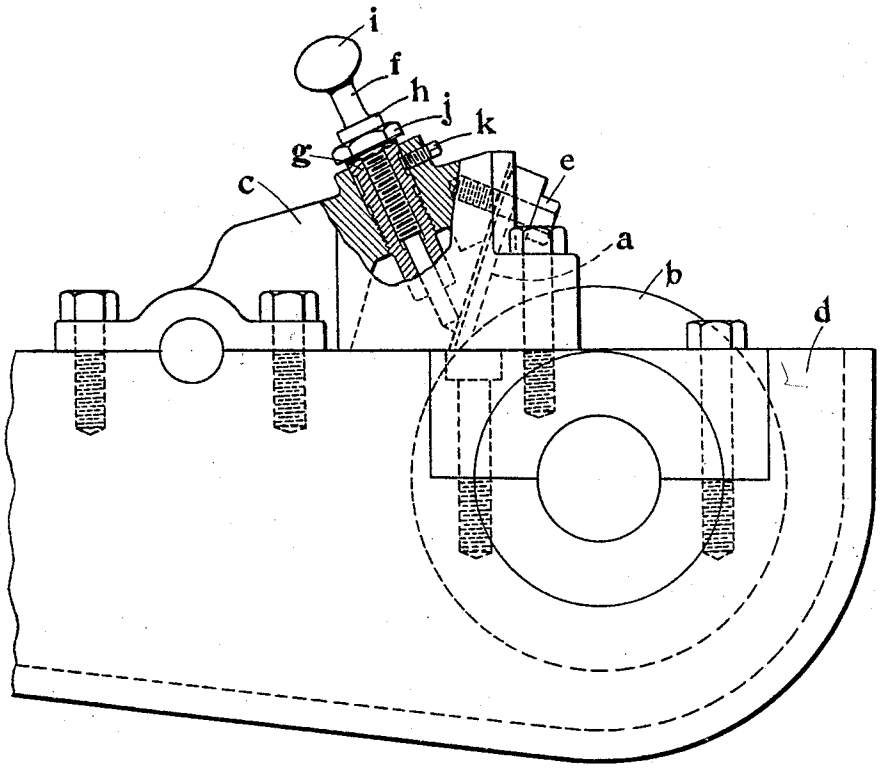
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INKING APPARATUS FOR PRINTING MACHINES

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INKING APPARATUS FOR PRINTING MACHINES

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This invention relates to inking apparatus for printing machines, and has among its objects to provide simple and effective means for adjusting the amount of ink taken up on the periphery of the fountain roller on its rotation. In such inking apparatus it is usual to provide horizontal blades for the purpose, but such blades are open to the disadvantage that after they have been in use in one position for a certain time a choking results that necessitates the screws, by which they are held, being released for the purpose of cleaning and adjustment. The invention has among its objects to avoid such and other disadvantages of horizontal blades as usually provided in such inking apparatus.

According to the invention the blade is set in an upstanding position inclined slightly over the fountain roller so that the blade is disposed substantially tangential to the fountain roller at the line of contact, and means are provided by which the lower edge of the blade may be adjusted to a determined extent with respect to the periphery of the fountain roller by a member that is adapted to be secured in position after the adjustment is made.

The invention comprises the features hereinafter described.

A construction of inking apparatus according to the invention is represented, by way of example, in the accompanying drawing which is a side elevation, partly in section, of the fountain roller, blade, and blade-adjusting mechanism.

In carrying the invention into effect according to the construction represented in the drawing, the blade *a* is set at an upstanding inclination to the fountain roller *b* so that it lies substantially tangential to the periphery of the roller, with the lower edge adjacent the roller, whereby the lower edge has a slicing action on the ink as the ink is carried upward on the roller. For this purpose the blade *a* is carried from an overhanging carrier or bridge *c* extending across the ink fountain *d*. Thus, the upper end of the blade is disposed rearwardly over the fountain roller *b* and the upper end is secured by such means as studs *e* to the carrier or bridge upon a prepared face having an inclination corresponding to that which the blade is to assume. Means are provided also mounted upon the carrier or bridge aforesaid, by which the lower end of the blade *a* may be precisely set into determined position with respect to the periphery of the fountain roller *b* so as thus to adjust the distance of the extreme edge of the blade from the fountain roller and thus to determine the amount of ink carried forward by the roller in its rotation. Such means consist of a number of adjusting screws *f*, provided at determined positions apart, set in an upstanding position behind and slightly above the fountain blade but at an opposite inclination, the adjusting screws being for the purpose carried each within an externally screw-threaded bush *g*, the bushes being mounted at prepared positions on the carrier or bridge *c*, the lower ends of the bushes protruding beneath the carrier or bridge, the bushes being also internally screw-threaded for the reception of the adjusting screws which are screw-threaded to correspond. The adjusting screws may be provided at their lower ends of a conical form by which they contact with the rear face of the blade near its lower edge, while these adjusting screws are provided near their upper end with a flange *h* by which their lowermost position within their respective bushes *g* is determined and with a head *i* of convenient form for manipulation.

It will be understood that when the adjusting screws *f* are screwed down so that the flange *h* contacts with the upper end of the respective bush *g*, the bush, which at its upper end may be provided with a hexagonal head *j*, may be rotated so that the lower conical end of the adjusting screw may be applied to the blade *a* for its deflection to the desired extent towards the periphery of the fountain roller. A transversely disposed locking screw *k* may be provided, the inner end of which may engage the bush *g*, whereby the bush may be locked after the setting of the blade.

It will be understood that by the means described the adjusting screws may be re-set to the determined position at any time dur-

ing the printing operation to ensure uniformity in the supply of ink, while any desired adjustment of the supply of ink may be secured by resetting the bushes.

I claim:—

1. The combination with an ink fountain, an ink roller therein, a stationary support, and a blade secured to said support and lying in a plane substantially tangential to the roller, of means for adjusting the edge of the blade toward and from the roller, comprising a bushing adjustable in said support toward and from the edge of the blade and a member adjustable in said bushing and adapted to engage the blade.

2. The combination with an ink fountain, an ink roller therein, a stationary support, and a blade secured to said support and lying in a plane substantially tangential to the roller, of means for adjusting the edge of the blade toward and from the roller, comprising a bushing adjustable in said support toward and from the edge of the blade and a spindle threaded in and extending through the bushing and adapted to engage the blade, said spindle having a stop adapted to engage the bushing to limit the adjustment of the spindle.

EDGAR WILTON SMITH.