(No Model.)

G. L. LAWRENCE.

COLOR ATTACHMENT FOR PRINTING PRESSES.

No. 523,358. Patented July 24, 1894.

Fig. 1.

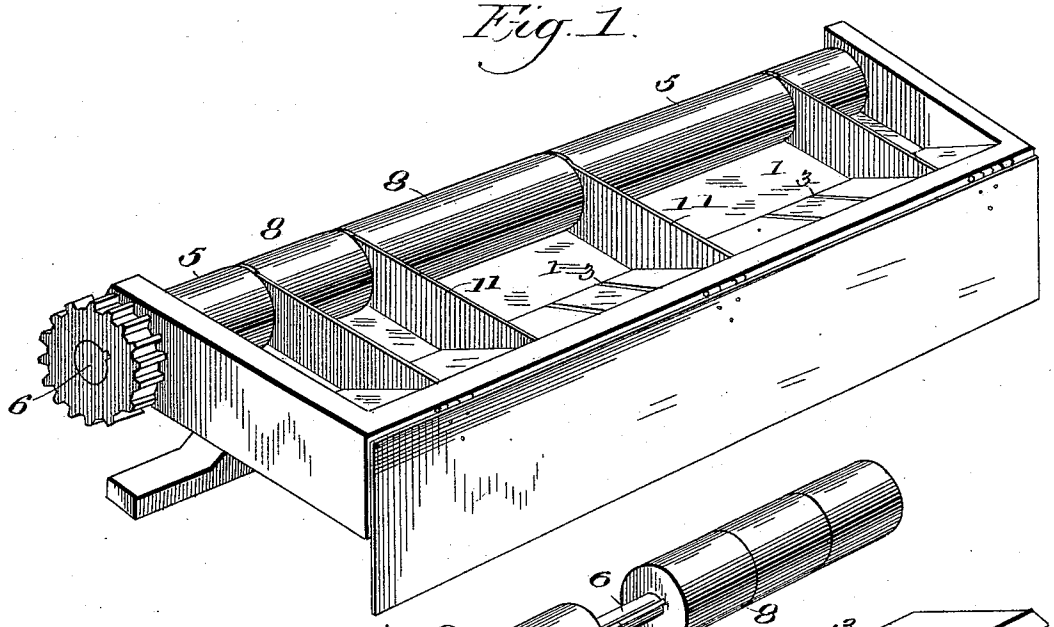


Fig 2

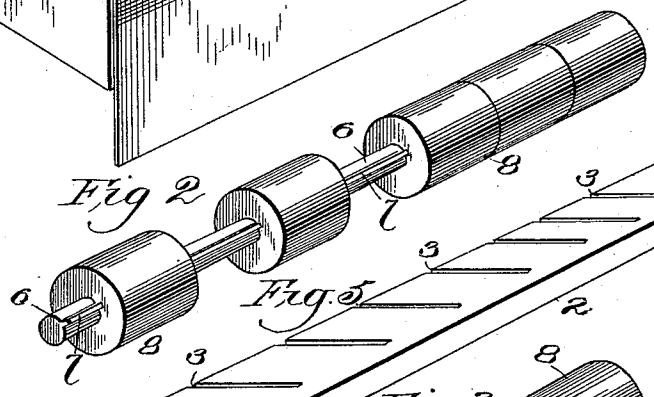


Fig. 5

Fig. 3

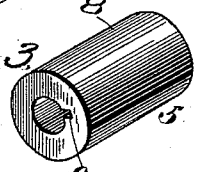


Fig 6

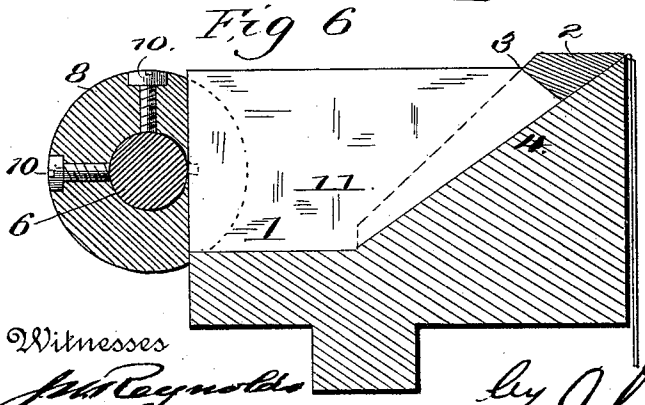
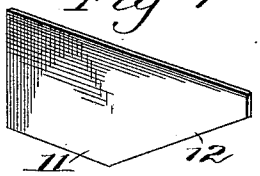


Fig 4



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UNITED STATES PATENT OFFICE.

GUSTAVUS L. LAWRENCE, OF MONTPELIER, VERMONT.

COLOR ATTACHMENT FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 523,358, dated July 24, 1894.

Application filed November 7, 1893. Serial No. 490,229. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVUS L. LAWRENCE, a resident of Montpelier, in the county of Washington and State of Vermont, have invented certain new and useful Improvements in Color Attachments for Printing-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to color attachments for printing presses and consists of a fountain roller in sections instead of in a solid piece as usual, and also provided with a board at the rear of the fountain, which is slotted on one edge to receive the ends of pieces of steel which form the partitions and which are held or supported by the said rollers.

The object of the invention is to provide simple and effective means to deliver different colored inks to the fountain roller which are held separated until they are conveyed to the distributing roller by said fountain roller where they are slightly mixed so that there is a gradation from one color to another instead of an abrupt change.

In the drawings:—Figure 1 is a perspective view of a portion of the fountain and the fountain roller embodying the invention. Fig. 2 is a similar view of the fountain roller, disconnected, and showing the sections separated. Fig. 3 is a detail perspective view of one of the sections of the fountain roller. Fig. 4 is a similar view of one of the partitions. Fig. 5 is a detail perspective view of the partition board which is placed at the rear of the fountain. Fig. 6 is a transverse sectional view on a large scale of a fountain and the improved construction applied thereto.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates a fountain for receiving inks and adapted to be employed in connection with a printing press and which is in the present instance provided at the rear with an inclined board 2, which is beveled off at its opposite ends and converged from one end toward the other as shown, and also formed with a series of transverse slits or slots 3, which extend partially therethrough. This board 2 rests against the rearwardly inclined wall 4 of the fountain and at the opposite end of the fountain is located a fountain roller 5, which is composed of a steel shaft 6, having a feather 7 thereon, and on the said shaft are removably mounted steel cylinders 8, having grooves 9 therein, adapted to fit the feather 7 for an evident purpose, the cylinder at the extreme end being held in position by set screws 10. Between the cylinders, at proper intervals as may be desired, are steel or other metal partitions 11, whose rear ends have under bevels 12. The width of the partitions is about equal to the depth of the fountain and when in position the bottom edges of the same rest on the bottom of the fountain while the under bevels rest against the inclined partition 4 of the rear of the fountain, the said rear ends of the partitions being seated in the slots 3 of the board 2 and when the fountain roller is mounted in position as shown in Fig. 6, the two ends of each partition are held in proper position and prevented from moving to thereby retain a substantially rigid partition. The front ends of the partitions loosely abut against the steel shaft 6 and the fountain roller revolves in the ordinary manner without displacing the said partitions.

The steel partitions are placed between the cylindrical sections or steel cylinders at points where it is desired to use ink of a different color, and compartments are thus formed in the fountain as well as divisions on the fountain roller, in which and on which inks of different colors can be placed without mixing with each other. The size of these compartments can be varied by placing the partitions different distances apart.

The inks from the fountain roller are delivered to the distributing roller in the ordinary manner where they are slightly mixed so that there is a gradation from one color to another without a distinctive line of change. The one section at the extreme end of the roller is securely fastened in position as set forth, and the sections or cylinders are all

held in place thereby, so that the roller revolves as if constructed of one solid piece of steel or other metal.

It is obviously apparent that many slight changes in the construction and arrangement of the several parts might be made and substituted for those shown and described without in the least departing from the spirit or nature of the invention.

Having thus described the invention, what is claimed as new is—

In a color attachment for printing presses, the combination of a fountain, provided with a stationary bottom having a rear inclined wall a board mounted on said rear inclined wall and with a series of slits or slots therein, a fountain roller having a series of cylindrical sections removably and adjustably mounted thereon, and a series of partitions adjustably and removably held by the said cylinders and the said board, the rear ends of said partitions being mounted in the slits or slots of the said board, substantially as described.

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

GUSTAVUS L. LAWRENCE.

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