

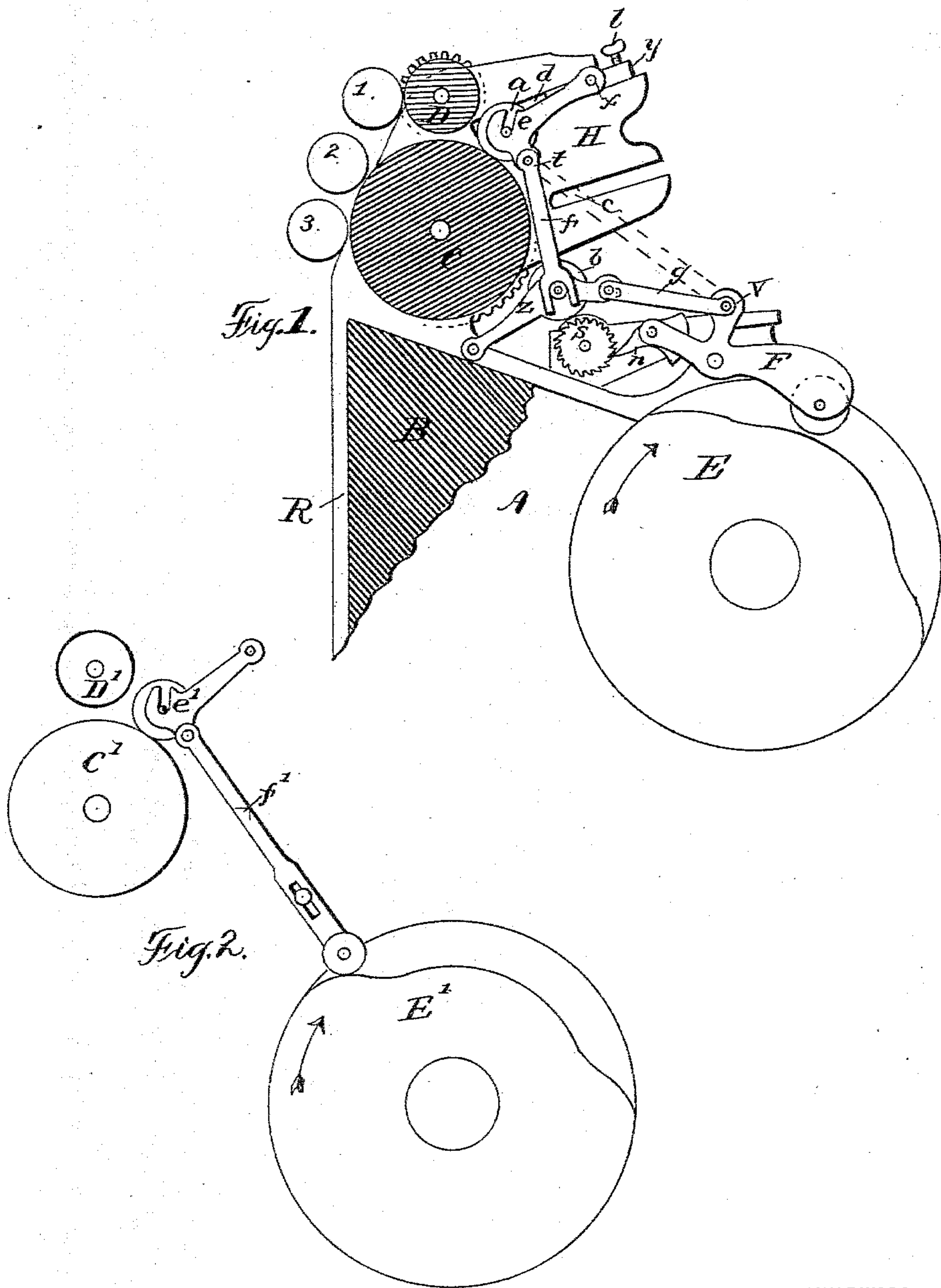
(No Model.)

M. GALLY.

INK DISTRIBUTING APPARATUS FOR PRINTING PRESSES.

No. 356,828.

Patented Feb. 1, 1887.



WITNESSES:

James Whitford  
D. B. Gally.

INVENTOR

Merritt Gally.



# UNITED STATES PATENT OFFICE.

MERRITT GALLY, OF NEW YORK, N. Y.

## INK-DISTRIBUTING APPARATUS FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 356,828, dated February 1, 1887.

Application filed July 3, 1886. Serial No. 207,091. (No model.)

*To all whom it may concern:*

Be it known that I, MERRITT GALLY, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Ink-Distributing Apparatus for Printing-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

In the accompanying drawings, Figure 1 is a side view of the ink-distributing apparatus, showing also a part of the supporting framework and the bed of the press, partly sectional, some parts not essential to the description of this invention being omitted. Fig. 2 is an outline side view showing a modified construction of the improved distributing device.

In Fig. 1 three form-inking rollers, 1 2 3, are shown in contact with two distributing-cylinders, C D. Two slideways, *c* and *d*, are shown in the frame-work of the press. In these slideways it is customary to place the composition distributing-rollers of the press; and I have usually driven only the cylinder C by means of the positively-moving machinery of the press, depending upon the friction or adhesion of the composition distributing-roller having its bearings in slot *d* to drive cylinder D and apply the ink to form-roller 1. This construction and arrangement of cylinders and rollers appears to be somewhat defective, from the fact that if the distributing-roller in slide *d* is not made of extra tough composition and thoroughly seasoned it is liable to tear or to become too soft from heat produced by friction. I obviate this difficulty by the construction shown in the drawings.

Instead of placing the journals of distributor *a* in the slideway *d*, and allowing the distributor to touch both cylinders C and D simultaneously, I place roller *a* in a vibrating frame, *e*, which is pivoted at *x*, and allow the roller to touch first one cylinder and then the other, alternately. I produce the movement of frame *e* by means of the bar *f*, pivoted to the frame *e*, as at *t*, and connect this bar *f* to or operate it in connection with some regularly-moving part of the press.

In Fig. 1 the bar *f* is shown as yoked onto the hub of the fountain ductor-roller frame, which has a movement regularly for each en-

tire movement of the press. I connect the bar *f* with the ductor-frame *z*, for two reasons: First, it forms a convenient operative attachment having a regularly-occurring movement; and, secondly, it produces the movement of frame *e* at a time most advantageous in the process of distribution and application of ink.

It will be seen by examination of the drawings that during the time the ductor-roller is taking ink on the fountain-roller *s* the distribution of the ink previously applied to cylinder C is going on, and thoroughly-distributed ink is applied to the roller *a* from cylinder C. As the ductor-roller leaves the fountain to apply the additional undistributed ink to cylinder C the roller *a* leaves cylinder C and is carried by its frame *e* to cylinder D, from which it does not return to cylinder C until ductor *d* returns to the fountain-roller *s*. No ink therefore can reach cylinder D until it has first been thoroughly distributed. The distribution of each fresh application of ink to cylinder C is made while the inking-rollers 1 2 3 are inking the form on the face of the bed at R, so that no undistributed ink can reach the form-inking rollers.

The construction as described allows me to drive both cylinder C and cylinder D by movement of the machinery of the press. Gearing is shown in partial view for both cylinders in Fig. 1.

The movement of bar *f* is shown in Fig. 1 as produced by means of the cam-wheel E and fountain ratchet-lever F. It may be more directly produced by carrying bar *f* down to cam-wheel E', having reciprocating motion given to it directly by the cam, as shown in Fig. 2. The bar *f* may otherwise be connected with lever F by pivoting at *v*, as shown by the dotted lines. A distributor may occupy the slot *c*, and other distributors be applied to either or both of the cylinders C D, if desired. These are omitted from the drawings for the purpose of more clearly showing the parts and operation of the present invention.

The roller-frame *e* may be pivoted directly to the frame-work H, but is shown as pivoted to a slide, *y*, which is set in position by means of the set-screw *l*. The slide *y* is duplicated—one slide for each side of the press. This construction provides for easy application of the



device to presses already in use having the slideways *d*. The adjustability of the slides *y* also provides for perfectly lining the roller *a* as to the distributing-cylinders C D, and also for making allowance in the movement of roller *a* for shrinkage of its composition.

The form-inking rollers 1 2 3 are shown in the drawings, 1 on cylinder D, and 2 3 on cylinder C. A greater number of cylinders may be used having one or more form-rollers to each. The gist of the invention requires that there be at least two distributing-cylinders, and to each cylinder a form-inking roller or rollers.

I claim—

1. The combination, with a plurality of distributing-cylinders in a printing-press, from all of which the form-inking rolls receive their ink supply, of a distributor-roll alternately engaging said cylinders.

2. The combination, in a printing-press, of a plurality of distributing-cylinders, with all of which the form-rolls come in contact for their ink supply, a distributing-roll adjustable relatively to the distributing-cylinders, and mechanism, substantially as described, by which said distributing-roll is brought into contact alternately with the distributing-cylinders.

3. In a printing-press in which a plurality of form-inking rolls take their ink separately from a plurality of distributing-cylinders, and in combination therewith, a distributing-roll, as *a*, and its carrier connected with a movable

part of the press, by which said distributing-roll is brought alternately into contact with the distributing-cylinders at each complete movement of the press.

4. The combination, with the form-inking rolls, as 1 and 2, and the distributing-cylinders C D, which separately supply said ink-rolls, of the roll *a*, hung in the frame, and a connection therefrom to the ductor-roll frame by which roll *a* is brought alternately into contact with the rolls C and D, as set forth.

5. The combination, in a printing-press of the character described, of the distributing-cylinders C and D, both positively driven from the moving parts of the press, of the distributor *a*, and a connection, substantially as described, to the moving parts of the press, by which roll *a* is made to engage alternately with the rolls C and D.

6. The combination, with the frame having positively-driven distributing-cylinders C D and slot *d*, of the slide *y*, adjustable in said slot, the frame *e*, pivoted thereto, the roller *a*, supported in said frame, and mechanism, substantially as described, by which frame *e* and its roll are rocked on the pivots of said frame, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MERRITT GALLY.

Witnesses:

ROBT. A. GALLY,  
JOHN W. ESSEX.