(No Model.)

F. C. BOYNTON.

HAND PRINTING DEVICE.

No. 561,859. Patented June 9, 1896.

Fig. 1.

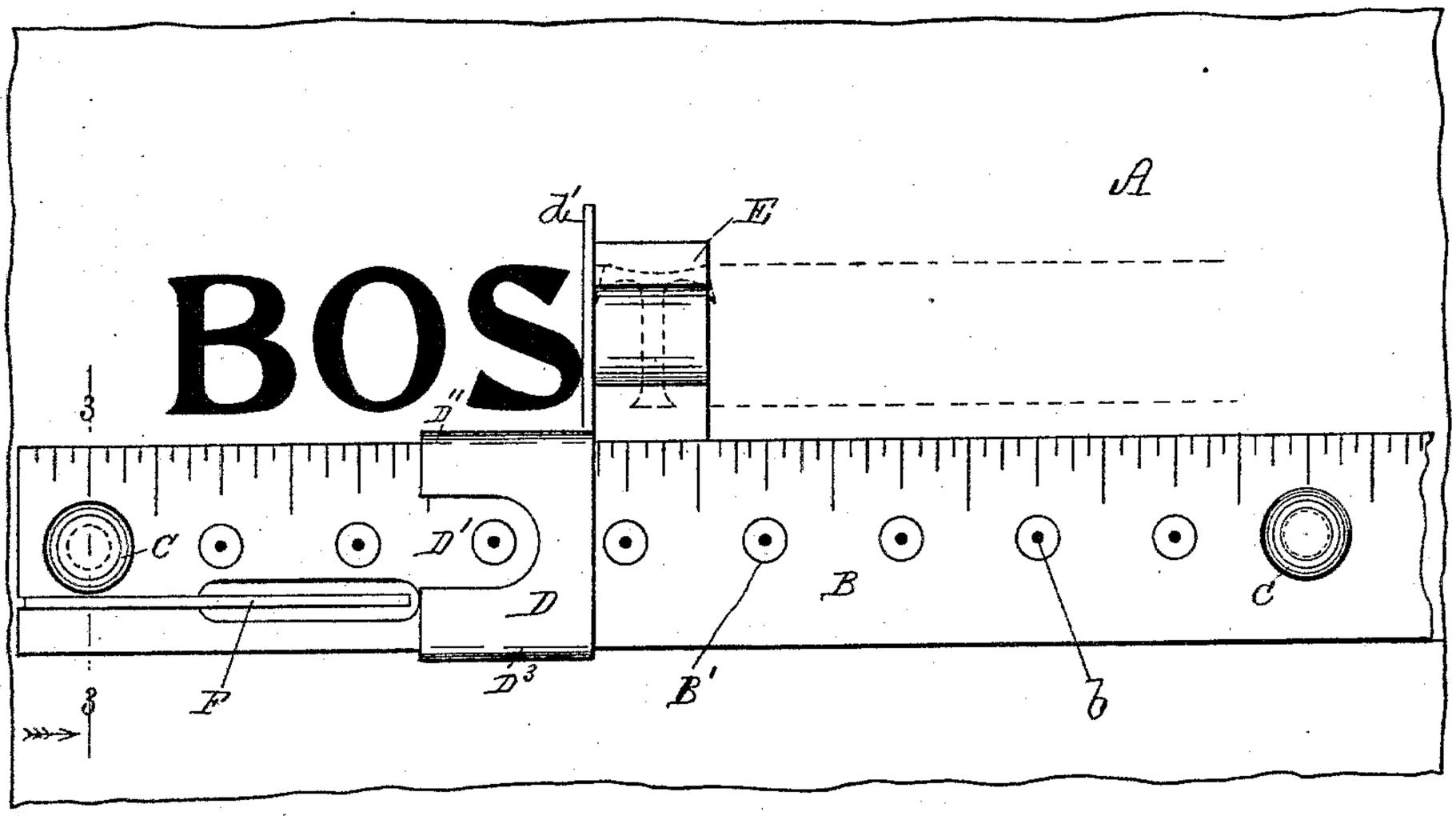


Fig. 2.

Fig. 4.

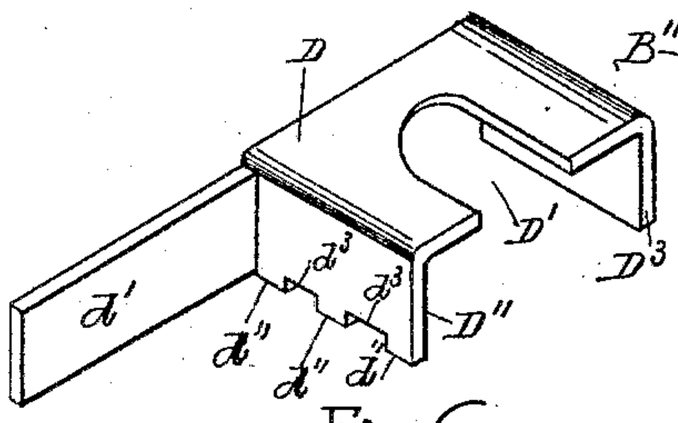


Fig. 6.

Fig. 3

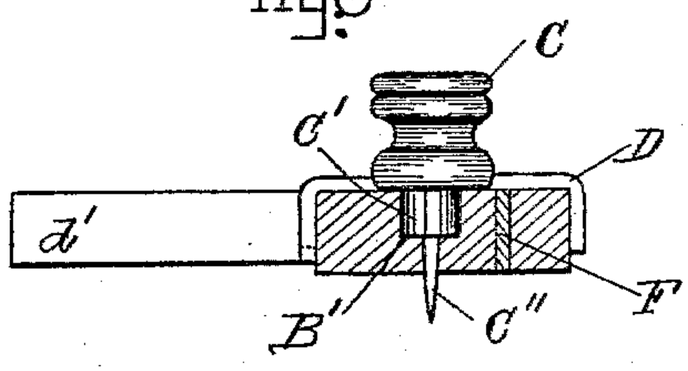
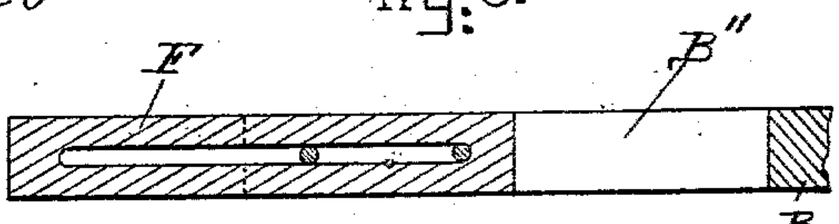


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

FRANK C. BOYNTON, OF SPRINGFIELD, MASSACHUSETTS.

HAND PRINTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 561,859, dated June 9, 1896.

Application filed May 16, 1895. Serial No. 549,508. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. BOYNTON, a citizen of the United States, and a resident of Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Hand Printing Devices, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in hand printing devices for the purpose of marking or printing show-cards, price-cards, tags, window-cards, notices, &c., by means of type-blocks in straight or curved lines, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 represents a top plan view of my improved hand printing device shown in position for printing straight lines. Fig. 2 represents a similar top plan view showing the device in position for printing on curved lines. Fig. 3 represents a cross-section on line 3 3 shown in Fig. 1. Fig. 4 represents a detail perspective view of the longitudinal movable spacer. Fig. 5 represents a longitudinal section on the line 5 5 in Fig. 2, showing the end spacing device connected to the graduated bar; and Fig. 6 represents a modification of such end spacing device.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In Fig. 1, A represents the card, sheet, box, or other object that is to be printed by my improved hand printing device, which consists of a graduated bar or rule B, which is temporarily secured to the object to be printed by means of buttons C C, having trunnions C′ C′, adapted to fit into recesses B′ B′ in the rule B, as shown in Figs. 1 and 3, each of such button having attached to it a pin or prong C″, which, after passing through a perforation *b* in the center of the recess B′, is made to enter the sheet or card to be printed and the table on which it may be supported during the printing operation.

When printing upon wood, boxes, or other similar objects the pins C″ serve as means for securing the rule B directly to such object that is being printed upon.

In connection with the rule B, I use a longitudinally-adjustable spacer device, which is fully shown in detail in Fig. 4, and it consists of a metal plate D, having a notch D′, adapted to receive the button C, when the said spacer is moved to its extreme left-hand position on the scale or rule B in commencing the printing of the line or lines.

The spacer-plate D is provided with downwardly-projecting front and rear guide-ribs D″ D³, (shown in Fig. 4,) adapted to encompass the rule or scale B and to serve as guides in adjusting the position of the spacer on the said scale or rule. In one piece with said spacer is made an upwardly-extending spacer projection *d′*, against the side of which the type-block E is held during the marking or printing operation, as shown in Fig. 1.

The front guide-rib D″ of the movable spacer is provided with projections *d″ d″* and intermediate notches *d³ d³*, adapted to serve as spacing-measures for leaving spaces between the words or where additional or extra spaces are desired between the letters.

In using the device for printing straight lines on sheets, cards, boxes, boards, &c., I secure the rule B to the object to be printed on by means of the buttons C C and their pins or points C″, as described. I then place the spacer D in position on the rule B, according to the desired position for marking the first letter in the word or sentence. I then place the inked type-block against the top edge of the rule B and against the right-hand side of the spacer projection *d′*, as shown in Fig. 1, and press the type-block against the object to be printed on. After one letter has been printed I move the spacer toward the right on the rule B until the left-hand side of the spacer projection *d′* is just about clear of the previously-printed letter, when I proceed as before and print the next letter by placing the type-block at the right-hand side of the spacer projection *d′* and in contact with the same, and so on, until a word in the desired sentence has been completed. For spacing between the letters I may also use the graduations on the rule B, which may also be used as a guide or measure for spacing between the letters, or I may use the projections and notches *d″ d³* as spacing-measures for locating letters in proper position with proper spaces between them, or I may use such pro-

jections and notches for measuring spaces between two successive words or otherwise, as may be most practical and convenient. After one line has been printed I remove the fastening devices C C and place the rule in a new position at a proper distance below the line already printed and repeat the printing operation, as above described.

For printing on curved lines I remove the above-mentioned spacer device and extend beyond the upper end of the spacing-bar B a sliding or pivoted curve spacer-bar F, as shown in Fig. 2. Said curve spacer-bar is normally retained in a groove B″ in the rule B, as shown in Fig. 1. Said curve spacer-bar F may be arranged to slide in and out in the recess or groove B″, as shown in Figs. 1 and 5, or it may be arranged to swing out and in of position, as shown in Fig. 6, and I wish to state that I do not desire to confine myself to any one of such described means for adjusting the curve spacer-bar, as either one may be used without departing from the essence of my invention.

In printing on a curved line I pivot the rule B by means of one of the buttons C to the object to be printed at a proper distance from the upper end of said rule B, according to the curvature desired, and print the article by placing the type-block against the right-hand side of the spacer-bar F and against the end of the bar B, as fully shown in Fig. 2, and press the type-block against the object to be printed. I then remove the type-block and swing the now pivoted bar B a sufficient distance on its fulcrum so as to cause the left-hand side of the curve spacer-bar free of the previously printed letter, after which I proceed to print and space subsequent letters in the word or words.

What I wish to secure by Letters Patent and claim is—

In a hand printing device, the combination with a graduated rule or scale having a series of enlarged perforations extending partially therethrough and terminating at their middle portions in pinholes which extend entirely through the rule, and fastening-buttons provided with trunnions and pins which engage the perforations and pinholes respectively, of a longitudinally-adjustable spacer arranged to slide upon the rule and provided with an outwardly-extending arm, and a type-block guide-arm pivoted within a slot arranged at one end of the rule or scale, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 27th day of April, A. D. 1895.

FRANK C. BOYNTON.

Witnesses:

CHARLES M. FOWLER,

GEORGE M. TAYLOR.