March 24, 1931. H. E. RANKIN 1,798,109

PHOTO SIGN PRINTER

Filed Oct. 16, 1929 3 Sheets-Sheet 1

Fig. 1.

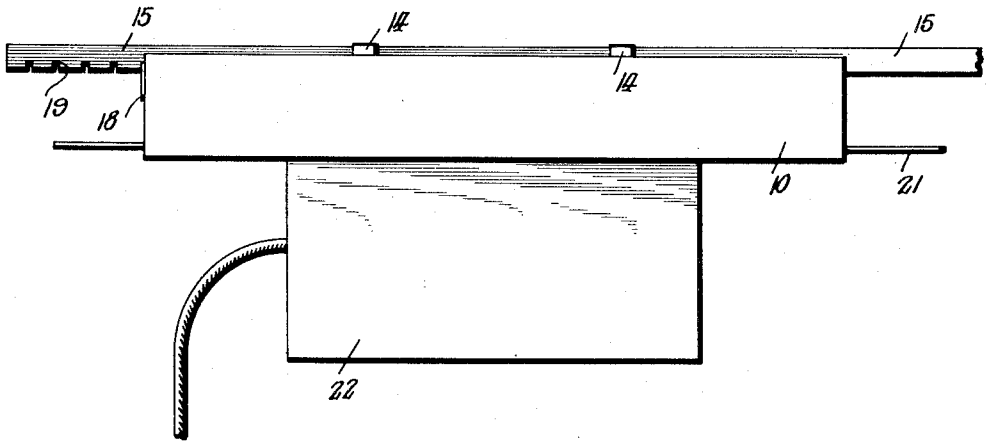
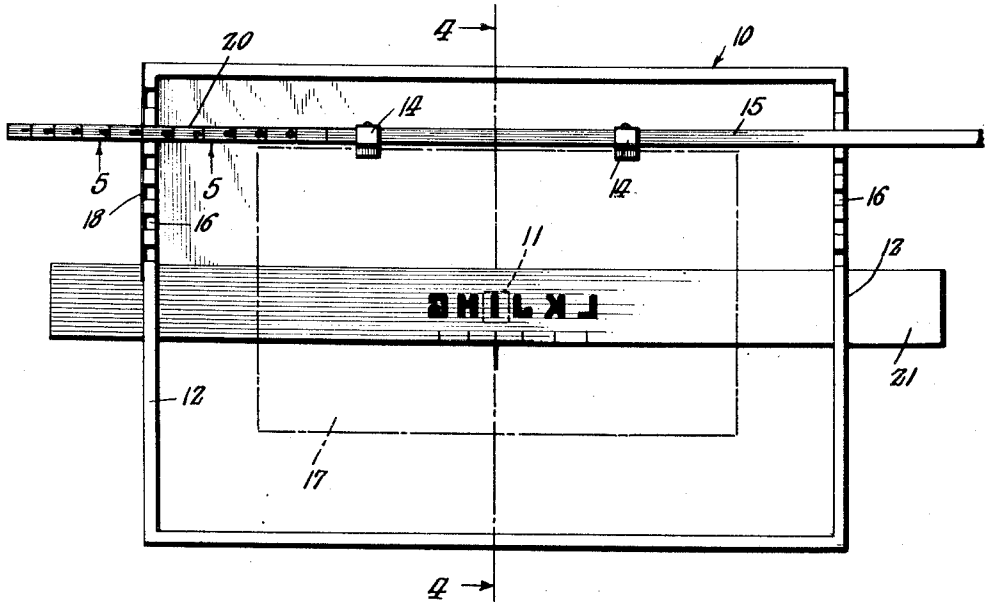


Fig. 2.



H. E. Rankin,
INVENTOR

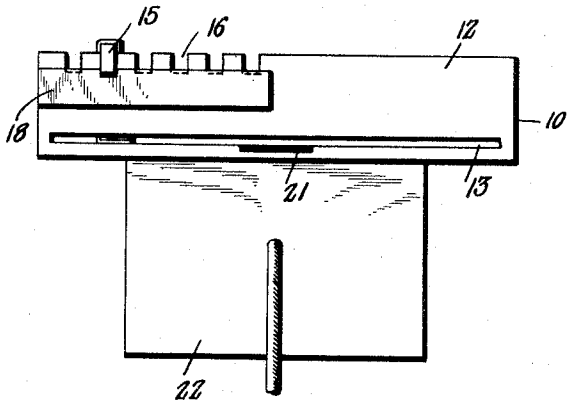
BY Victor J. Evans
ATTORNEY

March 24, 1931. H. E. RANKIN 1,798,109

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Fig. 3.



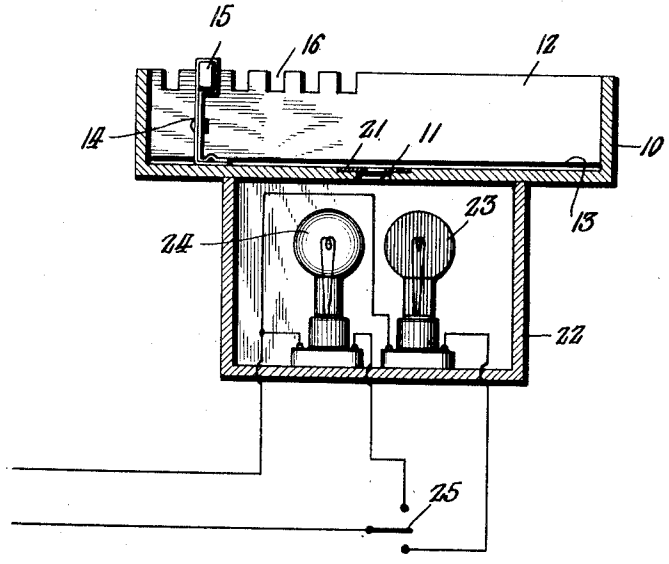


Fig. 4.

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March 24, 1931. H. E. RANKIN 1,798,109

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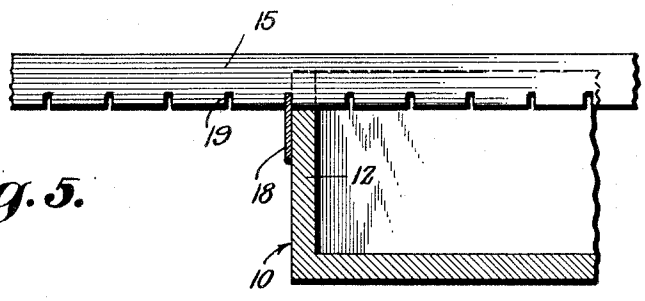


Fig. 5.

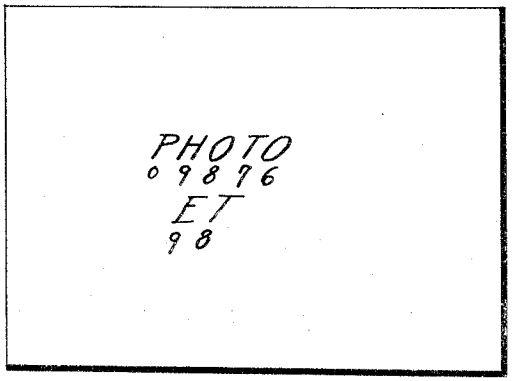


Fig. 6.

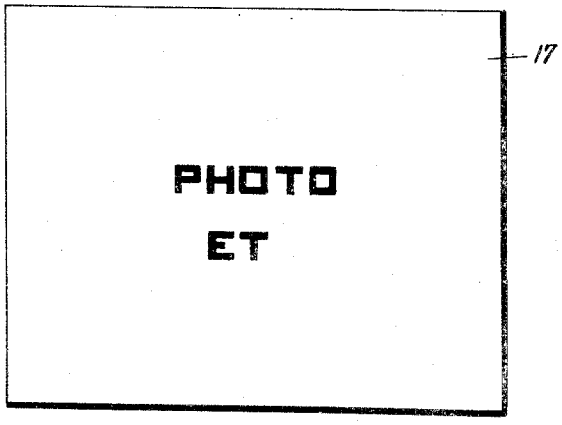


Fig. 7.

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BY Victor J. Evans
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Patented Mar. 24, 1931

1,798,109

UNITED STATES PATENT OFFICE

HAROLD E. RANKIN, OF KELSO, WASHINGTON

PHOTO SIGN PRINTER

Application filed October 16, 1929. Serial No. 400,005.

The present invention contemplates the provision of a machine, by means of which signs of any suitable character can be quickly and accurately made by photographing the individual letters, words or designs for the sign directly upon the body thereof, the finished product being free of lines or other marks which would require erasures or elimination.

The nature and advantages of the invention will be better understood when the following detail description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1 is a side elevation of the machine.

Figure 2 is a top plan view.

Figure 3 is an end elevation.

Figure 4 is a sectional view on line 4—4 of Figure 2.

Figure 5 is a fragmentary sectional view.

Figures 6 and 7 are views of different character of work produced by the machine.

The machine forming the subject matter of the present invention comprises a box like receptacle 10, which may vary in size and configuration, and which may also be constructed from any suitable material without departing from the inventive idea. The bottom of this receptacle is provided with a centrally located opening 11 through which each individual letter or other design of the sign is photographed in a manner to be hereinafter described. The end walls 12 are slotted longitudinally adjacent the bottom as indicated at 13, and these slots permit the paper or sign holder to be moved longitudinally of the receptacle during the use of the machine.

The paper or sign holder comprises a longitudinally disposed bar 15 adapted to be received by aligned notches 16 formed in the upper edges of the opposed end walls 12, while depending from this bar are the clamps 14 for the paper or body of the sign indicated at 17. Secured to the opposed end walls are plates 18, the upper edges of which extend a slight distance above the bottom of the notches 16, and it will be noted upon inspection of Figures 1 and 5, that the lower edge of the bar 15 is provided with spaced notches 19 to receive the adjacent upper edge of the plate 18, and thereby hold the bar against casual displacement. The bar 15 is also graduated as at 20, so that it can be moved step by step a predetermined distance, and thereby regulate the space or distance between each letter or design to be photographed upon the body of the sign.

The bottom of the receptacle 10 is also provided with a longitudinally and centrally located groove to slidably receive the plate or bar 21 upon which the letters of the alphabet are arranged, these letters being preferably stamped in the bar 21 as clearly illustrated in Figure 2.

Depending from the receptacle 10 is a casing 22 in which is arranged a plurality of electric lights 23 and 24 respectively, which are included in circuit with a switch indicated at 25. The lamp 23 is preferably red and is used as a work lamp, while the lamp 24 is white and is employed to photograph the design or letter upon the body of the sign. The switch 25 is preferably a foot actuated switch, so that the lamps can be quickly and alternately connected in circuit.

In practice, the body of the sign 17, which may be of paper or any other suitable material is associated with the clamps 14 of its holder, and the bar 15 is then adjusted longitudinally of the receptacle 10 to properly position the sign body 17 with relation to the openings 11 for the first letter or design of the sign to be made. The bar 21 is then shifted through the receptacle 10, to also properly position the first letter or design carried thereby over the opening 11, whereupon the operator actuates the switch 25, to disconnect the lamp 23, and to close the circuit to the lamp 24, whereupon the particular letter or design on the bar 21 is transferred to the sign body.

The switch is then again actuated to cut out the lamp 24, whereupon the bar 21 is shifted

to bring the next letter of the sign or the next design carried by the bar 21 in alignment with the opening 11, after which the bar 15 is again adjusted to shift the sign body 17 a predetermined distance, which is regulated by the graduation 20 on the bar 15. Consequently the space between each letter or design transferred from the bar 21 onto the sign body is uniform. Manifestly after each adjustment of the bar 21 and the sign body 17, the switch 25 is actuated in a manner above stated. In Figures 6 and 7 I have shown samples of different signs which can be made by the machine, with both speed and accuracy, and it is obvious from an inspection of these figures, that letters, numbers and other designs varying in size and character can be employed. As the sign body is moved across the bottom of the receptacle, it is allowed to pass through the slots 13 in the end walls 12. Manifestly, the user of the machine can work out his own designs for signs, and there is no limit to the different characters of signs that can be quickly and accurately produced by use of the machine. The machine may also vary in size without departing from the spirit of the invention.

While it is believed that from the foregoing description the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein illustrated and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:—

1. A sign making machine of the character described comprising a receptacle having a light opening in the bottom thereof, means for shifting and supporting a sign body above said opening, a bar slidable across said opening beneath the sign body, and bearing the letters or designs of the sign, and adapted to singly present said letters or designs to said light opening, a casing beneath said receptacle, electric lamps arranged in said casing, and a switch included in the circuit for said lamps, whereby the latter are singly called into use for the purposes specified.

2. A sign making machine of the character described comprising a receptacle having a light opening in the bottom thereof, and aligned notches in the opposed end walls, means for shifting and supporting a sign body above said opening, and including a graduated bar slidable through said notches, a bar slidable across said opening beneath the sign body, and bearing the letters or designs of the sign, and adapted to singly present said letters or designs to the light opening, a casing beneath the receptacle, electric lamps arranged in said casing, and a switch included in the circuit for said lamps, whereby the latter are singly called into use for the purposes specified.

3. A sign making machine of the character described comprising a receptacle having a light opening in the bottom thereof, and aligned notches in the opposed end walls, a plate secured to one end wall and having its upper edge extended a slight distance above the bottom of said notches, means for shifting and supporting a sign body above said opening, and including a graduated bar slidable longitudinally through said notches, clamps depending from said bar and engaging the sign body, said bar having notches in its lower edge adapted to singly receive the adjacent edge of said plate, a bar slidable across said light opening beneath the sign body, and having the letters or designs of the sign thereon, and adapted to singly present the letters or designs to the said light opening, a casing beneath said receptacle, electric lamps arranged in said casing, and a switch included in the circuit for said lamps, whereby the latter are singly called into use for the purposes specified.

In testimony whereof I affix my signature.

HAROLD E. RANKIN.