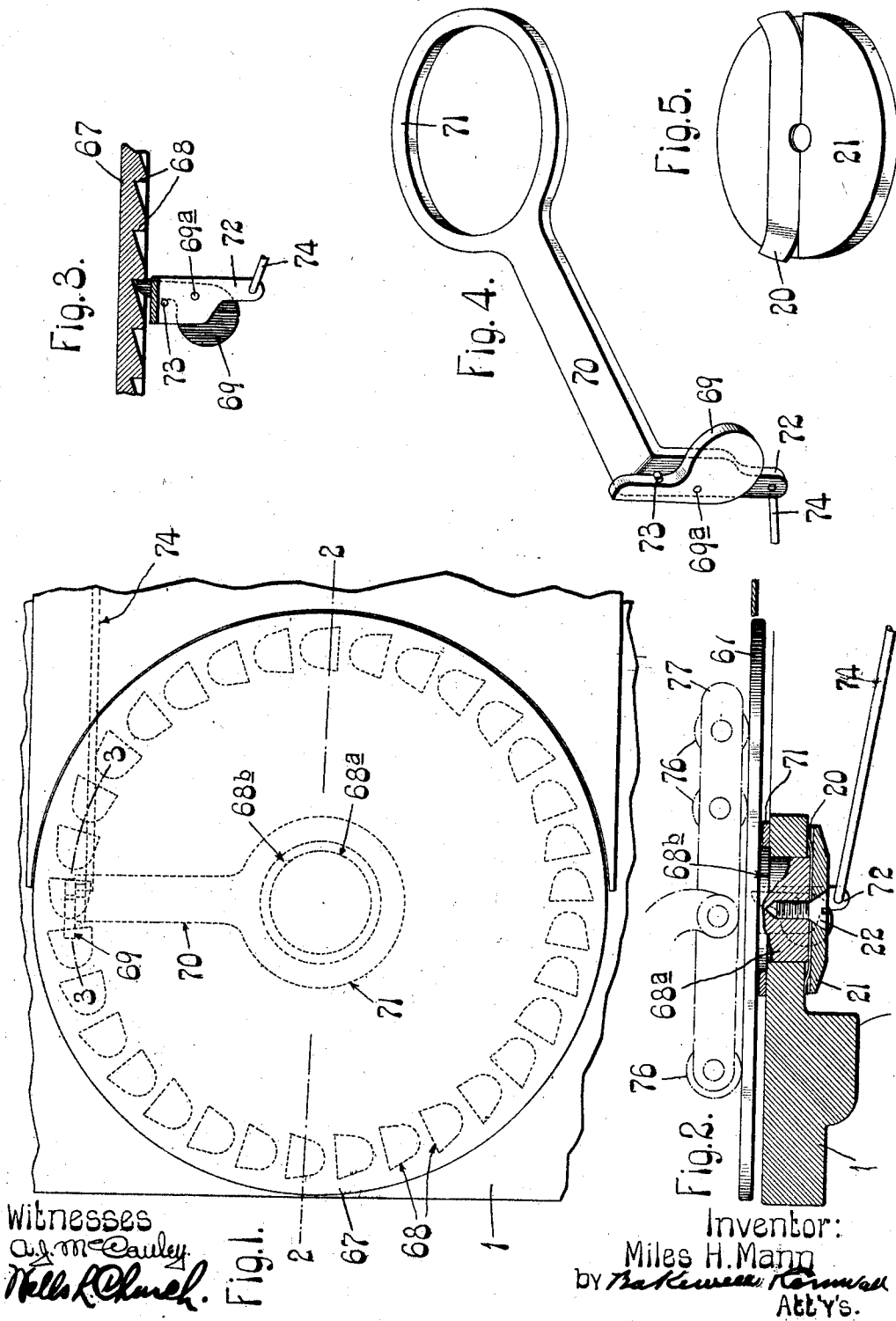


M. H. MANN.
 INKING APPARATUS FOR PRINTING MACHINES.
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907,070.

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Witnesses
A. M. Cauley
Nels R. Church

Inventor:
 Miles H. Mann
 by *Thos. Keenan* *Thomas*
 Att'ys.

UNITED STATES PATENT OFFICE.

MILES H. MANN, OF LOUISIANA, MISSOURI, ASSIGNOR TO FRANK W. BUFFUM, TRUSTEE, OF LOUISIANA, MISSOURI.

INKING APPARATUS FOR PRINTING-MACHINES.

No. 907,070.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MILES H. MANN, a citizen of the United States, residing at Louisiana, Missouri, have invented a certain new and useful Improvement in Inking Apparatus for Printing-Machines, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of an inking apparatus constructed in accordance with my invention; Fig. 2 is a vertical sectional view taken approximately on the line 2—2 of Fig. 1; Fig. 3 is a sectional view taken approximately on the line 3—3 of Fig. 1; Fig. 4 is a perspective view of the means for actuating the inking plate; and Fig. 5 is a detail view of a spring-pressed disk which tends to prevent the inking plate from rotating and vibrating.

This invention relates to new and useful improvements in inking apparatus for printing machines.

One of the objects of this invention is to provide a novel means for positively actuating a revoluble inking plate step by step.

Another object is to provide means for positively actuating a revoluble inking plate in combination with yielding means tending to prevent said plate from rotating and vibrating.

In the accompanying drawings 67 indicates an inking plate rotatably mounted on the bed plate 1 of a printing machine. The under side of plate 67 is provided with a circular row of ratchet teeth 68 with which a weighted pawl 69 on an oscillating lever 70 co-operates, said row of teeth being concentric to the axis of the inking plate. Pawl 69 is pivoted at 69^a to a downwardly projecting portion 72 on the outer end of lever 70, said portion 72 being provided with a pin 73 which forms a stop for the pawl. The lever 70 is provided at its inner end with a collar 71 which surrounds a boss 68^a on the under side of the inking plate. The upper portion of boss 68^a is provided with a shoulder 68^b which rests on the bed plate 1 and prevents the inking plate from frictionally engaging the collar 71.

20 indicates a leaf spring interposed between the boss 68^a and a disk 21, said disk

being secured to the boss by means of a screw 22.

The free ends of spring 20 are bent upwardly and engage the under side of bed plate 1 so as to force the shoulder 68^b into engagement with the bed plate, thereby taking up all lost motion at this point and preventing vibration and at the same time allowing the inking plate to rotate freely whenever the lever 70 is actuated.

An oscillating movement is intermittently imparted to the lever 70 by a link 74 connected to a rock arm (not shown) and as the pawl on said lever moves in a path that is concentric to the axis of the inking plate said plate will be fed positively and accurately with a step-by-step movement. Spring 20 prevents the inking plate from turning while lever 70 is moving rearwardly and as it holds the shoulder 68^b in frictional engagement with the bed plate 1 it prevents the inking plate from overthrowing or moving beyond the point to which the pawl has moved it. Ink is taken from the inking plate and supplied to the type of the printing apparatus (not shown) by means of rollers 76 mounted in a reciprocating carriage 77.

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

1. In a device of the character described, a support, a revoluble inking plate provided on its underneath side with a central stud that projects through an opening in said support, a head on said stud, a flat spring interposed between said head and the support and having upturned ends which bear on the underneath side of the support so as to force the inking plate into frictional engagement with said support, and means for actuating said inking plate intermittently; substantially as described.

2. In a device of the character described, a support, a revoluble inking plate having ratchet teeth and provided on its underneath side with a stud that is journaled in said support, yielding means cooperating with said stud and said support and tending to prevent said plate from rotating, means for imparting a step-by-step movement to said inking plate, said means including a lever fulcrumed on the axis of said plate and interposed between the plate and support, a pawl on said lever for engaging the ratchet

teeth on said plate, and an actuating link connected to said lever; substantially as described.

3. In a device of the character described,
5 a revoluble inking plate having a row of ratchet teeth arranged concentric to its axis, a support for said inking plate, a cylindrical boss on the center of said plate, said boss being provided with a shoulder which rests
10 on said support, a device connected to the lower end of said boss and extending underneath the support, a yielding member interposed between said device and the support, a lever loosely mounted between said inking
15 plate and its support, said lever being fulcrumed to the axis of the inking plate, a pawl on said lever for engaging the ratchet teeth of the inking plate, and means for actuating said lever; substantially as described.
20

4. In a device of the character described, a revoluble inking plate having a row of ratchet teeth arranged concentric to its axis, a support for said inking plate, a cylindrical
25 boss secured to the center of said inking plate and journaled in said support, said boss being provided with a shoulder which rests on the support, a device connected to the lower end of said boss and projecting underneath the support, a flat spring interposed between said device and said support,
30

an oscillating lever having a collar on one end which surrounds said boss, said lever being loosely mounted between the inking plate and said support, a pawl on said lever
35 for engaging the ratchet teeth on the inking plate, and an actuating member connected to said lever; substantially as described.

5. In a device of the character described, a revoluble inking plate having a row of
40 ratchet teeth arranged concentric to its axis, a support for said inking plate, a cylindrical boss secured to the center of said inking plate and journaled in said support, said boss being provided with a shoulder which
45 rests on the support, a spring for forcing said shoulder into frictional engagement with the support, an oscillating lever having a collar on one end which surrounds said boss, said lever being loosely mounted be-
50 tween the inking plate and said support, a pawl on said lever for engaging the ratchet teeth on the inking plate, and an actuating member connected to said lever; substantially as described.
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In testimony whereof I hereunto affix my signature in the presence of two witnesses, this twenty ninth day of May, 1908.

MILES H. MANN.

Witnesses:

WELLS L. CHURCH,
GEORGE BAKEWELL.