No. 670,718. Patented Mar. 26, 1901.

L. K. MEARKLE

CHANGEABLE FORM FOR PRINTING.

(Application filed Dec. 8, 1900.)

(No Model.)

Fig. 1.

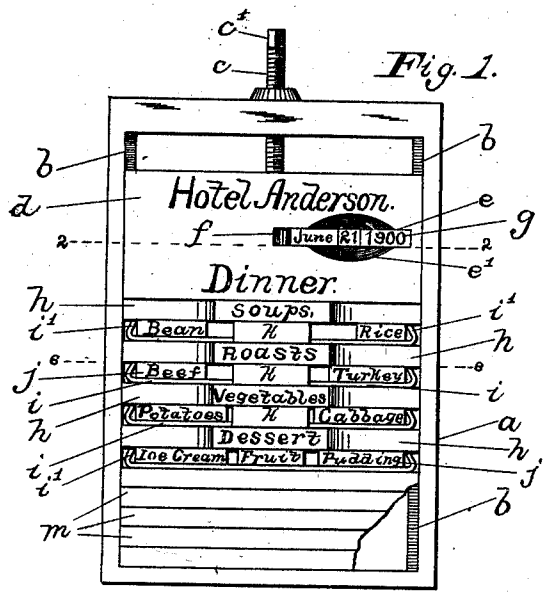


Fig. 2.

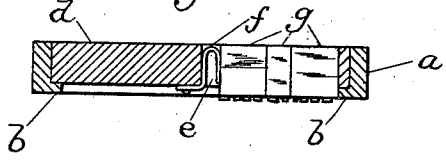


Fig. 3.

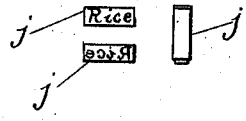


Fig. 4.

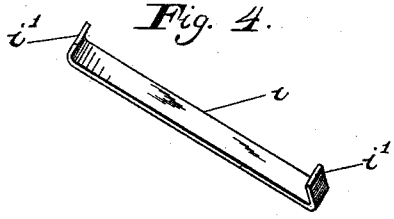


Fig. 5.

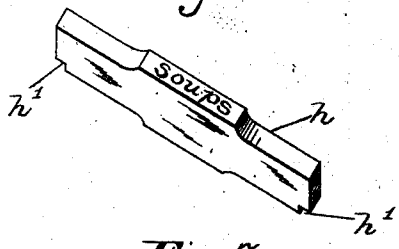


Fig. 6.

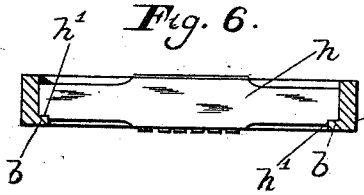


Fig. 8.

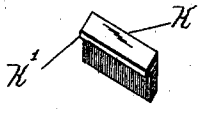
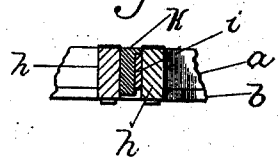


Fig. 7.



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UNITED STATES PATENT OFFICE.

LOUIS K. MEARKLE, OF PITTSBURG, PENNSYLVANIA.

CHANGEABLE FORM FOR PRINTING.

SPECIFICATION forming part of Letters Patent No. 670,718, dated March 26, 1901.

Application filed December 8, 1900. Serial No. 39,138. (No model.)

To all whom it may concern:

Be it known that I, LOUIS K. MEARKLE, a citizen of the United States, residing at Pittsburg, State of Pennsylvania, have invented certain new and useful Improvements in Changeable Forms for Printing, of which the following is a specification.

My invention is an improvement in printing devices; and its object is to provide a readily-changeable printing-form of simple construction comprising a chase, type, and spacers therefor, which will enable any unskilled person to easily arrange and set up bills of fare or the like, thereby dispensing with the services of a skilled compositor and lessening the cost of producing the printed matter.

The invention consists in certain constructions and arrangement of the parts hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a rear or bottom view of the form, illustrating a bill of fare set up in the chase. Fig. 2 is a transverse section thereof on the line 2 2 of Fig. 1. Fig. 3 illustrates three detail views of one of the block type employed. Fig. 4 is a detail perspective view of one of the space-retainers which maintain the line-spacers in proper relative position while one block type is being replaced by another. Fig. 5 is a similar view of one of the combined line-spacers and block type. Fig. 6 is a transverse section of the form, taken on the line 6 6 of Fig. 1. Fig. 7 is a detail longitudinal section illustrating the manner of supporting a block-spacer on a space-retainer. Fig. 8 is a detail perspective of one of the block-spacers.

Referring to the drawings, the letter *a* designates a rectangular chase provided on its front or printing side with two inwardly-extending longitudinal flanges *b*, as shown in Figs. 1, 2, and 6, and working in the upper cross-bar of the chase is a lock-up bolt *c*, whose upper end *c'* is squared to receive a spanner or other wrench, whereby to lock up the form when the chase is lying face down on the "stone."

The printing matter adapted to be locked up in the chase in this instance is intended for a bill of fare and comprises a head-block *d*, cast in solid metal type high and provided on its rear face (which is the face shown in Fig. 1) with printed words—such as "Hotel Anderson," "Dinner"—whose letters are arranged in the proper order for reading and which indicate the cameo-type characters on the opposite, front, or printing face of said head-block. This head-block rests on the flanges *b* of the chase, while the cameo-type face is in the proper plane above the chase for printing, and the lower end of the lock-up bolt *c* bears against the upper end of said head-block.

As illustrated in Figs. 1 and 2, the head-block *d* is provided with a slot *e*, extending therethrough from face to face and whose side walls are cut out or recessed, as shown at *e'*. A spring *f* is secured in one end of said slot and bears against one end of a row of block type *g*, which fit snugly in the said slot *e* and whose rear faces are provided with printed characters denoting the year, month, and day, as "June 21, 1900," and corresponding to the cameo-type characters on the opposite, front, or printing face of said block type. The said spring *f* in the end of the slot, together with the frictional engagement between the walls of the slot *e* and block type *g*, is sufficient to hold the latter in position while printing, and said block type can be withdrawn when desired by inserting the finger and thumb in the two recesses *e'* and grasping the block type.

Below the head-block *d* are arranged smaller block types naming the courses and dishes on the bill of fare, and the arrangement in this instance consists of block type showing the name of each course, and underneath are the names of the different dishes in that course, as plainly indicated in Fig. 1 of the drawings. The name of each course is formed in cameo-type face on the front and also indicated by a printed name on the rear of a bar *h*, one of which is shown in detail in Fig. 5. These bars form a word or block type and line-spacer combined, and their ends are rabbeted, as at *h'*, to fit the flanges *b* on the chase, as shown in Fig. 6, and are thus supported in the chase, with their type characters in the proper plane for printing.

Between every two adjacent combined block words and line-spacers is located a space-retainer *i*. (Shown in detail in Fig. 4 and

seen in Fig. 1.) Said space-retainers consist of a thin strip of metal having each end bent in the same direction. This strip stands on edge and abuts against one of the said line-spacers *h*, and the ends *i'* of said space-retainers rest on the flanges *b* of the chase, and the bent portions of the ends extend laterally, with their extremities abutting against the next adjacent line-spacer, thereby maintaining between every two adjacent line-spacers open spaces for the reception of the block type *j* for printing the name of the different dishes on the bill of fare, so that one block-type name may be taken out and another substituted, while the line-spacers *h* are certain to maintain their proper relative positions. The said block type *j* are provided on one edge with cameo-type characters and on the opposite edge with indicating characters in the same manner as the line-spacers *h* and are inserted in the chase between the space-retainers *i* and their adjacent line-spacers, as shown in Fig. 1, and wherever the said block type do not approximately fill up a line I there insert a blank-spacer *k* between the line-spacer and its adjacent space-retainer, so that the form will lock up securely when the bolt *c* is screwed down. As shown in Figs. 7 and 8, these blank-spacers *k* are a little less than type high, and each is provided on its rim or lower face with a flange *k'*, which overhangs upon the edge of the space-retainer *i* and prevents the said blank-spacer from dropping through the chase to the inking and printing side thereof, which in the drawings is the lower side. When the matter to be printed does not approximately fill the chase from top to bottom, the remaining portion of the chase is filled with furniture *m*, as shown in Fig. 1.

It is proposed to have for a hotel three of my improved printing devices—one for breakfast, another for dinner, and a third for supper or luncheon; but while I have shown and described the invention as adapted for printing a bill of fare it is to be understood that it is not limited solely to such use, as its construction and arrangement are plainly adapted for printing other forms that require frequent change where a large range of type characters is not necessary.

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

1. The herein-described changeable form for use in printing, comprising a chase; combined block type and line-spacers in said chase; block word-type for printing words located between two adjacent combined block type and line-spacers; and space-retainers for holding the latter in proper spaced-apart relation when said block word-type are withdrawn, as set forth.

2. The herein-described changeable form for use in printing, comprising a chase; line-spacers in said chase; block type for printing words located between two adjacent line-spacers; and space-retainers located between the sides of said block type and a line-spacer and provided with laterally-extending ends which abut against the next adjacent line-spacer, as and for the purpose set forth.

3. The herein-described changeable form for use in printing, comprising a chase provided on its front or printing side with inwardly-extending flanges; a printing head-block resting on said flanges and provided with a slot and block word-type detachably held in said slot; combined block type and line-spacers provided with rabbeted ends fitting on said flanges; block word-type located between two adjacent combined block type and line-spacers; space-retainers having laterally-extending ends which rest on said flanges and maintain said combined block type and line-spacers in proper spaced-apart relation; and blank-spacers provided with flanges which overhang upon said space-retainers, as set forth.

4. In a printing device of the character described, the combination with a chase, of line-spacers and block type in said chase; space-retainers between two adjacent line-spacers; and blank-spacers provided with flanges which overhang upon said space-retainers, as set forth.

5. In a printing device of the character described, a combined block type and line-spacer, *h*, provided on one face with type characters and also provided on its opposite face with characters in proper position for reading and corresponding to the said type characters, as and for the purpose set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

LOUIS K. MEARKLE.

Witnesses:

CINNIE T. BENGOUGH,

J. F. MCHENDRY.