

W. L. SLOANE & J. S. OWSLEY.
PRINTING MACHINE.

APPLICATION FILED MAR. 23, 1909.

941,106.

Patented Nov. 23, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

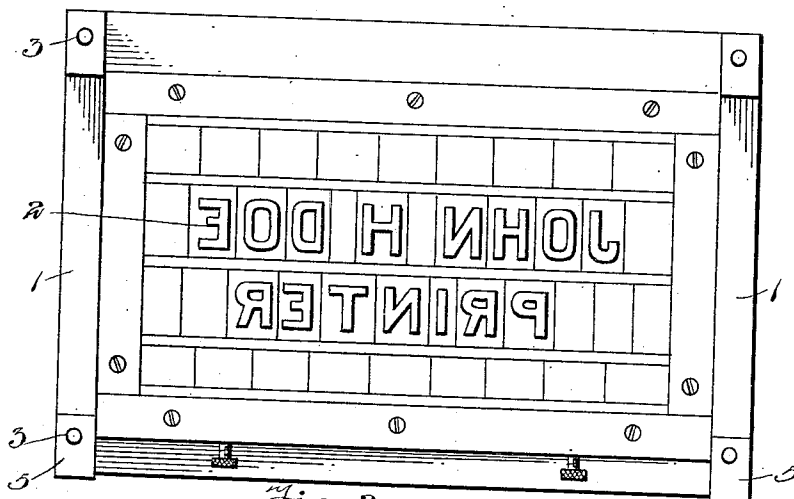
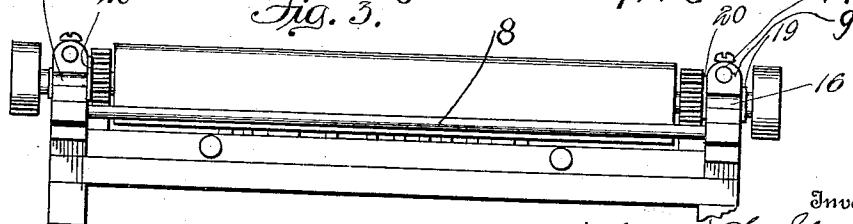


Fig. 2.



Fig. 3.



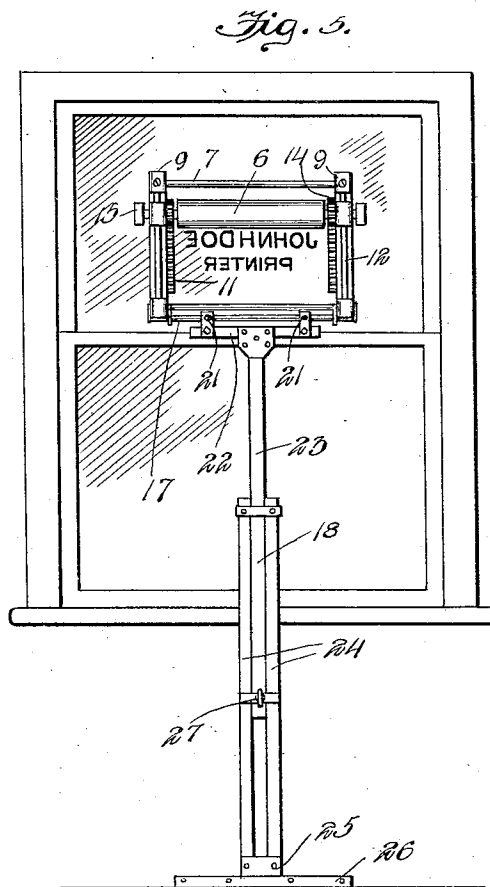
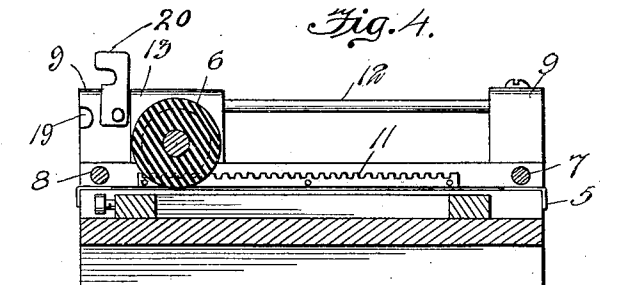
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UNITED STATES PATENT OFFICE.

WILLIAM L. SLOANE AND JAMES S. OWSLEY, OF OWENSBORO, KENTUCKY.

PRINTING-MACHINE.

941,106.

Specification of Letters Patent.

Patented Nov. 23, 1909.

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To all whom it may concern:

Be it known that we, WILLIAM L. SLOANE and JAMES S. OWSLEY, citizens of the United States, residing at Owensboro, in the county of Daviess and State of Kentucky, have invented certain new and useful Improvements in Printing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in printing machines, and particularly to machines for printing upon glass or other surface already mounted, and has for an object the provision of improved means for receiving an impression and then transferring the impression to the surface desired regardless of the position of the surface to which the impression is to be applied.

Another object of the invention is the arrangement of a frame for containing type and adapted to receive an auxiliary frame having mounted therein a roller for receiving an impression from the type in the first named frame.

A still further object of the invention is the arrangement of a transfer roller arranged in a guiding frame which receives an impression from any desired kind of type, together with an adjustable supporting member for holding the frame of the roller in position for permitting a movement of the roller in its frame for transferring the impression thereon to a pane of glass that has been mounted, or to any other desired surface.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangements of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 is a top plan view of a frame for containing type and arranged for receiving a roller carrying frame. Fig. 2 is a top plan view of the roller carrying frame and type frame. Fig. 3 is an edge view of the structure shown in Fig. 2. Fig. 4 is a section through Fig. 2 on line 4-4. Fig. 5 is a view of an embodiment of the invention in operation.

In forming a machine embodying the invention a framework is provided of any desired kind in which type of any character or shape is mounted disclosing the sign de-

sired to be printed upon a window-pane or other surface as desired. The frame is provided with a plurality of guiding pins for receiving a roller carrying frame. The roller carrying frame is arranged with a rack for engaging gear wheels mounted upon a roller carried by the frame whereby upon the movement of the roller across the frame the gear wheels will positively cause the same to rotate in order not to allow any sliding of the roller so as to receive a correct depression of the type in the type frame. The roller carrying frame after having been placed upon the type frame is held stationary by the guides or pins on the type carrying frame fitting into suitable apertures in the roller carrying frame. The roller in the roller carrying frame is then moved once across the type and the roller frame removed from the type carrying frame. The roller carrying frame is then mounted upon a support and the frame is then placed against a window or other surface to which the sign is to be applied. After having located the roller carrying frame upon the window or other surface the roller is forced across the frame and by reason of the rack and gear teeth is positively rotated, whereby a clear complete sign is transferred from the roller to the window-pane or other surface. The frame is then taken down from the window and the sign touched up by hand or backed as desired.

In order that the invention may be more clearly understood an embodiment of the same is shown in the accompanying drawings, in which—

1 indicates a type frame formed in any desired manner for containing type of any desired or preferred kind. Type 2 may be letters or configurations as preferred and may be transferred as hereinafter more fully described as readily as if ordinary type was used. Frame 1 is formed with a plurality of pins or guiding members 3 arranged to fit into the apertures in a roller carrying frame 4 when the roller carrying frame has been placed upon the type frame. Spacing members 5 are mounted preferably at each corner of frame 1 in order to properly space frame 4 sufficiently above type 2 to permit correct impression to be made upon the roll 6 which is preferably composed of a yielding rubber substance similar to the ordinary printer's roller.

Frame 4 is only placed upon frame 1

whenever it is desired to place an impression upon roller 6. Frame 4 is formed with a pair of bracing rods 7 and 8 which engage corner pieces 9 for holding the end members of the frame correctly in position, the rods 7 and 8 forming side members, while the ends are composed of corner pieces 9, bearing strips 10, racks 11, and guiding bar 12. Mounted to slide upon bearing strip 10 are sliding blocks 13 which also have passed therethrough the guiding rods 12. Both ends of the frame are constructed identical and are arranged with the slides 13 in the same manner for guiding roller 6 in its movement across the frame. Roller 6 in addition to slides 13 is provided with gear wheels 14—14 and end or gripping members 15—15. The gear wheels 14—14 are arranged to engage the racks 11 in order that upon the movement of the roller 6 across the frame the same will be positively rotated in order not to permit any sliding action of the same across the type or other configuration. Formed in two of the corner pieces 9 are grooves 16—16 for receiving a rod 17 secured to a support 18 hereinafter more fully described. End guiding members 19—19 are provided for limiting the end-wise movement of rod 17 and hooks 20—20 are pivotally secured to corner piece 9 in order to lock rod 17 in grooves 16—16 when placed therein.

Rod 17, arranged to be held in grooves 16—16, is adjustably secured to supporting brackets 21—21 which in turn are secured to supporting bar 22 that is carried by a sliding upright 23. Sliding supporting member 23 is arranged to operate between guiding and supporting members 24 which are secured to base 25 which in turn is preferably provided with a padding 26 for engaging the floor or other surface against which it may be placed in order to prevent slipping of the support and scarring the surface that the same engages.

In operation letters or other configuration as desired are set up in type carrying frame 1, and has ink applied thereto by an ordinary ink roller, of the color and quality preferred. After the type has been set up and ink applied thereto frame 4 is placed upon frame 1 with the roller in the position as shown in Fig. 2. Roller 6 is then forced across the type preferably only once and as the same passes across the type an impression will be made upon the roller, that is, the roller will take up ink from the letters or other configuration. Preferably there is no reverse movement made as such movement would usually tend to blur or spread the im-

pression on roller 6. After the roller 6 has been moved across the type once the roller carrying frame, including the roller, is moved off the type frame, and has applied thereto rod 17 with its associated supports. Roller 6, after frame 4 has been removed from frame 1, is again moved back to the position shown in Fig. 2. When in this position the frame 4 is connected with rod 17 and then the frame is placed against a window-pane or other surface as shown in Fig. 5 with a support therefor engaging the floor or other supporting surface as preferred. After the roller carrying frame has been properly squared or positioned upon the window-pane the end members 15—15 are grasped and the roller 6 forced preferably only once across the frame or to the position shown in Fig. 5, which will cause the impression on the roller 6 to be transferred to the window-pane. Then the frame, including the roller and the support, is moved from the window, and the sign is complete if an ordinary single color sign is desired. If a better sign is desired the same may be touched up by hand, backed up, or added to as desired. In transferring the sign from the roller to the glass or other surface, if any of the letters or other configurations do not come out clearly it is a comparatively easy matter, and requires but little skill to touch up the same and fill in open places. In connection with guiding frame 4 against the window the supports 23 and 24 are arranged to be telescopic in regard to each other, and to be held in any desired position by a clamping screw 27 which clamps the various parts together by acting upon the cross pieces connected with member 23 and acting upon members 24.

What we claim is—

In an apparatus of the character described, a form, a roller for receiving an impression from the form, a frame for supporting the roller, means for causing the roller to rotate when moved from one side of the frame to the other, means for causing positive co-action between the roller and its rotating means to prevent sliding action, and means for supporting the frame against a surface for permitting the roller to be moved thereagainst.

In testimony whereof we affix our signatures in presence of two witnesses.

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JAMES S. OWSLEY.

Witnesses:

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J. W. MOBBERY.