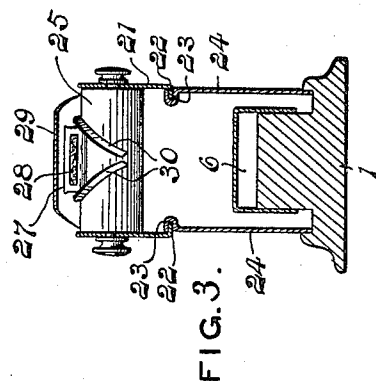
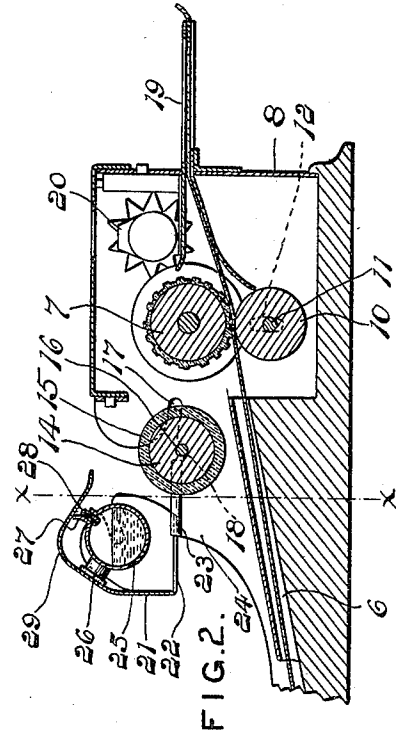
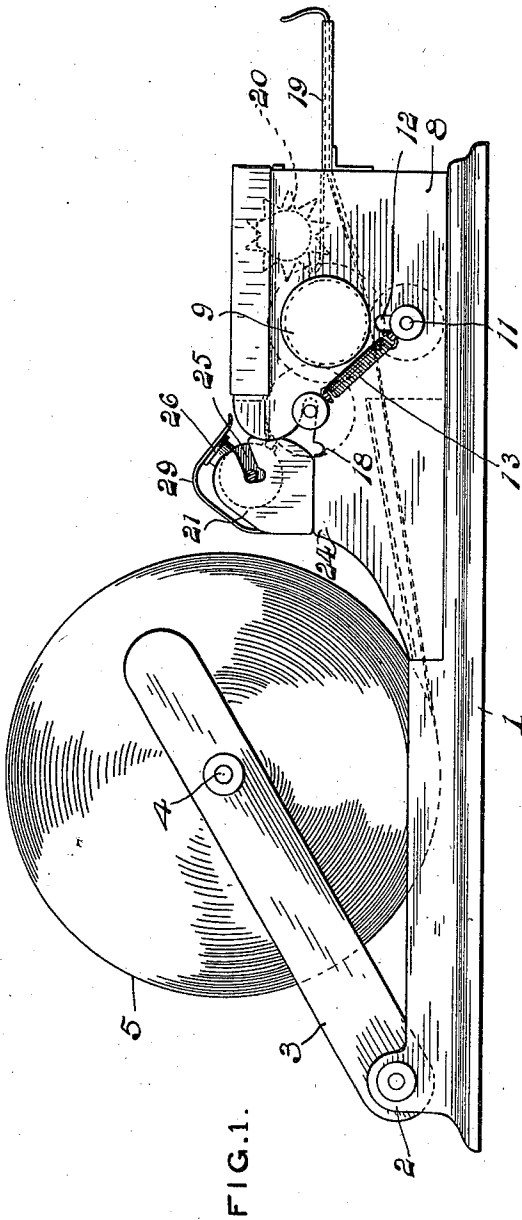


N. E. SPRINGSTEEN.  
INKING MECHANISM.  
APPLICATION FILED OCT. 23, 1911.

1,030,026.

Patented June 18, 1912.



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# UNITED STATES PATENT OFFICE.

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## INKING MECHANISM.

1,030,026.

Specification of Letters Patent.

Patented June 18, 1912.

Original application filed April 7, 1910, Serial No. 553,960. Divided and this application filed October 23, 1911. Serial No. 656,141.

*To all whom it may concern:*

Be it known that I, NELSON E. SPRINGSTEEN, a citizen of the United States of America, residing at Royal Oak, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Inking Mechanisms, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to ticket printing machines and more particularly to inking mechanism therefor, its object being to provide a simple and efficient device for supplying ink to the inking roll of a ticket printing machine which device may be detached or turned into or out of operative position and is provided with certain other new and useful features; the invention consisting in the matters hereinafter set forth and more particularly pointed out in the claims reference being had to the accompanying drawing in which,

Figure 1, is a side elevation of a ticket printing machine with inking mechanism embodying the invention in operative position thereon; Fig. 2 is a longitudinal vertical section through the printing end of the machine and inking mechanism; and Fig. 3 is a transverse vertical section of the same on the line X—X of Fig. 2.

The device embodying this invention may be applied to any suitable well known form of ticket printing machine having an inking roller for applying ink to a printing or type roller, but for convenience of illustration the same is shown as applied to the construction of machine shown and described in an application which resulted on May 9, 1911 in Patent No. 991,660, and from which application the subject matter of this present application was divided out.

The ticket printing machine proper, comprises a base 1 having ears 2 at one end between which arms 3 are pivoted at one end, carrying a shaft 4 upon which a roll of paper 5 is mounted to turn fully. From the roll 5 the strip of paper is led forwardly through a passage 6 to a printing or type roller 7 mounted in bearings in the sides of a suitable casing 8 and adapted to be turned by means of a head or knob 9. Below the printing roll is a friction roll or platen 10 mounted upon a shaft 11, the ends of which

extend through slots 12 in the casing sides and springs 13 attached to the outer ends of said shaft normally hold the platen moved toward the printing roll to force the strip of paper into contact with the type.

An inking roll 14 having a facing 15 of felt or other suitable material for holding ink, is mounted at the rear side of the printing roll upon a shaft 16 having extended ends engaging rearwardly opening slots 17 in the side walls of the casing and this inking roll is normally held at the forward end of the slots and in contact with the printing roll to ink the type thereon by the springs 13 which are attached at their upper ends to the outwardly projecting ends of the shaft 16. Notches 18 in the side walls of the casing at the lower sides of the slots 17 are provided to receive the shaft 16 and hold the inking roll in inoperative position against the action of the coiled springs 13. From the printing roll the strip of paper passes out through an opening in the front of the casing and a guide frame 19 is secured upon the casing front to receive and guide the strip.

20 represents a suitable counting or registering device operated by the turning of the printing roll in any desired manner.

The foregoing described parts as shown and arranged are shown and described in the beforementioned patent and form no part of this invention which relates to a device for supplying ink to the inking roll 14 and comprises a suitable holder or casing 21 formed of sheet metal having inturned flanges 22 along the lower edges of its ends to engage grooves 23 formed in the side walls of the casing 8 along the upper edges of portions 24 thereof extending rearwardly of the slots 17 in said walls. This casing is thus free to slide toward and from the inking roll which roll may be moved outward from the casing in its slots 17 as before described. Within the holder 21 is mounted an inking fountain or cylinder 25 to rotate therein and this cylinder is provided with a fill opening having an outwardly projecting cap 26 which may be removed to put ink in the cylinder. The cylinder is also formed with a longitudinal slot having an outwardly extending flange 27 at the upper side of the slot and the slot is filled with felt or other suitable material

28 to prevent the ink from running out of the opening when the cylinder is turned, but permits the ink to gradually feed through when the cylinder is turned to bring the felt into engagement with the inking roll. The felt extends into the fountain only a short distance and therefore when the cylinder is turned to bring the feed opening at the top of the cylinder, the inner end of the felt will not be immersed in the ink and the ink will not be drawn out of the fountain by capillary attraction.

The top of the holder 21 is formed by a spring member or tongue 29 which extends upward and over the inking fountain and is adapted to engage the filler cap 26 and lie flat against the same when the fountain is turned to inoperative position and also when turned to bring its feed opening adjacent to the inking roll and thus yieldingly hold the fountain in either position. The fountain cylinder is provided upon its outer surface with ribs 30 extending from each end of the feed slot therein part way around the cylinder converging toward their lower ends which lie close together said ribs forming between them a trough to receive any drip from the discharge-opening and conduct it to the center of the roll where it will drop down upon the inking roll after the fountain has been turned to inoperative position. If it is found desirable to ink the inking roll by hand the holder 21 may be slid rearwardly out of the way and the inking roll then moved backward into the notches 18; and the holder may be quickly and easily taken off for the purpose of cleaning, filling or repair.

Having thus fully described my invention what I claim is:—

1. In a device of the character described comprising a casing, a printing roll mounted in bearings in said casing, an inking roll yieldingly held in contact with said printing roll, an ink fountain rotatably supported adjacent to said inking roll and having a discharge opening adapted to be brought into operative position adjacent to the inking roll by the turning of the fountain, and a spring member adapted to engage the fountain and hold the same in both operative and inoperative positions.

2. A device of the character described comprising a casing, a printing roll mounted in bearings in said casing, an inking roll adjacent to the printing roll, a holder detachably attached to the casing and formed with bearings at its ends, a rotatable ink fountain mounted in said bearings in said holder, said ink fountain being provided with a discharge opening adapted to be brought into operative position relative to the inking roll by the turning of the fountain, a filler cap engaging a fill opening in

one side of the fountain, and a spring member on the holder extending over the fountain and adapted to engage the cap to yieldingly hold the fountain in both operative and inoperative position.

3. A device of the character described comprising a casing, a printing roll mounted in bearings in the casing, an inking roll in the casing, adjacent to the printing roll, a holder detachably engaging the casing to slide thereon toward and from the inking roll and having bearings in its ends, a rotatable ink fountain mounted in said bearings in the holder and provided with a discharge opening, a filling of fibrous material in the discharge opening projecting therefrom and adapted to engage the inking roll to deliver ink thereto when the ink fountain is turned to bring said discharge opening toward the lower side thereof, a cap for closing the fill opening in the fountain, and a spring tongue on the holder extending over the fountain and adapted to engage the cap.

4. The combination with a casing, a printing roll in said casing, and an inking roll to engage the printing roll, of a holder, inwardly extending flanges on the ends of the holder, guides on the casing adjacent to the inking roller to receive the said flanges, a horizontally disposed cylindrical ink fountain rotatively mounted in said holder and provided with a discharge opening along one side, means for turning the fountain to bring its discharge opening adjacent to the lower side thereof to discharge ink upon the inking roll, ribs upon the cylindrical outer surface of the fountain with one end adjacent to the ends of the discharge opening and converging toward their opposite ends, and means for yieldingly holding the fountain turned to operative and to inoperative position.

5. The combination of a casing having guideways, a printing roll in said casing, an inking roll adjacent to the end of said ways to engage the printing roll, a holder formed of sheet metal with intumed end flanges to engage the guide ways and provided with a spring tongue extending over and forming the top of said holder, a cylindrical inking fountain pivotally mounted in said holder and provided with a longitudinal discharge slot in one side and a fill opening, absorbent material in said slot, a cap to close the fill opening adapted to engage the spring tongue of the holder and yieldingly hold the fountain turned with its discharge slot adjacent to the lower side of the fountain and also turned with said slot at the upper side of said fountain, and ribs upon the outer cylindrical surface of the fountain converging downwardly around the same from the ends of said discharge slot.

6. The combination of a casing, a printing roll in said casing, and an inking roll to engage the printing roll, of an ink fountain rotatably supported adjacent to the  
5 inking roll and formed with a slot in one side, absorbent material in said slot adapted to engage and absorb ink in the fountain when said fountain is turned to bring said slot toward the lower side of the fountain  
10 and to be out of contact with ink in the

fountain when the fountain is turned with said slot at the upper side thereof, and means for holding the fountain in the position to which it is turned.

In testimony whereof I affix my signature 15  
in presence of two witnesses.

NELSON E. SPRINGSTEEN.

Witnesses:

ANNA M. DORR,

ANNA M. SHANNON.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."

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