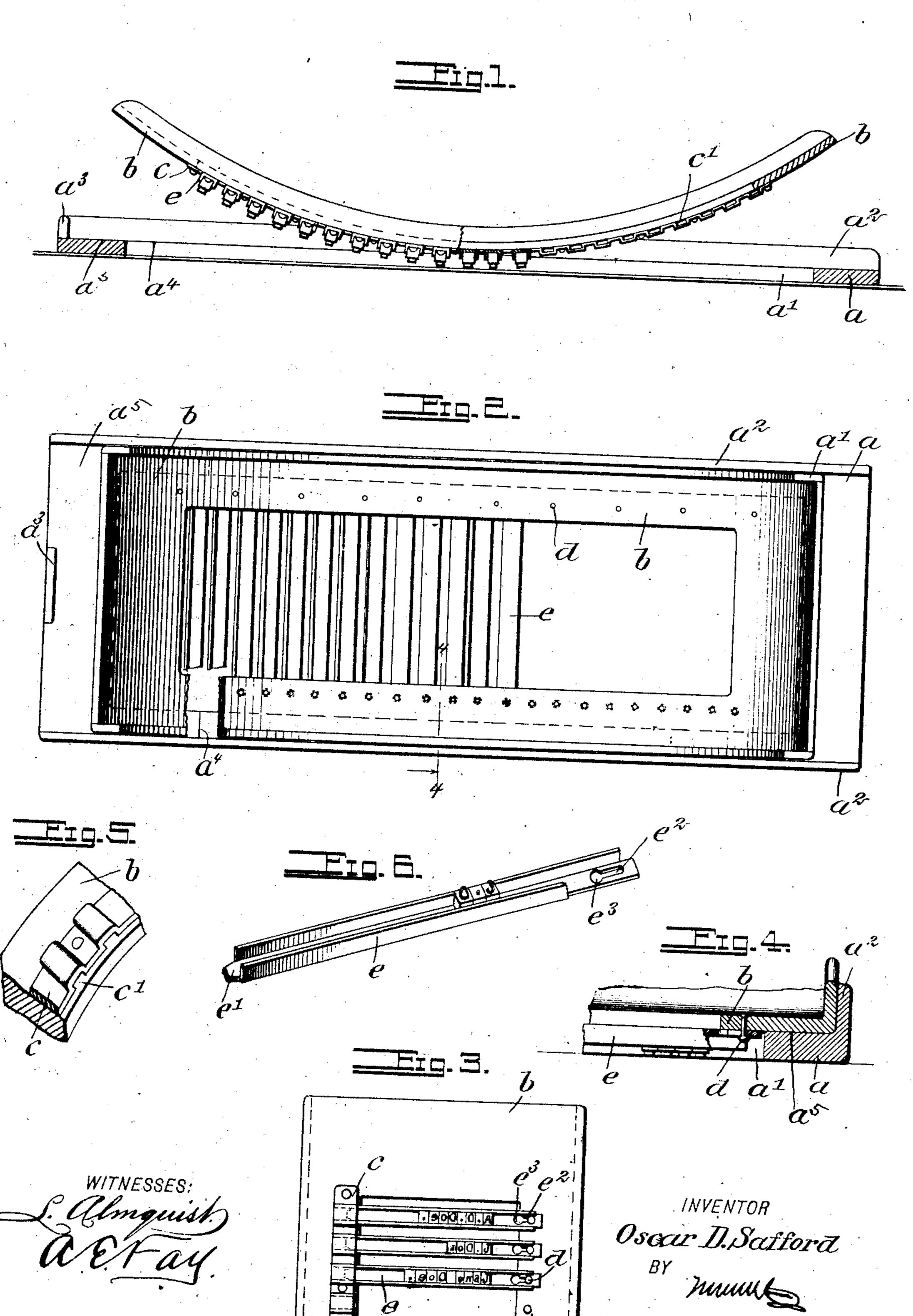
## O. D. SAFFORD. PRINTING DEVICE. APPLICATION FILED AUG. 22, 1905.



## UNITED STATES PATENT OFFICE.

OSCAR DICKINSON SAFFORD, OF PASSAIC PARK, NEW JERSEY.

## PRINTING DEVICE.

No. 826,889.

Specification of Letters Patent.

Patented July 24. 1906.

Application filed August 22, 1905. Serial No. 275,202.

To all whom it may concern:

Be it known that I, OSCAR DICKINSON SAF-FORD, a citizen of the United States, and a resident of Passaic Park, in the county of Passaic and State of New Jersey, have invented a new and Improved Printing Device, of which the following is a full, clear, and exact description.

My invention relates to a device for printio ing, and is especially designed for printing
columns. While capable of general use for
this purpose, it is particularly designed for
printing names, addresses, and the like.

The principal object of the invention is to provide for conveniently setting up words to be printed in such a way that they can be readily placed in alinement and readily removed from the printing device, so as to adapt it for those classes of business in which only a small number of impressions is required.

With this object in view I provide a frame having a perforation or space through which the characters can be projected for printing.

This frame forms a guide for a plate for supporting the type, and it also has other functions. The plate for supporting the type is provided with means whereby the type can be placed in holders and readily applied and removed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation, partly in longitudinal section, of a device showing the principle of my invention. Fig. 2 is a plan of the same. Fig. 3 is a bottom plan of one element. Fig. 4 is an enlarged sectional view on the line 4 4 of Fig. 2. Fig. 5 is a fragmentary perspective view of a detail, and Fig. 6 is a perspective view of a type-holder which is included in my invention.

The drawings show a frame a, which is provided with a perforation a'. This perforation preferably extends longitudinally with respect to the frame. This frame is also provided with a guide, shown in the present instance in the form of a pair of flanges a<sup>2</sup>, extending upwardly from its opposite sides and slightly inclined on their inner surfaces. At the rear end of the frame it is provided with a stop a<sup>3</sup> for the end of a plate b, the motion of which is adapted to be limited by said stop. This plate is formed with parallel sides of suf-

ficient width to be received between the flanges  $a^2$  and to fit the same in such a manner that the latter form a guide to keep the plate at all times in alinement with the perfora- 60 tion in the frame a and on a platform  $a^5$ , which constitutes a part of the frame.

The plate b is shown as having a curve from one end to the other upon its surface, whereby it can be rocked from the stop  $a^3$  to 65 the other end of the frame a and its lower surface brought into engagement with the upper surface of the frame a. The plate b is provided with a strip c, of sheet metal or any other suitable material, along one edge, this 70 sheet being crimped so as to form pockets c'. The lower surface of the plate is also provided with a series of headed study d. The study d and sheet c are designed to be received between the opposite edges of the per-75 foration a'.

The purpose of the stude d and pockets c' is to receive a series of type-holders e. Each of these type-holders is provided with a projection e', preferably tapered at its edges for 8c engagement in the pockets c', and with a slot e2 in its other end, having an eye e3 for receiving the heads of the studs d. The type-holders, being supplied with the necessary type to form the desired impression, are placed in 85 such a position that the eye e³ will slip over the head of any desired stud d, and the projection e' is placed at the entrance of one of the pockets c'. The holder is then slid toward the pocket, and the longer portion of 90 the slot e2 is received below the head of the stud, while the projection e' passes into the pocket. In this way the type-holders are all held in the same position with respect to the edge of the opening a' and can be readily re- 95 moved and replaced by others when desired.

In order to provide for registering this instrument with respect to the paper upon which the impression is to be made, I provide the frame with an indicating-mark a. This roo mark preferably extends across the frame and appears on both sides of the perforation a', so that any desired line or other device on the paper can be placed in registration with it, and the printing will then appear the deresting this instrument with it.

In operation, the type having been set up and placed in the holders and the holders having been applied to the printing-plate, as 110 specified above, the latter is placed with its upper end in contact with the stop a<sup>3</sup> and

also directly in contact with the upper surface of the frame a. The plate is then grasped by the other hand and rolled along in the frame a, guided by the flanges a<sup>2</sup>, until all of the type have been forced through the perforation a' and made their impression upon the paper.

Having thus described my invention, I claim as new and desire to secure by Letters

ro Patent---

1. A printing device, comprising a frame having a platform, a passage therethrough, side flanges, and a stop located near one end thereof, and a curved printing-plate for supporting type, adapted to rock along the platform between the flanges, and guided thereby so as to project the type through said passage, the motion of the plate being limited by said stop.

20 2. In a printing device, the combination of a supporting-frame, having a passage and guides, a printing-plate having edges adapted to be moved between said guides, said printing-plate being provided with pockets, and a series of type-holders adapted to be remov-

series of type-holders adapted to be removably mounted on said plate, each type-holder having a projection for entering one of said

pockets, and means for removably securing it to said plate at another point.

3. A printing device comprising a support- 30 ing-frame and a printing-plate, said printing-plate being provided with a series of pockets along one side, and a series of headed studs along the other side, whereby type-holders can be removably mounted thereon.

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4. In a printing device, the combination of a supporting-frame having a passage and guides, a printing-plate having edges adapted to be moved between said guides, said printing-plate being provided with pockets along 40 one edge and headed studs along the other edge, and a series of type-holders adapted to be removably mounted on said plate, said type-holders each having a projection for entering one of said pockets and a slot having 45 an eye for receiving one of said headed studs.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

## OSCAR DICKINSON SAFFORD.

Witnesses:

NELLIE MYERS GARDNER, MURAT GARDNER.