

C. N. MORRIS.

Feed-Gages For Printing Presses.

No. 145,890.

Patented Dec. 23, 1873.

Fig. 1.

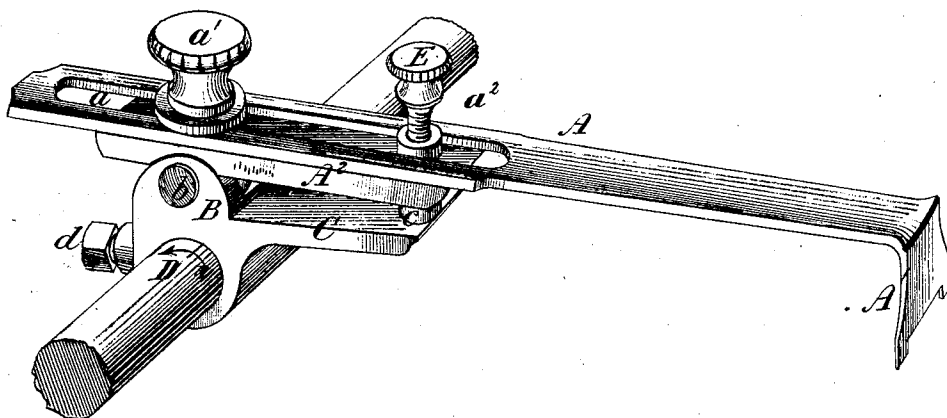


Fig. 2.

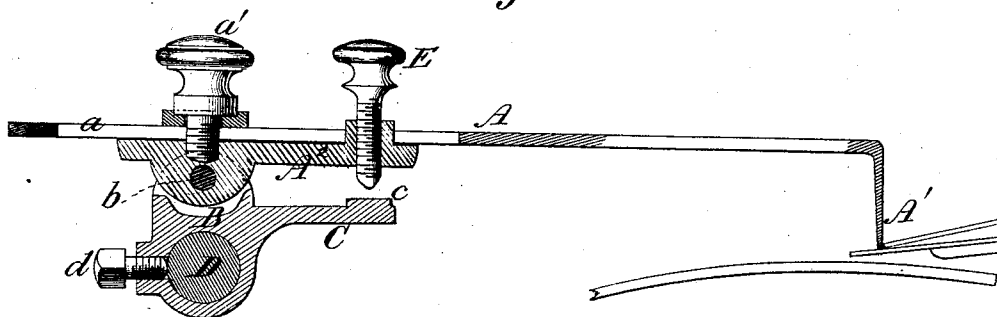
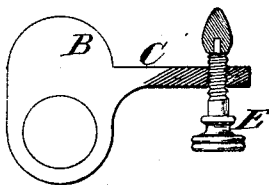


Fig. 3.



Witnesses.
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CHARLES N. MORRIS, OF CINCINNATI, OHIO.

IMPROVEMENT IN FEED-GAGES FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. 145,890, dated December 23, 1873; application filed April 10, 1873.

To all whom it may concern:

Be it known that I, CHARLES N. MORRIS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain Improvement in Feed-Gages for Printing-Presses, of which the following is a specification:

My invention relates to feed-gages, having a retreating movement before rising, so as to avoid lifting the edges of the sheets, or otherwise displacing them upon the feed-table. This has heretofore been accomplished by means of a jointed gage-arm, one member of which was rigidly secured in about a horizontal position to the actuating rock-shaft. My improvement consists in the use of a rigid gage-arm, which is pivoted to a vertical short arm of the rock-shaft, and combined with a horizontal arm thereon in such a manner that both movements of the gage-arm will be imparted to it positively and directly from the rock-shaft.

Figure 1 is a perspective view of my improved feed-gage, showing also a portion of the actuating rock-shaft. Fig. 2 is a vertical longitudinal section thereof, showing the position of the gage with reference to the feed-table and cylinder. Fig. 3 shows a modification in the adjustment of the lifting devices.

The same letters of reference are used in all the figures in the designation of identical parts.

The long gage-arm A, terminating at its extreme end in the gage A¹, is preferably rendered adjustable in length. To this end it is provided with an elongated slot, *a*, and clamped to a short bar, A², by means of a thumb-screw, *a*¹. The bar A² has, near its outer end, a boss, *a*², fitting the slot *a* of the arm, to prevent lateral motion of the latter after it has been properly adjusted and secured on the bar A². The

gage-arm thus constructed is pivoted, by a downwardly-projecting lug on the bar A², to the vertical arm B of a bell-crank lever, which is secured to the rock-shaft D by means of a set-screw, *d*. The pivotal point *b* of the gage-arm, being thus located in about the same vertical plane with that of the axis of the rock-shaft, it will be moved in a horizontal arc by the oscillations of the shaft, and consequently a positive longitudinal reciprocating motion will be imparted to the gage-arm.

The oscillation of the rock-shaft D in the direction of the arrow in Fig. 1 first draws the gage A¹ back toward the edge of the feed-table, and then lifts the arm by means of the horizontal arm C of the bell-crank, which, by that time, is brought up against the end of the adjustable screw E of the gage-arm.

The arm C of the bell-crank has a boss, *c*, on its upper side, near its extreme end, which comes in contact with the screw E. By adjusting the screw E the point at which the lifting action of the bell-crank shall begin can be readily regulated. This screw may be inserted in the arm C of the bell-crank, as shown in Fig. 3.

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

The rigid gage-arm A, pivoted to a vertical arm, B, of the rock-shaft D, in combination with a horizontal arm, C, thereof, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

CHAS. N. MORRIS.

Witnesses:

FRANK MILLWARD,
J. L. WARTMANN.