B. B. HILL.

REVERSIBLE RIBBON FEED FOR DATING STAMPS.

APPLICATION FILED JULY 8, 1909.

942,827. Patented Dec. 7, 1909.

2 SHEETS—SHEET 1.

Fig. 3.

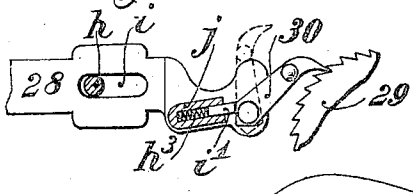

Fig. 4.

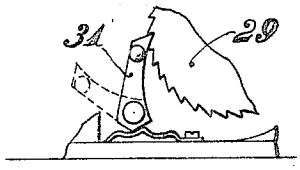

Fig. 1.

Fig. 5.

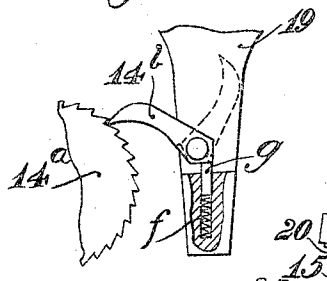

Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 6.

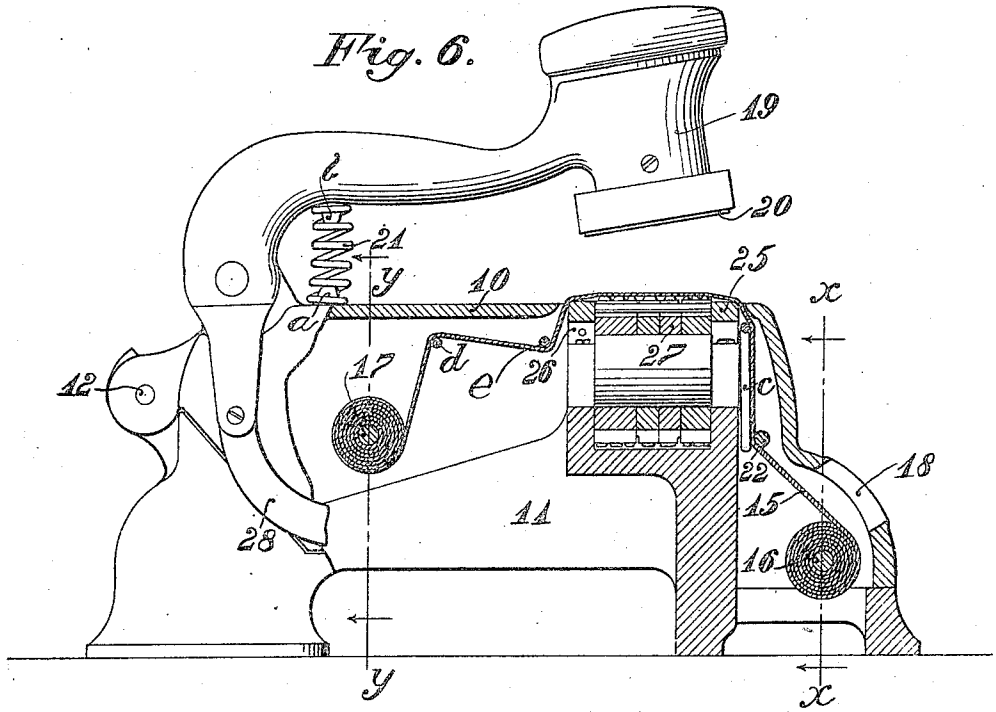


Fig. 7.

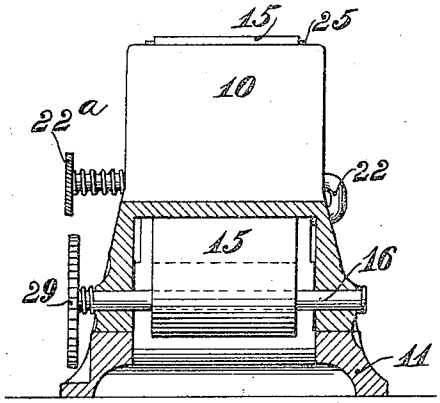
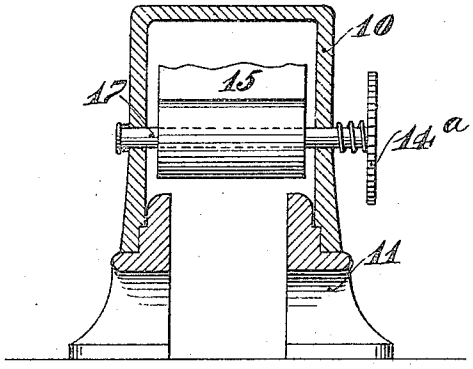


Fig. 8.



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REVERSIBLE RIBBON-FEED FOR DATING-STAMPS.

942,827. Specification of Letters Patent. Patented Dec. 7, 1909.

Application filed July 8, 1909. Serial No. 506,450.

To all whom it may concern:

Be it known that I, BENJAMIN B. HILL, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Reversible Ribbon-Feeds for Dating-Stamps, of which the following is a specification.

My invention has relation to a reversible ribbon feed for a dating stamp of the type of Letters Patent granted to me under date of November 3rd, 1908, under the No. 902,582, the main purpose or object of the present invention, in such type of dating stamp, being to provide practically a continuous inking ribbon for a dating stamp and in which the same can be fed first in one direction from one reel onto the other and then in the other direction by the provision of the stamp with simple and effective step-by-step mechanism, opeative through the spring controlled stamping head, to feed the inking ribbon in one direction and then in the other, without interfering with stamping acts or operations upon tickets or other matter.

My invention hereinabove stated, in general terms, will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figures 1 and 2 are respectively, side elevational views showing opposite sides of the dating stamp having the inking ribbon feeds, embodying main features of my present invention, shown in application thereto. Figs. 3 and 4, are respectively detail views in broken section, enlarged, of the inking ribbon pawl-and-ratchet feed mechanism and controlled spring detents of said mechanism, as shown in operative relations in Fig. 1. Fig. 5, is a broken sectional and side elevational view of the spring control pawl feed device of Fig. 2. Fig. 6, is a view partly in side elevation and partly in central longitudinal section of the dating stamp, showing the two reels and inking ribbon connected therewith and passing over the dating or type bed of the stamp; and Figs. 7 and 8, are vertical sectional views on the lines x x, and y, y, of Fig. 6.

Referirng to the drawings, 10 represents the dating stamp, comprising the stand 11, hinged at 12, to an oblong telescoping case 13, adapted to embrace and protect the principal working parts of the stamp as well as carrying pawl-and-ratchet mechanism 14, for operating an ink-ribbon 15, from one drum 16, onto another drum 17, as clearly illustrated in Figs. 1, 2 and 6. The case 13, in front is provided with an opening 18, along which passes the ink-ribbon 15, and above the case 13, is hinged the stamping head 19, with a pad case or pocket 20. The head 19, is normally maintained a proper distance from the top of the case 13, in an inoperative position by means of a coiled spring 21, the respective ends of which bear or seat with stops a and b, of the case 13, and stamping head 19.

22 is a spring controlled locking bar extending through the case 13, and formed into substantially an inverted U-shape and extending from the outside through the case 13, into the stand 11, as clearly shown in Figs. 2 and 7, whereby by pushing inward on the thumb-nut 22^a, of said bar, the case 13, is readily released from the stand 11, so as to assume with the stamping head 19, an inoperative position away from the said stand 11.

25, is a die-plate fitting the bed 26, for the series of impression or dating wheels 27, as clearly shown in Fig. 6.

c, d and e, are guide bars arranged interiorly of the casing 13, and along over which the ink ribbon 15 from the drum 16, passes to the other drum 17, as clearly or fully shown in Fig. 6. The said pawl-and-ratchet mechanism 14, operates the inking ribbon 15, in a rearward direction onto the drum 17, when the ratchet 14^a, is revolved in the direction of the arrow in Fig. 2, by the feed of the pawl 14^b, pivoted to the rear of the stamping-head 19, adjacent to a pocket f, provided with a spring controlled pin g, in bearing contact with the heel portion of the feed pawl 14^b, as clearly shown in Fig. 2. Any slip or failure to hold the feed ribbon in a rearward direction is prevented by the locking detent 14^c, arranged to engage the ratchet 14^a. On the opposite side of the stamp 10, is pivotally connected with the stamping-head 19, a sliding longitudinal bar 28, which is held in proper sliding position by a bolt h, passing through an oblong slot i, of the said bar; the said bolt h, having a slotted head h^1, and a washer h^2,

bearing against the said bar. The free end of the said bar 28, carries a feed-pawl 30, adapted to be thrown into contact with the ratchet-wheel 29, of the inking ribbon drum 16.

In a bearing or pocket *j*, in the forward end of the bar 28, are mounted a coiled spring h^3 and pin i^1, normally contacting with the heel portion of the feed-pawl 30, provided with an arm 30^a. In the stand 11, adjacent to the ratchet-wheel 29, is located a spring controlled locking detent 31, Figs. 1 and 4, for preventing slip of the ratchet-wheel 29, during forward feeding of the same and thereby of the inking-ribbon 15, as indicated in Fig. 1. When the pawl-and-ratchet mechanism of Fig. 1, is in the position so shown therein, for forward feeding step-by-step of the inking ribbon 15, over the die-plate 25, the pawl-and-detent of the pawl and ratchet mechanism 14, of Fig. 2, will be thrown out of engagement with the ratchet-wheel thereof. In order to rewind the said ribbon from the drum 16, in one direction onto the drum 17, the spring controlled pawl and detent of the pawl-and-ratchet mechanism of Fig. 1, will be thrown out of engagement with the ratchet-wheel 29, of the said mechanism.

The arrangement of the dating stamp in the manner described permits practically as will be seen the continuous winding of the inking ribbon 15, over the die-plate 25, from one drum onto the other, by simply shifting first one and then the other of said pawl-and-ratchet mechanisms of Figs. 1 and 2, on respective sides of the casing 13, of the stamp and the operating up and down the stamping head 19, against the traveling inking-ribbon 15, passing over the die-plate 25, to cause the series of impressing type of the printing wheels held in the bed, exposed through said die-plate 25, to be subjected to the action of said head 19, for making impressions upon tickets or other articles to be stamped.

I am aware that prior to my invention it was old to provide a dating-stamp with mechanism to operate an inking-ribbon first in one direction and then in the other as shown in and by Patents No. 474,724, of May 10th, 1892, and No. 227,295, of May 4th, 1880; therefore, I do not lay claim herein broadly to such mechanisms for the defined purpose, in a dating-stamp, but only specifically to the constructive arrangement of such mechanisms as hereinbefore described and shown in the accompanying drawings.

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

In a dating-stamp, an inking-ribbon mounted on separate ratcheted-drums and actuating mechanism therefor, comprising a spring controlled stamp-head, a bar arranged in sliding connection with the stamp-casing and in pivotal connection with said spring controlled stamp-head, a pivotal pawl, a coiled spring and a pin bearing normally against said pivotal pawl to hold it in contact with one of said ratcheted drums and a spring controlled detent pivoted to the stamp-base, said detent actuated by said ratcheted-drum and said pawl and detent provided with means to respectively, throw the same manually into and out of engagement with said ratcheted-drum, substantially as and for the purposes described.

In witness whereof, I have hereunto set my signature in the presence of two subscribing witnesses.

BENJAMIN B. HILL.

Witnesses:

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THOMAS M. SMITH.