(No Model.)

E. T. PETTIT.

PERFORATING DEVICE.

No. 259,910. Patented June 20, 1882.

Fig: 1.

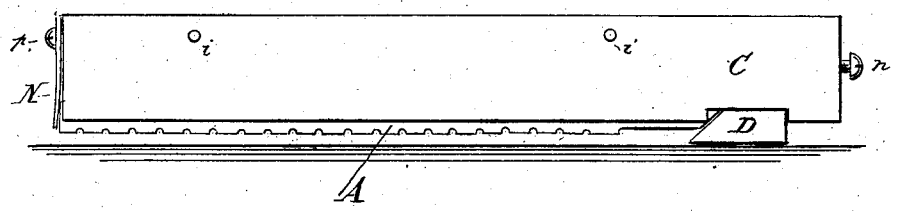


Fig: 2.

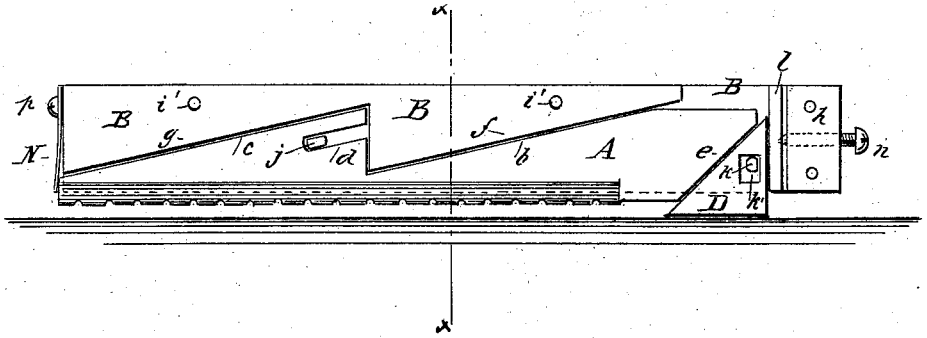


Fig: 3.

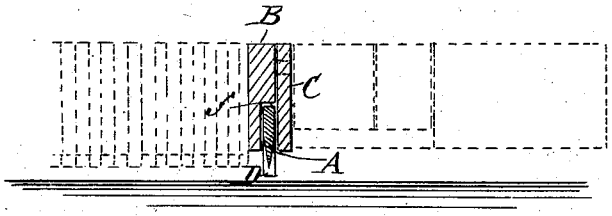
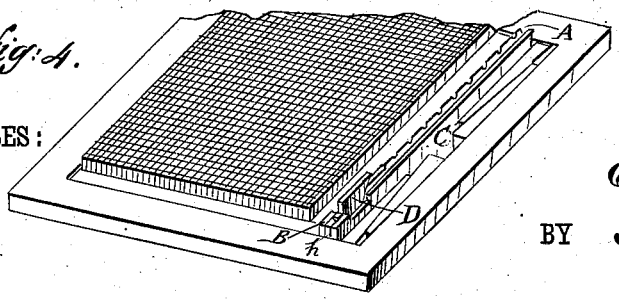


Fig: 4.



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UNITED STATES PATENT OFFICE.

EDWIN T. PETTIT, OF MARSHALLTOWN, IOWA, ASSIGNOR TO HIMSELF AND GEORGE E. KESTER, OF SAME PLACE.

PERFORATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 259,910, dated June 20, 1882.

Application filed December 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, EDWIN T. PETTIT, of Marshalltown, in the county of Marshall and State of Iowa, have invented a new and Improved Perforating Device, of which the following is a full, clear, and exact description.

My invention consists of a perforator having such construction that the cutting-edge of the blade is adapted to rest on a level with or a little below the printing-surface of the type, so as not to interfere with the inking of the type, and to be elevated into position for perforating the sheets at the time or a little before the impression is taken.

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

Figure 1 is a side elevation of my improved perforator. Fig. 2 is a side elevation with the plates removed. Fig. 3 is a cross-section taken on the line *x x*, Fig. 2; and Fig. 4 is a perspective view of a type-frame, showing the manner of holding the perforator for use.

A represents the blade of the perforator, which is formed with the inclined faces *b c*, inclined slot *d*, and is formed at one end with the incline, as shown at *e*. The blade is held between the plates B and C, the latter being a plain plate formed with the perforations *i i* for the passage of the dowel-pins *i' i'*, which are formed upon the inner surface of the plate B. The plate B is recessed upon the inside, so as to form the inclined faces or shoulders *f* and *g*, which correspond with the inclined faces *b* and *c* of the blade, and so as to form the offset *h* at one end, as shown in Figs. 2 and 4, and the said plate is formed with the stud *j*, which fits in slot *d*, and with the stud *k*, which serves as a stop to the sliding triangular plate D, as clearly shown in Fig. 2. The triangular plate D is formed with the slot or hole *k'*, and is placed between the plates B and C, so as to come between the beveled end *e* of the blade and the offset *h* of the plate B, as shown in Fig. 2.

Between the offset *h* and the edge of the plate is placed the narrow strip of metal *l*, which is slightly recessed in the center, and fits on and is held in place by the set-screw *n*, which passes through the offset *h* and serves to adjust the distance of movement and elevation of the blade.

At the opposite end of the plate C to that at which the set-screw is placed is secured by the screw *p* the flat spring N, which impinges against the end of the blade and holds the blade at all times in contact with the diagonal edge of the triangular plate. The triangular plate is of such size or width in relation to the width of the plates B and C and the width of the blade that when in place it will be adapted to project from between the plates a greater distance than the cutting-edge of the blade, as clearly shown in the drawings.

In use the perforator is to be locked up in the form with the type and wedged in place, as clearly shown in Fig. 4, so that the cutting-edge of the blade will normally stand "type-high," or nearly so. The triangular plate will then be adjusted by the screw *n* according to the thickness of the paper to be printed. Thus arranged, it will be seen that as the impression is about to be taken the triangular plate will be forced backward between the plates, causing the blade to be moved longitudinally and also elevated by its movement up the inclines of the plate B, so that at the time the impression is taken the teeth of the cutting-edge of the blade will perforate the paper. As soon as pressure is removed from the triangular plate the spring N will force the blade backward and downward below the surface of the type, out of the way of the inking-roller.

I do not confine myself to the use of the triangular plate and the inclined faces for moving the blade, as other means for this purpose might be devised and not depart from the principle of my invention.

It will be seen that no matter how tightly the perforator may be locked in the form the blade will always move freely between the side plates of the perforator and always do its work.

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

1. The perforator-blade having inclined

faces *b c*, inclined slot *d*, and end incline, *e*, in combination with the plate B, having pins *i' i'*, inclined faces *f g*, offset *h*, and stud *k*, the plate C, having perforations *i i*, the sliding triangular plate D, having hole *k'*, the metal strip *l*, and the set-screw *n*, as and for the purpose described.

2. In combination with the blade A, plates B, C, and D, and the spring N, the screw *n* and the bar *l*, for adjusting the blade, substantially as described.

EDWIN THOMAS PETTIT.

Witnesses:
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G. F. VALIANT.