Nov. 11, 1924. 1,515,359

A. H. PITNEY

JOB PRINTING ATTACHMENT FOR POSTAGE METER MACHINES

Filed Oct. 26, 1921 2 Sheets-Sheet 1

FIG. 1.

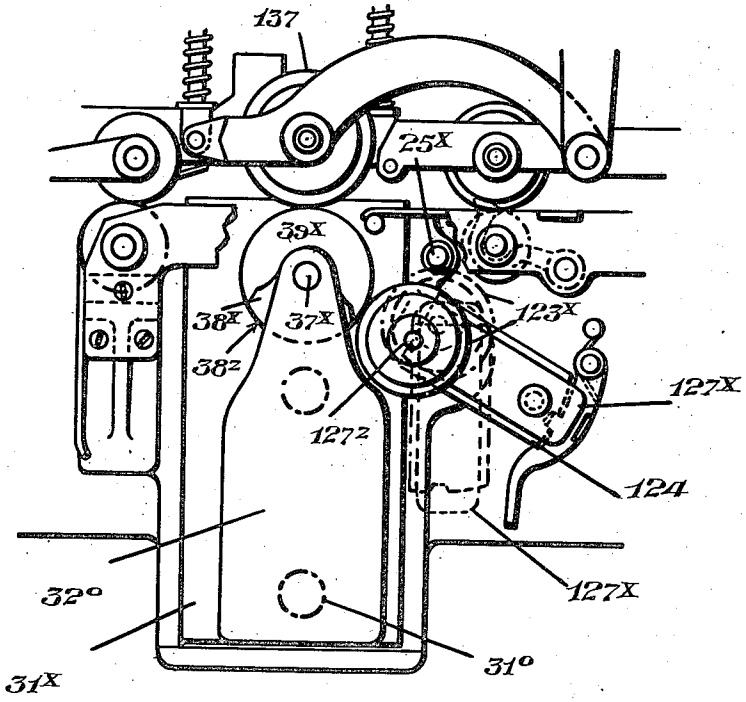
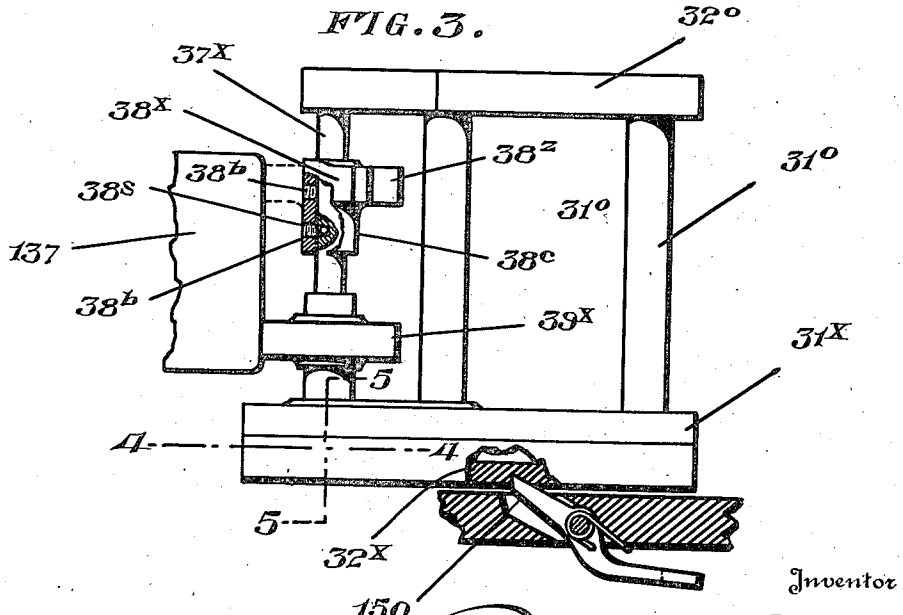


FIG. 3.



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FIG. 2.

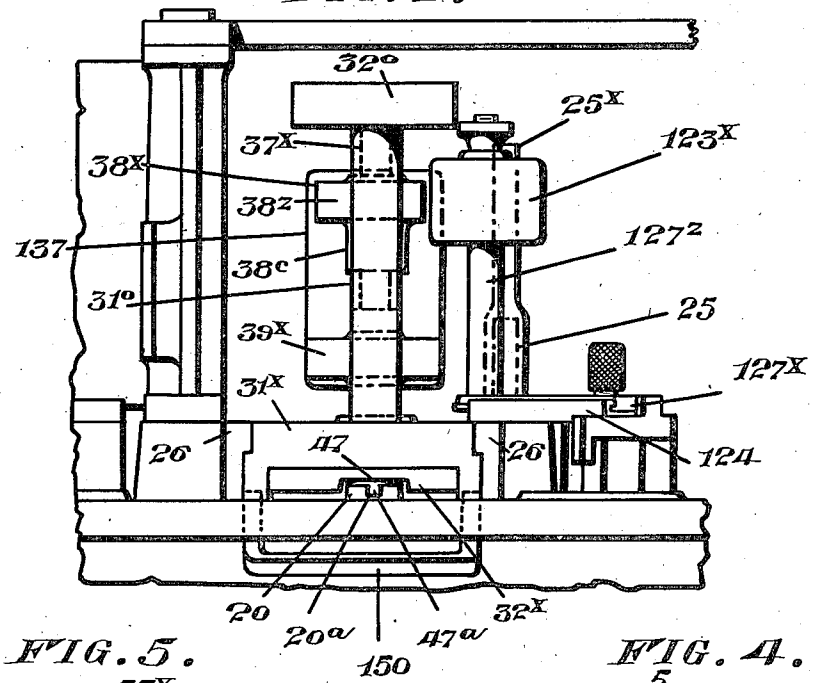


FIG. 5.

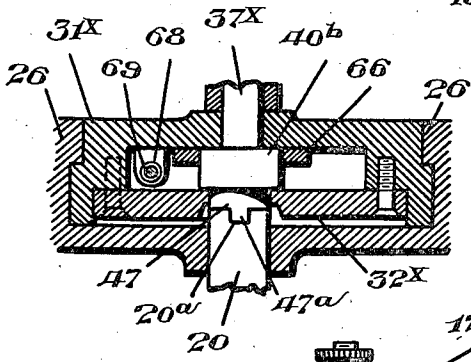
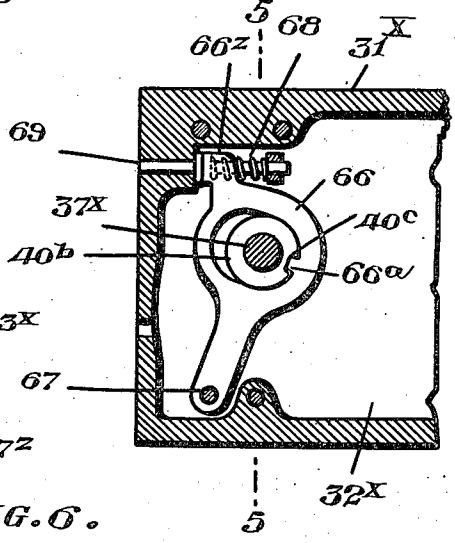


FIG. 4.



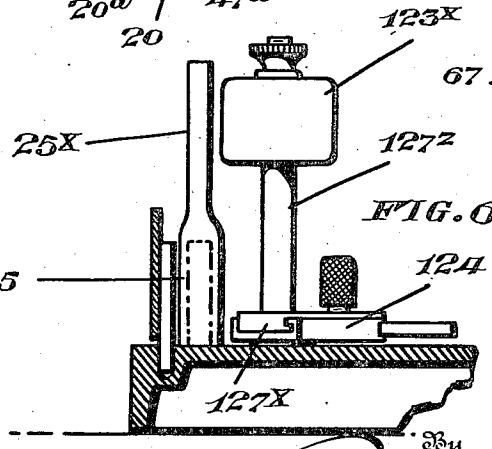


FIG. 6.

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Patented Nov. 11, 1924. 1,515,359

UNITED STATES PATENT OFFICE.

ARTHUR H. PITNEY, OF STAMFORD, CONNECTICUT, ASSIGNOR TO PITNEY-BOWES POSTAGE METER COMPANY, OF STAMFORD, CONNECTICUT, A CORPORATION OF DELAWARE.

JOB-PRINTING ATTACHMENT FOR POSTAGE-METER MACHINES.

Application filed October 26, 1921. Serial No. 510,608.

To all whom it may concern:

Be it known that I, ARTHUR H. PITNEY, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Job-Printing Attachments for Postage-Meter Machines; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an attachment to be used in connection with meters and mail marking machines of the type shown in Patent No. 1,370,668 granted to me March 8, 1921 and No. 1,377,853 granted to me May 10, 1921. The said patented machines are designed for printing stamps upon envelopes or letters and the like, and are provided with meters, or registering mechanism, whereby the number of stamps applied, or number of effective stamping operations of the machine, are recorded. In said machines the "meter" carrying the printer and registering mechanism is removable as a unit from, and replaceable in, the machine.

The primary object of the present invention is to enhance the utility of such machines, and render them more serviceable and valuable to their owners or users, by enabling such machines to be used for what might be termed "job printing", on envelopes, postcards, and the like, or as a check endorser, when the machine is not being used for stamping the letters.

In carrying out the invention I provide an attachment for such machines which is interchangeable in position with the "meter" of the machine, so that when it is not desired to use the machine to stamp letters, the "meter" can be removed and the attachment substituted in its place, and then the machine can be used to print on letters, cards and the like, such matter as the owner of the machine may wish, within the capacity of the attachment.

For example, the attachment will enable the machine to be used for printing return addresses in the corners of envelopes or cards; to print special notices to be enclosed in letters or envelopes; and for other like uses; and the attachment will do it efficiently, neatly and rapidly,—the extent of printing surface used being limited by the type holding capacity or size of the type carrier of the attachment.

The invention includes a removable member, supporting the type carrier and other operative parts which can be placed in the machine in the place of the "meter" when the latter is removed, and which is provided with means whereby the type carrier will be actuated by the same mechanism of the machine which operates the printer of the meter when the latter is properly positioned in the machine.

The invention also includes novel means for inking the printing surface of the type carrier of such attachment, when the latter is in the machine.

The invention also provides a novel device for properly positioning the ink supply roll for the type carrier of the attachment when the latter is to be applied to the machine.

In the accompanying drawings I have illustrated one practical embodiment of the invention, as applied to machines of the type shown in my aforesaid patents, and an understanding thereof will enable others to adapt and use the invention. In the claims following the description are set forth the essentials of the invention and the novel features of construction and novel combinations of parts for which protection is desired.

In said drawings:

Fig. 1 is a top plan view of part of one of my said patented machines, showing the novel printing attachments in operative position therein.

Fig. 2 is a front view of Fig. 1.

Fig. 3 is a side view of Fig. 1, some of the parts being removed to show the attachment in elevation.

Figs. 4, 5 and 6 are detail sectional views through the attachment showing different operative parts and connections thereof.

The machine shown in my said patents has means for conveying envelopes and the like from a pile successively past the rotary printer of the base of the "meter", and a coacting impression member mounted on the frame of the machine, whereby the letters are successively printed by the printer and then passed on to the delivery or stacker.

It is not necessary herein to enter into a detailed explanation of these parts. In the said patents the printer is mounted on the "meter" so that it will be operatively positioned adjacent the impression roller when the meter is properly inserted in the machine, and will be withdrawn with the meter when the latter is removed from the machine.

In the accompanying drawings I have illustrated sufficient parts of said patented machine to enable others to readily understand and use the present invention in connection therewith, and like parts are designated by like reference numerals.

As shown, the said patented machine has a top plate provided with grooved guides 26 adapted to engage the correspondingly flanged sides of the base of the "meter", and is also provided with a catch 150 adapted to engage a notch in the bottom of the base of the "meter" to secure the same in proper operative position in the machine; and said machine is also provided with a rotatably grooved members 20 having a longitudinal slot 20^a adapted to engage a diametrically disposed rib on the base of the printer shaft, so that the latter is driven in unison with the other operative parts of the machine when the latter is operated and the meter is in position therein.

The present attachment has a base 31^x which substantially corresponds in form to the base of the meter shown in my aforesaid patents, and has flanges adapted to engage the guide 26 when the attachment is inserted in the machine in the place of the meter and is provided with a notch adapted to be engaged by the same catch 150 which is used to lock the meter in place.

Said base 31^x is hollow and is closed by a bottom plate 32^x like the "meter" shown in said patents.

Supported upon the base 31^x by standards 31° is a top plate or bar 32°, and journaled in one end of the base and one end of this top plate 32° is a shaft 37^x on which is keyed a disk 40^b (Figs. 4 and 5) having a notch 40^c adapted to be engaged by a tooth 66^a on a lever 66 which is pivoted to a stud 67 in the base. Lever 66 has an opening around the disk 40^b and also has an ear 66^z at its end opposite the pivot, adapted to be engaged by a collar on a rod 69 slidably mounted in the base 31^x. Rod 69 is normally pushed outward by a spring 68 which also normally swings lever 66 into position to cause the tooth 66^a to engage the notch 40^c in disk 40^b, and will lock shaft 37^x against rotation when the attachment is removed from the machine substantially as the printer of the meter is locked, as described and shown in my Patent #1,370,668.

When the attachment is slid into operative position in the machine, the pin 69 is pushed inward (by a stud on the machine, as shown and described in my said patent) causing the lever 66 to move and disengage its tooth 66^a from the notch 40^c, thus permitting the shaft 37^x to be rotated.

When the machine is operated, on the lower end of the shaft 37^x is keyed a disk 47 having a diametrically disposed rib 47^a adapted to engage with a diametrical notch 20^a in a rotatable member 20 journaled in the base of the machine and corresponding to parts similarly lettered in my Patent #1,370,668 and operated as described therein.

Before the attachment can be withdrawn from the machine the slot 20^a must be parallel with the guides 26 and it will be held in that position, as described in said patent, until the meter, or the attachment is re-inserted in place; and in the present case the latch 66 and notched disk 40^b will, when the attachment is removed from the machine, lock the shaft 37^x so that the rib 47^a will remain in position to correctly engage and connect the shaft 37^x with the notch 20 when the attachment or meter is re-inserted, so that the shaft 37^x of the attachment when inserted in place will be driven exactly as the shaft 37^x of the meter will be driven, as described in the patent: the attachment and meter being interchangeably insertable in and removable from the machine, either in place of the other.

On the shaft 37^x of the attachment is fastened a printing die or printing surface carrier, or type carrier 38^x (which I shall hereinafter designate as "printer", meaning thereby to include any kind of printing surface or printing surface carrier)—this type carrier occupies the place of the idler 39 shown in my said patent. Below the type carrier an idle roller 39^x is loosely mounted on the shaft 37^x in the place occupied by the printer 39 in said patent. As shown the printer 38^x has a printing surface indicated at 38^z which is curved on an arc corresponding with the radius of the roller 39^x so that it is adapted to cooperate with the impression roller 137, which is located and operated as described in my said patent, when the attachment is placed in the machine.

The printing surface of the printer may be of any suitable kind:—it may be formed thereon; or may be formed separately and detachably attached thereto; or the printer may be constructed in any well known manner to hold interchangeable printing plates, or interchangeable type;—all these variations being within the scope of the invention, and the particular construction of the printer surface not being an essential part of the present invention. I prefer to use

interchangeable electrotypes but the invention is not limited thereto.

The printer is preferably adjustably mounted on the shaft 37^x in any desired way. As shown it has a long hub 38^c provided with screw threaded perforations 38^b through which a sunken screw 38^s may be passed and engaged with a corresponding threaded recess in the shaft 37^x so that the printer can be adjusted longitudinally of the shaft and also locked against rotary motion thereon. Any other suitable means may be provided for adjustably mounting the type carrier on shaft 37^x.

In the machine shown in my said patent an impression roller 137 cooperates with the printer of the meter in stamping the letter. When the present invention is used in connection with such machine I simply make the impression member 137 longer, or raise it so that it will cooperate with the printer 38^x when the attachment is placed in the machine and enable it to print envelopes, cards etc. passed through the machine, (the front edge of the envelope or card actuating the trip mechanism and in turn the clutch, to which the printing die is attached, as described in my said patent).

The roller 39^x is preferably loose on the shaft 37^x and simply cooperates with the opposed portion of the impression roller to move the envelopes etc. past the printing point.

The machine shown in my said Patent #1,377,853 is provided with an inking roller and inking roller support, which is preferably constructed as shown in my Patent #1,377,853.

When the machine is used (with the meter) for stamping letters the letters are passed through the machine upside down, so that the stamps are properly applied by the meter printer to the envelopes while in inverted position, and thus in my said patent the printer 38 is below the idler 39; but in the present attachment the idler 39^x is below the printer 38^x, therefore I provide a removable inker for the printer 38^x which is to be placed in the machine when the attachment is inserted therein.

As shown this inking mechanism comprises a slide 127^x adapted to be slid into the support 124 and having a stud 127^z on the upper end of which is rotatably mounted an inking roller 123^x adapted to supply ink to the printer. To insure the proper positioning of the slide 127^x in the machine so that the ink roller 123^x will properly coact with the printer 38^x I provide a removable stop pin 25^x which has a socket in its lower end whereby it can be slipped onto the setting pin 25, which is provided in my patented machine (see Patent #1,377,853).

After the attachment has been slid into the machine (in place of the meter) the roller 123^x is moved inward until its periphery engages the stop pin 25^x, (as shown in dotted lines in Fig. 1) and then when it is turned to operative position it will be properly positioned to supply ink to the printer just as the inking roller in my Patent #1,377,853 is adjusted to operative position, as explained in said patent.

It will be seen from the foregoing that in my present invention I have provided a job-printing attachment for the postage meter machines; which attachment is adapted to be positioned in the machine in the same manner and interchangeably with the meter of such machines, as described in said patents; the job-printing attachment occupying the place of the meter after the latter has been withdrawn and vice versa. The inking roller is placed in the machine in the same manner and in the same position as the inking roller is placed in said machine as described in said patent, so that it cooperates with the printer on the attachment, but the latter operates upon the envelopes or cards fed through the machine top edge uppermost; and the stop 25^x enables me to accurately position the ink roll for the attachment in the manner described in said patent.

Although the invention is very simple and inexpensive it greatly enhances the utility of the postage meter machines, such as shown in my said patents, and enables such a machine to be employed by its owner or renter for "job printing" envelopes, cards and the like efficiently and rapidly, when the machine is not being used for stamping mail. This novel attachment practically converts such postage meter machines into rotary job printing presses of limited printing surface capacity but of great speed. Obviously the printing surfaces on the printer can be of any desired kind, and may be changeable as stated; and interchangeable inking rollers 123^x can be provided so that the job printing can be done in any desired color. This simple invention enables the postage meter machines to perform work which they could not perform without such attachment.

I have explained the invention as applied to my aforesaid patented "postage meter" machines, but it is obvious that the invention can be readily adopted for use in connection with other makes of machines, analogous to mine, and is not restricted to the use with machines such as shown in my aforesaid patent.

What I claim is:

1. For a machine of the character specified having a removable meter; an attachment interchangeable with the meter and provided with printing elements similar to those of the meter but adapted to print work of a character different from that of

the meter; said attachment being adapted when inserted in the machine to be operated by the same mechanism thereof which operates the meter, substantially as described.

2. For a machine of the character specified having a removable meter carrying a printer, and an impression roller cooperating with the printer; of an attachment interchangeable with the meter and provided with printing elements similar to those of the meter but adapted to print work of a character different from that of the meter; said attachment being adapted when inserted in the machine in place of the meter, to be operated by the same mechanism which operates the meter printer and to cooperate with the impression roller; the attachment and the meter being interchangeable in the machine, substantially as described.

3. For a machine of the character specified, having a removable meter provided with a printer, and a removable inker; an attachment interchangeable with the meter and provided with printing elements similar to those of the meter but adapted to print work of a character different from that of the meter; said attachment being adapted when inserted in the machine to be operated by the same mechanism which operates the printer of the meter; and in inker for the printer of the attachment, interchangeable with the inker of the meter printer, substantially as described.

4. In a machine as set forth in claim 3 having a removable inker, a setting pin; and a setting post for the interchangeable inker having a socket in one end adapted to fit over the setting pin, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature.

ARTHUR H. PITNEY.