Sept. 24, 1929. H. A. FOOTHORAP 1,729,166

PUBLIC SERVICE POSTING MACHINE

Filed May 3, 1924 4 Sheets-Sheet 1

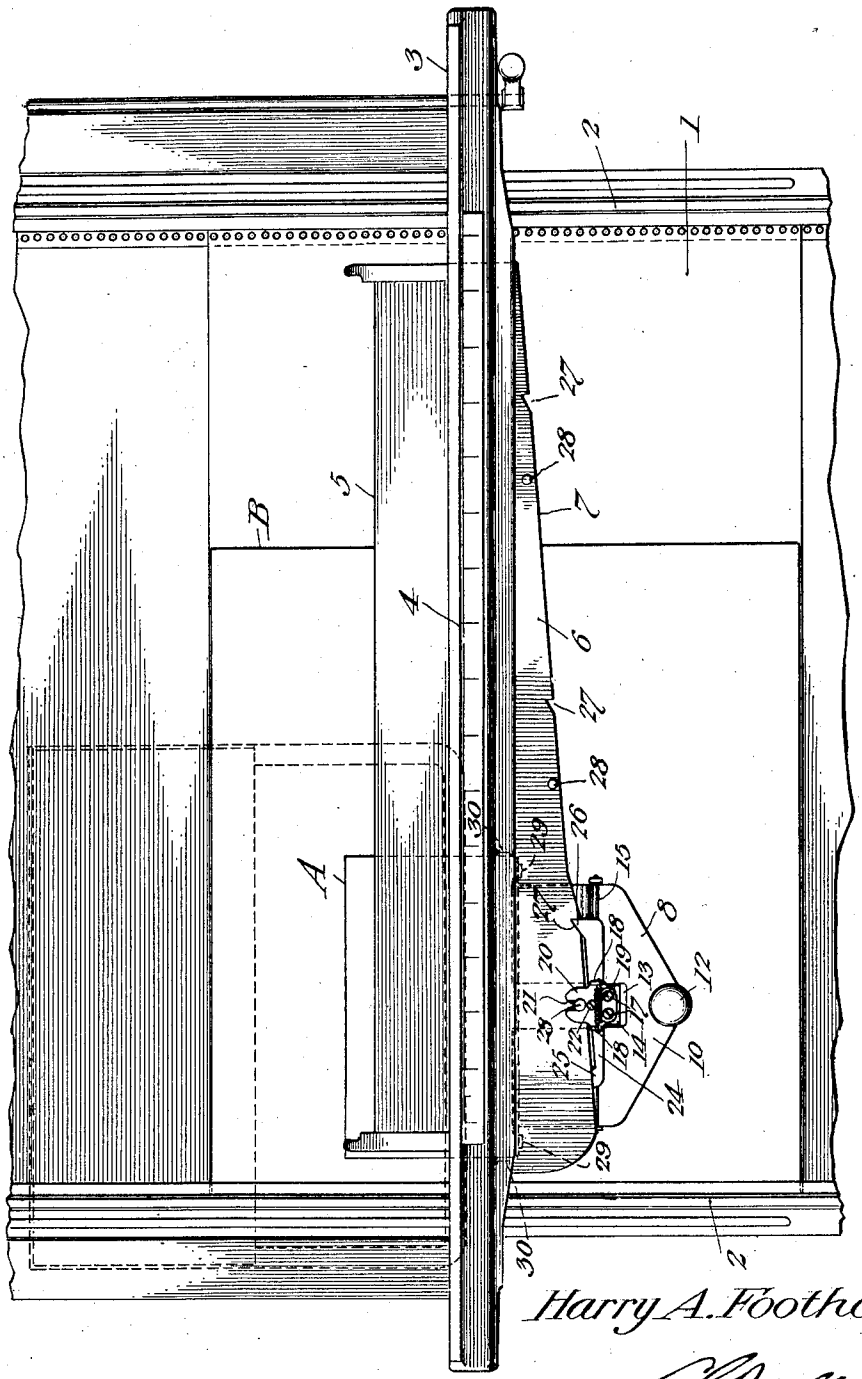

Fig. 1.

Inventor,
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Attorney

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PUBLIC SERVICE POSTING MACHINE

Filed May 3, 1924 4 Sheets-Sheet 2

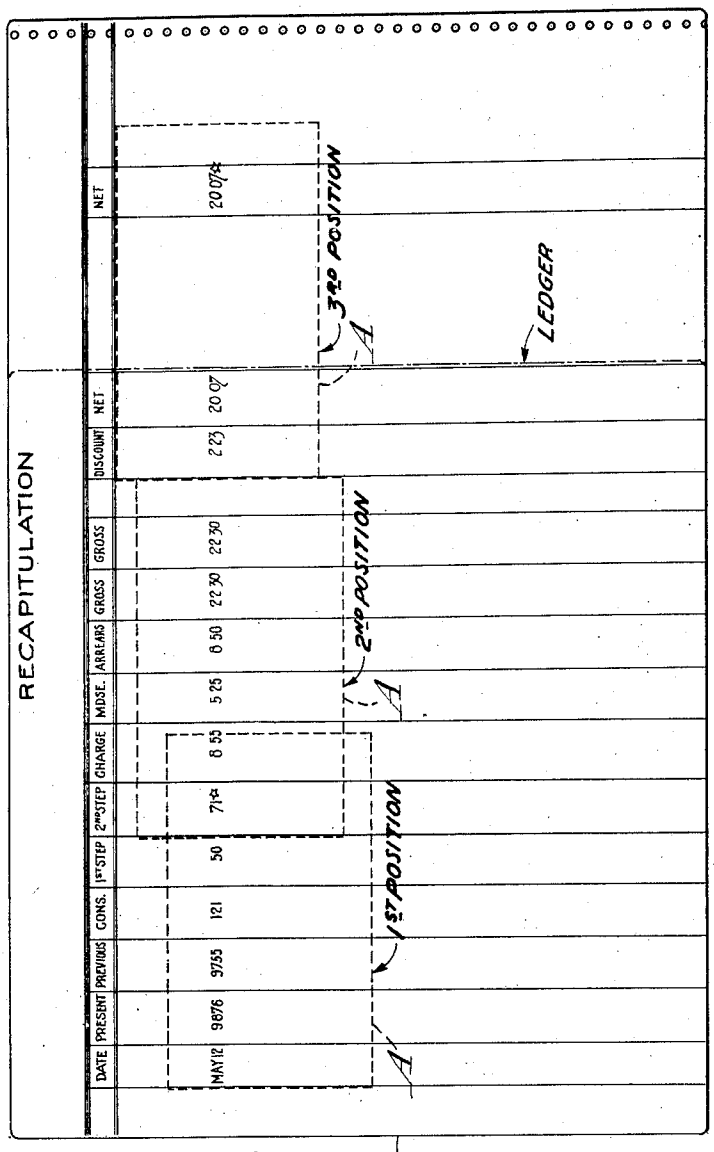

Fig. 2.

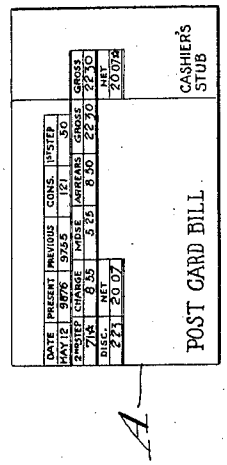

Fig. 3.

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Sept. 24, 1929. H. A. FOOTHORAP 1,729,166

PUBLIC SERVICE POSTING MACHINE

Filed May 3, 1924 4 Sheets-Sheet 3

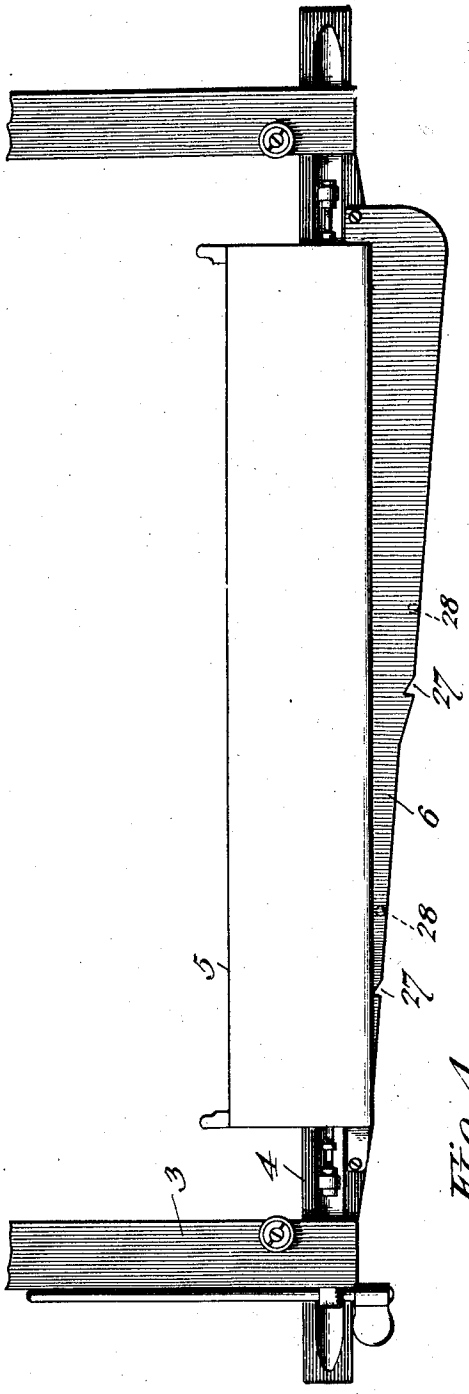

Fig. 4.

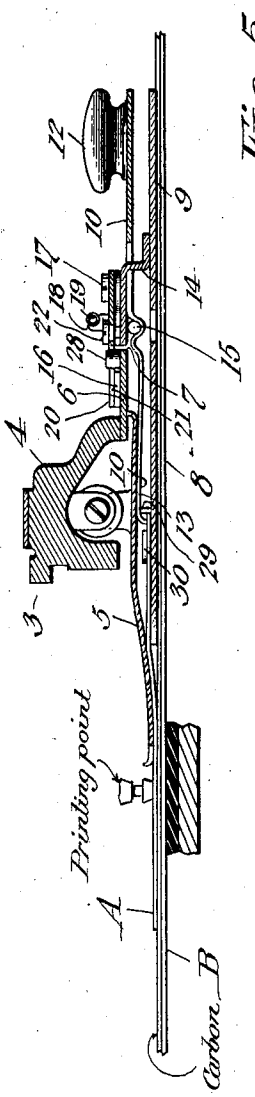

Fig. 5.

Inventor,

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PUBLIC SERVICE POSTING MACHINE

Filed May 3, 1924 4 Sheets-Sheet 4

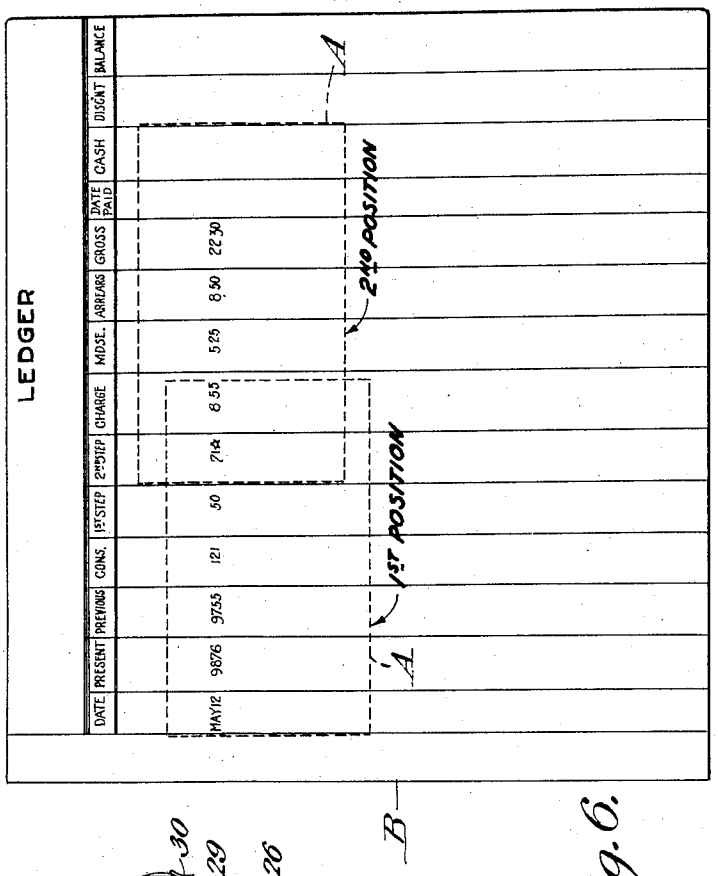

Fig. 6.

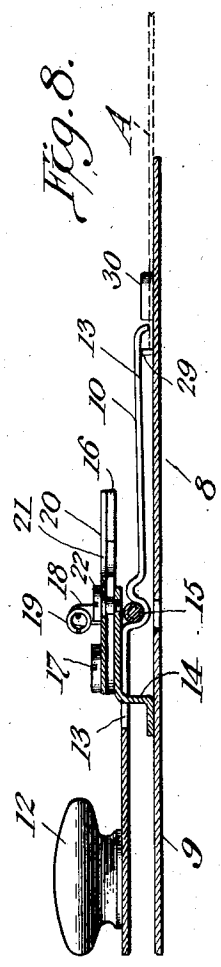

Fig. 8.

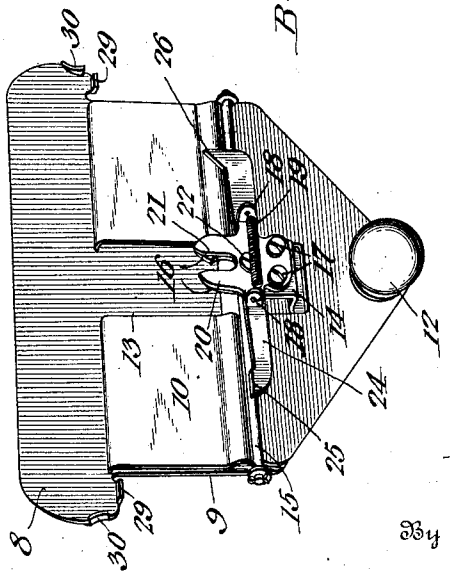

Fig. 7.

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Patented Sept. 24, 1929 1,729,166

UNITED STATES PATENT OFFICE

HARRY A. FOOTHORAP, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR TO ELLIOTT-FISHER COMPANY, A CORPORATION OF DELAWARE

PUBLIC SERVICE-POSTING MACHINE

Application filed May 3, 1924. Serial No. 710,811.

This invention relates to public service billing equipment for typewriters, and more particularly to the equipment of typewriters of the flat platen type.

The object of the invention is to provide means for holding a bill and statement in progressively different relative positions which will result in the data appearing in different lines on the bill and in a single line on the statement.

To the accomplishment of this object the preferred embodiment of the invention resides in the construction and arrangement of parts to be hereinafter described, illustrated and claimed.

In the accompanying drawings:

Fig. 1 is a plan view of a portion of an Elliott-Fisher billing machine equipped with my invention.

Fig. 2 is a view of a statement or recapitulation sheet showing the line of data which has been transferred thereto and indicating in dotted lines the several positions of the bill during the printing thereon of the data appearing in said line.

Fig. 3 is a view of the bill showing how the data is imprinted thereon.

Fig. 4 is a bottom plan view of a portion of the line space frame of the machine equipped with the guide plate.

Fig. 5 is a sectional view through the front portion of the frame, guide plate and bill holder.

Fig. 6 is a view of a ledger sheet with the bill positions indicated in dotted lines.

Fig. 7 is a perspective view of the bill holder.

Fig. 8 is a sectional view of the bill holder detached, with the bill indicated in dotted lines.

The machine illustrated in connection with my invention is what is known as the Elliott-Fisher billing and bookkeeping machine of commerce. In this machine the printing mechanism (not shown) imprints upon a flat platen 1 associated with tracks or guides 2 on which travels longitudinally of the platen a line space frame 3 which supports and guides the carriage constituting the vehicle for the printing mechanism. As is well understood in the art, letter spacing of the printed record is effected by the movement of the carriage on the frame 3 while line spacing is effected either by the movement of the frame 3 or the work sheets relative to the platen and sometimes, as in the present instance, by the movement of both the line space frame and the work. The frame 3 which is of open rectangular form has a front bar 4 to the under side of which is ordinarily attached the depressor plate 5 which serves to hold the work close against the platen at the line of printing. My invention contemplates the attachment to the bar 4 of a bill guide plate 6 extended in front of the bar 4 and having its front edge 7 disposed at an acute angle to said bar and extended substantially the entire width of the writing surface. Cooperating with this guide plate is a bill holder, indicated as a whole by 8 and comprising a base plate 9 over which is disposed a bill clamp 10 having at its front end an operating handle 12. The clamp 10 is divided in the center, as shown at 13, to accommodate a bracket 14 rising from the base plate 9 and connected as by a hinge 15 to the clamp 10.

Carried by the bracket at the upper side thereof are a pair of swinging clamping jaws 16 pivotally mounted on screws 17 and having upstanding lugs 18 between which is interposed a spring 19 which tends to draw the gripping jaws together. The screws 17 also retain a top plate 20 bifurcated at 21 to form a guide and pierced by an additional centrally located screw 22 which acts as a stop common to both jaws.

At its rear edge the bracket 14 is formed with a guiding and locating member 24, the guiding end 25 of which rests against the front edge of the guide plate 6 and the locating end of which is provided with a locating tooth 26 which is designed to fit into one of a series of locating notches 27 in the front edge of the plate 6. Associated with each of the notches 27 is a locating pin 28 designed to be received within the guide 21 of the bill holder and to be engaged by the jaws 16. The shape of these jaws is such that the holder may be placed or displaced by the application of sufficient force to overcome the

spring 19 since the jaws while normally retaining the holder in position by engagement with the pins will yield when presented to the pin with sufficient force for either placement in or displacement from position. To facilitate positioning of the bill A on the holder the latter is formed with a work gauge in the form of lugs 29 and 30.

It will now be seen that by pressing the handle 12 the clamp 10 may be raised and a bill slipped thereunder and against the lugs 29. The handle being released the bill is firmly gripped and may be slipped under the front bar or rail of the frame 3 until the guiding or locating member 24 is against the front edge of the guide plate 6 with one of the pins 28 engaged by the clamping jaws 16 and with the tooth 26 in engagement with one of the notches 27.

Assuming that a ledger or recapitulation sheet B is supported by the platen in the usual manner and held at one edge, it will be observed that data printed on the bill in a single line will be transferred in the usual manner to the underlying sheet. If, when the capacity of the bill has been reached the holder is withdrawn from engagement with the pin and shifted along the inclined edge of the guide plate to a new position the bill will have been moved both laterally and longitudinally of the platen, these two feeding movements being represented by the inclination of the guide plate 6. These successive positions of the bill will be readily understood by reference to Fig. 2 and it will be obvious that if the machine now writes additional data on the bill it will be imprinted thereon in a plane below the first line written but the transferred record will be in the same line as the previously transferred record on the underlying sheet. In other words, the machine writes in a continuous line but by means of the bill holder described the bill is given a line spaced feed between the printing of different portions of the same line of writing and at the same time is sufficiently advanced to again permit the printing to take place across the bill.

It is believed that from the foregoing the construction, operation and advantages of my invention will readily appear.

What I claim is:

1. The combination with the line space frame of a billing machine, of a guide mounted on said frame and extending obliquely across the lines of writing, a work holder, and means for detachably attaching the work holder at any one of a series of points along said guide.

2. The combination with the line space frame of a billing machine, of a guide mounted on said frame and extending obliquely across the lines of writing, a work holder, means for detachably attaching the work holder at any one of a series of points along said guide, and other means for locating the work holder in exact registration with said points of attachment.

3. The combination with the line space frame of a billing machine, of a guide mounted on said frame and extending obliquely across the lines of writing, a work holder including cooperating work clamping member, and a clamp operating key, and means for detachably attaching the work holder at any one of a series of points along said guide.

4. The combination with the line space frame of a billing machine, and a depresser plate beneath said frame and having a work engaging edge, of a guide on the frame extending obliquely of the lines of writing, a work holder, and means for attaching the work holder at any one of a series of points along the guide, said holder in its attached position extending beneath the depresser plate to position the work relative to the work engaging edge of said plate.

5. The combination with the frame of a billing machine, of a guide on the frame having an edge extending obliquely across the lines of writing, a work holder designed to be attached at different points along said guide corresponding to different column locations, and means for detachably attaching the work holder to the guide and including a series of pins on the guide spaced apart in correspondence with said column locations, and a pin engaging clamp on said holder.

6. The combination with the frame of a billing machine, of a guide on the frame having an edge extending obliquely across the lines of writing, a work holder, means for detachably attaching the work holder at any one of a series of points along said guide, and a locator member on the holder cooperating with the oblique edge of the guide to space the holder uniformly from said edge at said points of attachment.

7. The combination with the frame of a billing machine, of a guide on the frame having an edge extending obliquely across the lines of writing, a work holder, means for detachably attaching the work holder at any one of a series of points along said guide corresponding to different column locations, and cooperating devices on said guide and holder, respectively, for locating the holder at said points prior to attachment to the guide.

8. The combination with a platen and a guide plate, of a work holder for holding a work sheet opposite the platen, said plate having locating notches and retaining pins and said holder having locating and retaining devices disposed to engage a notch and pin.

In testimony whereof I hereunto affix my signature.

HARRY A. FOOTHORAP.