June 23, 1925. 1,543,066

J. S. DUNCAN

SECTIONAL PRINTING FORM BED

Filed Aug. 8, 1924

Fig. 1

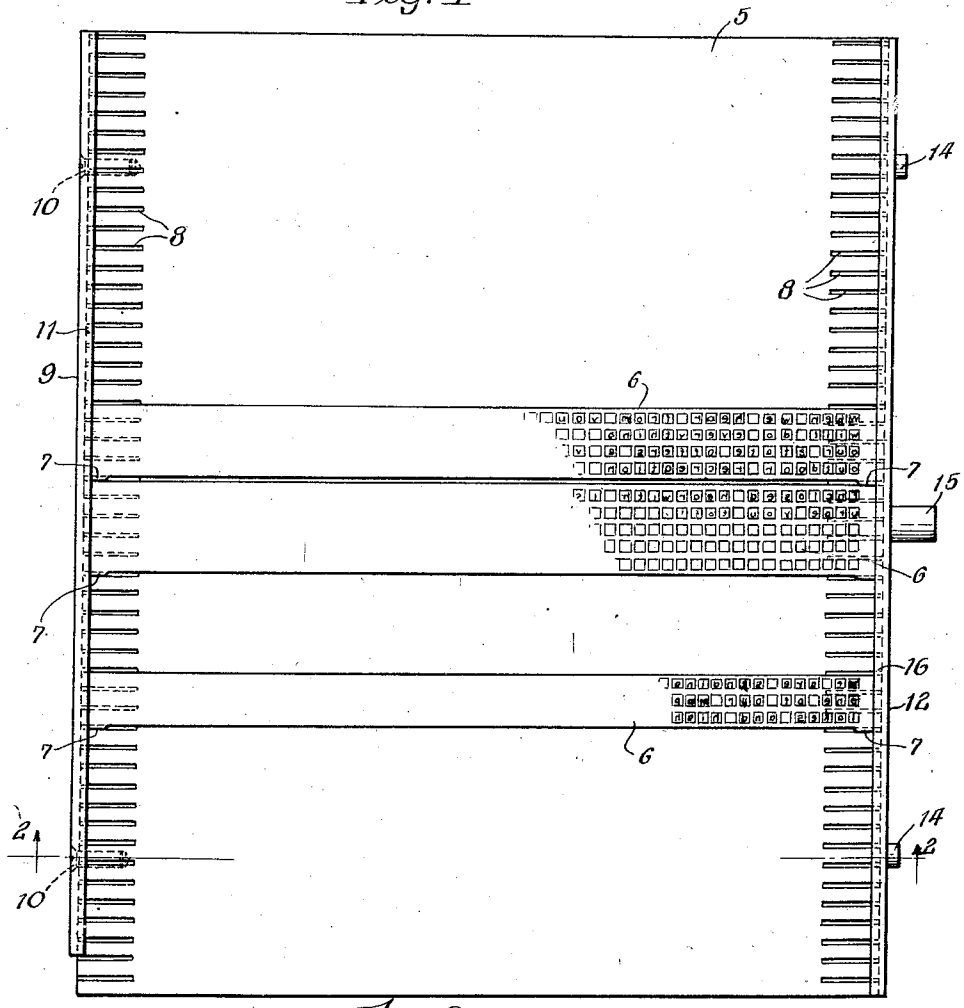


Fig. 2

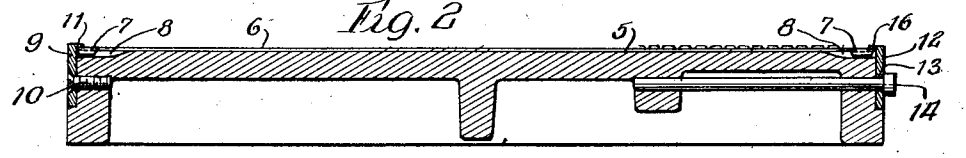
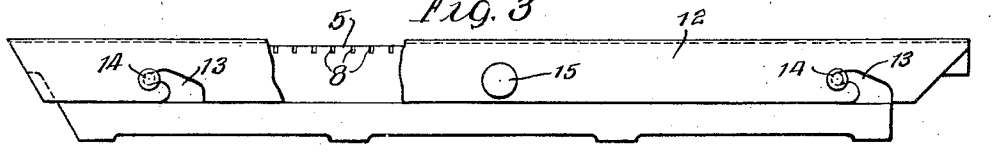


Fig. 3



Inventor:
Jos. S. Duncan
By: Wm. O. Belcatty.

Patented June 23, 1925. 1,543,066

UNITED STATES PATENT OFFICE.

JOSEPH S. DUNCAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO ADDRESSOGRAPH COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SECTIONAL PRINTING-FORM BED.

Application filed August 8, 1924. Serial No. 730,817.

To all whom it may concern:

Be it known that I, JOSEPH S. DUNCAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sectional Printing-Form Beds, of which the following is a specification.

This invention relates to printing form beds, and more particularly to beds adapted for receiving and holding sectional printing forms made of sheet metal and having printing characters struck up on one face thereof, as set forth in my Letters Patent No. 1,054,284, patented February 25, 1913, and No. 1,203,718, patented November 7, 1916, and No. 1,209,412, patented December 19, 1916, to my present assignee.

For many years address plates have been made by striking up printing characters on a plate of convenient size, and, as my previous patents indicate, the same idea has been employed in striking up printing characters from larger plates in the form of sections which are assembled on a printing form to print a whole letter or other text. My previous patents set forth the necessity for maintaining a uniform line spacing corresponding as closely as may be with that of a typewriter, so that the impression may be made to closely imitate that of a typewriter; and they also set forth the desirability of a bed having transverse grooves suitably disposed thereon to receive a longitudinally extending down-turned flange or down-turned retaining lugs for holding the sections in fixed position.

It was contemplated heretofore that the grooves in the bed for receiving the flanges or lugs of the printing form sections should be spaced apart to correspond with the width of the sections, but it has been found in practice that this does not give the desired flexibility in the commercial use of a sectional printing form of this kind, because sometimes it is desired to space the sections apart and to permit the use of sections of different widths.

Therefore, the object of my invention is to provide a bed of simple and improved construction adapted to accommodate printing sections of different widths, and also adapted to permit printing sections to be spaced apart, preferably according to line spacing on the bed.

In the accompanying drawings illustrating a selected embodiment of the invention,

Fig. 1 is a plan view of a bed embodying the invention and showing several printing forms thereon.

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

Fig. 3 is a side view showing the removable locking plate for securing the sections on the bed.

Referring to the drawings, 5 designates the form bed which is made preferably of solid cast iron to provide a firm and even support for the printing form sections 6, which are arranged side by side upon the bed, and are provided with down-turned lugs 7 adjacent their ends to engage grooves 8 at the margins of the bed. A side plate 9 is secured on one side of the bed, preferably the left side, by screws 10, and this side plate has a flange 11 to engage the ends of the sections. A side plate 12 is arranged at the other side of the bed, and it is provided with angular grooves 13 to engage the headed bolts 14 rigid with the bed. A stud 15 on this side plate 12 facilitates handling the plate. The side plate 12 is also provided with a flange 16 to engage the ends of the sections.

I prefer to employ the down-turned lugs 7 of my Patent No. 1,203,718 instead of the flange 9 of my Patents No. 1,054,284 and No. 1,209,412, because they are more easily inserted in the grooves and seem to answer the purpose quite as well as the continuous flange. And I also prefer to make the grooves extend in only a short distance from each side margin of the bed, sufficient to receive the lugs, since this leaves the main body of the bed unbroken and adapted to form a smooth and continuous supporting surface for the sections, which can be easily and at all times kept clean and free from dirt.

As I have heretofore stated, it was contemplated in my previous patents that the grooves should be uniformly spaced to accommodate sections of uniform width, but this has been found to be too inflexible for universal use, and I have overcome this by line spacing the grooves so that I may use sections of different widths or space the sections apart, as desired. This comparatively simple improvement over my preceding patents has very materially simplified the use

of my invention since it enables spacing the sections more like a type setter line spaces his type and thus enables the work to be done more easily and more satisfactorily with the result that better impressions are obtained more closely imitating a typed letter. This invention enables the printing sections to be used more economically than has heretofore been possible, because narrow sections may be employed when suitable for the purpose, and because the sections can be spaced apart when desired to provide a form letter with special line spacing.

It will be readily understood that when the sections are prepared the side plate 12 is removed from the bed and the left ends of the sections are inserted in the grooves at the left of the bed and beneath the flange 11 of the side plate 9, after which the sections are engaged with the grooves at the right of the bed and the side plate 12 is applied in place. This can be done quickly and easily and the construction and arrangement of the side plate 12 provides a locking device of simple construction, which can be easily applied for securing the sections in place.

I am aware that changes in the form, construction and arrangement of parts may be made without departing from the spirit and without sacrificing the advantages of the invention and I reserve the right to make all such changes as fairly fall within the scope of the following claims.

I claim:

1. The combination of a printing form section having type characters thereon and down-turned lugs on one side edge adjacent its ends, a bed therefor having a series of grooves adjacent each side margin to receive said lugs and spaced apart according to the line spacing of the type characters on the section, and means for holding the sections in place on the bed.

2. The combination of a printing form section having type characters thereon and down-turned lugs on one side edge adjacent its ends, a bed therefor having a series of grooves adjacent each side margin to receive said lugs and spaced apart according to the line spacing of the type characters on the section, a flange at one side edge of the bed for engaging one end of the section, headed bolts on the other side edge of the bed, and a removable side plate having a flange to engage the other end of the section and provided with angular slots for engaging said bolts.

JOSEPH S. DUNCAN.