I. L. G. RICE.

INKING APPARATUS FOR PRINTING-PRESSES.

No. 185,191. Patented Dec. 12, 1876.

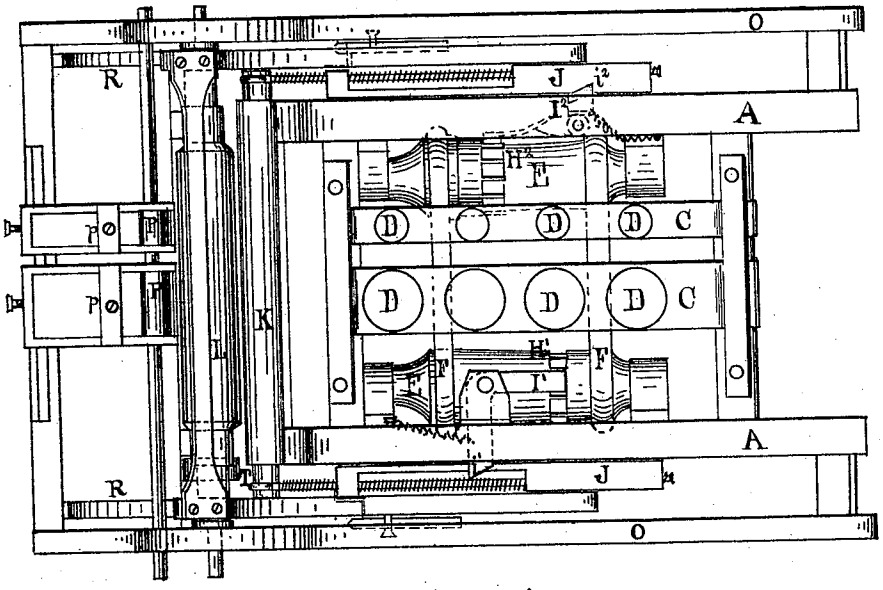

Fig 1

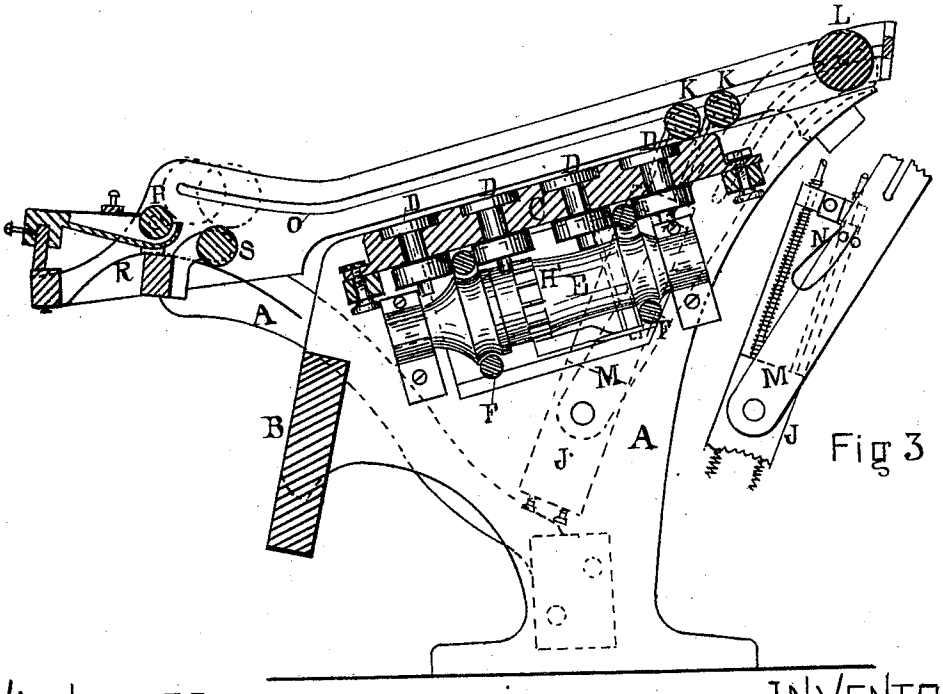

Fig 2

Fig 3

WITNESSES

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ISRAEL L. G. RICE, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN INKING APPARATUS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **185,191**, dated December 12, 1876; application filed April 22, 1876.

To all whom it may concern:

Be it known that I, ISRAEL L. G. RICE, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Inking Apparatuses for Printing-Presses, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The object of the invention is to provide a printing-press with an inking apparatus for printing several colors from a single form at one impression.

The invention consists in that system or mode of distribution of inks by placing small disks into a sectional ink-table, the surfaces of the disks and table being level with one another; then, after these tables have been arranged to correspond with the lines of type to be printed, the press is started; and after the rollers pass over the tables, a turn is given to the disks by self-acting mechanism, so that they present a different position to the rollers as they pass over them the next time.

A is the frame of the printing-press. B is the type-bed. C C are sectional ink-tables. D D are disks. E E are shafts that are set in the frame of the printing-press, and on which are placed the belts F F to revolve the disks. H^1 and H^2 are ratchets on these shafts, and are acted upon by means of the bell-crank levers and pawls I^1 I^2, the action being as follows: When the swinging carriage J, that has the inking-rollers, passes by the lever I^1, it comes in contact with the end marked *i'*, and strikes it and moves it along as it goes, and causes the ratchet to turn one tooth. This causes the shafts to turn a little, and the rubber belts upon them that pass in contact with the stems of the disks causes them to revolve a little. The action of I^2 is similar. It is best to have the movement take place when the rollers are not in contact with any of the disks; and it is also best to have the disks turn when the rollers are over the type-bed, and again when they have passed over the disks and are farthest from the platen. By doing this each disk will present a fresh portion of the surface to the rollers each time that they pass up and back. The inking-rollers that pass over the form are shown at K K. L is the distributing-roller. This roller is in the roller-carriage M. This carriage is pivoted to the roller-frame J. A spring, N, connects the two together. This spring is fastened to J. Now, as J is moved so that the rollers pass over the type-bed, the spring N pushes the carriage M along, and allows the roller L to move up in the guide-frame O until it strikes against the sectional fountain-rollers P P. The spring R now pushes the roller L off the fountain-rollers, the rollers K K having moved on so as to place the spring N in such a position that it does not hold the roller L against the fountain-rollers. The roller L is thrown by the spring R against the rapidly-revolving distributer S, this distributer being kept in motion by a belt from the main shaft of the machine passing over the pulley T. The sectional ink-fountains P P are placed in such a position that the operator may readily adjust the fountain knives or scrapers *p p* by means of the regulation-screws without stopping the press or leaving his position in front of it.

These movements and parts are clearly shown in the plan view, Fig. 1, the sectional view, Fig. 2, and the carriage J, that holds the inking-rollers, and the carriage M, that holds the distributer, together with the connecting-spring N, that moves it backward and forward over the inking-tables, are clearly shown in Fig. 3.

I claim as my invention—

1. The movable, interchangeable, sectional ink-tables of various widths, having disks inserted in them, substantially as in the manner and for the purpose herein set forth.

2. The combination of movable, interchangeable, sectional ink-tables, provided with disks with movable, interchangeable, sectional ink-fountains, substantially as in the manner and for the purpose herein set forth.

ISRAEL L. G. RICE.

Witnesses:

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