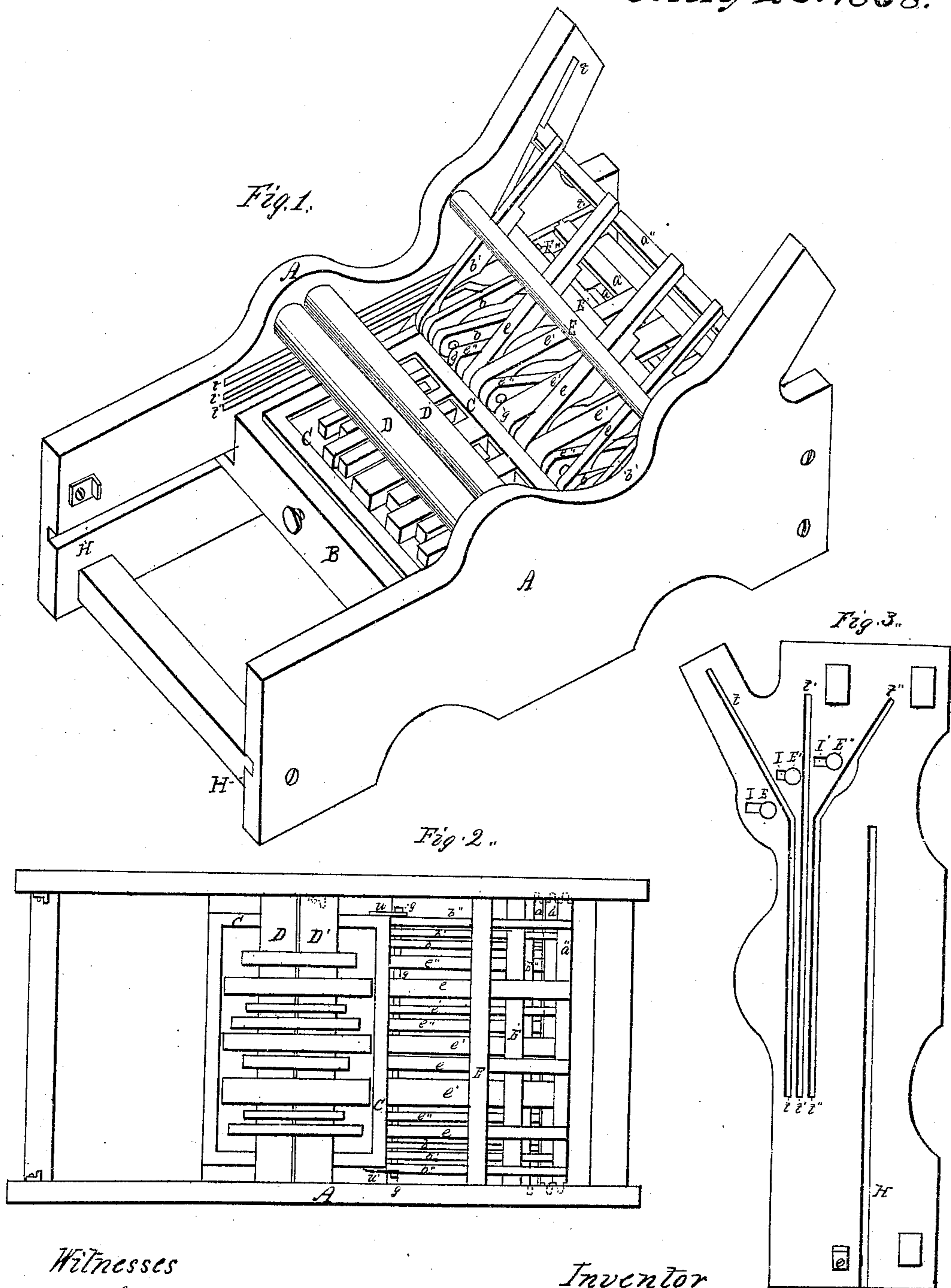


T. L. Baylies.
Inking App's for Printg Press.
Nº 78358. Patented May 26. 1868.



Witnesses

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Inventor

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THOMAS L. BAYLIES, OF RICHMOND, INDIANA.

Letters Patent No. 78,358, dated May 26, 1868.

IMPROVEMENT IN INKING-APPARATUS FOR PRINTING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS L. BAYLIES, of the city of Richmond, and State of Indiana, have invented a new and useful Improvement in Chromatic Inking-Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view,

Figure 2 a plan view, and

Figure 3 a longitudinal section.

The same letters in the different figures relate to corresponding parts of the invention.

My invention relates to an inking-apparatus to be used in connection with printing-presses, by means of which printing may be done in different colors at one and the same impression.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the structure or frame of the press to which the inking-apparatus is applied.

B is the type-bed supported and movable in the grooves H and H'.

C represents the form, on which are located the different colors representing the different lines of type.

D and D' are rollers for inking the type.

e, *e'*, and *e''*, each represents a set of inking-slats, which sets are attached respectively to frames composed of one of the transverse bars *a*, *a'*, and *a''*, and two of the longitudinal bars *b*, *b'*, and *b''*, (one at each end.) One end of the longitudinal bars is secured in any suitable manner to the corresponding transverse bar. The opposite ends of said longitudinal bars and one end of all the inking-slats are hinged by being looped or hooked on the transverse rod *g*. The latter is supported by its ends resting in ears *u* and *u'* attached to bed B, as shown in fig. 2.

The transverse bars *a*, *a'*, and *a''*, of the frames are each provided with wrists at their ends, which wrists rest in grooves *t* *t'* *t''* in each side of the frame A.

E, E', and E'', are inking-rollers, each of which is supplied (in any of the ordinary forms) with ink of a different color.

The frames to which the inking-slats, *e*, *e'*, and *e''*, are attached are made of successional sizes, by which, when brought together, they may occupy positions one within the other, and thus the upper surfaces of all the inking-slats conform to the same horizontal plane by correcting the difference caused by the different positions of the grooves *t*, *t'*, and *t''*, in which the ends of the transverse bars *a*, *a'*, and *a''* rest, which is done by notching the ends of slats *b*, *b'*, and *b''* to different depths where the latter are connected with the transverse bars.

The slat of the different sets are arranged in intermediate positions, according to the order desired for the different colors. The width of said slats is made suitable to give the desired breadth of color.

The upper and lower grooves *t* and *t''* diverge at a point near the inking-rollers E, E', and E'', by which the frames carrying the upper and lower sets of inking-slats are separated.

The operation of the apparatus is as follows:

The movement of the bed B, which carries the type back and forth for the purposes of inking said type and taking impressions therefrom, also causes a reciprocating movement of the inking-slats, and frames to which they are attached, the wrists at the ends of the bars *a*, *a'*, and *a''*, sliding respectively in the grooves *t*, *t'*, and *t''*, thus bringing said slats together, and in uniform contact with the under surfaces of rollers D and D'.

Each set of inking-slats receives its respective color from the corresponding one of the rollers E, E', and E'', the upper and lower sets of slats being brought in contact with their respective roller by means of the diverging directions of the upper and lower grooves, which being followed respectively by the wrists of said slat-frames, carry the upper slats *e* in contact with roller E, and the lower slats *e''* in contact with roller E'', as seen in fig. 1. The intermediate groove *t'* being in a direct line, carries the slats *e'* in contact with roller E'. Thus the sets of slats receive their particular color, which they, in turn, transfer in belts to the rollers D and

D'. As the slats, by their forward movement, are brought in contact with said rollers, the latter again transfer the colors, to the type, from which the impressions are taken and the operation completed.

The rollers E, E', and E'', have their bearings in vertical slots, I, I', and I'', in the sides of the frame, as seen in fig. 3, thus allowing said rollers to adapt themselves vertically to the changing positions of the slats. The necessary mechanism may also be applied to give the rollers E, E', and E'', a lateral or end motion for the better distribution of ink on their surfaces, if found necessary.

The construction of the inking-apparatus, as herein set forth, is particularly applicable to a cylinder-press of the table-distribution class. Some modifications would be necessary to make it applicable to presses of other descriptions.

Having thus fully described my said invention, what I claim, and desire to secure by Letters Patent, is—

1. The inking-slats *e*, *e'*, and *e''*, hinged and so arranged in sets as to all occupy the same horizontal plane, and also to admit of their being separated and brought in contact with different-colored inking-rollers, substantially as described and for the purpose set forth.

2. The grooves *t*, *t'*, and *t''*, in the sides of the frames, in combination with the inking-slat frames, or their equivalents, by which said inking-slats are directed against the surfaces of their respective inking-rollers, substantially as described and for the purpose set forth.

THOMAS L. BAYLIES.

Witnesses:

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