Aug. 2, 1932. B. NOWELL 1,869,708

CENTER STOCK GUIDE FOR PRINTING PRESSES

Filed Sept. 25, 1931

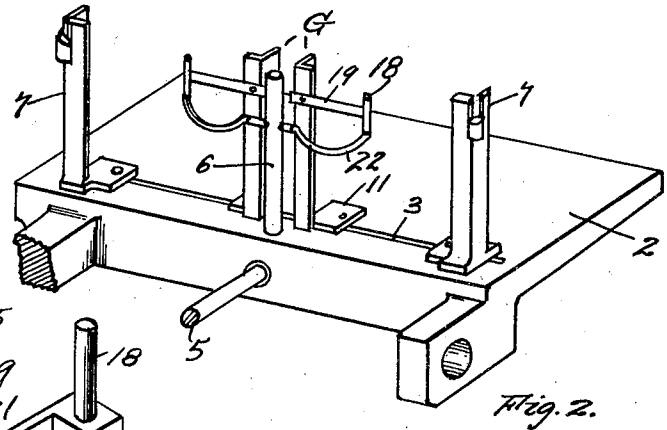


Fig. 2.

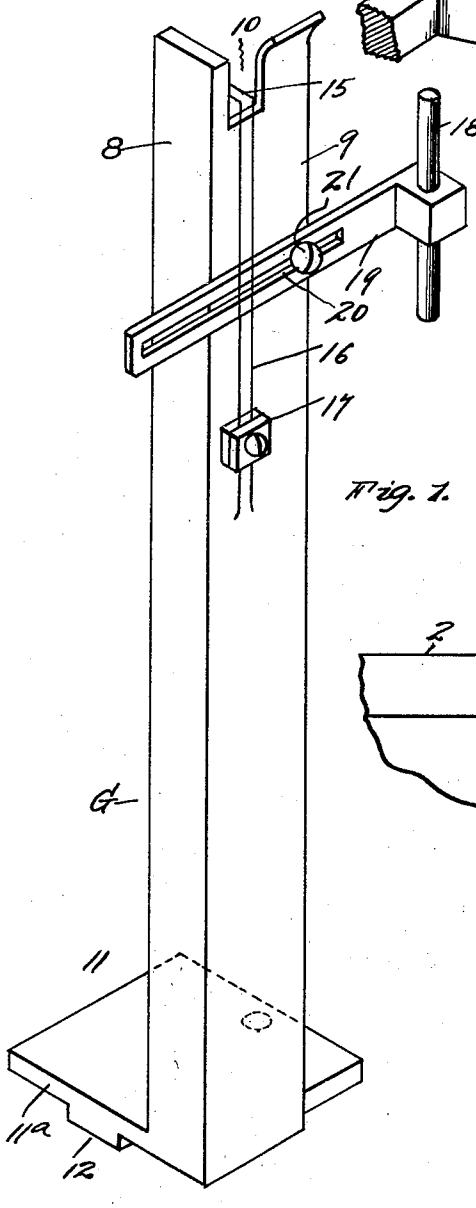


Fig. 1.

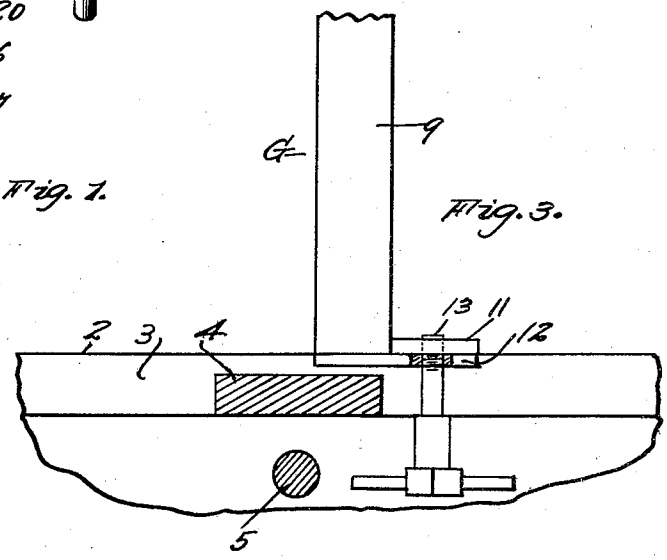


Fig. 3.

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CENTER STOCK GUIDE FOR PRINTING PRESSES

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This invention relates to printing presses and more especially to Miehle verticle presses.

Such presses have a stock feed table frame with a pair of guides of angle section which are adjustable along a slot in the frame bed for guidance of a stack of stock sheets which are to be transferred over to the printing elements. These presses have been practically limited to single sheet feed at each stroke of feeder means.

The broad object of the instant invention is to provide for transfer of a plurality of sheets, each separately by a relative feed part so as to enable use of a plurality of printing forms at one time in the press. In other words; to increase the capacity of the press 100% or more according to the size of the sheets being printed.

More directly expressed, an object is to provide a system of pairs of stock guides in which those guides disposed adjacent to the center of the table and here called the "center guides" are adapted for close adjustment with respect to each other over an obstructing element in the feed bed of the class of presses here concerned,—namely the Miehle vertical press. Also, the center guides are so constructed as to pass clear of the usual central blower tube of the paper fluffing system.

Heretofore such presses have been capable of feeding only one sheet at a time to a single form because the right and left stock guides were not adapted for adjustment in the manner here disclosed to provide multiple sheet feed.

By the present invention it is possible to run two sheets at a time of an aggregate size about equaling the form capacity of the type bed. This has not been possible before.

The invention consists in certain advancements in this art as set forth in the ensuing disclosure and having, with the above, additional objects and advantages, and whose construction, combination and details of means, and the manner of operation will be made manifest in the description of the herewith illustrative embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, principle and spirit of the invention as it is more directly claimed hereinafter.

Figure 1 is a perspective of a center guide.

Figure 2 is a perspective of the system of guides for two stock stacks (or piles).

Figure 3 is a sectional detail of the bed and a part of an applied guide.

The table bed 2 has a slot 3 which is interrupted by a medial web 4, under which lies the feeder pile worm shaft 5.

A central air tube 6 stands near the slot 3 to serve air to a fluffing system.

Outer corner guides 7 stand on the table 2 and are of such structure that they cannot be moved past the tube 6 nor over the web 4. But they are useful as outer corner guides of pairs of guides including center guides (or posts) G which are of L-shape cross section and present side flanges 8 and back flanges 9 these having top end slots 10.

The flanges 8—9 of each center guide are plane from top to bottom, except for a slight out-turn at the tops of the backs 9, and the thickness of the backs is such that when the guides G are adjusted along the table they will clear the air tube 6, and can be set with the side walls 8 close together over the web 4.

The center guides have foot plates 11 whose side edges 11ª are flush with the side walls of the guides, and have bottom tennons 12 fitting and slidable in the slot 3. Disposed at the side of the foot 11 remote from edge 11ª is a clamp screw 13 passing through the table slot 3 and binding up against the table bottom face to clinch the center at desired position.

By reason of the offset relation of the clamp screw 13 from the side wall 8 of each guide, these can be set over the web 4 to provide, with the relative outer guides 7, for two stock piles extending from the center guides to the outer guides.

It is understood that the stock piles are not laid on the bed but on a feeder table not shown.

Extending into the slot 10 is a wire fluffer paper stop 15 with shanks 16 secured under a clamp 17 on the guide back 9.

To facilitate sheet separation an air nozzle

18 is secured on an arm 19 having a longitudinal slot 20 receiving a clamp screw 21 in the back 9 of a guide G. The nozzle 18 is served with air by a hose 22 connected to the air tube 6.

It will be manifest that this center guide device clears the tube 6 and the web 4 and enables piling of two stacks of sheets of maximum size between two pairs of guides 7 and G on the table; the usual transfer feeder picking up two sheets side by side from the stacks for transfer to the forms in the press.

What is claimed is:

1. The combination with a Miehle vertical printing press feed table bed having a feeder guide slot and a central blower system tube, of a plurality of alined pairs of vertical feeder guides each pair adapted to hold a stack of stock to provide for feeding a plurality of sheets concurrently from the table; the inner guides adjacent to the blower tube being adjustable along the slot without interference by the tube.

2. The combination with a Miehle vertical printing press feed table bed having a feeder guide slot and a central blower system tube, of a plurality of alined pairs of vertical feeder guides each pair adapted to hold a stack of stock to provide for feeding a plurality of sheets concurrently from the table; the inner guides adjacent to the blower tube being adjustable along the slot without interference by the tube; the inner guides having adjustable arms carrying blow nozzles connected to the said tube by flexible air conduits.

3. A feeder guide post of L-shaped cross-section and whose back flange has a top end slot, and a fluffer paper stop secured on said back and overhanging into said slot.

4. A feeder guide post adaptable to a slotted bed presenting a bridge web, of L-shape cross-section and which has a foot plate one side of which is within the side plane of the coordinate flange of the post and whose opposite side has a clamp screw disposed a distance from the said flush side to permit adjustment of a pair of such guides into close position on such bed so that the obstacle in the bed slot is straddled by the said plates.

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