No. 627,583. Patented June 27, 1899.

F. KOSTLAN.

PRINTING ATTACHMENT FOR ROLL PAPER HOLDERS.

(Application filed Feb. 23, 1899.)

(No Model.)

Fig. 1

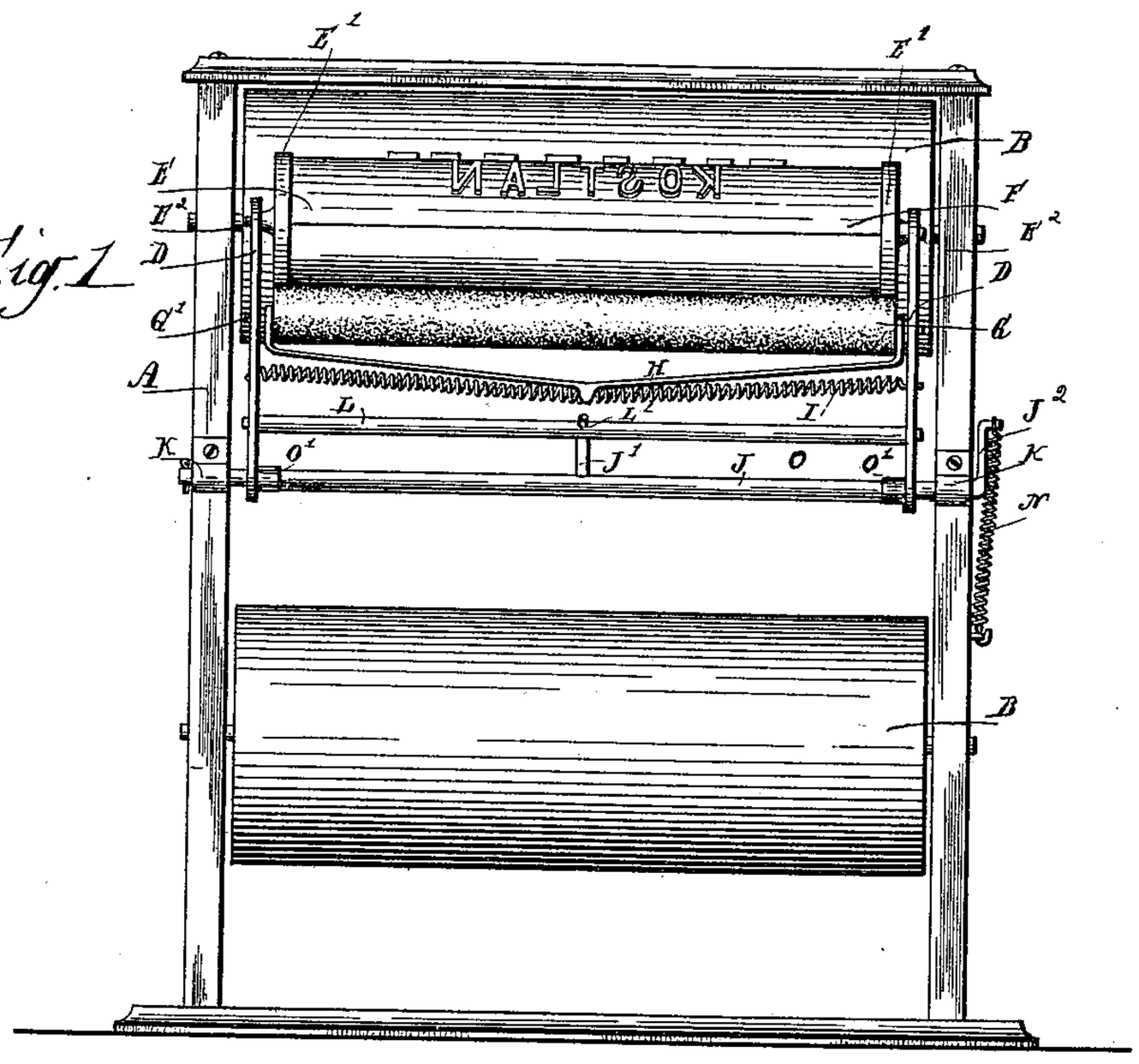
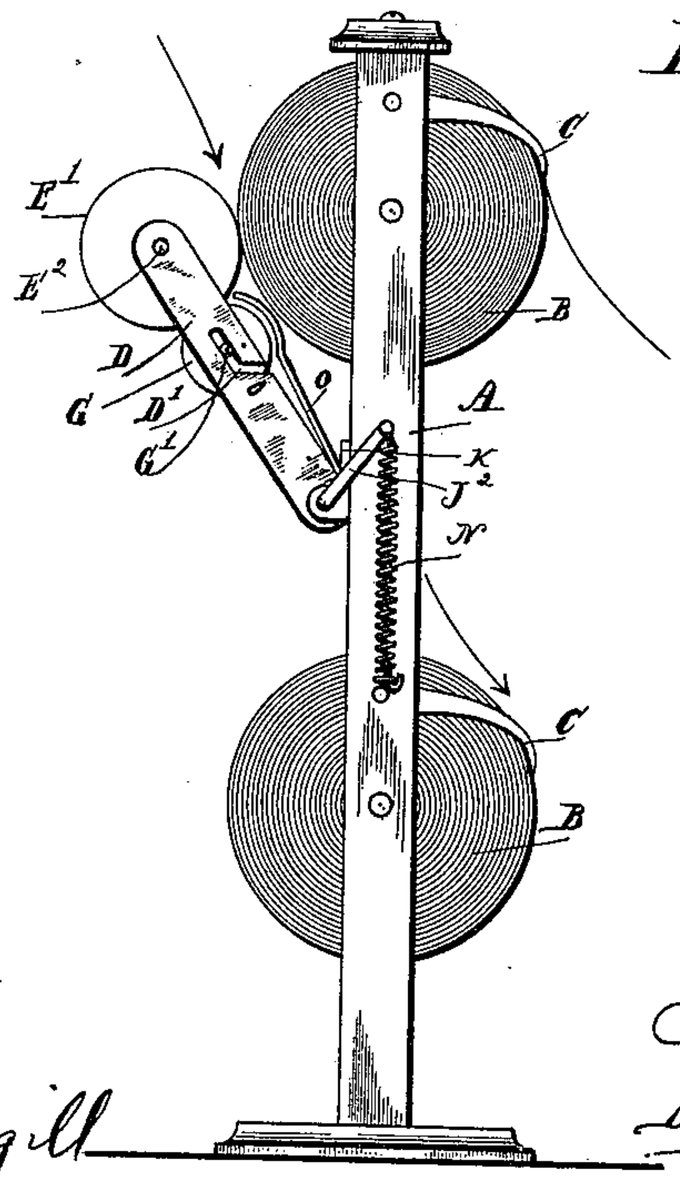


Fig. 2.



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PRINTING ATTACHMENT FOR ROLL-PAPER HOLDERS.

SPECIFICATION forming part of Letters Patent No. 627,583, dated June 27, 1899.

Application filed February 23, 1899. Serial No. 706,442. (No model.)

To all whom it may concern:

Be it known that I, FRANK KOSTLAN, a citizen of the United States, residing at Traer, in the county of Tama and State of Iowa, have invented certain new and useful Improvements in Printing Attachments for Roll-Paper Holders; 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 that class of printing devices used in connection with roll-paper holders; and the object of the invention is to produce a device of this nature capable of printing on either an upper or a lower roll on the same stand and so constructed that it may be easily and quickly taken apart or attached to or removed from the roll-stand.

The nature of the invention will fully appear in the description and claims following, reference being had to the accompanying drawings, in which--

Figure 1 is a front elevation of a device embodying my invention as applied to a roll-holder. Fig. 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

In the drawings, A is the stand, on which is mounted one or more rolls of paper B, and C is the straight-edge, along which the paper is torn off as required for wrapping or otherwise. This device is in common use, and forms no part of my invention, which relates wholly to the printing mechanism, described as follows:

In suitable bearing-arms D D is mounted a type-roll E, the ends of which are preferably raised to form rims E' a little less than type-high above the cylindrical body of the roll. On the body of the roll is secured, by brads, cement, or other suitable means, the type-form F, which is preferably of rubber. For convenience in attaching the type-form the roll is preferably made of wood, except, of course, the journals E^2. The rims of the type-roll, running on the paper-roll as it is revolved in taking off paper or otherwise, impart the desired rotary movement to the type-roll.

Adjacent to the type-roll is mounted the inking-roll G, the journals G' of which enter slots D' in the arms D, thus giving a limited movement of the rolls with respect to each other. These slots serve chiefly as guides for the inking-roll journals, the real bearings of which are in a stirrup H between the arms D D. This stirrup projects out from the roll at an angle in the middle, and across this angle is stretched a coil-spring I, connecting at each end with the arms D D. It will be seen that the connections of the ends are relatively nearer the roll than the middle of the coil, and the effect of this is both to hold the arms D D in position laterally and also to press the inking-roll against the type-roll, giving it at the same time perfect freedom of movement in passing over the inequalities in the surface of the type-roll due to the various positions of the type. By simply unhooking this spring from one of the arms D the roll may be removed in a moment, the arms D D being then free to spread apart for this purpose.

The ends of the arms D D opposite the type-roll bearing are mounted on a crank-shaft J, journaled in bearings K, secured to the uprights of the roll-stand. In the center of this shaft is a stud J', engaging a hole L' in a cross-bar L, the reduced ends of which pass through suitable holes in the arms D D, and thus serve as fulcrums for said arms against the inward strain of the spring I. At one end of the shaft J is a crank J^2, to which is connected a spring N, attached at the other end to an upright of the roll-stand. This construction is such that the printing-roll is pressed forcibly against the paper-roll but as the arms D D are loose on the crank-shaft they are free to oscillate at will according to the surface of the paper-roll over which the printing-roll travels. The printing, therefore, is not materially affected, though one end of the paper-roll be true and cylindrical and the other more or less flattened and elliptical.

O is a sheet-metal shield which serves to protect the ink-roll from dust to some extent and to keep from contact with the ink-roll any papers that may be printed by passing them through between the paper-roll and the printing-roll, as indicated by the arrow in Fig. 2. The construction is such as to make it very convenient to print in this manner such things as envelops, postal cards, and the

like, as will be evident. The shield is preferably connected to the crank-shaft by suitable ears or clips O', as shown in Fig. 1.

By reference to Fig. 2 it will be apparent that by simply pushing the printing device down the printing may be done on the lower roll as well as the upper one, the tension-spring N serving the same purpose in both positions.

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

1. The combination with a roll-paper holder provided with upper and lower paper-rolls, substantially as described, of a printing device composed essentially of a printing-roll, an inking-roll adjacent thereto, a pair of straight arms in which said rolls are journaled, a rock-shaft adapted to hold the arms from turning thereon, and having a crank at one end, and a spring attached to said crank at one end and at the other to some part of the paper-stand, whereby the device is adapted to print on an upper or lower roll, as described.

2. In a printing device for roll-paper holders, the combination of a printing-roll, an inking-roll adjacent thereto, a stirrup forming the bearings for the inking-roll and projecting at the middle to deflect a coil-spring stretched along it, laterally-movable arms forming bearings for both rolls, and a coil-spring connecting said arms and stretched across the stirrup and serving to hold the arms in position and the inking-roll against the printing-roll.

3. In a printing device for roll-paper holders, the combination of a printing-roll, an ink-roll adjacent thereto adjustable arms forming bearings for both rolls, a rock-shaft to take the opposite ends of the arms loosely, a cross-bar also loosely mounted between said arms and adapted to limit their movement inwardly, and a stud projecting from the rock-shaft into engagement with the cross-bar, substantially as and for the purpose set forth.

4. In a printing device for roll-paper holders, the combination of a printing-roll, an ink-roll adjacent thereto, arms forming bearings for both rolls and loosely mounted on a rock-shaft at the opposite ends thereof, a cross-bar adapted to limit the inward movement of the arms, a rock-shaft having a stud engaging said cross-bar, and a spring to draw the arms inwardly to the limit of their movement, substantially as described.

5. In a printing device for roll-paper holders, the combination of a printing-roll, an ink-roll adjacent thereto, arms forming bearings for both rolls, a cross-bar to limit their inward movement, a spring to draw them inwardly to the limit, a rock-shaft provided with a stud engaging said cross-bar and with a crank at one end, and a spring connecting said crank with the roll-holder frame, substantially as described.

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

FRANK KOSTLAN.

Witnesses:
E. O. ELLISON,
M. E. CHAMBERLAIN.