 1 the front plate 3 is cut away at its lower edge to form two feet, 1, as in Fig. 2, which feet straddle the fingers 12, attached to the feed-table 7. This feature, however, as well as mounting the feed-gage upon the rock-bar 11, is commonly practiced in cylinder printing-presses, and is introduced here simply to show the adaptation of this device to such a press.

Although the plates 3 and 8 are shown as formed from a continuous plate of metal, which form a spring-loop, whereby the plates 3 8 have a tendency to separate as the screw-bolt is operated to permit their movement, the invention is not limited to this construction, since the plate 3 may be hung to the plate 8 by a hinge, and the two adjusted by a screw-bolt bearing upon one plate and tapped through the other. This last-described form might also have a spring interposed between the plates and be operated by a screw-bolt, as in Fig. 1.

The front plate 3 is bent at its lower end, so as to provide at that point a stop which shall

have an angular or nearly horizontal bearing-shoulder as well as a vertical bearing-face.

The angular or nearly horizontal shoulder 13 forms an inclined sheet-guard, which guides the edge of the sheet into place, and prevents said edge from being misguided when the sheet is buckled, or from flying upward, either while being placed against the gages, or while resting there ready to be carried into the press. This sheet-guard may be provided by a bowed plate, as 14, which is preferably narrow, (see Fig. 8,) so as not to obstruct the view of the feeder while laying the edge of the sheet up to the gage.

This sheet-guard may be attached, at one or both ends, to the front plate 3. One mode of its attachment is by forming an elongated slot in one of its ends, through which slot the shank of the adjusting screw-bolt is passed, as in Fig. 7. The sheet-guard may then be adjusted vertically on the plate 3, and the pressure of the screw-bolt will securely hold it in place.

What, therefore, is claimed is—

1. The metal feed-gage, consisting of plates 3 8, the front one of which is adjustable to and from the other, by means substantially as described.

2. The metal feed-gage, consisting of a horizontal spring-shank, 4, and plates 3 8, one of which is adjustable to and from its companion, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DOMINICK WECKERLIN.

Witnesses:

CHARLES VERNON PACE,
CHAS. W. CARPENTER.